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Butte Area One
Parrot Tailings Waste Removal Project Report

Butte, Montana

Prepared For:
Montana Natural Resource Damage Program
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1 Introduction

This Project Completion Report was prepared by Water & Environmental Technologies (WET) on behalf of the Montana Natural Resource Damage Program (NRDP), in accordance with the Butte Area One (BAO) Restoration Plan Amendment Parrot Tailings Waste Removal (December 27, 2016)[1] (Parrot Amendment) and the September 20, 2019, Butte Area One (BAO) Restoration Plan Amendment to fund the Parrot Tailings Waste Removal. The site location, description, goals, and objectives of the Parrot Tailings Waste Removal Project are summarized in the Parrot Amendment and associated documents and are not restated here.

This report summarizes construction activities associated with the primary tasks necessary to address contamination associated with the Parrot Tailings Waste Removal (Parrot Project, including:

- Site Security;
- Monitoring Well Protection/abandonment/replacement;
- Haul Road Construction;
- Facility Demolition/Salvage;
- Waste Characterization and Removal;
- Backfill Import and Placement;
- Construction Dewatering;
- Utility Abandonment/Replacement;
- Evapotranspiration Cover (ET) Construction
- Soil Cover Borrow Source Development and Reclamation;
- Civic Center Road Replacement;
- Parking Lot Reconstruction;
- Post-Removal Reclamation.

1.1 Parrot Project Performance Monitoring Program (PMP)

The Parrot Project PMP was implemented to establish pre-waste removal baseline conditions in and around the Parrot Project Site, and to provide performance monitoring along the Silver Bow Creek Corridor following waste removal. The PMP incorporated 52 groundwater monitoring wells from BPSOU, 7 surface water locations, and the 25 new wells installed as part of the PMP to better characterize alluvial lithology, groundwater quality and water level fluctuations throughout the corridor. The monitoring network employed five transects that are generally aligned perpendicular to both groundwater flow and the known or anticipated extent of groundwater impacts. The transect approach was implemented to provide data from monitoring locations:

- Upgradient of the Parrot Project.
- Immediately downgradient of the Parrot Project.
- Additional transects downgradient of the Parrot Project.

The placement of new wells, coupled with existing BPSOU wells and surface water sites, supported an evaluation to address the specific objectives of the monitoring program:

- Establish current/baseline conditions for the corridor prior to and following Parrot Project removal efforts.
- Assess groundwater, including hydraulic gradients and water quality, through the Parrot Tailings.
- Develop accurate groundwater potentiometric surface maps.
- Evaluate hydraulic properties for three hydrologic features:
  - Blacktail Creek
  - Silver Bow Creek
  - Subdrain Groundwater Collection System

Continuous water levels were acquired using dedicated transducers in 28 monitoring wells, combining both PMP and BPSOU wells. Manual water levels were also acquired monthly, and low-flow sampling, laboratory analysis, and data validation are completed quarterly. Through six quarterly sampling events, a total of 527 groundwater samples have been collected representing 32,880 data points. Data summary reports are available at on the NRDP website at https://dojmt.gov/lands/sites/butte-area-one/.

Conceptual Site Model

Based on the data collected in the PMP, a Conceptual Site Model (CSM) for the Butte alluvial aquifer adjacent to and downgradient of the Parrot Project was developed (NRDP, 2020). It presents recent data (2017 through 2019), along with supporting historical data and information that quantify groundwater conditions in a portion of the Butte Priority Soils Operable Unit (BPSOU) in Butte, Montana. This CSM is intended to inform decision makers and planners on conditions in the Upper Silver Bow Creek corridor prior to and following the implementation of the Parrot Tailings Project and other projects that may impact groundwater flow or chemistry in the area. More recent data can be found in the subsequent data summary reports referenced above. The CSM is available on NRDP's website at https://dojmt.gov/lands/sites/butte-area-one/

2 Description of Construction Activities

Due to the site constraints and the need to move the Butte-Silver Bow County Shops, the Parrot Project was structured according to the following major phases:

- Phase 1: Site Security and Haul Road Construction
- Phase 2A: Waste Removal north of Civic Center Road
- Phase 2B: Demolition and Reconstruction of BSB County Shops
- Phase 2C: Waste Removal South of Civic Center Road
- Phase 3: Reclamation and End Land Use

This report documents Phase 1, 2A, 2C, and 3; Phase 2B was completed by BSB under another contract to NRDP and is described briefly below. The Parrot Project was completed in two construction bid packages; Phase 1 and 2A were completed in the first bid package in 2018 (Bid Package #1[2]), and Phase 2C and 3 were completed in the second bid package from 2021 to 2023 (Bid Package #2[3]). MK Weeden Construction served as the general contractor for Phases 1 and 2A. Intermountain Construction Services (ICS) served as the general contractor for Phases 2C

and 3. Water & Environmental Technologies (WET) and its team served as the design engineer and provided construction administration during construction of Phases 1, 2A, 2C, and 3.

Construction activities associated with the project are further described below.

2.1 Site Security

The Parrot Project is located within the urban limits of Butte Montana; as a result, site security and fencing were critical to keeping the public separated and safe from construction activities. The site was fenced on all sides, signs were posted to notify the public of construction activities, and any quests were required to check in with on-site personnel. These controls were maintained throughout the entire project.

2.2 Monitoring Well Abandonment, Protection, and Replacement

In order to complete waste removal, evapotranspiration cover construction, and other activities, several monitoring wells were required to be abandoned prior to construction. Some wells were able to be protected in place and saved, with minor adjustments. Table 1 summarizes the list of wells abandoned or protected for the project.

Table 1. Summary Table of Well Information

Well Name	GWIC ID	Total Depth (ft)	Screened (ft)	Abandon/Replace
AL-SD-605	155492	28.5	14-24	Abandon
TW-MP	N/A	38	16-38	Abandon
GS-45	137594	59.5	49-59	Abandon/Replace
GS-09-01	251420	40.6	30.8-40.6	Abandon/Replace
GS-09-02	251418	36	26-36	Abandon/Replace
GS-09-03	N/A	44	34-44	Abandon/Replace
AMW-08	137598	45	30-45	Abandon/Replace
GS-41S	150401	42	33.5-38.5	Abandon/Replace
GS-41D	150402	61.5	50.5-60.5	Abandon/Replace
GS-42S	150404	22	13-18	Abandon/Replace
GS-42D	150405	60	47.5-57.5	Abandon/Replace
PT 14-1	281259	44	34-44	Protect In Place
PW-01	150417	45	17-42	Protect in Place
GS-10A/B	4668/4666	112/112	100-110/19-29	Protect in Place

Per an EPA letter dated February 12, 2018, to BP-AR, EPA directed BP-AR to “take the lead on the design, coordination, procurement of driller, and installation, oversight, and monitoring of the replacement wells in the NRDP’s Parrot removal footprint area”[4]. BP-AR sent NRDP a letter dated July 27, 2018, stating BP-AR would replace “any monitoring wells deemed necessary”[5]. NRDP agreed with BP-AR on this matter per a September 14, 2018, letter from NRDP to BP-AR[6].

2.3 Waste Haul Road Construction

A haul road to move wastes offsite was constructed by MK Weeden in 2018 from the excavation area to the stockpile location at Montana Resources (MR). The haul road crossed underneath the Patriot Rail bridge, crossed the BNSF rail line, under the Shields Ave bridge, and then onto Montana Resources property where it traveled past their office building and to the stockpile

location. Refer to the Phase 1 and 2A Construction Drawings (Bid Package #1) for location and further details of the haul road construction. Near station 0+75, a bridge was installed to protect the buried natural gas (this was required by Northwestern Energy). This bridge was left in place through all phases of construction and ultimately removed in 2023 once the haul road was reclaimed.

The haul road was built over the top of the existing BNSF BRES cap as shown in Bid Package #1 construction drawings. When the haul road was reclaimed, the fill material was removed, and the cap was reseeded with the ET cover seed mix specified in Bid Package #2. MR's stormwater ditch was also re-established in this area to match pre-construction conditions.

2.4 Demolition

Prior to excavation, the site was cleared and grubbed. The Butte-Silver Bow (BSB) Shops complex was demolished on the south side of Civic Center Road. BSB relocated their shop complex to a location on Beef Trail Road as part of the Parrot Project agreement with BSB. Anything that was left behind by BSB was demolished by ICS in 2021. During demolition, 6 underground storage tanks were uncovered and removed per the project Petroleum Soils Contingency Plan (Appendix B of Bid Package #2).

2.5 Excavation/Backfill

Phase 2A excavation activities began July 2018 on the north side of Civic Center Road after the haul road to MR was constructed. Initial construction activities involved excavation and stockpiling of overburden. WET provided field screening of all excavated materials per the project QAPP[7,8]. Soils were routed according to the screening results. Overburden that did not exceed project action levels for project contaminants arsenic, cadmium, copper, lead, and zinc was used as backfill.

Excavated slag, a Parrot Project waste, was placed in the "Primary Slag Placement Area" shown in Bid Package #1. The existing cellular confinement layer adjacent to the Patriot Rail was left in place and slag was placed over the top of this layer. Competent slag was encountered north of Civic Center Road in Phase 2A. The slag required extensive effort including ripping to make removal possible. No competent slag was encountered south of Civic Center Road. The minimal slag that was encountered south of Civic Center Road was broken in small pieces and mixed with soil that exceeded action levels. This material was routed as waste per the QAPP.

Visible tailings, black clay and any other material that exceeded contaminant action levels were routed to MR as waste. Phase 2A material was dumped at the stockpile location. Phase 2C material was dumped at both the stockpile and placement locations. Refer to **Record Drawing 1-3 (Appendix A)** for the locations of both areas. Waste disposed at the stockpile location was eventually hauled to the placement location by MR.

During Phase 2A excavation activities, removal of additional waste material was needed because of high contaminant concentrations not predicted in the initial modeling of waste below the black clay layer but above groundwater. Sampling efforts were irregular across this section of the excavation floor due to dewatering challenges experienced by the contractor.

The Phase 2C excavation design floor was established using the lower elevation of the bottom of black clay and the seasonal low groundwater level. In areas where the seasonal low groundwater level was below the black clay bottom, excavation continued to the seasonal low groundwater level. For areas where the seasonal low groundwater level was above the black clay bottom, excavation stopped at the black clay bottom.

During excavation activities in the south Civic Center parking lot visible tailings were identified at certain locations along the excavation boundary; as a result, a decision was made to expand the horizontal waste removal footprint from the original design where practicable. The footprint in the south Civic Center parking lot was expanded to remove the buffer between the Civic Center Annex and the design excavation boundary. However, the excavation depth in this expanded footprint was approximately 24-inches (including existing asphalt). This area contained a relatively thin layer (about 2 inches) of visible tailings immediately under the existing asphalt. In addition, the existing asphalt in this area was in poor condition and no longer acting as an impermeable cap to reduce infiltration to underlying wastes. Excavating approximately 24inches allowed for the rebuilding of adequate parking lot subgrade and installation of a new asphalt cap across the entire parking lot. Additionally, the excavation footprint was expanded along the west excavation boundary, north of Civic Center Road.

Clean on-site overburden was the primary/preferred source of backfill for the excavation areas. However, due to a portion of the overburden failing waste criteria and the expansion of the excavation footprint in some areas, the final backfill volume required exceeded the amount of available overburden. During Phase 2C, a backfill source at MRI was identified (Lunchroom Dump). This backfill stockpile was sampled to ensure it met environmental and geotechnical criteria for the project. Sample results met criteria and it was used as a backfill source, with an ongoing sampling program developed to ensure suitability. Sampling continued throughout the Parrot Project while this material was excavated/hauled to ensure it continued to meet project requirements. **Appendix B** includes technical memos detailing the sampling protocols. In addition to overburden and MR backfill, imported pit run gravel was also utilized in the upper portions of the backfill envelope (select sub-base for parking lots and road). That material was imported from Butana Sand and Gravel's gravel pit located in Crackerville (between Butte and Anaconda). All backfill was placed in lifts and compacted according to project specifications.

Several other backfill sources were utilized over the course of the project (in addition to the sources already mentioned). These included fill that the Civic Center utilized for rodeo events and fill from BSB's crusher. The total volume from these sources was less than 10,000 cubic yards. All fill sources were sampled to ensure they met project criteria (environmental and geotechnical).

2.5.1 Dewatering

Groundwater that needed to be removed for waste excavation was highly contaminated. It typically had copper and zinc concentrations in excess of 150,000 ppb and was acidic (pH <4 s.u.)

During Phase 2A, minimal construction dewatering occurred. The contractor utilized a pumping truck to dewater where needed for a majority of the excavation. However, per the design plans, a dewatering sump was installed north of Civic Center Road and a 3”x 6” double wall HDPE pipe was installed from this sump to the discharge location at Montana Resources’ Emergency Pond. This sump and pipeline were then utilized during the interim dewatering phase and Phase 2C construction.

Due to the pause in construction required to allow the BSB shops to be rebuilt at another location, in 2019 an interim dewatering system was installed in the Phase 2A excavation area to remove highly contaminated groundwater encountered during construction. This system involved a series of collector drains and cleanouts that drained to the existing dewatering sump. From the sump, contaminated groundwater was pumped to Montana Resources’ Emergency Pond. Seasonal pumping began in fall of 2019 through the end of 2020.

In 2021, when Phase 2C construction began, the contractor utilized the interim dewatering system for construction dewatering purposes. In addition, the contractor installed perforated pipe extending south along the excavation floor. The perforated pipe was connected to the previously installed interim dewatering system. The contractor laid additional perforated pipe as excavation progressed. The buried infrastructure for the interim dewatering system and the additional perforated pipe placed during Phase 2C excavation was left in place if future dewatering activities were warranted.

2.6 Evapo-Transpiration (ET) Cover System

In areas where it was not feasible to remove all existing waste, the waste was unsaturated by groundwater, and the primary groundwater loading mechanism was infiltration, an ET Cover System was installed to prevent precipitation from infiltrating through the waste and impacting groundwater. Prior to construction, a suitable soil borrow source was identified at the Ueland Ranch located between Rocker and Ramsay, Montana. A borrow source was permitted through Montana DEQ Opencut (Permit #3249) and the soil was imported to the Parrot Project site. The ET Cover System was constructed according to **Record Drawing 11-2 (Appendix A)**. The cover consisted of a synthetic capillary break, approximately 30 inches of ET soil and 6 inches of topsoil. The subgrade within the ET Cover System areas was grubbed and rough graded with a dozer. Then, a Solmax geocomposite (2 layers of 6oz/yd^2 geotextile with a 330 mil geonet core) was placed on top of the subgrade to serve as a capillary break layer. Then, the ET soil was placed in two lifts using a dozer. The final lift of ET soil was ripped prior to topsoil placement to ensure that it wasn’t over-compacted during placement.

2.7 Utilities

A number of existing utilities in Civic Center Road and parking lot areas had to be removed for excavation and were rerouted or reinstalled upon excavation completion. The major impacted utilities included the following: Civic Center Road water main, sanitary sewer in the south Civic Center parking lot, Warren Ave storm main, and buried natural gas and power that served the BSB shops complex. Each utility is further described below.

2.7.1 Water

A new 8" water main was installed under the new Civic Center Road alignment as part of Phase 2C. The new main connected the existing main in the north Civic Center parking lot to the existing main on Walnut St near the intersection with Texas Ave. More details on the water main and associated appurtenances can be seen on **Record Drawing 6-3A and 6-3B (Appendix A)**. The portion of the new main that travels under Silver Bow Creek near the intersection of Texas Ave was installed using a horizontal directional drill to preserve existing remedy.

2.7.2 Sewer

A portion of the existing 12" sanitary sewer main in the south Civic Center parking lot was impacted by the Phase 2C excavation. During excavation of this area, the sanitary sewer was bypass pumped around the site to allow for the removal of the existing main within the excavation footprint. Once excavation was completed, the disturbed portion of the sewer main was replaced (including a new manhole) and bypassing was stopped to restore flow to the main. An existing 4" sewer service from the Civic Center Annex was also impacted. This pipe was taken out of service for several months and replaced once excavation was complete. This service connects to the replaced sanitary manhole in the south Civic Center parking lot. Further details on the sewer replacement can be seen on **Record Drawing 6-6 (Appendix A)**.

2.7.3 Storm

Several portions of the existing Warren Ave storm main were realigned over the course of the project. In addition, new storm water infrastructure was installed in portions of Civic Center Road and the north and south Civic Center parking lots.

The Warren Ave storm main upstream of the Warren Ave Hydrodynamic Device (HDD) was realigned during Phase 2A. The storm main downstream of the HDD was realigned during Phase 2C. The HDD and the diversion structure were not disturbed during excavation or utility installation. As such, tailings/waste was left in place underneath and immediately surrounding these structures.

Further details on the replaced and newly installed stormwater infrastructure can be found on **Record Drawings 6-4, 6-5, and 8-1 through 8-7 (Appendix A)**.

2.7.4 Natural Gas and Power

Upon completion of excavation and backfilling, NRDP contracted with Northwestern Energy to restore natural gas and power services (since the BSB shops complex was served by natural gas and power prior to demolition) for future potential developments on the north and south side of Civic Center Road (interim seeded areas). Primary power and natural gas were installed north of Civic Center Road near the back edge of sidewalk from the west edge of the project to the east end of Civic Center Road as shown on **Record Drawing 1-4 (Appendix A)**. The installed power will be able to serve future developments as well as potential street lighting on Civic Center Road.

2.8 Site Reclamation

Site reclamation efforts included a number of different surface reclamation types. These included permanent vegetative cover, interim vegetative cover, gravel parking, paved parking, and a re-aligned Civic Center Road. The site reclamation efforts are further described below.

2.8.1 Vegetative Cover

The areas depicted on **Record Drawing 11-1 (Appendix A)** were reclaimed with permanent and interim vegetative covers. Both types of covers consisted of 12" of subsoil (ET borrow soil from Ueland Ranch) and 6" of topsoil. Topsoil was seeded, fertilized and mulched in accordance with the Butte Hill Revegetation Specifications in Spring 2023. The Pal 2020 Seed Mix defined in Bid Package #2 was used for both interim and permanent vegetative areas. Most areas were drill seeded. A few small areas were seeded by hand that could not be reached with equipment. The hand seeded areas were seeded in Fall 2023.

A post and pole fence was installed around the perimeter of the interim and permanent vegetative cover areas adjacent to Civic Center Road and the parking lots. Portions of the chain link fence installed during Phase 2A were left in place (along railroad ROW, around ET cover areas and along Shields Avenue) to preserve site security until vegetated areas are better established.

The ET soil borrow source was reclaimed and seeded in the spring of 2023 pursuant to the requirements of Permit #3249. ICS conducted reclamation: a) in accordance with the approved plan of operation; b) as concurrent with operations as feasible; and c) within one year of the cessation of operations.

2.8.2 Parking Lots

Portions of the excavation area consisted of existing asphalt parking for the Civic Center. Site reclamation efforts included replacing any disturbed asphalt and establishing additional gravel parking areas north and south of Civic Center Road. During construction, an agreement was made between NRDP and BSB to eliminate the planned pavement patch in the north parking lot and instead replace additional existing asphalt in the south parking lot. Any disturbed parking areas in the north parking lot were replaced with gravel parking. Gravel parking areas were constructed with 15" of sub-base (pit run gravel) and capped with 6" of asphalt millings. Paved parking areas consisted of 15" of sub-base (pit run gravel), 6" of asphalt millings, and 3" of PG 64-28 polymer modified asphalt.

2.8.3 Civic Center Road

During Phase 2C, the existing Civic Center Road was closed and demolished to allow for excavation of the site. As part of site reclamation, Civic Center Road was realigned (horizontally and vertically), widened and curb/gutter and sidewalk installed along the entire disturbed portion. The new road tied into existing Civic Center Road on the east and west ends of the project. The paving consisted of 4" of PG 58-28 asphalt on top of 6" of base course and 15" of sub-base. Several laydown approaches were installed along the north and south sides of the road to accommodate BSB's redesigned parking lot layouts.

2.9 Butte-Silver Bow Shops

As part of the Parrot Project, on February 20, 2018, BSB and NRDP (on behalf of the Trustee) entered into an agreement to provide for reimbursement to BSB of the costs of relocating and constructing replacement BSB maintenance shops (BSB Shops) in order to allow for the implementation of the Parrot Project. February 20, 2018, *Agreement between the State of Montana Natural Resource Damage Program and the City and County of Butte-Silver Bow*, including November 2020 approval of revised figures). The access portion of this agreement is discussed in Section 7. The agreement included numerous provisions to allow for BSB submittal and NRDP approval of a design for the BSB Shops (referred to as the "Relocation Specifications" in the Agreement). The Agreement was premised on the concept of funding the construction of "like kind, cost, form and function" of the existing BSB Shops.

Throughout the BSB Shops project, BSB reviewed the architectural and engineering designs and provided construction oversight. The State of Montana reviewed the initial architectural and engineering designs, subsequent change orders, and reimbursement requests to ensure that the BSB Shops were being funded in "like kind, cost, form and function" and that the costs were within the State-approved budget.

BSB completed the construction of the shops in 2022 and provided a July 2022 invoice to NRDP (Invoice 32) for the full payment to its architect because the construction was 100% complete and the architect had produced final as-built drawings.

Amount Spent and Budgeted for BSB Shops:

Total amount paid to BSB for the Shops relocation including all construction, land, and staff time was $14,237,482.80, which includes $267,720.75 for land, $76,400.00 BSB staff time, and $13,893,362.05 for the construction, including architecture and engineering (A&E) costs. In the final approved June 2019 budget, The State agreed to fund $12,995.08 for construction, and $1,205,897 for A&E for a total of $14,201,105.

3 As-Built Conditions

In general, construction activities conformed to the design drawings and specifications in Bid Package #1 and Bid Package #2. The two significant deviations from design are highlighted below.

3.1 Contaminated Overburden

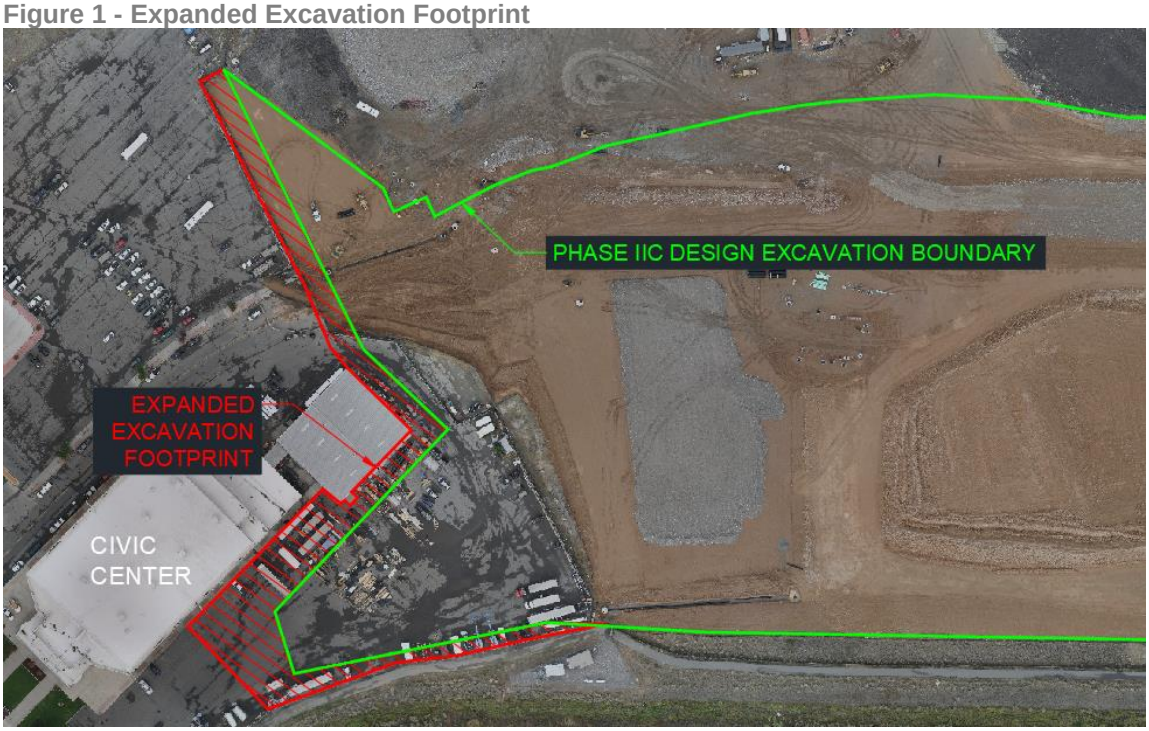
Prior to construction of Phase 2C, lithologic models indicated approximately 375,000 CY of overburden existed within the excavation footprint. During excavation, a significant portion of the excavated overburden failed the numeric criteria that defined Wastee. Per the project QAPP, this contaminated overburden (i.e. Waste) was routed to Montana Resources (MR) along with other Waste. Approximately 110,000 CY of overburden was routed as waste which increased the fill deficit for the project. Rather than importing the additional 110,000 CY deficit from a gravel pit, another backfill source was identified at MR (the "Lunchroom Dump" described above in Section 2.3). The Lunchroom Dump material was a more economical alternative than importing pit run

gravel, and it created schedule efficiencies by allowing the use of off-road trucks and avoided risks associated with approximately 10,000 truck trips over public roads. As such, it became the primary source of imported backfill except for areas that required structural material (parking/road sub-base and base course, etc.).

3.2 Expanded Horizontal Excavation Footprint

During Phase 2C excavation activities, several areas along the western excavation design boundary showed visible tailings in the side wall. NRDP, in conjunction with WET, determined it was appropriate and consistent with the Parrot Amendment to expand the excavation boundary westward in these areas to maximize tailings removal where feasible. Figure 1 below shows the design excavation boundary for Phase 2C (green) and the expanded excavation footprint (red) where additional waste was excavated. The red area north of Civic Center Road was excavated to full depth (below the black clay). The expanded area immediately adjacent to the Annex and south Civic Center parking lot was excavated to a depth of 24". Deeper excavation in this area was not feasible due to building foundation conflicts.

Figure 1 - Expanded Excavation Footprint



4 Quantities of Materials

The quantities of major/significant materials installed/excavated during all phases of the project are summarized below in Table 1.

Table 2: Project Quantities of Materials

Item Description	Quantity	Units
Asphalt Demolition	52,092	SY
Fill		
Overburden	374,852	CY
MR Backfill	182,408	CY
Pit-Run Backfill	30,378	CY
ET Cover and Subsoil	104,291	CY
Topsoil	25,060	CY
Total Fill =	716,989	CY
Waste		
Waste	550,855	CY
Slag	99,390	CY
Total Waste =	650,245	CY
Mulch, Fertilize, and Seed Topsoil	33.6	AC
Geocomposite Capillary Break	755,655	SF
Civic Center Road	1,598	LF
Sidewalk and Curb/Gutter	3,184	LF
Approaches Along Civic Center Road	7	EA
8-inch C900 PVC water pipe	1,908	LF
Fire Hydrants	4	EA
Trenchless Stream Crossing (8-inch HDPE)	382	LF
12-inch Storm Pipe	878	LF
18-inch Storm Pipe	721	LF
24-inch Storm Pipe	934	LF
48-inch Storm Manhole	11	EA
Curb Storm Inlets	6	EA
72-inch Storm Manhole	5	EA
12-inch Sanitary Sewer Pipe	264	LF
48-inch Sewer Manhole	1	EA
Civic Center Asphalt Parking Lot Replacement	12,808	SY
Civic Center Gravel Parking Lot	34,418	SY
Post and Pole Fence	5,085	LF

5 Construction Quality Assurance (QA)

Construction activities were monitored for QA/QC throughout the project. WET provided an onsite resident project representative (RPR) during all phases of the project. The RPR took daily construction photos and completed daily construction logs. Construction photos and logs were submitted to NRDP in an electronic format and are available upon request. During excavation activities, WET provided an onsite team of soil samplers to screen soils and route them appropriately per the project QAPP. This process is further described in section 5.1. WET

collected as-built survey data throughout the project and provided grade checks as needed for the Contractor to ensure excavation and backfill was completed to the lines and grades in the design drawings. The contractor was responsible for providing QC compaction testing (density and moisture) for all backfill materials. Compaction testing results were submitted to NRDP in an electronic format and are available upon request.

5.1 Contaminant Sampling

The Parrot Project defined Waste as the products or byproducts of historic hard rock mining, placer mining, and smelting operations including but not limited to mine tailings, contaminated waste rock, contaminated organic clay, and contaminated alluvium as determined by the Engineer in the field. Native soils/overburden mixed with or contaminated by tailings were considered impacted soils and classified as Waste if it exceeded the numeric criteria in Table 3.

Table 3: Soil Screening Pass/Fail Criteria for Waste Removal

Constituent	Failure Criteria (mg/Kg)	XRF Failure Criteria (mg/Kg)	XRF Ceiling Criteria (mg/Kg)
Arsenic	200	>241	Any single analyte above 5,000 mg/kg
Cadmium	20	Zinc >3020	
Copper	1,000	>1,240	
Lead	1,000	>1,090	
Zinc	1,000	>1,330	

Note that if a sample failed the screening criteria (as shown in Table 3) for a single analyte, it was classified as waste.

It should be noted that mercury has been considered a contaminant at other Butte CERCLA sites because elevated concentrations found, however concentrations in soils samples collected from the Parrot Project are generally all very low (generally below the method detection limits (QAPP, 2016 and Tetra Tech, 2015).

Waste within the lithological horizons was identified during the design phase using a lithological model derived from historical and recent borehole data. The design model was then used to develop initial volumes, grades, and removal elevations for bidding and planning purposes. However, it is common with mine waste removal projects that the actual lithology in the field over a large area such as the Parrot Project varies substantially from the model. As a result, a soil screening procedure was developed for the Parrot Project and refined after Phase 2A. The Phase 2A removal activities (north of Civic Center Road) were completed in 2018 under the original *Butte Area One, Parrot Tailings Removal – Construction Management Quality Assurance Project Plan* (QAPP), dated March 2018[7]. The Phase 2B and 2C removal activities were completed in 2022-2023 under the revised *Butte Area One, Parrot Tailings Waste Removal Project (Revision 3 – Final, Updated Phase 2B, 2C, 3) – Construction Management Quality Assurance Project Plan (QAPP),* dated October 2020[8]. These project plans ensured waste was removed and clean overburden was not cross-contaminated during construction activities.

For the Parrot Project, excavation monitoring and extensive waste removal verification sampling was performed using various approaches depending on the work sequence(s) outlined in the excavation plan. The approaches identified in the Parrot Project QAPPs included collection of samples during active excavation, sampling of stockpiles material, and/or in-situ measurements of soil. Previous investigations at the Parrot Project site revealed that the subsurface lithology is a blend of waste types, and the vertical distribution of the various waste forms was not uniform. To ensure sample flexibility, opportunistic samples (grab samples) were also utilized to aid in materials characterization. The general approaches outlined in the Parrot Project QAPPs were implemented on-site and are described in detail within the August 30, 2021, technical memo titled *Parrot Tailings Waste Removal Criteria* provided in **Appendix B**.

The materials screening procedure included the acquisition of field and laboratory XRF data from excavation spoils of the various lithological horizons to identify the horizon boundaries and to support the segregation of clean backfill from waste. The materials screening procedure utilized in-situ field portable XRF measurements to determine whether sampling media was above or below Waste or other action levels. Confirmation samples of the in-situ field measurements were collected, processed, and analyzed by performing field portable XRF screening level analysis. Together, project data identified which horizons represented non-waste material that was segregated and used as backfill, and where the waste horizons were located. This was accomplished by acquiring field XRF data at these interfaces and correlating it with changes in soil horizons (color/texture). Using in-situ field data and visual evidence of soil color/texture changes identified the boundary where soils were segregated as backfill, slag, and waste. Robust field XRF soil screening throughout the excavation and segregation process aided in confirming waste was not used as backfill. In-situ field measurements identified contaminated overburden material that lacked visual or textural cues typical of the underlying waste material and promoted real time materials routing. In-situ field measurements were also used to confirm that the excavation had reached its vertical limit when the uncontaminated alluvium horizon or groundwater had been reached and the maximum amount of waste material has been removed.

5.1.1 Phase 2A

A summary of the Phase 2A (north of Civic Center Road) Field Portable XRF confirmation sampling effort is provided below, and the analytical data is provided in **Appendix C1**. Prior to major excavation activities, 21 samples were collected at various depths from four excavated test pits and an additional 20 samples of surface soil were collected and sent for laboratory XRF analysis. These samples aided in characterizing site surface soils and confirmed elevations of various lithological horizons. During major excavation activities, 304 samples were processed and screened using the field portable XRF. To comply with quality control requirements specified in the QAPP, 29 field portable XRF samples were sent for laboratory analysis to ensure the field portable XRF unit was accurately and consistently reporting soil contaminant readings. The laboratory analytical results associated with Phase 2A are provided in **Appendix C2** with field portable XRF and laboratory XRF data comparisons provided in the Phase 2A tabular data (**Appendix C1**). Additionally, 778 in-situ soil samples were collected and recorded to augment the soil screening procedures which provided additional analytical data to inform the soil routing process. Field Portable XRF in-situ sample data for Phase 2A is provided in **Appendix C3**.

5.1.2 Parrot Project Overburden Import (Between Phase 2A and Phase 2C)

Between Phase 2A and Phase 2C, fill material was imported to augment the overburden that was found to be above action levels and routed as waste material during Phase 2A. Parrot Project import samples consisted of 35 processed and screened samples using the field portable XRF, of which, three of these samples were sent for laboratory analysis to satisfy quality control requirements. An additional 15 samples were analyzed to characterize the soils contaminant concentrations within 10 Geoprobe borings which aided in identifying various lithological horizons within Phase 2C. These sample results and associated laboratory data are provided in **Appendix C1**. Fifty-seven (57) additional Field Portable XRF in-situ soil samples were collected and recorded during the overburden import process with the analytical data provided in **Appendix C3.**

5.1.3 Phase 2C

A summary of the Phase 2C (south of Civic Center Road) Field Portable XRF confirmation sampling effort is provided below and the analytical data is provided in **Appendix C4.** During major excavation activities, 1458 samples were processed and screened using the field portable XRF. To comply with quality control requirements specified in the QAPP, 74 field portable XRF calibration verification samples were sent for laboratory analysis along with the required quality control samples associated with field duplicates, blanks, and Standard Reference Materials (SRMs). The laboratory analytical results associated with Phase 2C are provided in **Appendix C5** with field portable XRF and laboratory XRF data comparisons provided in the Phase 2C tabular data (**Appendix C4**). Additionally, 125 in-situ soil samples were collected and recorded to augment the soil screening procedures which provided additional analytical data to inform the soil routing process. Field Portable XRF in-situ sample data for Phase 2C is provided in **Appendix C6.**

5.1.4 Montana Resources (MR) Lunchroom Dump Borrow Material

During excavation activities associated with Phase 2C, soil screening of the overburden material identified large quantities of impacted overburden that contained soil contaminant concentrations above actions levels; therefore these materials were routed and disposed of as waste material. This resulted in the need for additional off-site overburden. The Montana Resources (MR) Lunchroom Dump Borrow area was identified as an appropriate source and field portable XRF screening samples were collected, processed, and analyzed to ensure that borrow material met the numeric criteria for fill outlined in the QAPP. A modified sampling plan for the Lunchroom Dump Borrow Site was developed and is provided in **Appendix B**. A total of 176 samples were collected at this borrow site, samples were collected and analyzed to ensure material hauled and placed within the Parrot Project excavation met numeric fill criteria. The field portable XRF analytical data for the Lunchroom Dump Borrow Site is provided within the Phase 2C tabular data contained in **Appendix C4**.

5.1.5 Floor Samples – Phase 2A & Phase 2C

Following the removal of waste materials where the excavation had reached the numeric criteria or vertical elevation limit and the excavation was properly dewatered, the footprint of the excavation area was divided into 100-ft by 50-ft sampling components and within each component, eight evenly spaced subsamples were created using ArcGIS software. The eight subsamples within each grid were combined into a single composite sample that underwent

preparation, processing, and field XRF analysis. During sample collection, field personnel visually inspected the excavation floor for waste left in place. If any subsamples contained black clay material, or it was evident that the alluvial sediments had not been reached, the area was over excavated until all visible waste was removed.

Portions of Phase 2A excavation were difficult for the Contractor to dewater. This resulted in inconsistent floor sample grid spacing and required sample methodology modifications to ensure sampler safety.

The Floor Sample Result Figure and associated field portable XRF analytical data are provided in **Appendix C7**. The data presented within **Appendix C7** is a subset of the field portable XRF data screening data provided in **Appendix C1** (Phase 2A) and **Appendix C4** (Phase 2C). There were a total of 191 floor samples collected within Phase 2A & 2C; 80 samples were below action levels and 111 samples contained elevated contaminant concentrations for at least one of the five Constituents of Concern (CoC). For Phase 2C, The sample areas that were above actions levels were typically located at the design excavation floor within the alluvium lithological horizon; therefore, waste was not further pursued. Refer to section 2.5 above for how the excavation floor was established.

6 Health and Safety

The nature and location of this project required health and safety considerations to be a top priority throughout all phases to protect the health and safety of the contractor and the general public. Contract documents required the contractor to prepare and submit a site-specific Health and Safety Plan (HASP). This plan and contract documents addressed coordination requirements between the contractor and BSNF Railway Company and Montana Resources in accordance with the respective access agreements. Communication and coordination between all involved parties was paramount throughout the project. The project was successfully completed without any worker injuries.

Fugitive dust was another significant health and safety consideration throughout the project. The contractor was required to provide adequate dust control throughout the construction phases of the project. These efforts included multiple water trucks on-site, frequent water truck usage in excavation areas and haul roads, and a citizen call-in line to report dust concerns. A mister system was also utilized during excavation to minimize dust and prevent it from leaving the site. Dust monitoring data was collected during Phase 2A and did not show any elevated dust concentrations.

7 Access Agreement Closeout

The Parrot Project was governed by three access agreements. The pertinent close-out requirements are provided below.

BNSF Railway Company Access Agreement (May 1, 2018, *Agreement for Temporary Private Crossings, Haul Road, Two Spur Roads, and Crossing Approaches, Contract No. 16-54773, under BF82869*, including 2021 Modification 1):

- Paragraph 21: "Upon the State's determination of the completion of the State's work on the Premises but no later than October 30, 2023, the State shall remove the haul and spur roads and any related materials from the BNSF right-of-way at the State's sole cost, unless the Parties agree otherwise."
    - ICS removed the haul and spur roads and any related materials from the BNSF right-of-way by October 30, 2023.
- Paragraph 2: "…Should any fencing or signage need to be temporarily removed or relocated to accommodate the roads and Crossing designs approved by BNSF, the State's contractor will coordinate with BNSF to minimize any impact on railroad operations. Unless the Parties otherwise agree, any fencing or signage that is removed or relocated must be returned to its original location after completion of the State's work on the Premises or the termination of this Agreement, whichever comes first, and must be rebuilt to as good or better quality than the fence or sign removed."
    - Where fencing previously existed, it was put back in the same location and was re-built to as good or better quality. NRDP's contractor installed new fencing along the ET cover areas that was not previously there per the design drawings. The contractor did modify the fencing from design in one location where we moved it farther away from the railroad. WET emailed Brant Pierson (BNSF, Butte contact) on July 5, 2023, to gain his approval and he agreed to the changes on July 10, 2023, in an email.
- Exhibit B, 1.03.09: "The Contractor upon the State's determination of completion of the work covered by this Agreement, but no later than October 30, 2023, must promptly remove from the Railway's Premises all of Contractor's tools, equipment, implements and other materials, whether brought upon Premises by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Premises to be left in the same condition it was in prior to Contractor's work on the Premises or a condition acceptable to the Railway's representative."
    - ICS removed all tools and other implements and left the Premises in a condition acceptable to BNSF.

Montana Resources Agreement (December 13, 2016, *Agreement Between Montana Resources, LLP, and the State of Montana through the Natural Resource Damage Program Regarding Access and Placement of Parrot Tailings*, including Modifications 1-4 from 2017 through 2020):

- Section G (as modified by Mod 4), REMOVAL OF IMPROVEMENTS: "Within one hundred and twenty (120) days of the State's completion of placement of Parrot Tailings at the Stockpile Location or by October 1, 2023, whichever occurs first, the State, unless otherwise requested in writing by MR, shall at its sole cost, remove all roads, infrastructure, and any improvements it has installed related to the construction of the haul road on MR Property and the Construction Dewatering Water Access Points on the Mine Permitted Area and shall return the haul road on MR Property and the Construction Dewatering Water Access Points to the condition they were in prior to the State's activities."
    - ICS removed all roads, infrastructure, and improvements on the MR Property and returned everything to the condition it was prior to the State's activities.
- Mod 4, Revised Exhibit B: "Removal of Stockpile Haul Road: **"**Within the Mine Permitted Area the State shall remove the Stockpile Haul Road and restore the property to the original contours prior to October 1, 2023."

  - ICS removed the Stockpile Haul Road and returned the property to its original contours.
- Mod 4, Revised Exhibit B: Pipe Removal: **"**On or before October 1, 2023, the State shall remove any pipes and infrastructure it installs and restore all areas disturbed by the transportation and delivery of Construction Dewatering Water to MR and restore the Construction Dewatering Access Points to their original condition prior to the State's use."
  - ICS removed all pipes and infrastructure and returned it to the original condition.

- Section D.5 (including Mod 4), Stockpile Location Removal: "Within one hundred and sixty (160) days of the completion of the State's transport and placement of Parrot Tailings at the Stockpile Location, or by October 1, 2023, whichever occurs first, MR shall at its sole cost complete removal and relocation of the Parrot Tailings from the Stockpile Location in a manner consistent with its MMRA Permits."

- **Last report for 2023--Section I, RECORDS.** "The State shall maintain records of: (i) the volume of all Parrot Tailings transported across MR Property and placed at the Stockpile Location and the Placement Location; (ii) the amount, date and location of all Construction Dewatering Water delivered to the Construction Dewatering Access Points; (iii) the vehicle miles traveled by the State, Contractor(s) and Subcontractor(s) on the Mine Permitted Area; and (iv) all documentation associated with storm water management and discharge, including requirements of a general permit for storm water discharge related to construction activity on the Mine Permitted Area, and shall on a monthly basis for (i) and (ii) and annual basis for (iii) and (iv), provide records of such to MR."
  - NRDP has copies of the above records.

Butte-Silver Bow Agreement (February 20, 2018, *Agreement between the State of Montana Natural Resource Damage Program and the City and County of Butte-Silver Bow*, including November 2020 approval of revised figures):

- Section 10: "Property End-State**: "**As Removal Specifications for each phase of the Removal Project are finalized, the parties shall agree in writing to any changes to the final property end state as described and shown on Exhibit 2."
- BSB approved the revised figures for the ICS Contract 700157, as a "Construction Plan Revision" in November 2020.
- Section 14: State Access to the Parrot Site: "At the time that portion of the Parrot Site is returned to BSB, it shall be in the condition specified in the final property end state plan as required in the Removal Specifications, except that the haul road may temporarily remain after construction upon agreement of the Parties, with related access. After the expiration of the thirty-day notice period, NRDP shall have no further right of use and shall have no further responsibility to fence, patrol, or otherwise take actions on that portion of the Parrot Site."

NRDP completed the final property end state as shown in the November 2020 BSB-approved figures for the NRDP's Contract 700157.

8 Operation and Maintenance

BSB owns the Parrot Project site, including the excavation and evapotranspiration cover (ET cover) areas, as well as parking areas for the Butte Civic Center. NRDP and BSB completed the

project with an access agreement that defined responsibilities of each part during construction and a subsequent maintenance agreement. According to the 2018 *Agreement Regarding NRDP Operation and Maintenance Activities for the ET Cover Property*, NRDP must maintain the ET cover for five to seven years (until the ET cover is functioning as intended) and until NRDP agrees with BSB on a funding agreement for maintaining the ET cover.

BSB has agreed not to interfere with or adversely affect the ET cover and has agreed to place an institutional control to avoid adversely affecting the ET cover. NRDP anticipates using a commemorative sign that documents the Parrot Project and outlines the location of the ET Cover (and restrictions required to protect it) would likely be a protective institutional control . Also, if NRDP uses a contractor to perform operation and maintenance of the ET cover, NRDP must add BSB as an additional insured and provide them with certificates of insurance.

NRDP and BSB will negotiate a subsequent operation and maintenance agreement that will establish funding for post-construction maintenance requirements. This will primarily consist of vegetative cover maintenance and other minor general site maintenance tasks. Once the vegetation is well established, site maintenance should be minimal. Following a three to five -year period, it is anticipated that maintenance requirements will be handled by the BSB Reclamation Department.

BSB will be responsible for implementing appropriate future development restrictions for the project area.

9 References

1. Montana Natural Resource Damage Program, December 27, 2015 and September 20, 2019. Butte Area One Restoration Plan Amendment Parrot Tailings Waste Removal.
2. Montana Natural Resource Damage Program, May 2020. Draft Final – Butte Area One Parrot Performance Monitoring Program Conceptual Site Model Report
3. Montana Natural Resource Damage Program, 2015. Draft 2015 Data Gaps Site Investigation Technical Memorandum, Parrot Tailings Area, Butte Area One, Butte, Montana. Prepared by Tetra Tech, Inc. for the Montana Department of Justice, Natural Resources Damage Program. November 24, 2015.
4. Tetra Tech, 2016. Data Gap Investigation- Silver Bow Creek and Blacktail Creek Corridors, memo to NRDP.
5. Montana Natural Resource Damage Program, 2019. Butte Area One – Parrot Tailings Performance Monitoring Program, Second Quarter 2018 Third Quarter 2018 Fourth Quarter 2018 First Quarter 2019 Data Summary Report. Prepared by Water and Environmental Technologies, Inc. for the Montana Department of Justice, Natural Resources Damage Program. March 2019.
6. Montana Natural Resource Damage Program, 2018. Butte Area One – Parrot Tailings Performance Monitoring Program, Fourth Quarter 2017 First Quarter 2018 Data Summary Report. Prepared by Water and Environmental Technologies, Inc. for the Montana Department of Justice, Natural Resources Damage Program. May 2018.

7. Montana Natural Resource Damage Program, 2017. Parrot Tailings Waste Removal Performance Monitoring Work Plan. Prepared by Water and Environmental Technologies, Inc. for the Montana Department of Justice, Natural Resources Damage Program. September 18, 2017.
8. Montana Natural Resource Damage Program, March 2018. Project Manual – Butte Area One Parrot Tailings Removal Bid Package #1 – Phase I & IIA.
9. Montana Natural Resource Damage Program, November 2020. Project Manual – Parrot Tailings Waste Removal Project Phases IIB, IIC, and III.
10. U.S. Environmental Protection Agency, February 12, 2018. "Re: Comment letter for Silver Bow Creek/Butte Area NPL Site Butte Priority Soils Operable Unit Request for Change: Monitor Parrot Tailings Construction Project (dated January 16, 2018)".
11. Atlantic Richfield Company, July 27, 2018. "RE: Follow-Up Communication to the July 11 Parrot Tailings Mine Waste Removal, Groundwater Monitoring Well Abandonment Meeting".
12. Montana Natural Resource Damage Program, September 14, 2018. "Re: Response to AR 'Follow-Up Communication to the July 11, 2018 Parrot Tailings Mine Waste Removal, Groundwater Monitoring Well Abandonment Meeting" Letter dated July 27, 2018".
13. Montana Department of Justice Natural Resource Damage Program, March 2018. Butte Area One Parrot Tailings Waste Removal Project Construction Management Quality Assurance Project Plan (QAPP).
14. Montana Department of Justice Natural Resource Damage Program, October 2020. Butte Area One Parrot Tailings Waste Removal Project Construction Management Quality Assurance Project Plan (QAPP). Revision 3 – Final, Updated Phase IIB, IIC, and III.

Appendix A—Record Drawings

BUTTE AREA ONE
PARROT TAILINGS WASTE REMOVAL PROJECT

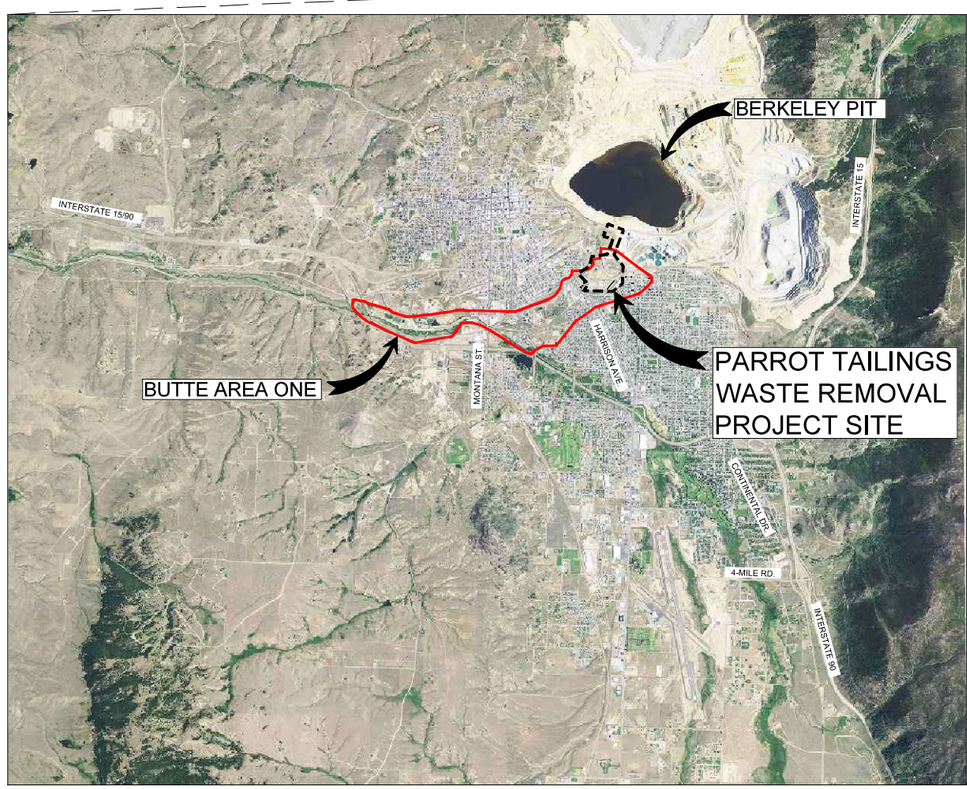
SILVER BOW COUNTY, MONTANA

FINAL RECORD DRAWINGS

MARCH 2024

LOCATION MAP

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

OWNER:

NATURAL RESOURCE DAMAGE PROGRAM
1720 9TH AVENUE
HELENA, MT 59620-1425
CONTRACT #700095

Montana Department of Justice
Natural Resource Damage Program

ENGINEER:

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Digitally signed by Stephen Frazee
Location: Butte, MT
Reason: As-Builts
Date: 2024.06.20 10:42:54-06'00'

STEPHEN WILLIAM FRAZEE NO. 51136 PE

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Sheet No.	Sheet Title
1-1	TITLE, LOCATION AND VICINITY MAP
1-2	INDEX TO DRAWINGS, CIVIL LEGENDS AND NOTES
1-3	PARROT TAILINGS REMOVAL PROJECT SITE MAP
1-4	CIVIL SITE LAYOUT
3-1	WASTE EXCAVATION AREA
3-2	EXCAVATION AREA CROSS SECTION A-A'
3-3	EXCAVATION AREA CROSS SECTION C-C'
3-4	EXCAVATION AREA CROSS SECTION D-D'
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3-6	FINISHED GRADE SURFACE GRADING PLAN
5-2	INTERIM DEWATERING SYSTEM EXTENSTION PLAN
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8-2	PARKING LOT STORMWATER PLAN & PROFILE (1 of 6)
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10-3	ET COVER AREA CROSS SECTION F-F'
10-4	ET COVER AREA CROS SECTIONS G-G' AND H-H'
11-1	RECLAMATION PLAN
11-2	SOIL COVER AND ROAD SECTION DETAILS

LEGEND

NG NG	NATURAL GAS LINE
W W WA WA	WATER LINES
SLWA	SILVER LAKE WATER LINE
E14W	14" HDPE SILVER BOW CREEK RE-WATER LINE
SD SD STM STM	STORM DRAIN LINES
UND	DEWATERING SUBDRAIN LINE
ES SAN SAN	SANITARY SEWER LINES
SUB	BPSOU SUBDRAIN LINE
EFF	HORSESHOE BEND EFFLUENT LINE
C	COMMUNICATIONS LINE
OHP	OVERHEAD POWER
E	BURIED ELECTRIC
	CHAINLINK FENCE
X X	WIRE FENCE
	WOOD RAIL FENCE
	GUARDRAIL
	RAILROAD TRACKS
5490 5489	EXISTING CONDITIONS CONTOURS
5490 5489	FINISHED TOPOGRAPHY CONTOURS

SURVEY NOTES:

1. VERTICAL DATUM: NAVD88.
2. HORIZONTAL DATUM: MONTANA STATE PLANE NAD83.
3. COORDINATES ARE SHOWN IN UNITS OF INTERNATIONAL FEET UNLESS INDICATED OTHERWISE.
4. UTILITIES SHOWN ARE BASED ON AVAILABLE RECORD DRAWINGS AND UTILITIES LOCATED BY ELECTRONIC METHOD IN THE FIELD. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE ACCURACY OF LOCATIONS PROVIDED OR THAT ALL UTILITIES ARE SHOWN. ALL UTILITY LOCATIONS ARE SUBJECT TO THE ACCURACY OF THE LOCATION METHOD, AND SUBJECT TO RELOCATION PRIOR TO ANY CONSTRUCTION ACTIVITIES. LIMITED EXCAVATION WAS COMPLETED TO VERIFY UTILITIES. THESE LOCATIONS ARE SHOWN ON THE PLAN SHEETS.
5. PARCEL LINES WITHIN PARROT TAILINGS WASTE REMOVAL PROJECT SITE ARE FROM RECORDS, DEEDS AND FIELD LOCATIONS.

GENERAL NOTES:

1. SCALES AND ORIENTATIONS TO NORTH VARY FROM SHEET TO SHEET.
2. EXISTING STORM WATER HYDRODYNAMIC DEVICES PROTECTED BY CONTRACTOR.
3. SUPERFUND REMEDY INFRASTRUCTURE PROTECTED BY CONTRACTOR.

RECORD

No	Description	Date	Drawn By

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INDEX TO DRAWINGS, CIVIL LEGEND AND NOTES

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LOCATION: BUTTE, MONTANA
FILE NO. SC-TI01-NRDPM14.dwg

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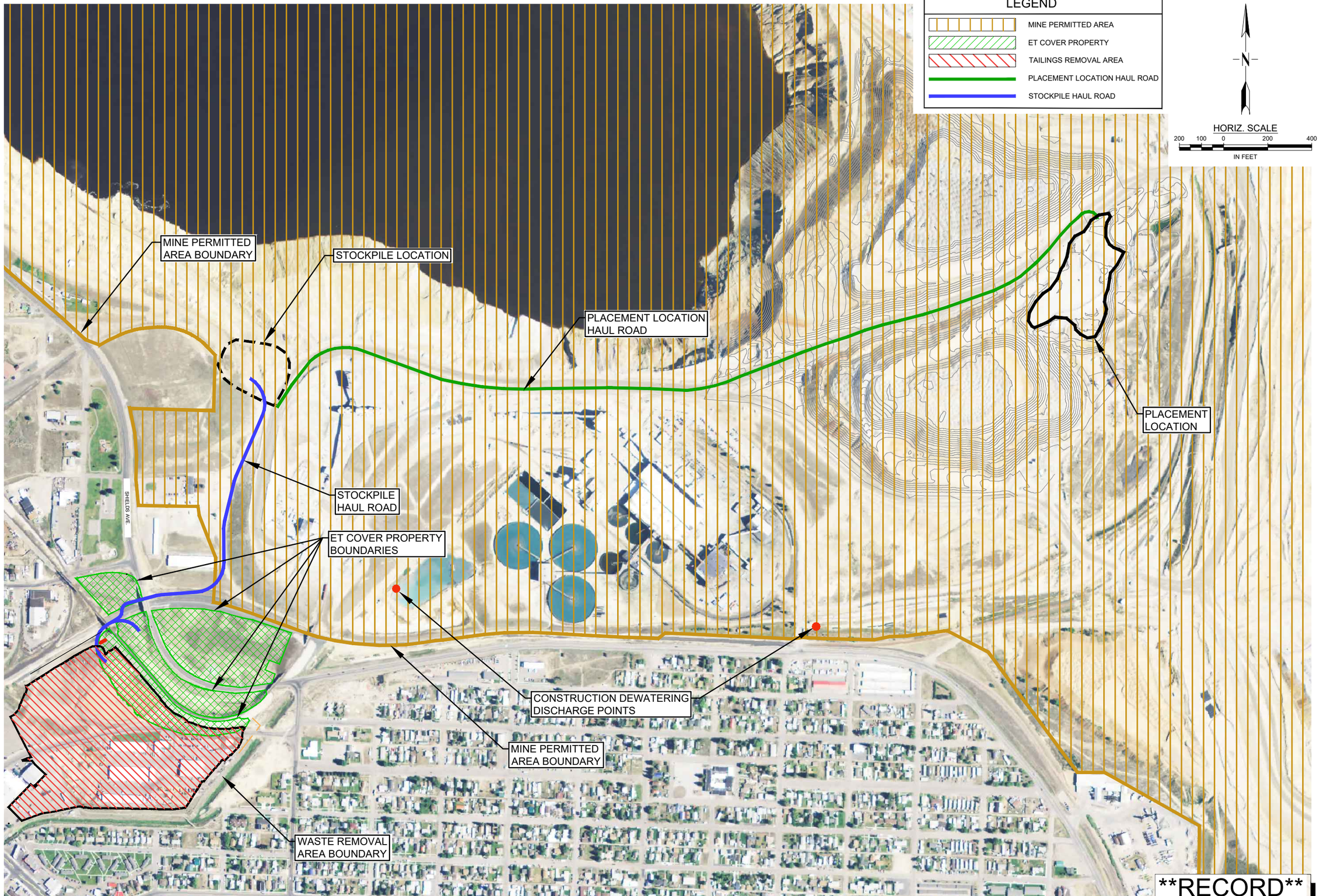

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PARROT TAILINGS REMOVAL PROJECT SITE MAP

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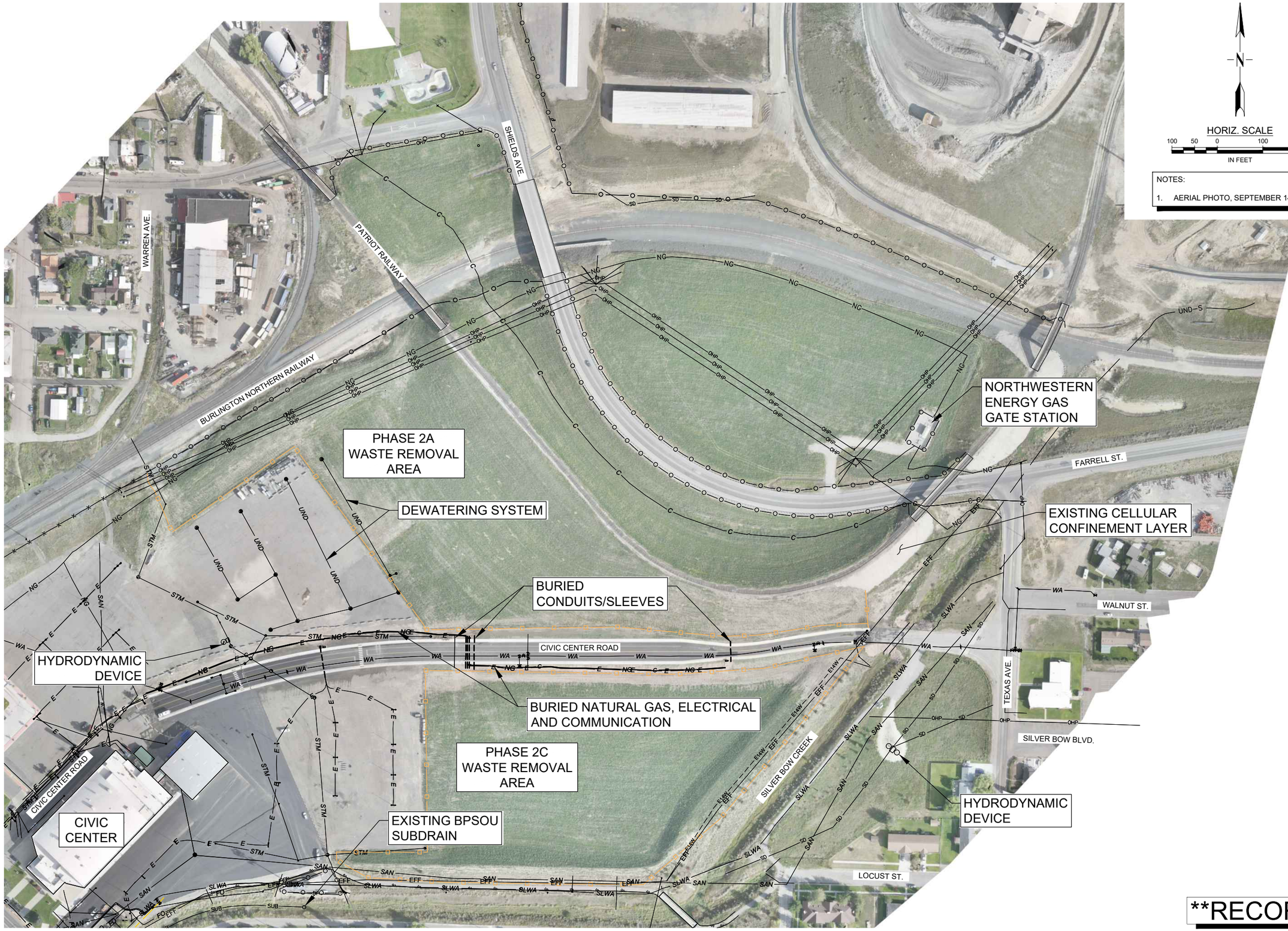

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100 50 0 100 200

IN FEET

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CIVIL SITE LAYOUT

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
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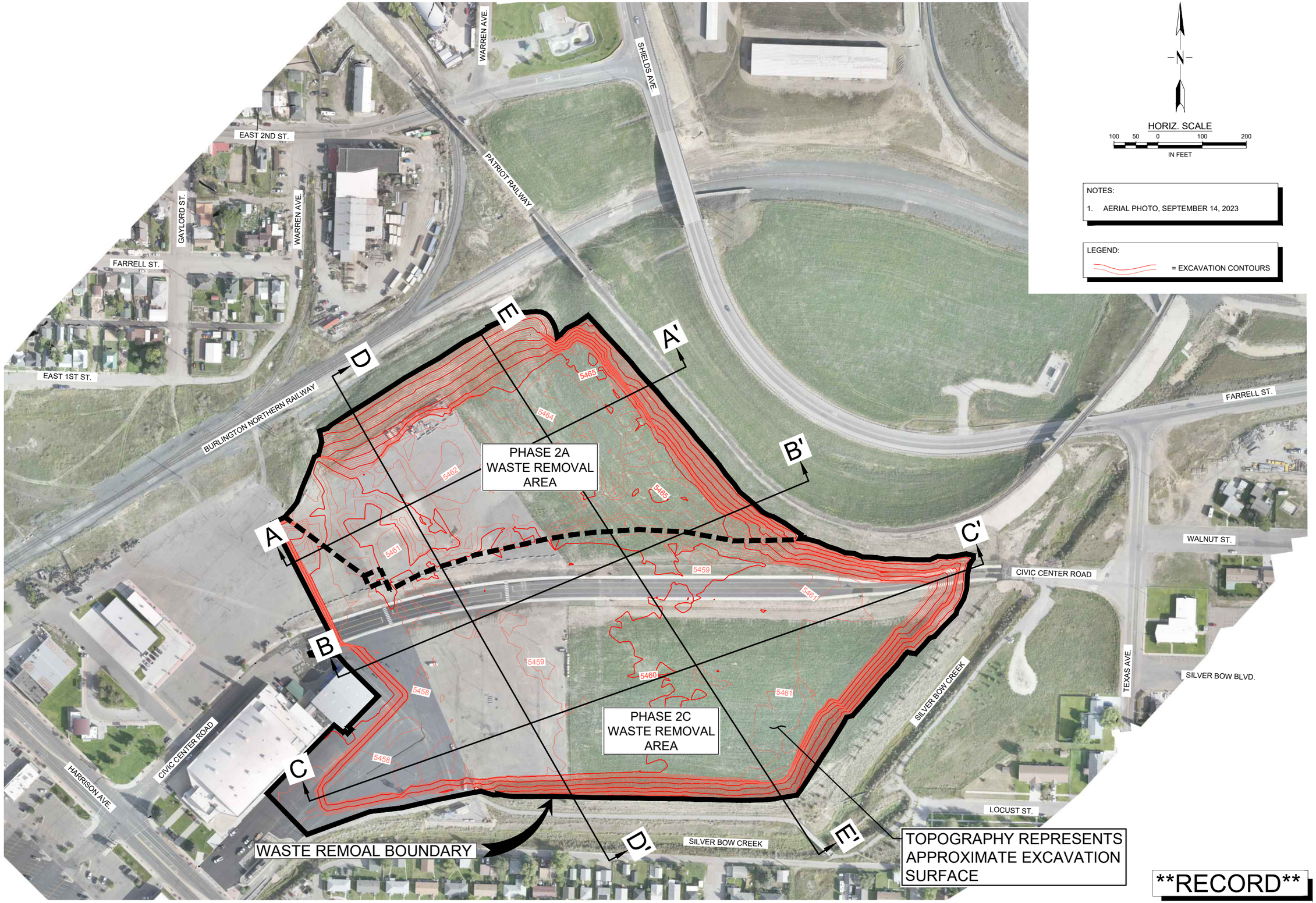

N

HORIZ. SCALE

100 50 0 100 200

IN FEET

NOTES:

1. AERIAL PHOTO, SEPTEMBER 14, 2023

LEGEND:

= EXCAVATION CONTOURS

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MONTANA
STEPHEN WILLIAM FRAZEE
No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

WASTE EXCAVATION AREA

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-TI01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
3-1

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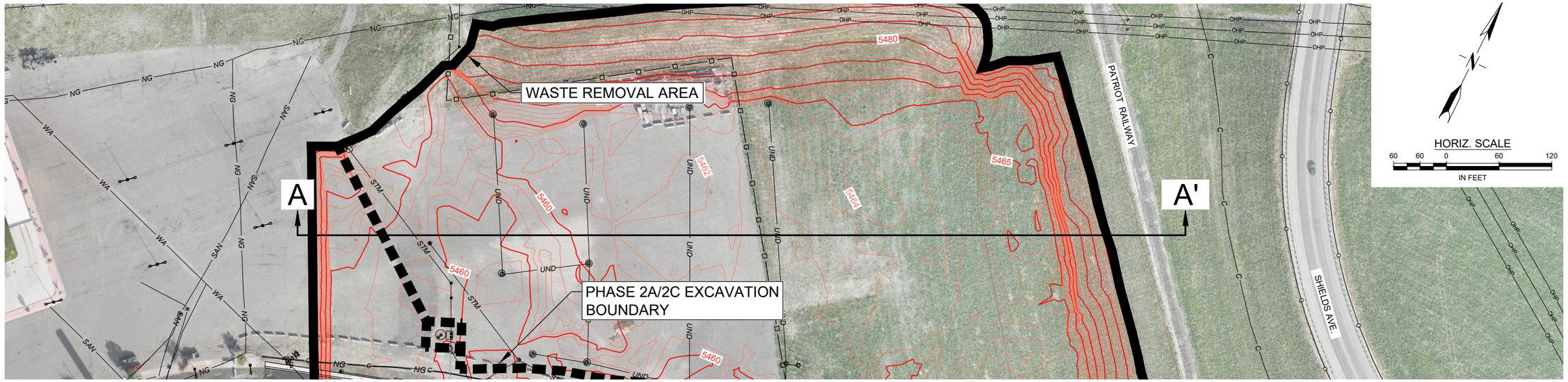

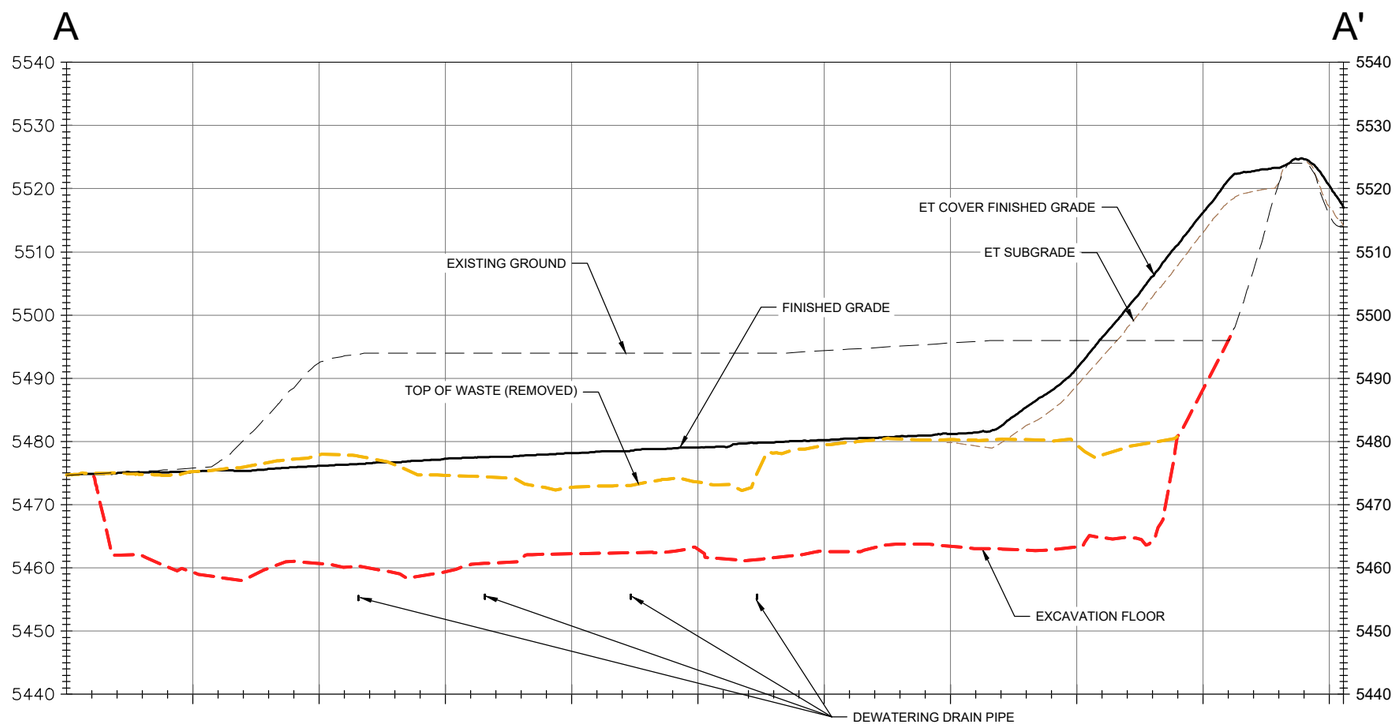

UTILITY NOTE:

1. UTILITIES NOT SHOWN IN CROSS SECTIONS.

LEGEND

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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

EXCAVATION AREA CROSS SECTION A-A'

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM02-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
3-2

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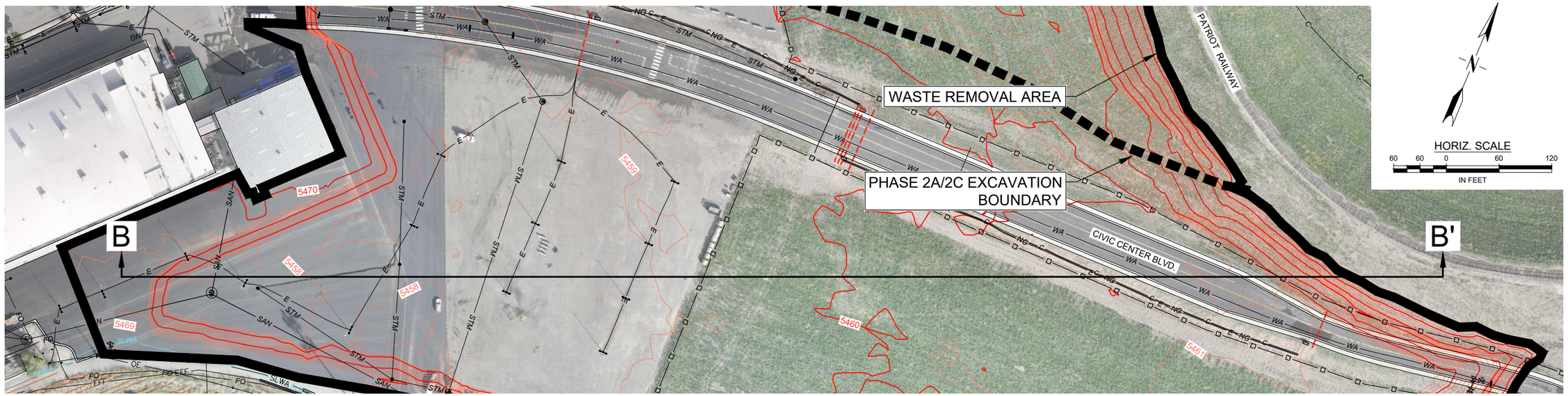

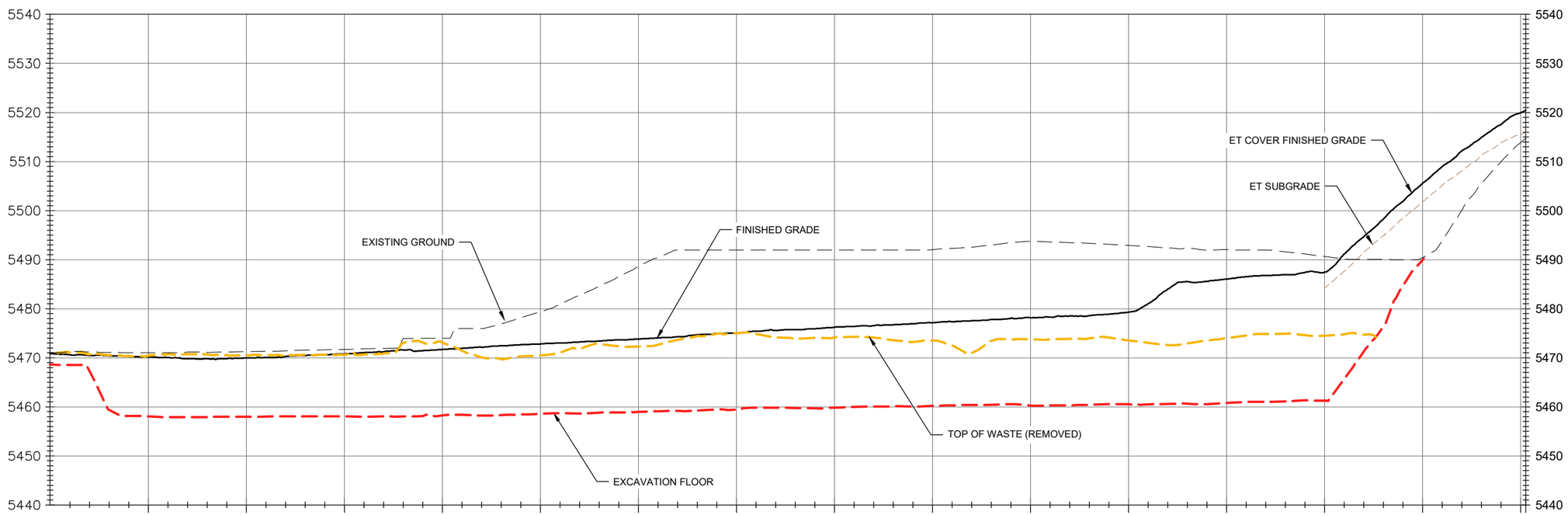

UTILITY NOTE:

1. UTILITIES NOT SHOWN IN CROSS SECTIONS.

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No. 51136 PE
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EXCAVATION AREA CROSS SECTION B-B'

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM02-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
3-3

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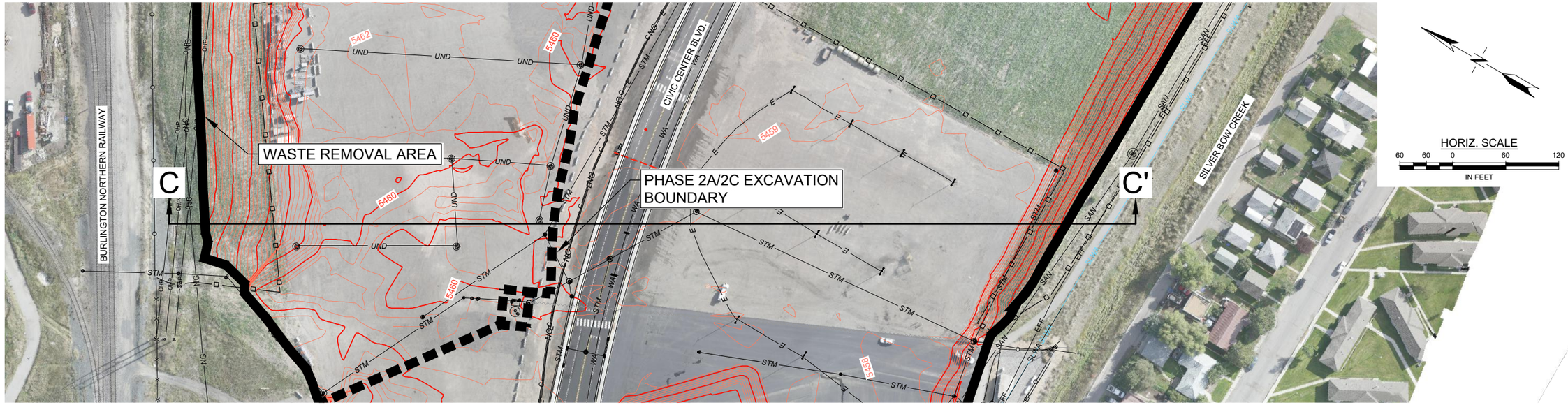

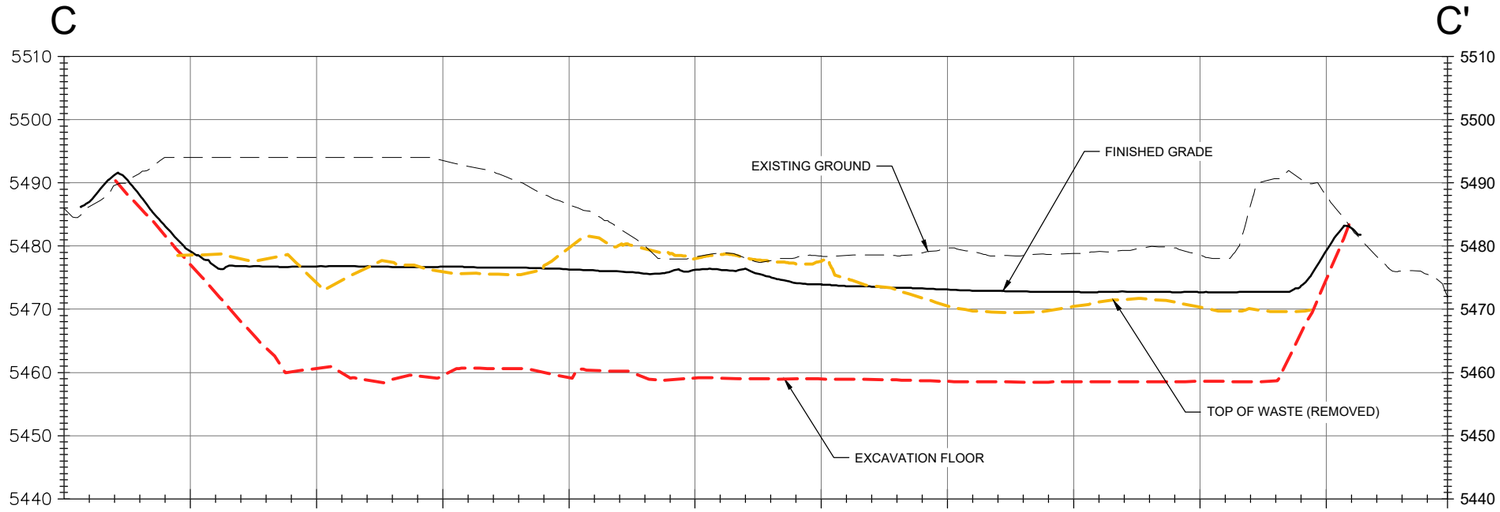

UTILITY NOTE:

1. UTILITIES NOT SHOWN IN CROSS SECTIONS.

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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

EXCAVATION AREA CROSS SECTION C-C'

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM02-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
3-4

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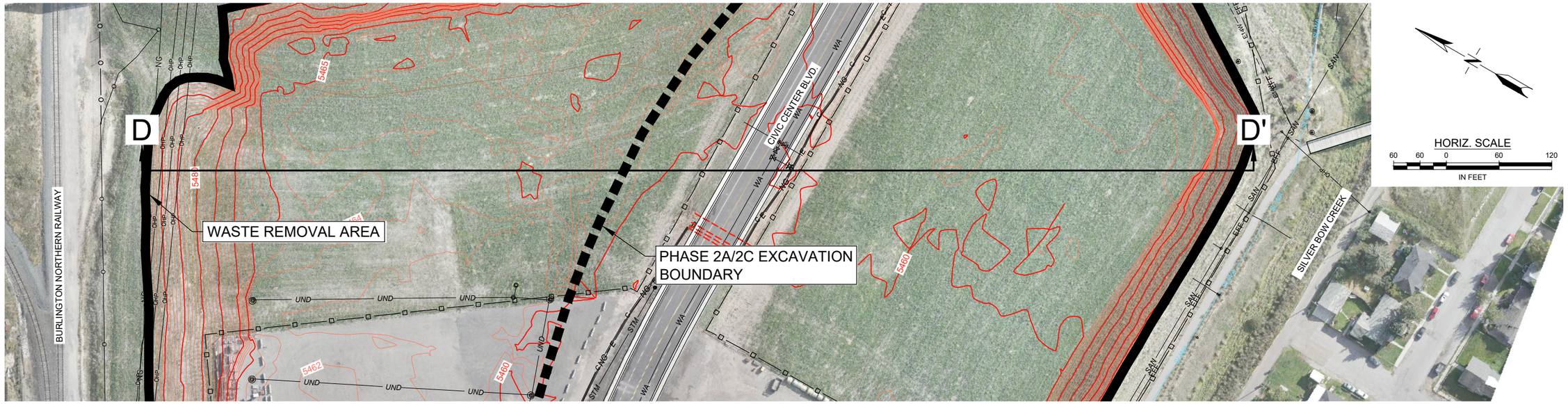

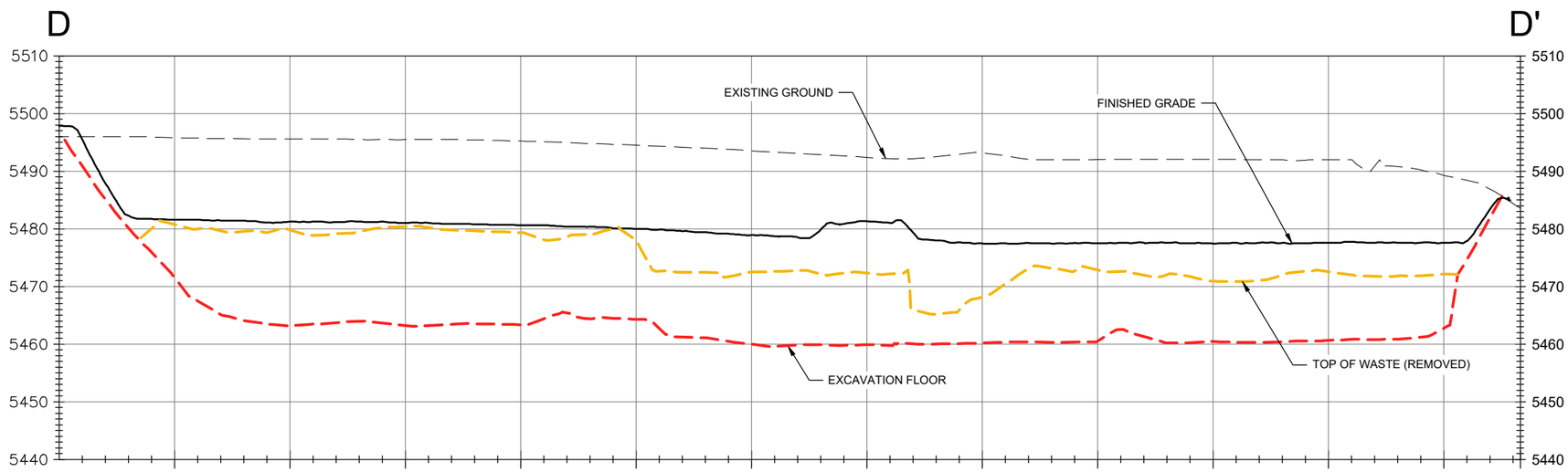

UTILITY NOTE:

1. UTILITIES NOT SHOWN IN CROSS SECTIONS.

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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

ET COVER AREA CROSS SECTION D-D'

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM02-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
3-5

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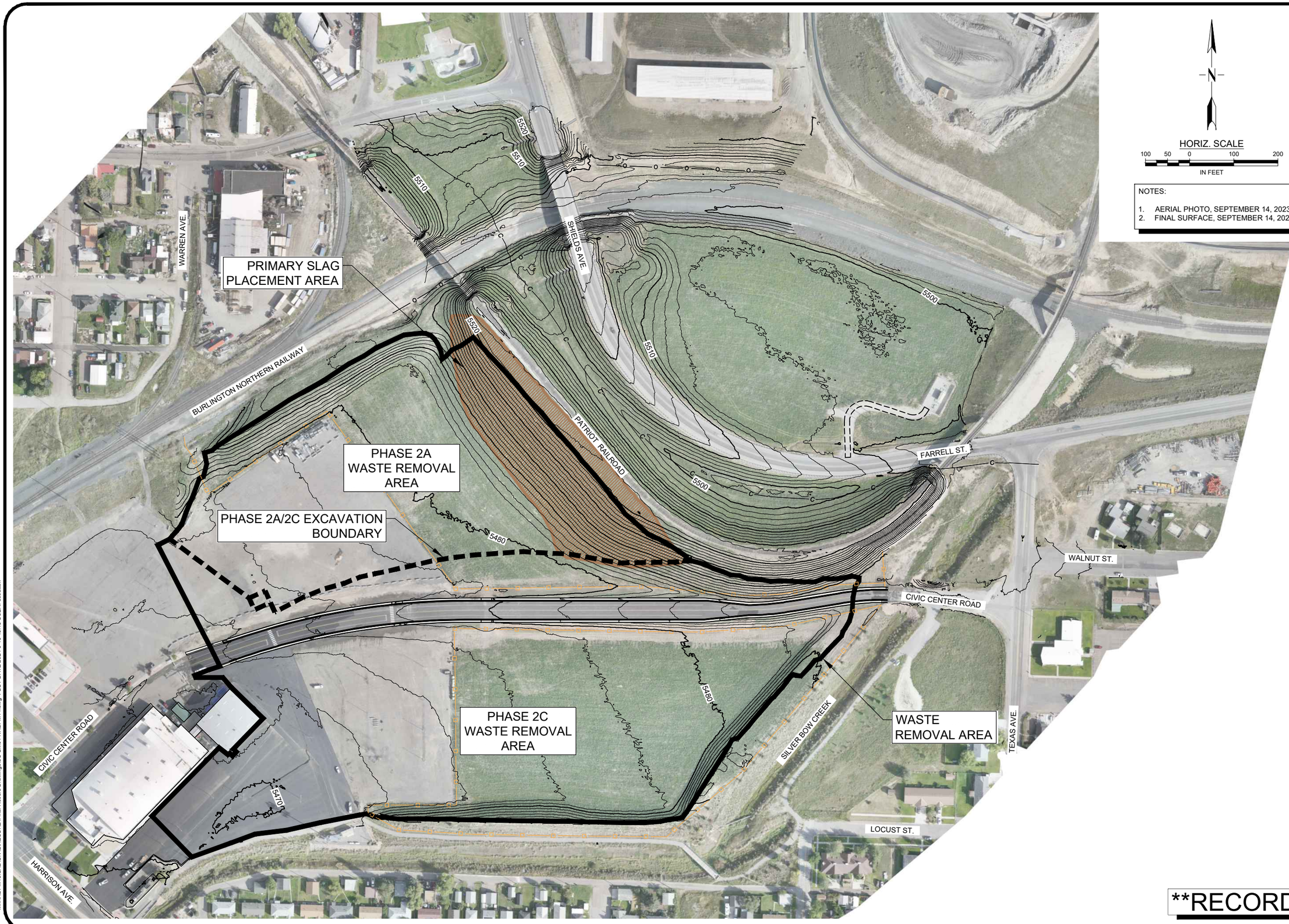

HORIZ. SCALE

100 50 0 100 200

IN FEET

NOTES:

1. AERIAL PHOTO, SEPTEMBER 14, 2023.
2. FINAL SURFACE, SEPTEMBER 14, 2023.

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MONTANA
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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

FINISHED GRADE SURFACE GRADING PLAN

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
3-6

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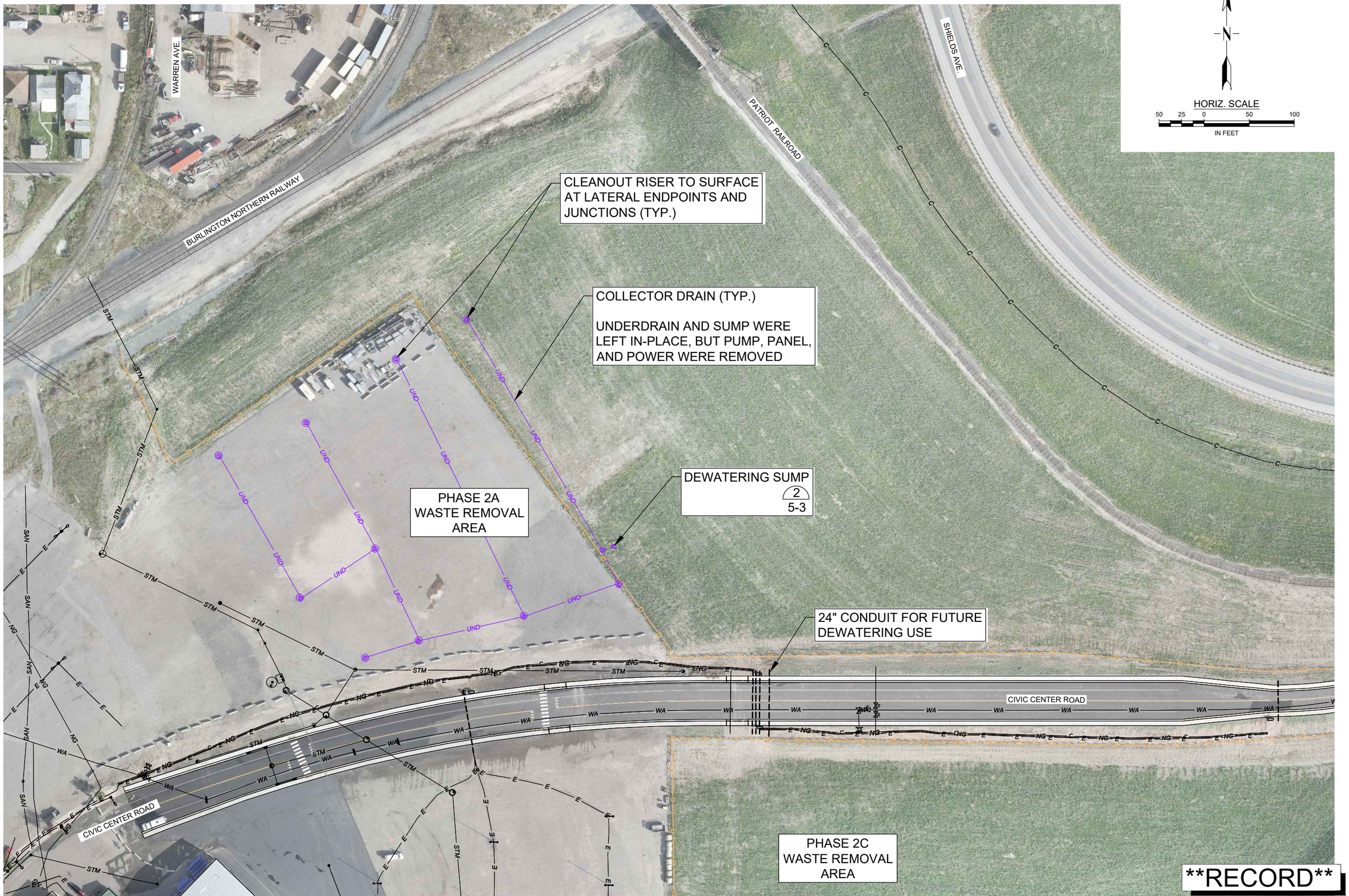

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LICENSED PROFESSIONAL ENGINEER

INTERIM DEWATERING SYSTEM EXTENSION PLAN

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
5-2

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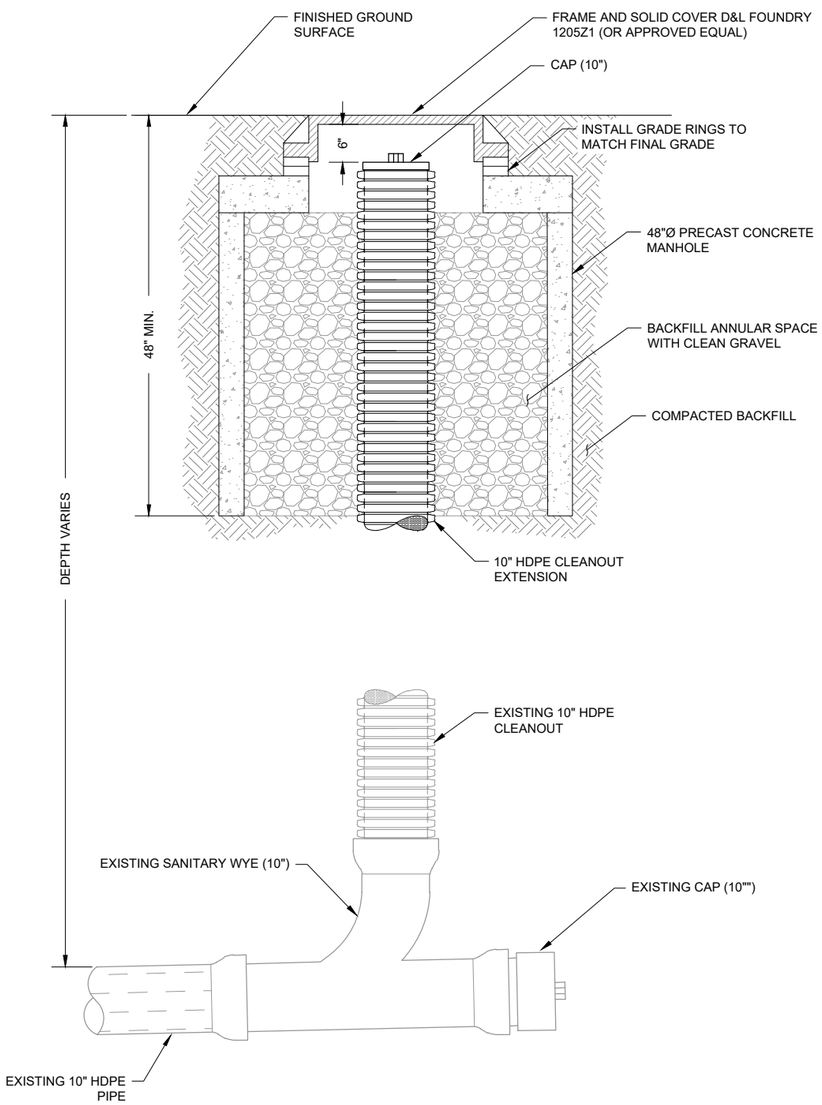
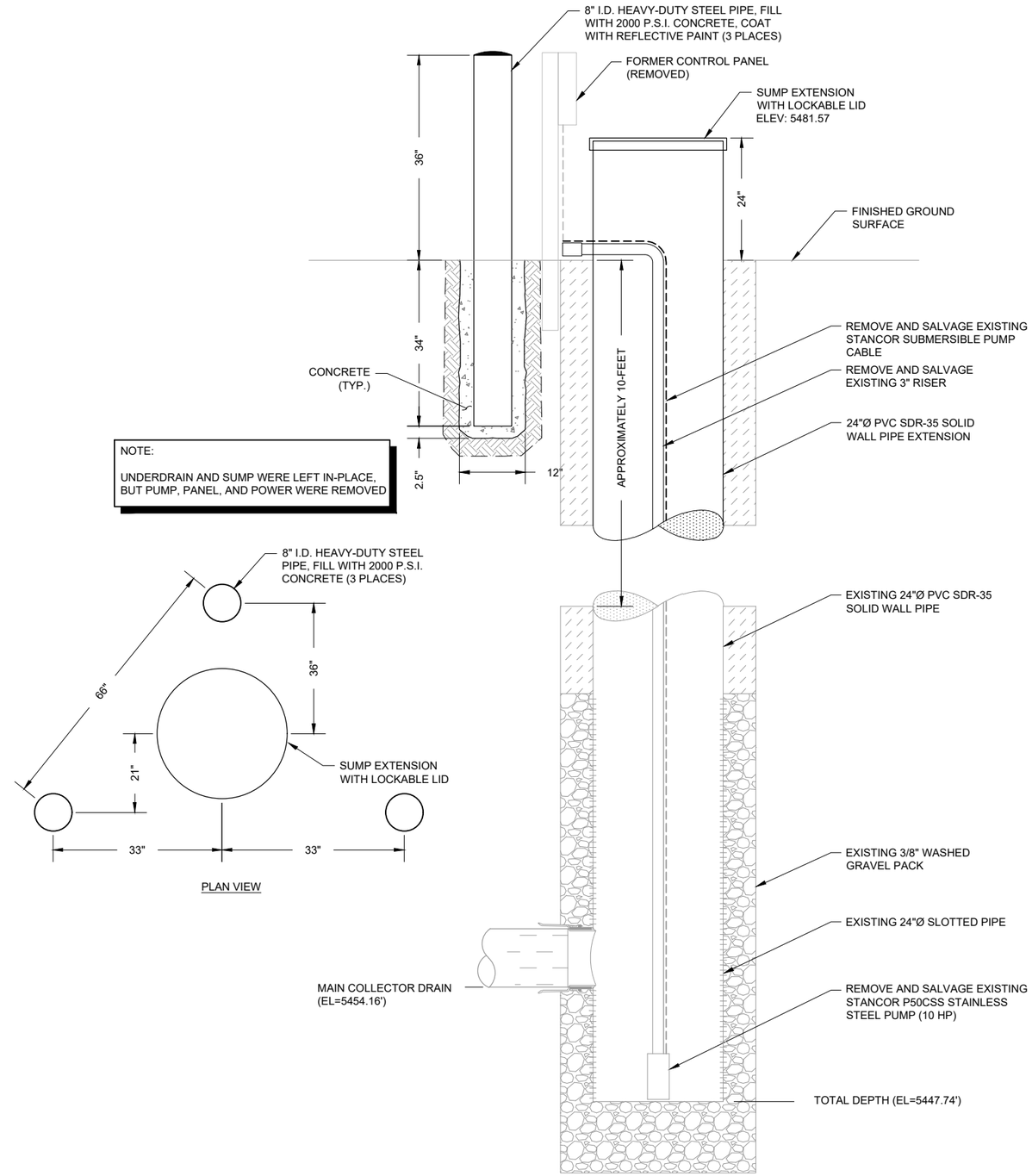


1 CLEANOUT EXTENSION DETAIL

Scale: NTS



2 SUMP EXTENSION WITH BOLLARDS DETAIL

Scale: NTS

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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

INTERIM DEWATERING SYSTEM EXTENSION DETAILS

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-DT01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
5-3

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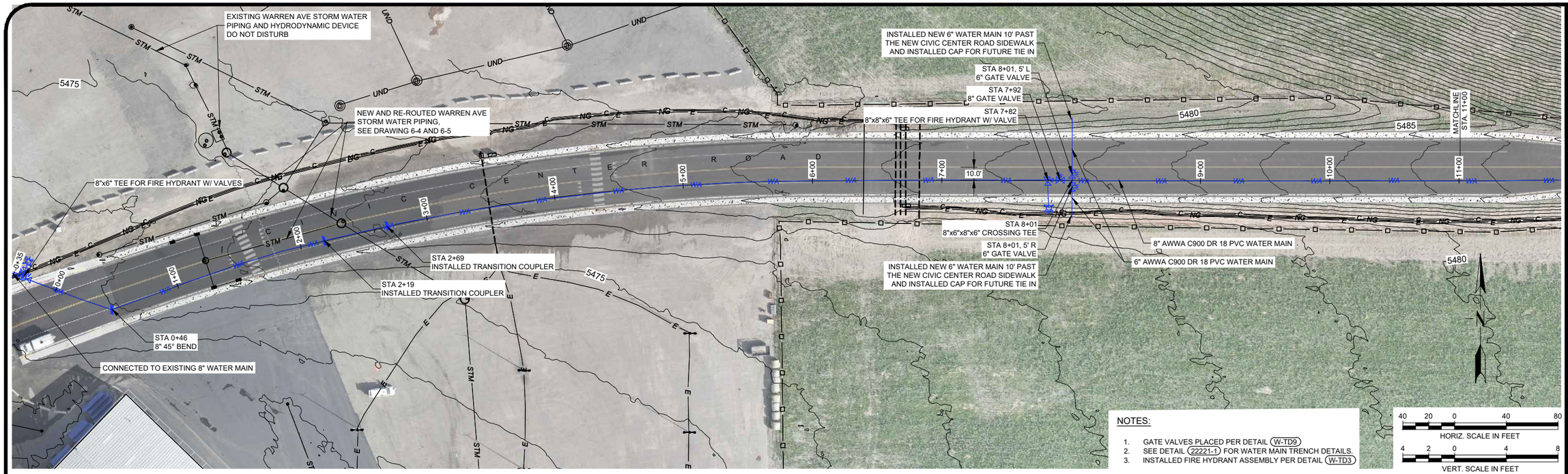
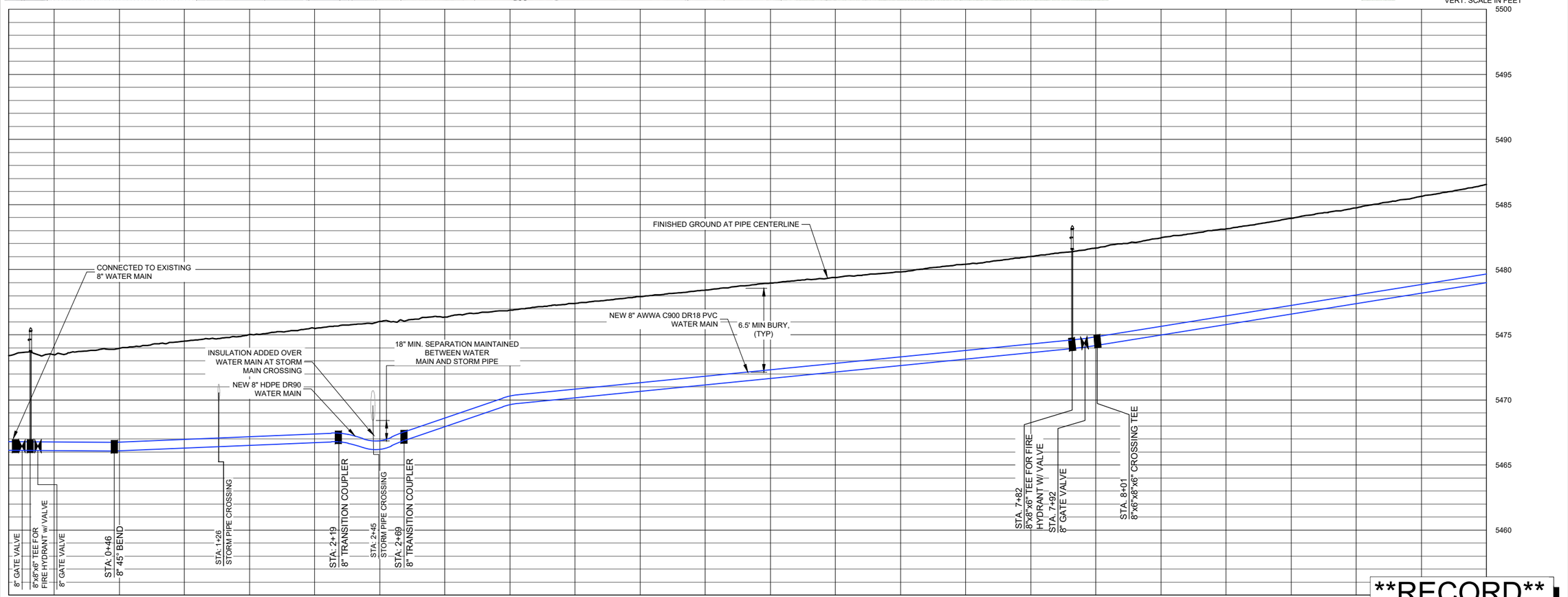


NOTES:

1. GATE VALVES PLACED PER DETAIL W-TD9
2. SEE DETAIL 22221-1 FOR WATER MAIN TRENCH DETAILS.
3. INSTALLED FIRE HYDRANT ASSEMBLY PER DETAIL W-TD3



CIVIC CENTER ROAD WATER MAIN PROFILE STA. 0+00 TO STA. 11+00

RECORD

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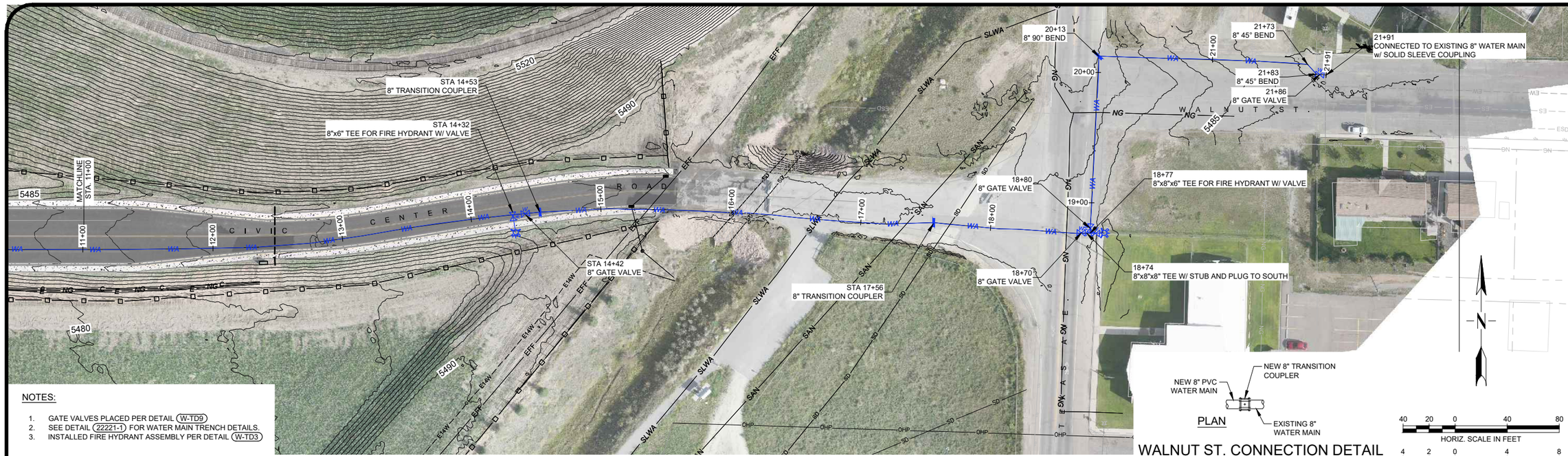
No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

CIVIC CENTER ROAD WATER MAIN PLAN AND PROFILE (1 OF 2)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. 6-3 CivicCenter Water Main Plan & Profile.dwg

JOB NO:	NRDPM02
DATE:	6/20/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
6-3A

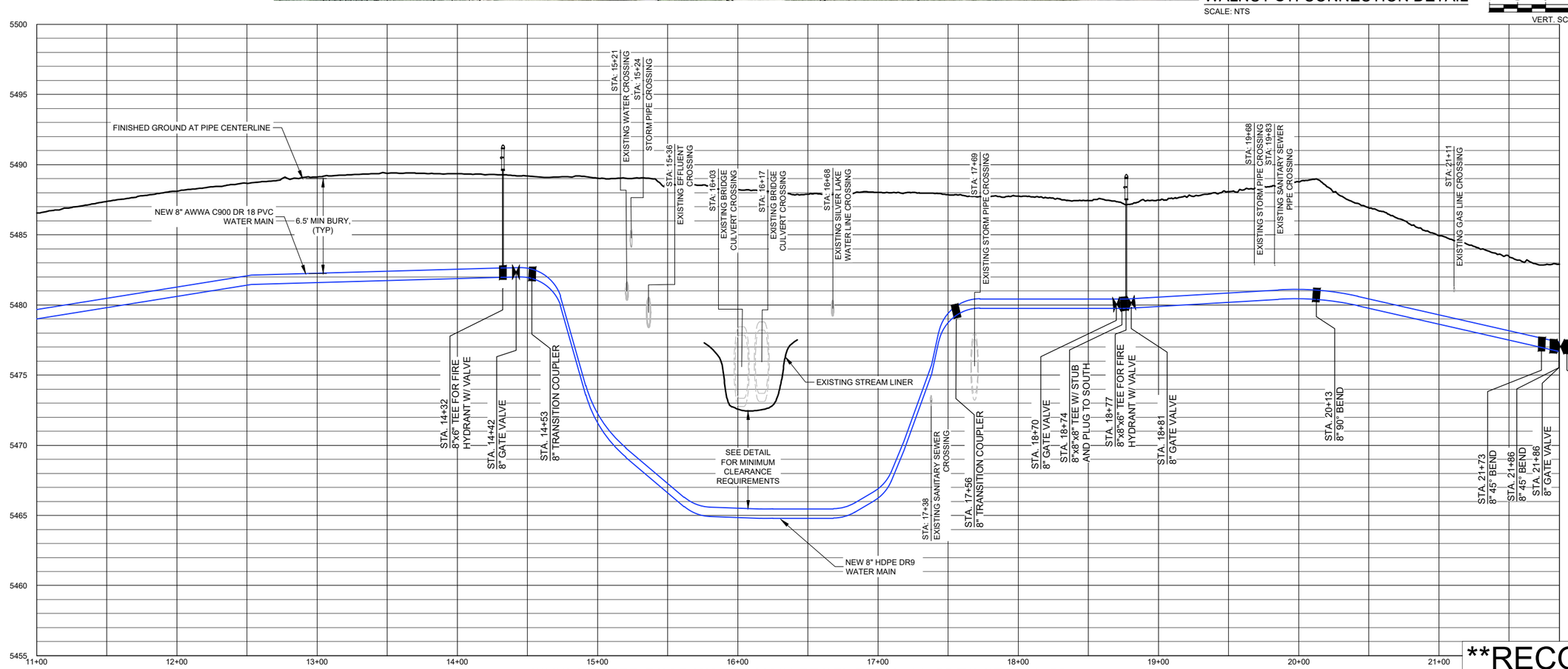


NOTES:

1. GATE VALVES PLACED PER DETAIL (W-TD9)
2. SEE DETAIL (22221-1) FOR WATER MAIN TRENCH DETAILS.
3. INSTALLED FIRE HYDRANT ASSEMBLY PER DETAIL (W-TD3)

WALNUT ST. CONNECTION DETAIL

SCALE: NTS



CIVIC CENTER ROAD WATER MAIN PROFILE STA. 11+00 TO STA. 21+68

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LICENSED PROFESSIONAL ENGINEER

CIVIC CENTER ROAD WATER MAIN PLAN AND PROFILE (2 OF 2)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. 6-3 CivicCenter Water Main Plan & Profile.dwg

JOB NO:	NRDPM02
DATE:	6/20/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
6-3B

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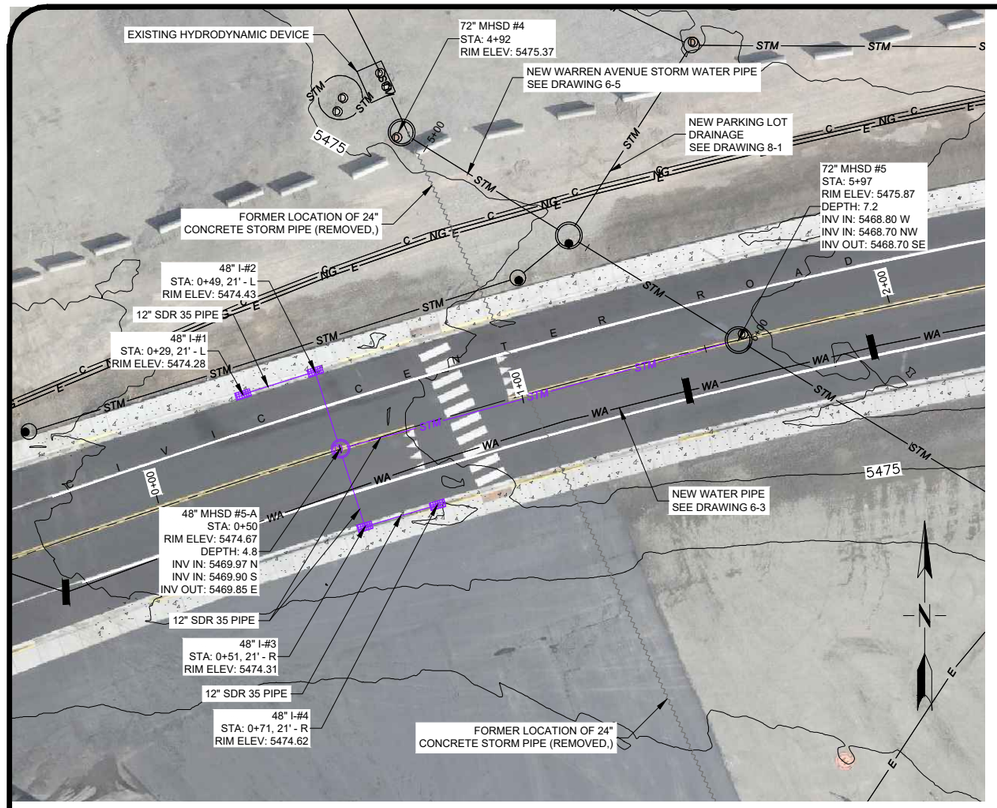
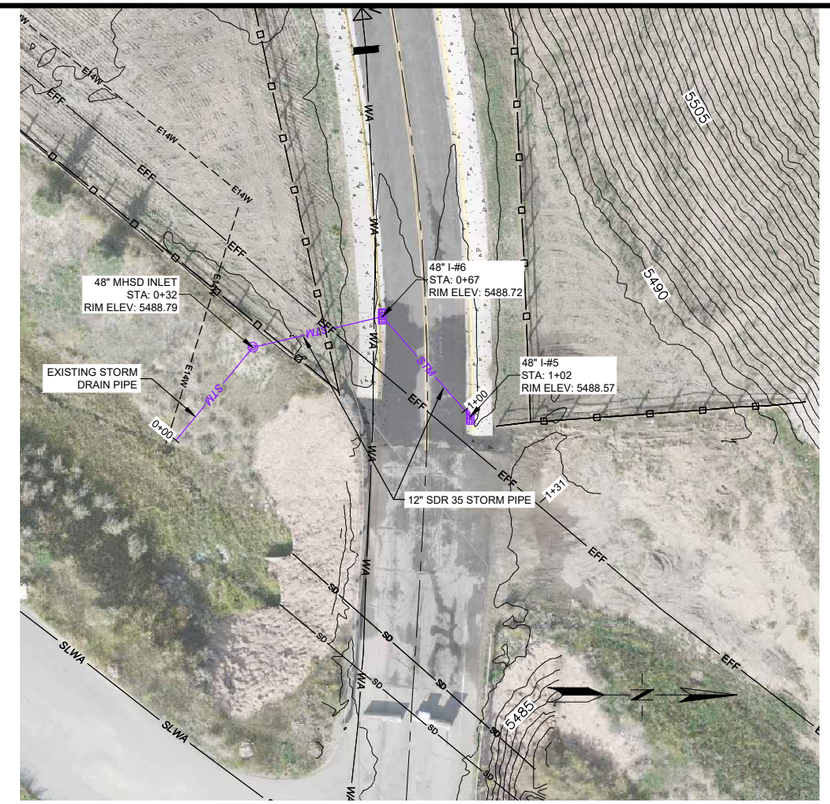
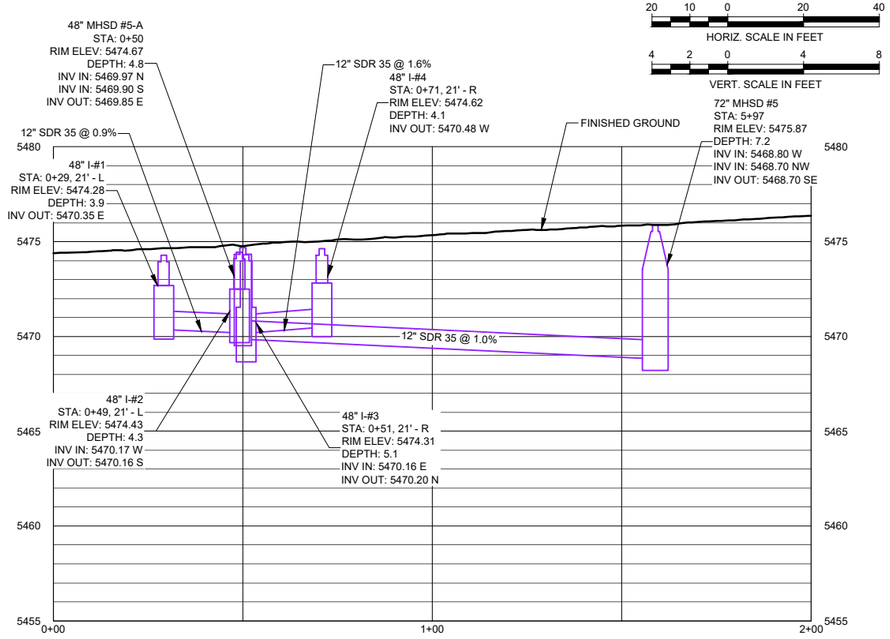


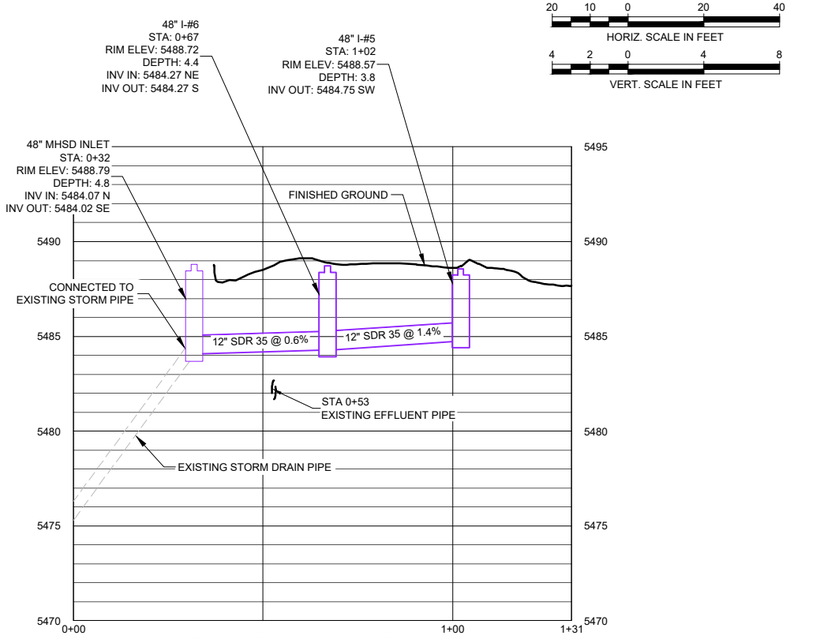


NOTES:

1. SEE DETAIL 2221-1 FOR STORM SEWER TRENCH.
2. SEE DETAIL 2351 FOR INLET/MANHOLE WITH 48" BARREL.
3. MANHOLES INSTALLED PER DETAIL 2225
4. GRATE ELEVATIONS ARE LOCATED AT THE GUTTER FLOW LINE AND CENTER OF GRATE.



CIVIC CENTER ROAD WEST STORM WATER PROFILE



CIVIC CENTER ROAD EAST STORM WATER PROFILE

RECORD

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LICENSED PROFESSIONAL ENGINEER

CIVIC CENTER ROAD STORM WATER PLAN AND PROFILE

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. 6-4 CivicCenter Storm Water Plan and Profile.dwg

JOB NO:	NRDPM02
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
6-4

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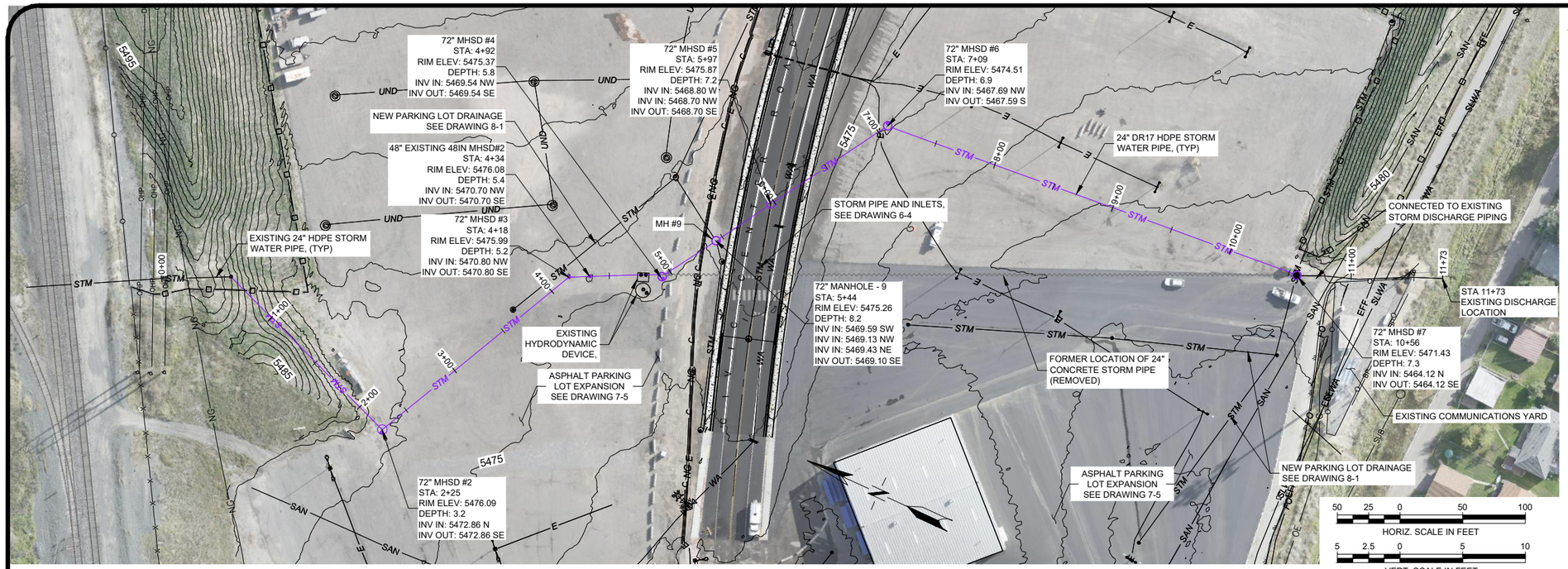
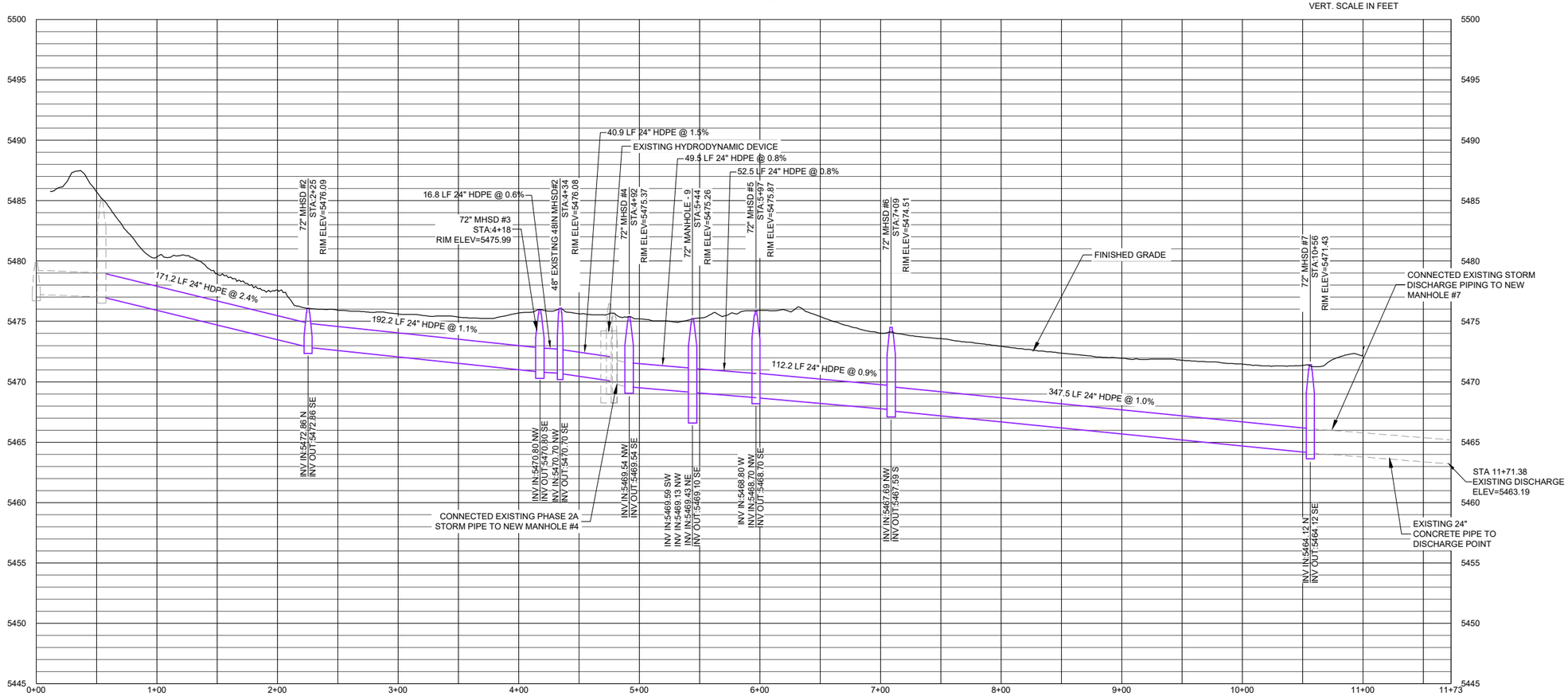


GENERAL NOTES:

1. SEE DETAIL 2221-1 ON DWG. 6-8 FOR STORM SEWER TRENCH.
2. MANHOLES INSTALLED PER DETAIL 2725 ON DWG. 6-8.



RELOCATED WARREN AVENUE STORM MAIN PROFILE

RECORD

No	Description	Date	Drawn By

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MONTANA
STEPHEN WILLIAM FRAZEE
No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

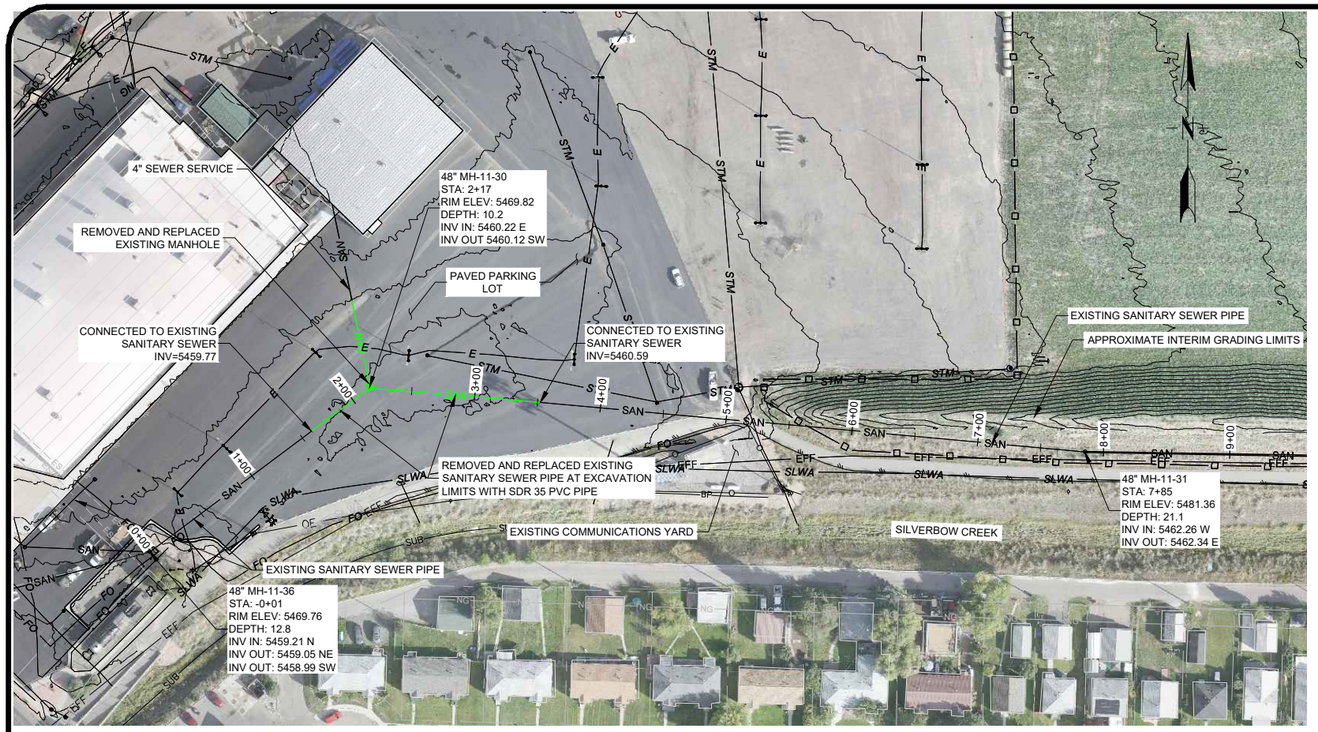
WARREN AVE STORM MAIN DEMOLITION AND RELOCATION PLAN AND PROFILE

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. 6-5 WarrenAve Storm Demolition & Relocation Pla

JOB NO:	NRDPM02
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
6-5

M:\NRDPM15\CAD\CIV\LIRECORD\Final Record Drawings\6-5 WarrenAve Storm Demolition & Relocation Plan & Profile.dwg PLOT DATE:2024-6-19 15:59 USER: dstratton

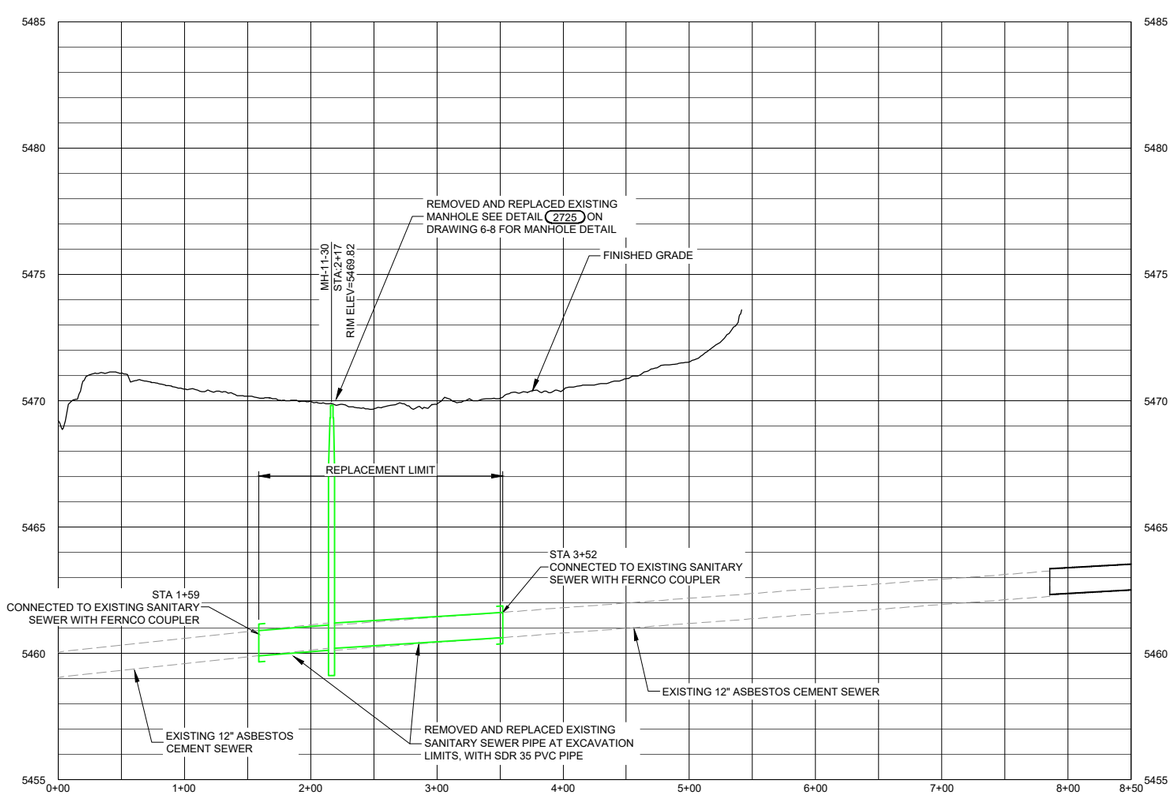


GENERAL NOTES:

1. SEE DETAIL 2221-1 ON DRAWING 6-8 FOR SANITARY SEWER TRENCH DETAIL..

60 30 0 60 120
HORIZ. SCALE IN FEET

3 1.5 0 3 6
VERT. SCALE IN FEET



SANITARY SEWER PROFILE

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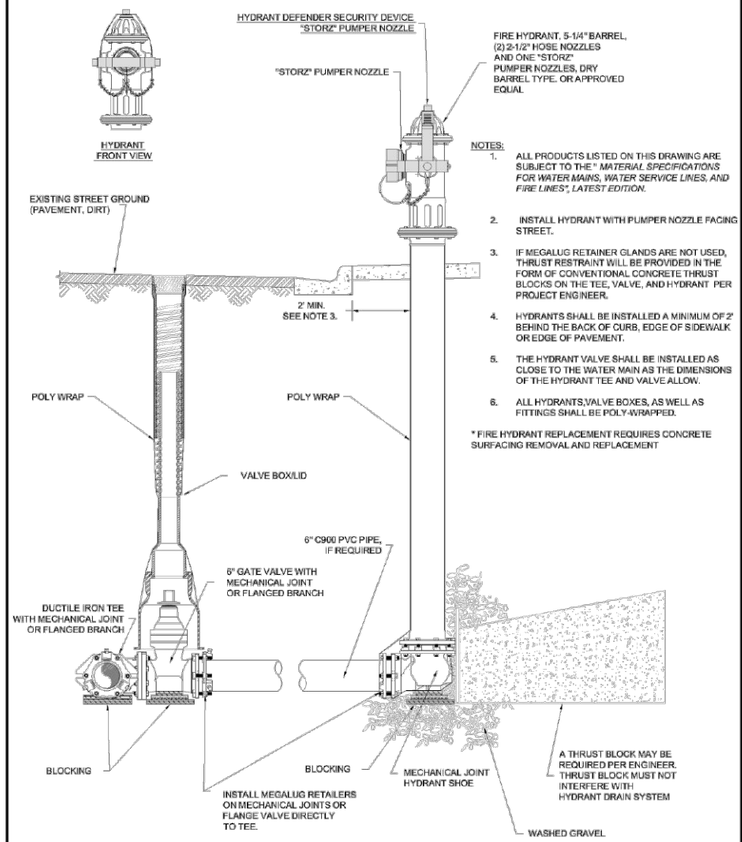
CIVIC CENTER SANITARY SEWER REPLACEMENT

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. 6-6 CivicCenter Sanitary Sewer Installation.dwg

JOB NO:	NRDPM02
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
6-6

M:\NRDPM15\CAD\CIVIL\RECORD\Final Record Drawings\6-6 CivicCenter Sanitary Sewer Installation.dwg PLOT DATE 2024-6-19 16:15 USER: dstratton



NOTES:

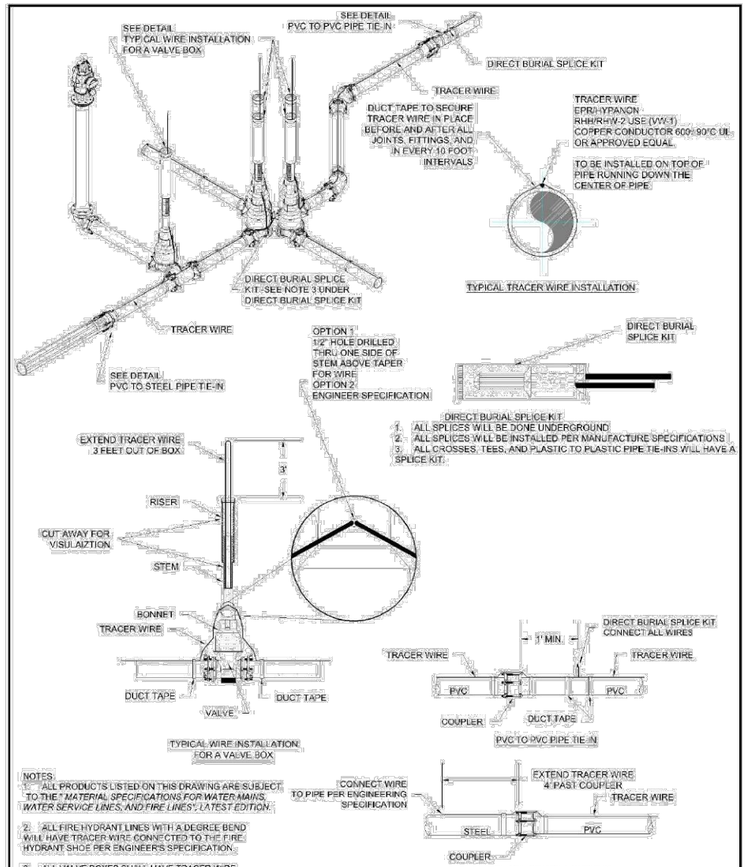
1. ALL PRODUCTS LISTED ON THIS DRAWING ARE SUBJECT TO THE " *MATERIAL SPECIFICATIONS FOR WATER MAINS, WATER SERVICE LINES, AND FIRE LINES*", *LATEST EDITION.*
2. INSTALL HYDRANT WITH PUMPER NOZZLE FACING STREET.
3. IF MEGALUG RETAINER GLANDS ARE NOT USED, THRUST RESTRAINT WILL BE PROVIDED IN THE FORM OF CONVENTIONAL CONCRETE THRUST BLOCKS ON THE TEE, VALVE, AND HYDRANT PER PROJECT ENGINEER.
4. HYDRANTS SHALL BE INSTALLED A MINIMUM OF 2' BEHIND THE BACK OF CURB, EDGE OF SIDEWALK OR EDGE OF PAVEMENT.
5. THE HYDRANT VALVE SHALL BE INSTALLED AS CLOSE TO THE WATER MAIN AS THE DIMENSIONS OF THE HYDRANT TEE AND VALVE ALLOW.
6. ALL HYDRANTS,VALVE BOXES, AS WELL AS FITTINGS SHALL BE POLY-WRAPPED.

* FIRE HYDRANT REPLACEMENT REQUIRES CONCRETE SURFACING REMOVAL AND REPLACEMENT

Water
Fire Hydrant

Revised: *2015*

Standard Drawing
W-TD3
NOT TO SCALE



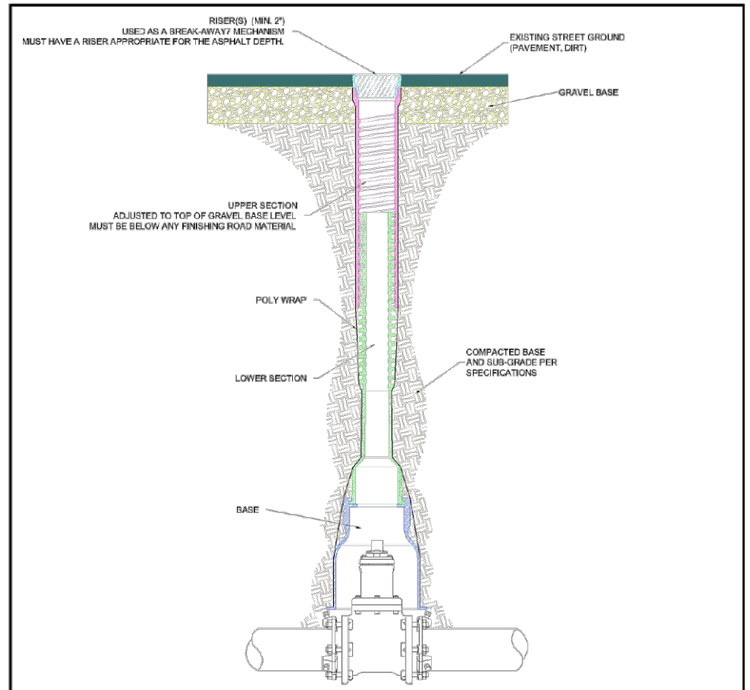
NOTES:

1. ALL PRODUCTS LISTED ON THIS DRAWING ARE SUBJECT TO THE " *MATERIAL SPECIFICATIONS FOR WATER MAINS, WATER SERVICE LINES, AND FIRE LINES*", *LATEST EDITION.*
2. ALL FIRE HYDRANT LINES WITH A DEGREE BEND WILL HAVE TRACER WIRE CONNECTED TO THE FIRE HYDRANT SHOE PER ENGINEER'S SPECIFICATION.
3. ALL VALVE BOXES SHALL HAVE TRACER WIRE.

Water
Tracer Wire Detail

Revised: *2010*

Standard Drawing
W-TD5
NOT TO SCALE



NOTES:

1. ALL PRODUCTS LISTED ON THIS DRAWING ARE SUBJECT TO THE " *MATERIAL SPECIFICATIONS FOR WATER MAINS, WATER SERVICE LINES, AND FIRE LINES*", *LATEST EDITION.*
2. RISER(S) MUST BE USED AS A 'BREAK AWAY MECHANISM' THROUGH ANY FINISHED ROAD MATERIAL (I.E. ASPHALT, CEMENT, ROAD MIX). A MINIMUM OF TWO-INCHES DEPTH FOR A RISER. FOR ODD NUMBER DEPTH, ONE-INCH MAY BE USED IN ADDITION WITH THE 2-INCH RISER. RISERS SHALL BE AT FINISH GRADE OR A $\frac{1}{2}$" (MAX.) BELOW FINISHED GRADE.
3. THE UPPER SECTION OF THE VALVE BOX SHALL BE ADJUSTED TO THE TOP OF THE GRAVEL BASE LEVEL OF THE ROAD AND NOT BE IN CONTACT WITH ANY FINISHING ROAD MATERIAL SUCH AS ASPHALT.
4. ALL ADJUSTMENTS SHALL BE DONE PRIOR TO PAVING.
5. ALL VALVE BOXES SHALL BE POLY-WRAPPED.

Water
Valve Box Detail

Revised: *2015*

Standard Drawing
W-TD9
NOT TO SCALE

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UTILITY MISCELANEOUS DETAILS (1 OF 2)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. 6-7 Utility Misc Details1.dwg

JOB NO:	NRDPM02
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
6-7

M:\NRDPM15\CAD\CIV\LRECORD\Final Record Drawings\6-7 Utility Misc Details1.dwg PLOT DATE 2024-6-19 16:31 USER: detratton

THRUST BLOCK NOTES AND DETAILS

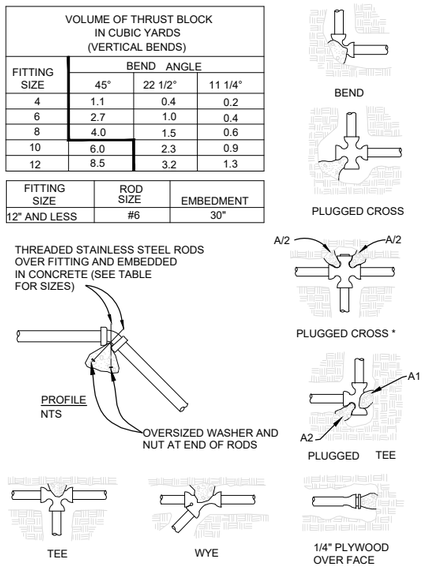
THRUST BLOCK NOTES

BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)							
FITTING SIZE	TEE, WYE, PLUG, OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED RUN		BEND ANGLE		
			A1	A2	45°	22 1/2°	11 1/4°
4	1.0	1.4	1.9	1.4	1.0	-	-
6	2.1	3.0	4.3	3.0	1.6	1.0	-
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.4	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7

VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS)			
FITTING SIZE	BEND ANGLE		
	45°	22 1/2°	11 1/4°
4	1.1	0.4	0.2
6	2.7	1.0	0.4
8	4.0	1.5	0.6
10	6.0	2.3	0.9
12	8.5	3.2	1.3

FITTING SIZE	ROD SIZE	EMBEDMENT
12" AND LESS	#6	30"

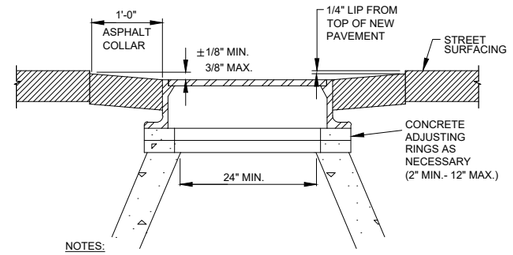
1. KEEP CONCRETE CLEAR OF JOINT AND JOINT ACCESSORIES.
2. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
3. REQUIRED VOLUMES OR BEARING AREAS AT FITTINGS SHALL BE AS INDICATED HEREIN, ADJUSTED, IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES) STATED BELOW. FOR PIPES LARGER THAN SHOWN, CHECK THRUST BLOCK SIZING WITH ENGINEER.
4. THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 PSIG AND THE WEIGHT OF CONCRETE = 4050 LBS/CU YD. TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: VOLUME = (TEST PRESS./150) x (TABLE VALUE).
5. BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 150 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 LBS/SQ FT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, MULTIPLY TABLE VALUES BY THE FACTOR $(13.33)(P^1/S_b^1)$, WHERE: P^1= ACTUAL TEST PRESSURE, PSIG
   S_b^1= ACTUAL SOIL BEARING PRESSURE, PSF.
6. THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUSTS SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
7. BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON THE DRAWINGS TAKE PRECEDENCE OVER THIS STANDARD.
8. BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SQ FT.
9. VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CUBIC YARDS REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS FOR VOLUMES SHOWN TO LEFT OF SOLID LINE IN TABLE.
10. TEST PRESSURES ARE SHOWN IN THE PIPING SCHEDULE IN THE SPECIFICATIONS.
11. ALLOWABLE SOIL BEARING STRESS IS 400 LBS/SQ. FT. PER FOOT OF DEPTH UP TO A MAXIMUM OF 2000 LBS/SQ. FT.



* EACH AREA (A/2) IS 1/2 OF TABULATED TOTAL AREA

THRUST BLOCK DETAILS

NTS

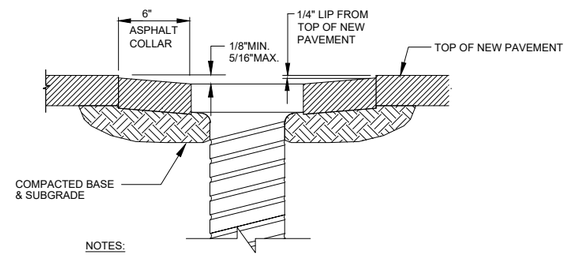


NOTES:

1. ADJUST MANHOLES UPWARD WITH ADJUSTING RINGS UNDER FRAME.
2. ADJUST MANHOLE DOWNWARD BY REMOVING CONE AND BARREL SECTIONS AS NECESSARY AND REPLACING WITH SECTIONS OF LENGTH REQUIRED TO MATCH GRADE.
3. SLOPE MANHOLE FRAME AS REQUIRED TO MATCH SLOPE OF STREET.
4. FINAL MANHOLE ADJUSTMENT SHALL BE MADE BEFORE PAVING.

MANHOLE ADJUSTMENT DETAIL

MPW 2213-1



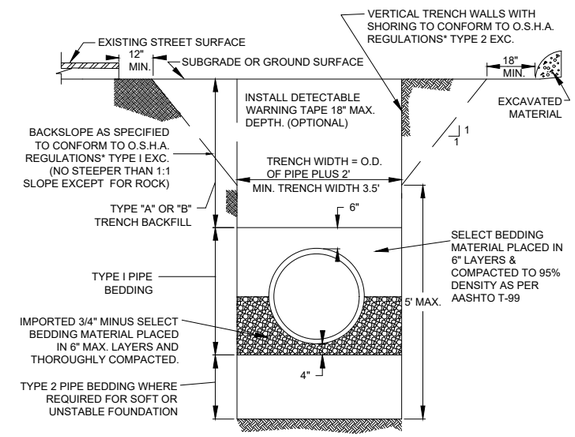
NOTES:

1. ADJUST WATER VALVES UPWARD OR DOWNWARD AS REQUIRED.
2. FINAL ADJUSTMENT SHALL BE MADE BEFORE PAVING.
3. NO PAYMENT SHALL BE MADE FOR ADJUSTMENT OF NEW VALVES TO FINAL GRADE.

WATER VALVE ADJUSTMENT DETAIL

MPW 2213-2

NOTE:
WHERE TRENCH PASSES THROUGH EXISTING PAVEMENT THE PAVEMENT SHALL BE CUT ALONG A NEAT VERTICAL LINE A MINIMUM OF 12" FROM THE EDGE OF THE TRENCH OPENING. WHERE NEAT LINE IS LESS THAN 3' FROM EDGE OF EXISTING PAVEMENT OR CURB AND GUTTER SECTION, REMOVE AND REPLACE ENTIRE PAVEMENT SECTION BETWEEN TRENCH AND EDGE OF PAVEMENT.

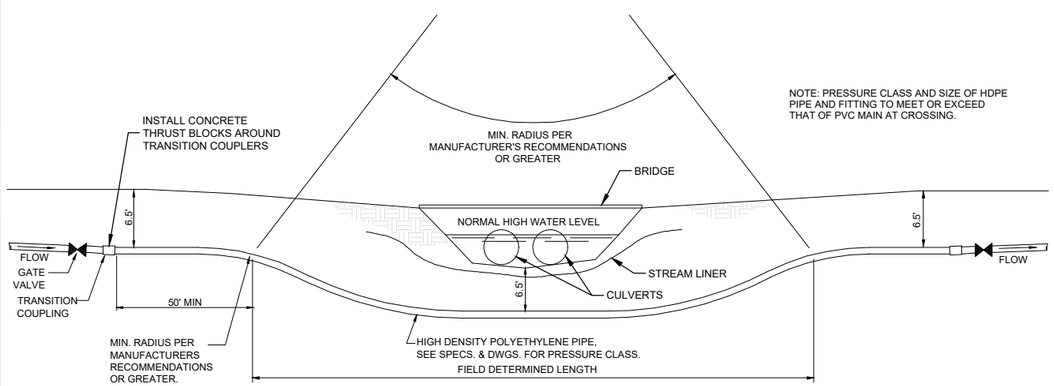


NOTE:
WHEN IN UNSTABLE OR SOFT MATERIAL, TRENCH WALLS SHALL BE BACKSLOPED FROM THE BOTTOM OF THE TRENCH. (TYPE I EXCAVATION)*

* SEE O.S.H.A. SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, SECTION 1926.652.

TYPICAL UTILITY TRENCH DETAIL

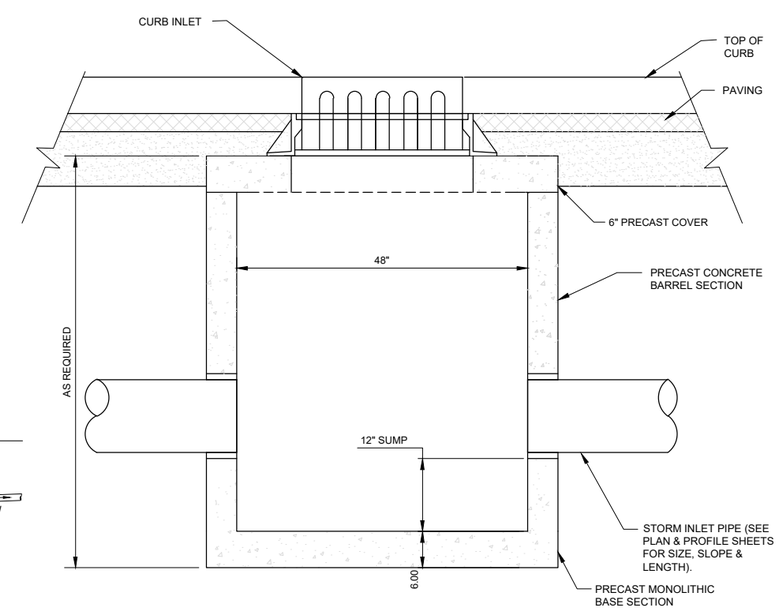
MPW 2221-1



STREAM CROSSING DETAIL

2226

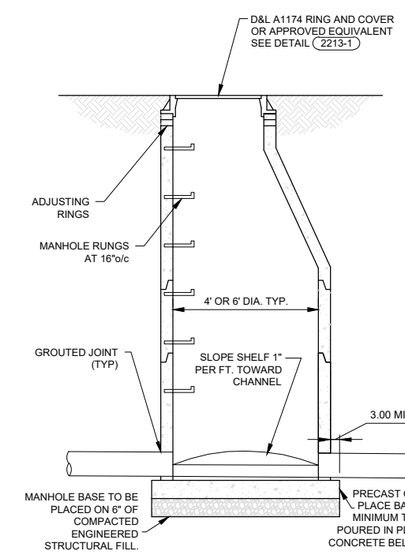
NOT TO SCALE



TYPICAL 48" CURB INLET DETAIL

2351

SCALE: 1"=1'-0"



TYPICAL MANHOLE DETAIL

2725

NTS

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UTILITY MISCELLANEOUS DETAILS (2 OF 2)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. 6-8 Utility Misc Details2.dwg

JOB NO:	NRDPM02
DATE:	6/20/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
6-8

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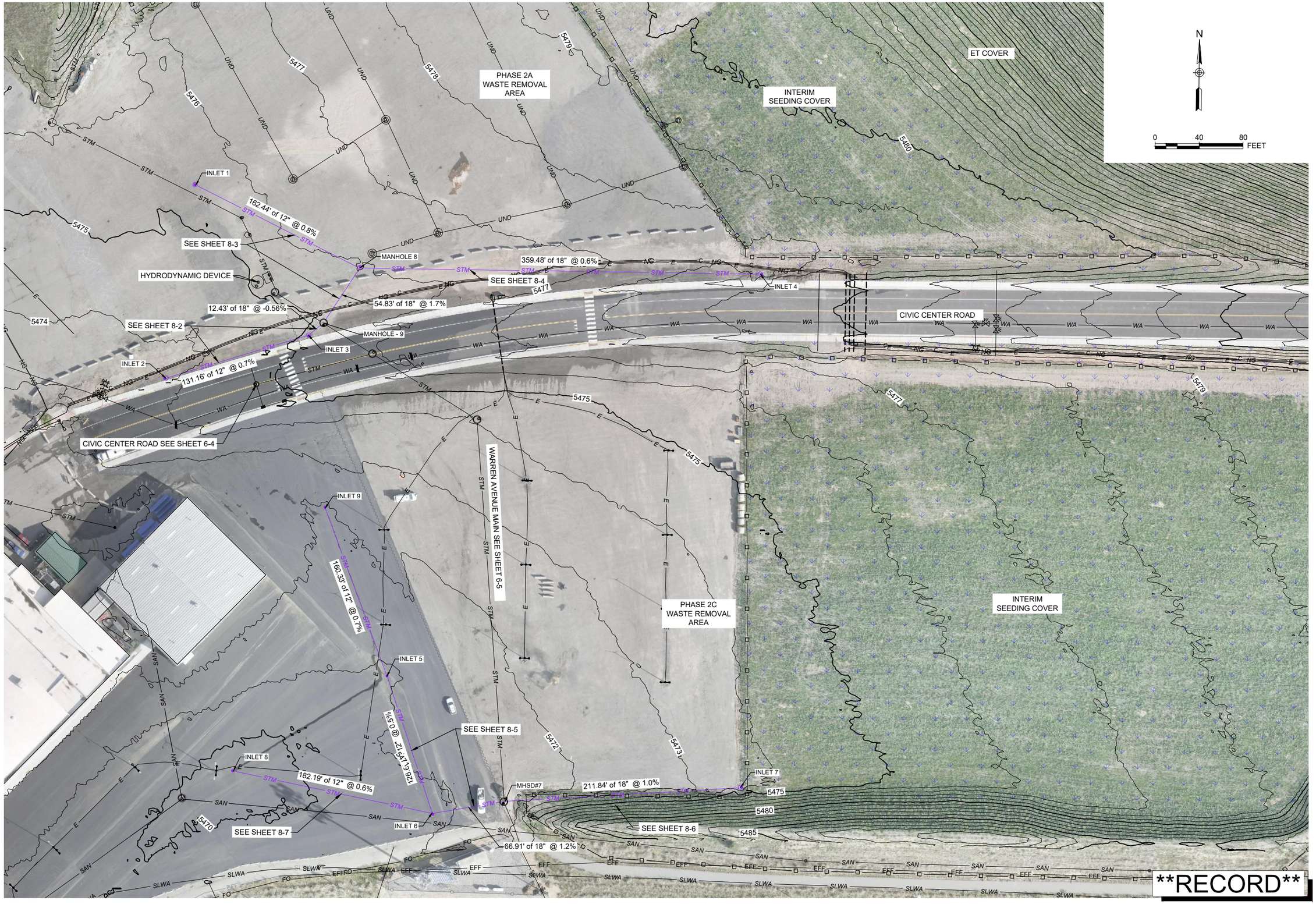

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PARKING LOT STORMWATER PLAN

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-STM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
8-1

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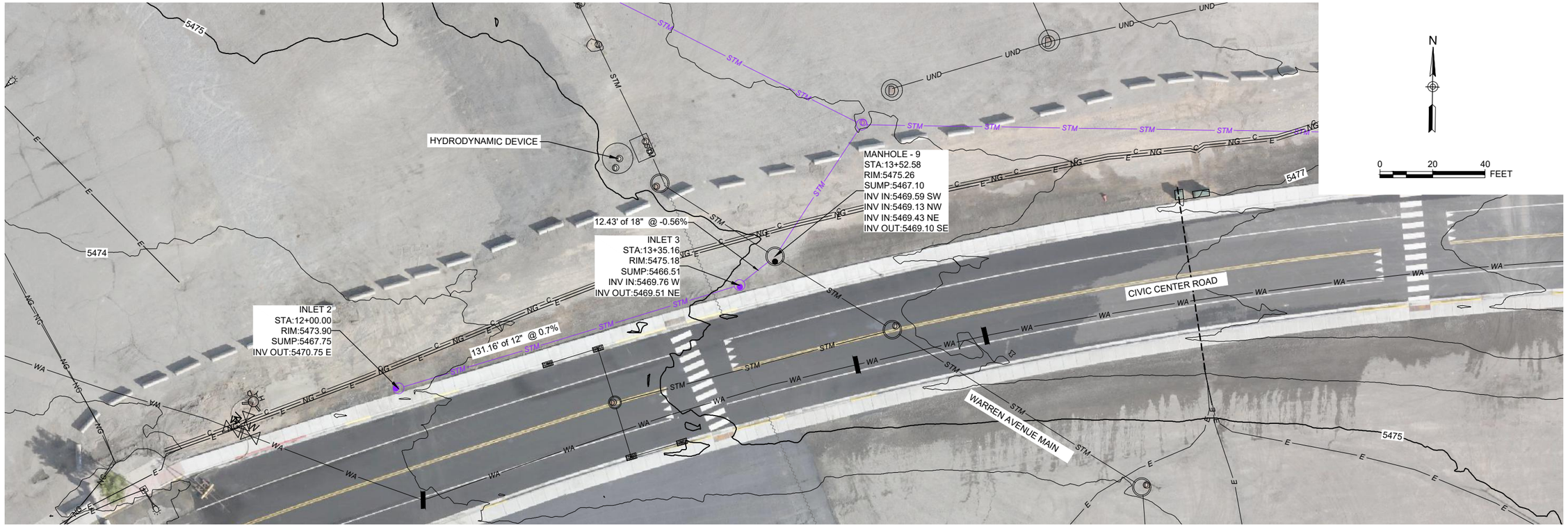

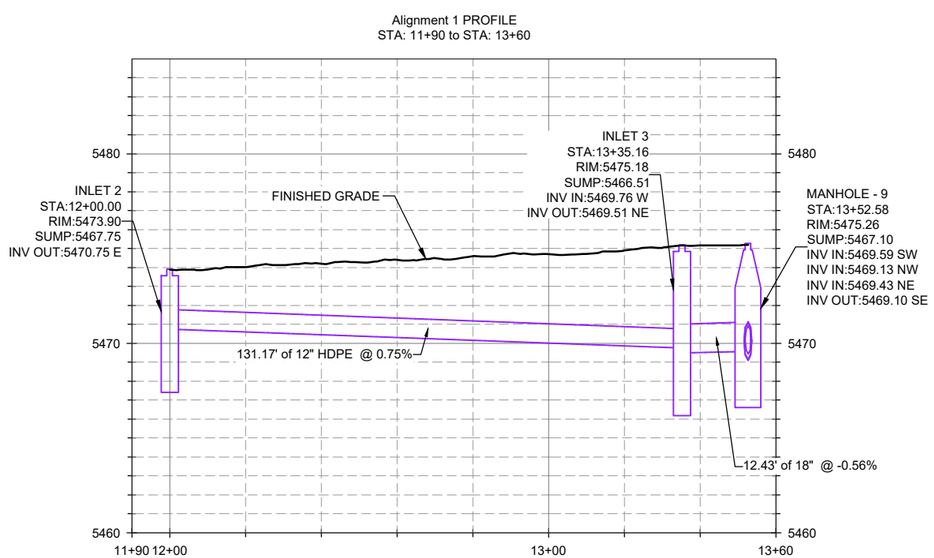

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PARKING LOT STORMWATER PLAN AND PROFILE (1 OF 6)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-STM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
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DRAWING NO.
8-2

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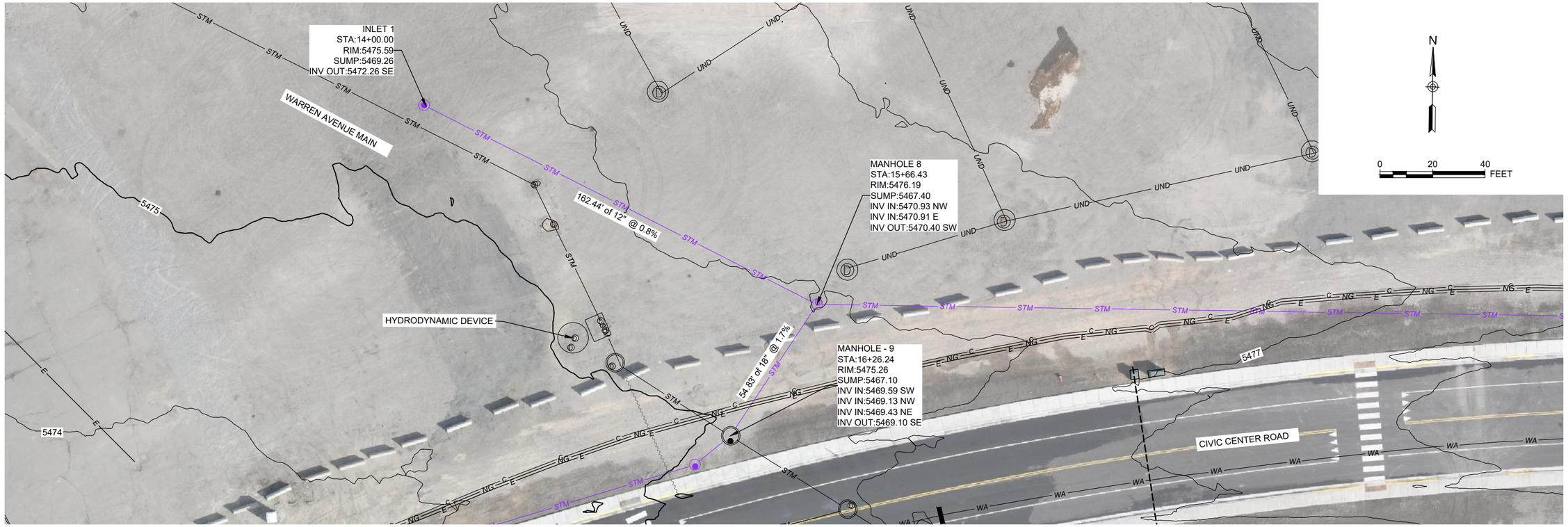

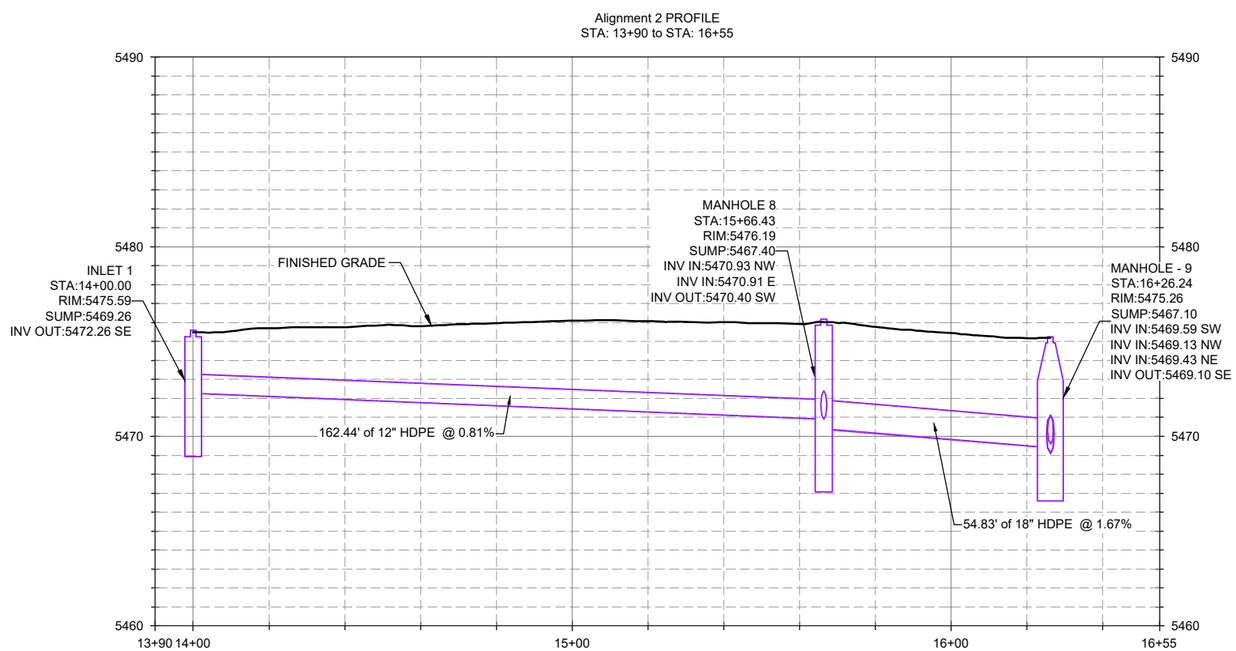

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PARKING LOT STORMWATER PLAN AND PROFILE (2 OF 6)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-STM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
8-3

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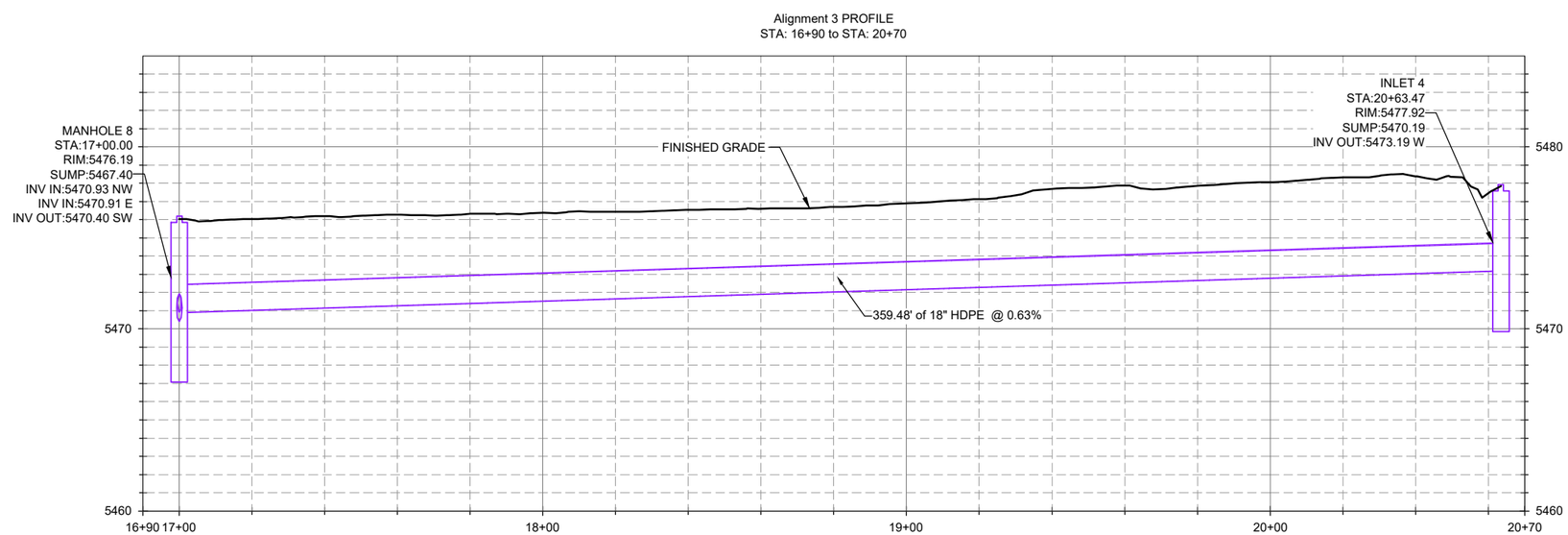

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MONTANA
STEPHEN WILLIAM FRAZEE
No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

PARKING LOT STORMWATER PLAN AND PROFILE (3 OF 6)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-STM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
8-4

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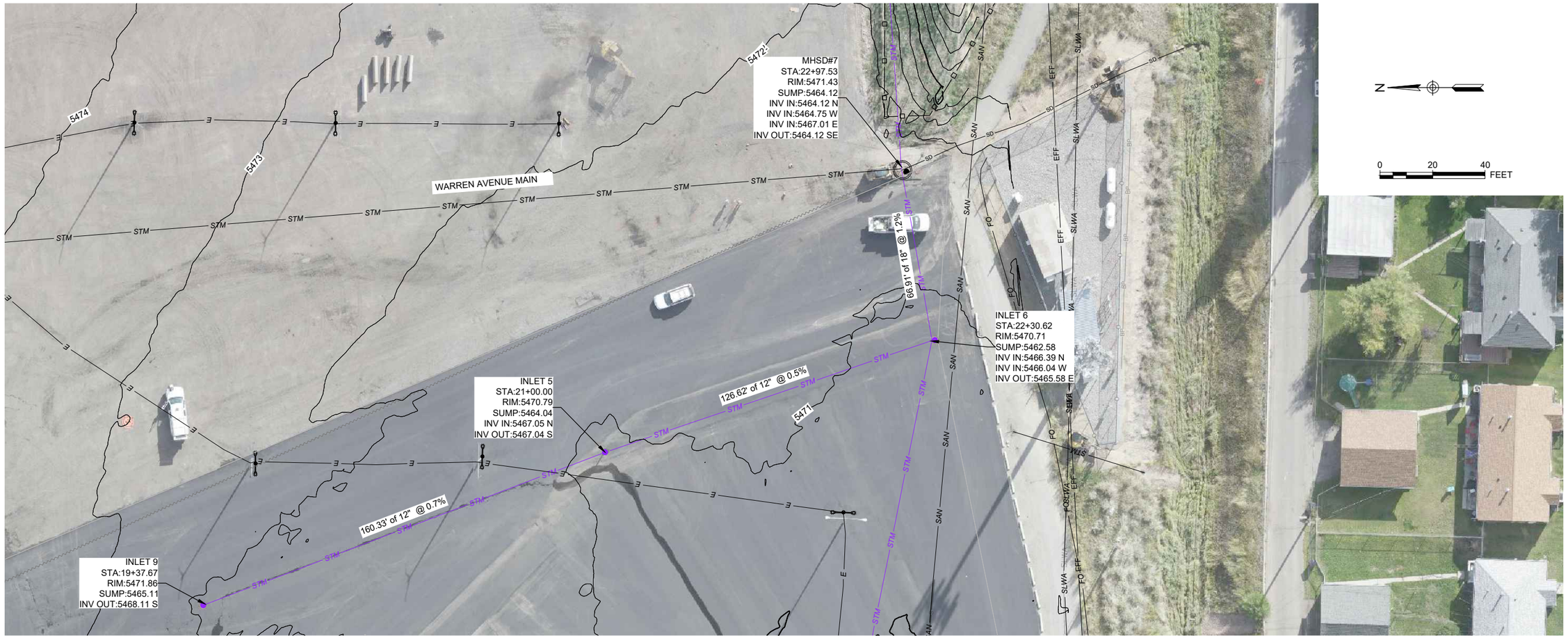

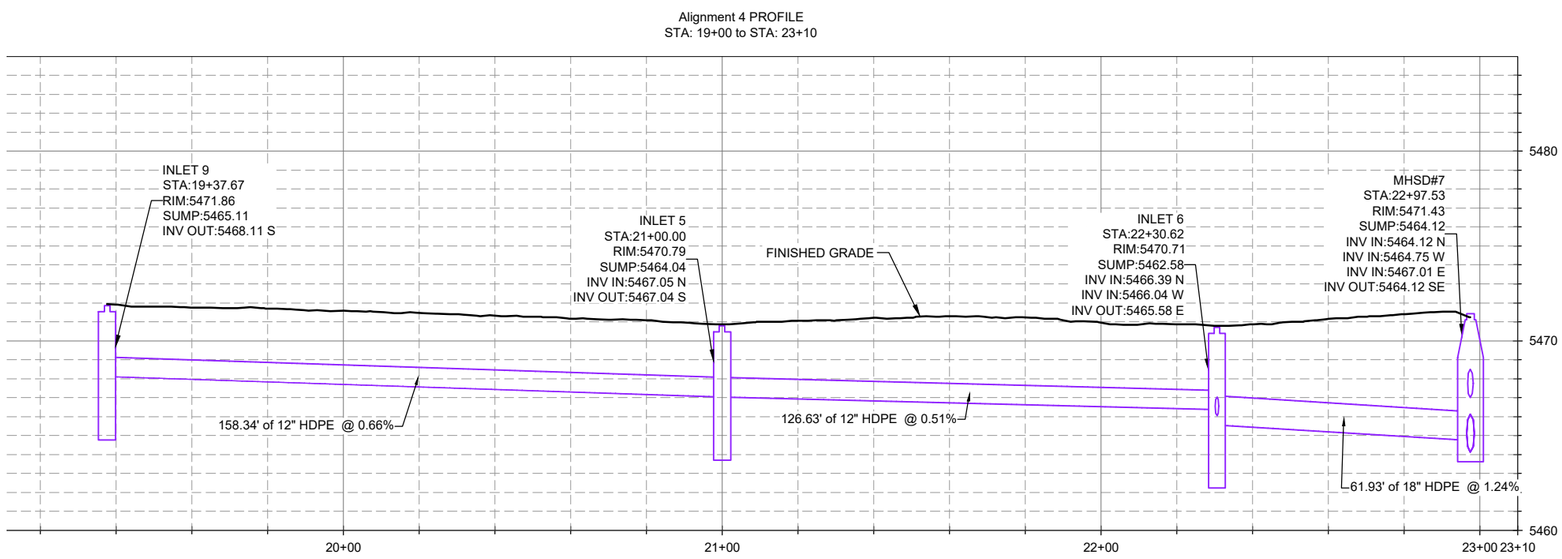

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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

PARKING LOT STORMWATER PLAN AND PROFILE (4 OF 6)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-STM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/20/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
8-5

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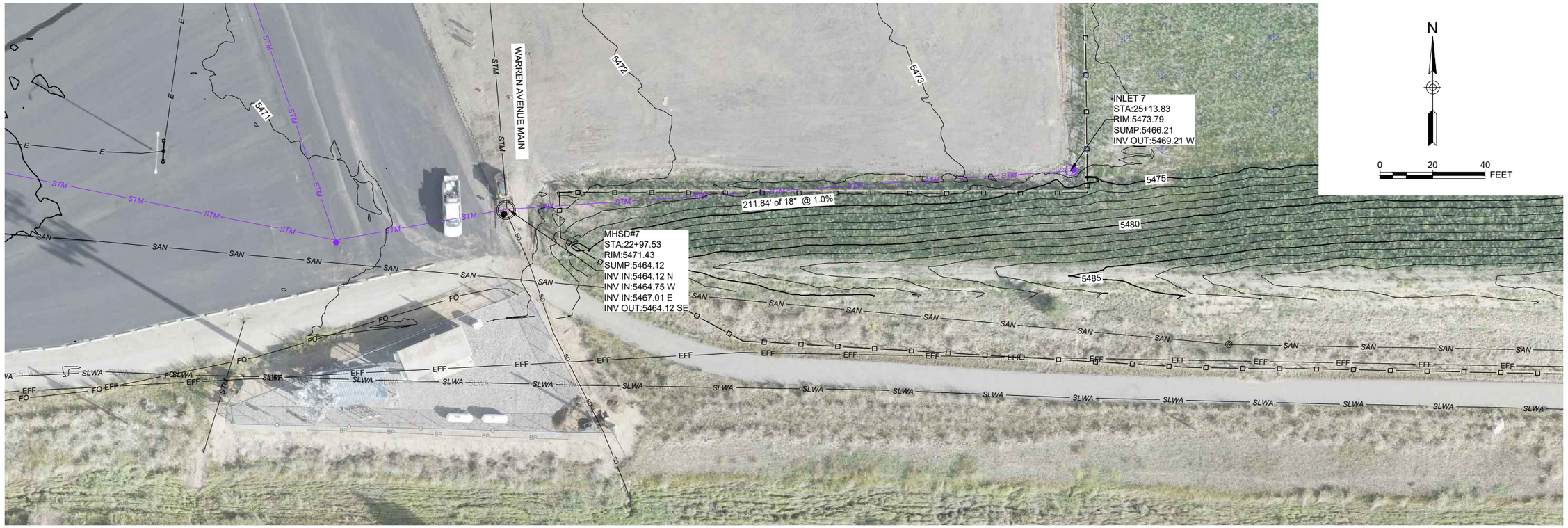

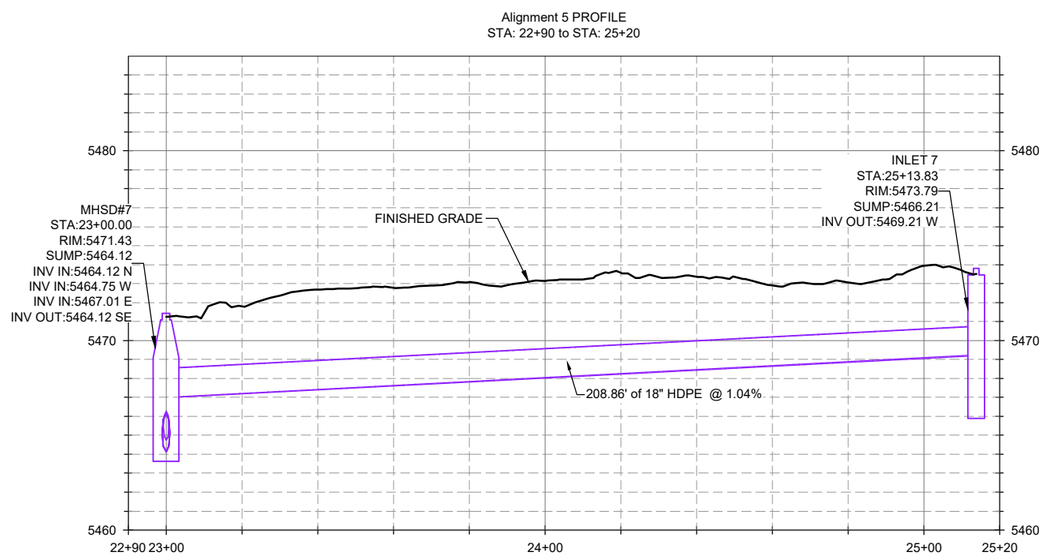

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MONTANA
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No. 51136 PE
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PARKING LOT STORMWATER PLAN AND PROFILE (5 OF 6)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-STM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/20/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
8-6

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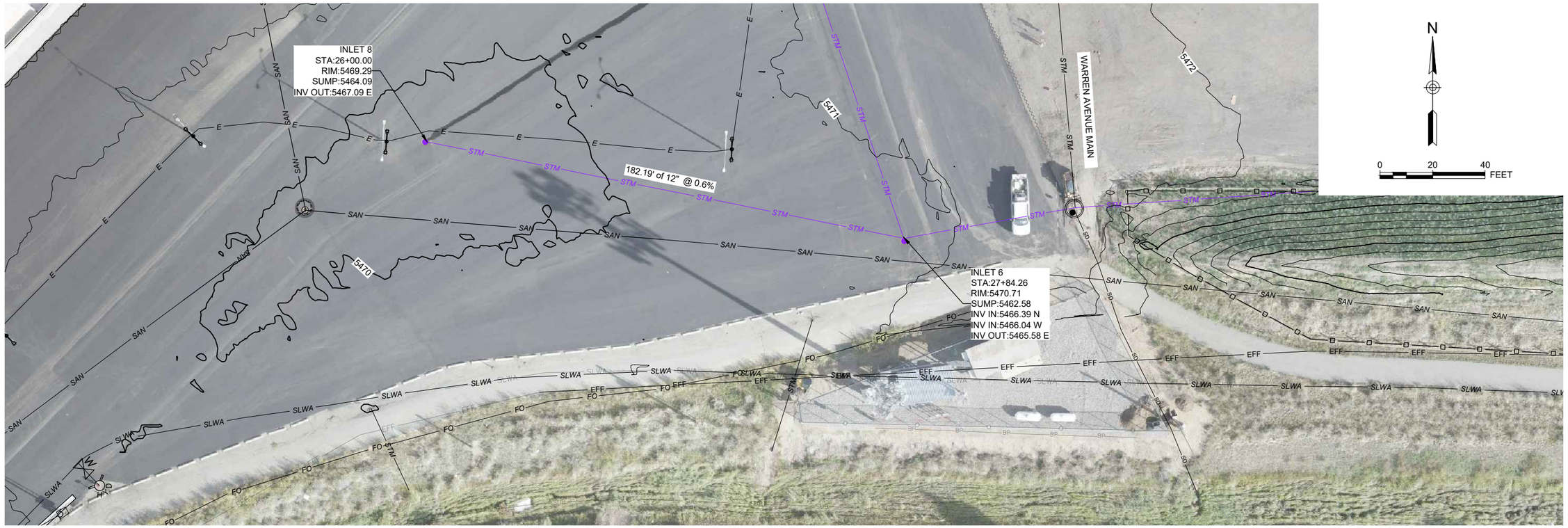

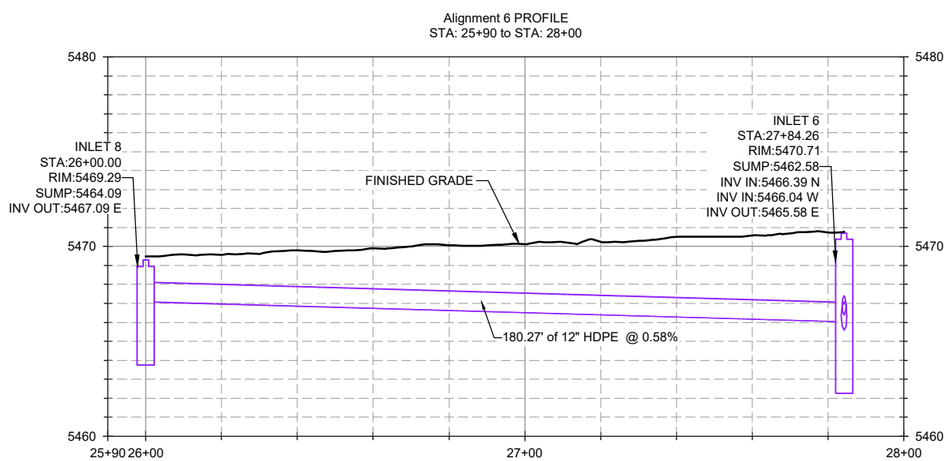

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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

PARKING LOT STORMWATER PLAN AND PROFILE (6 OF 6)

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-STM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
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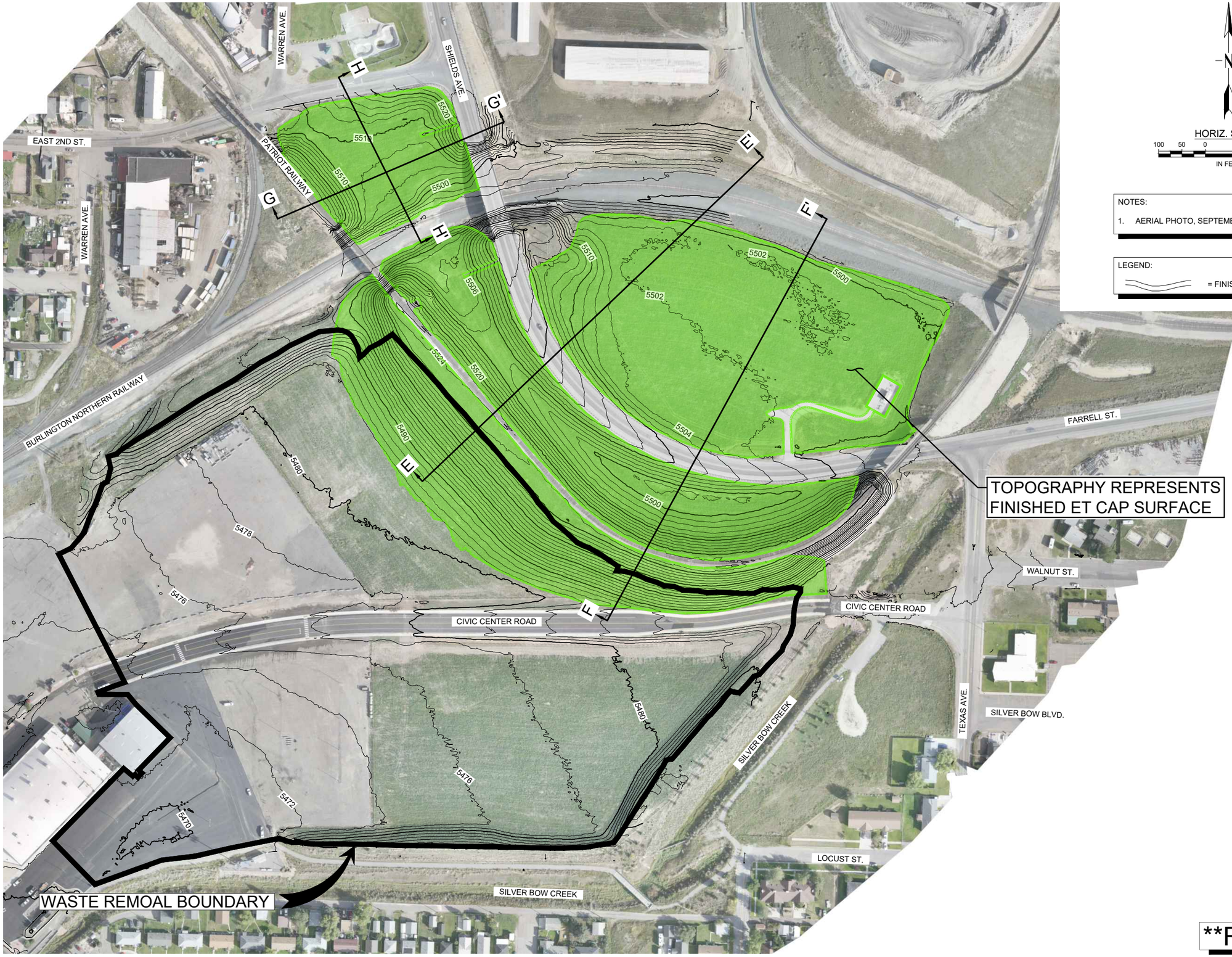

HORIZ. SCALE

100 50 0 100 200

IN FEET

NOTES:

1. AERIAL PHOTO, SEPTEMBER 14, 2023

LEGEND:

= FINISHED GROUND CONTOURS

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MONTANA
STEPHEN WILLIAM FRAZEE
No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

ET COVER PLAN

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-T101-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/20/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
10-1

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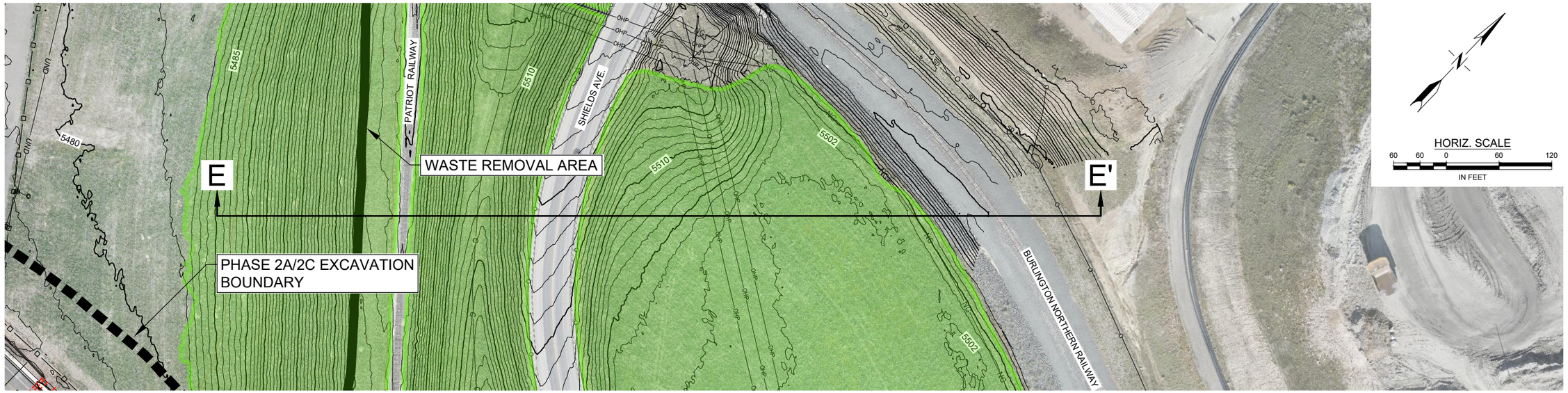

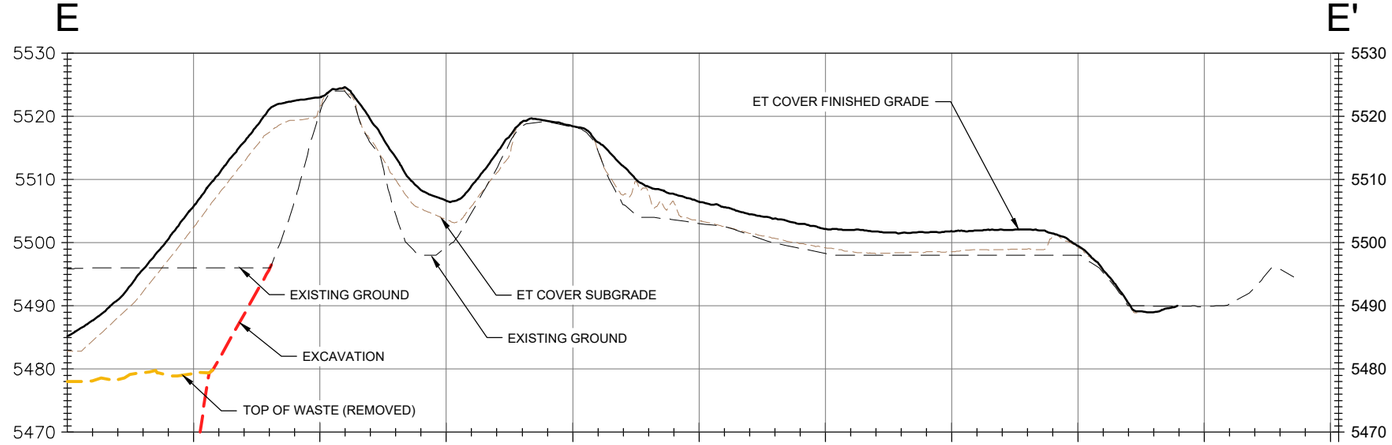

UTILITY NOTE:

1. UTILITIES NOT SHOWN IN CROSS SECTIONS.

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LICENSED PROFESSIONAL ENGINEER

EXCAVATION AREA CROSS SECTION E-E'

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM02-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
10-2

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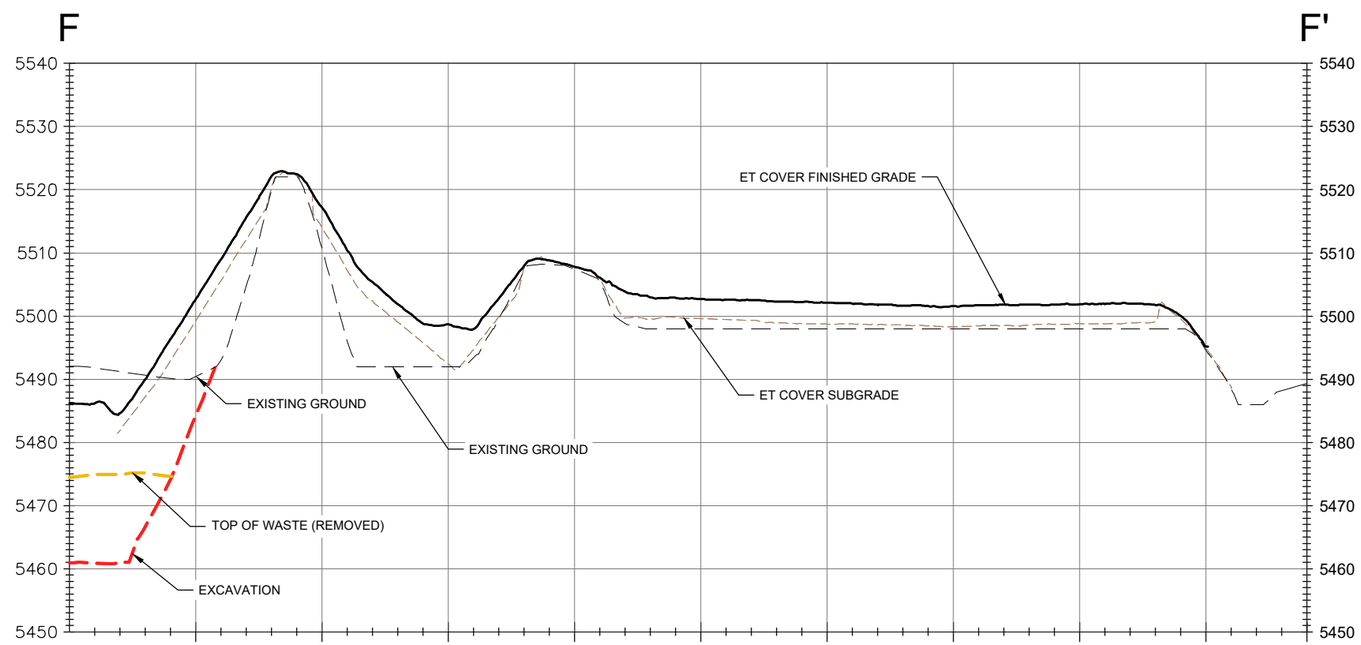

UTILITY NOTE:

1. UTILITIES NOT SHOWN IN CROSS SECTIONS.

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MONTANA
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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

ET COVER AREA CROSS SECTION F-F'

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM02-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
10-3

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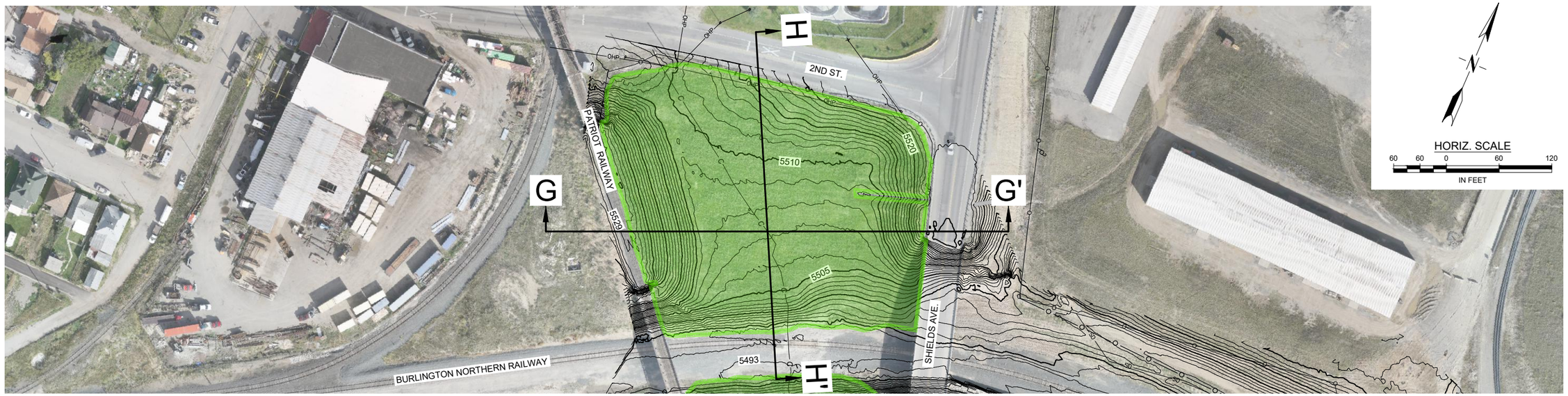

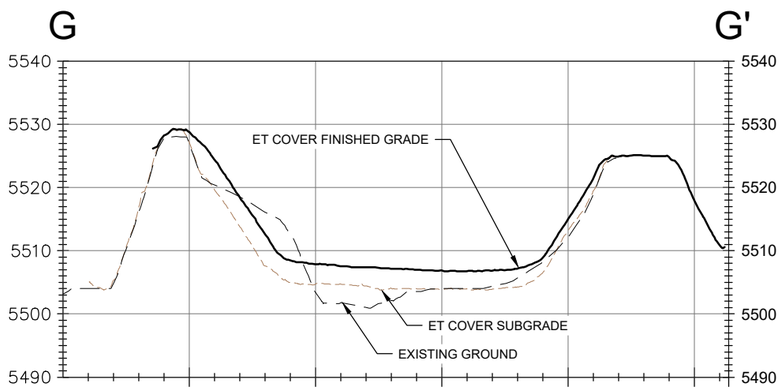

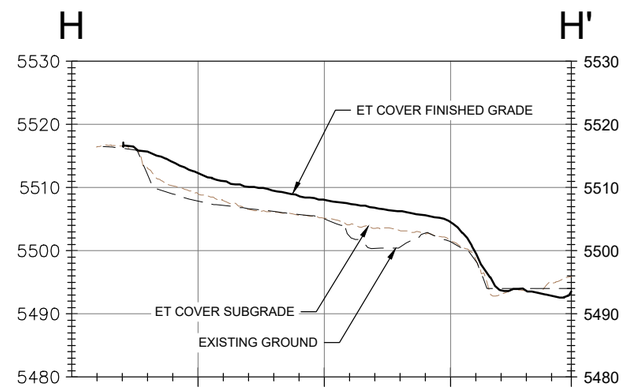

UTILITY NOTE:

1. UTILITIES NOT SHOWN IN CROSS SECTIONS.

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No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

ET COVER AREA CROSS SECTIONS G-G' AND H-H'

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM02-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
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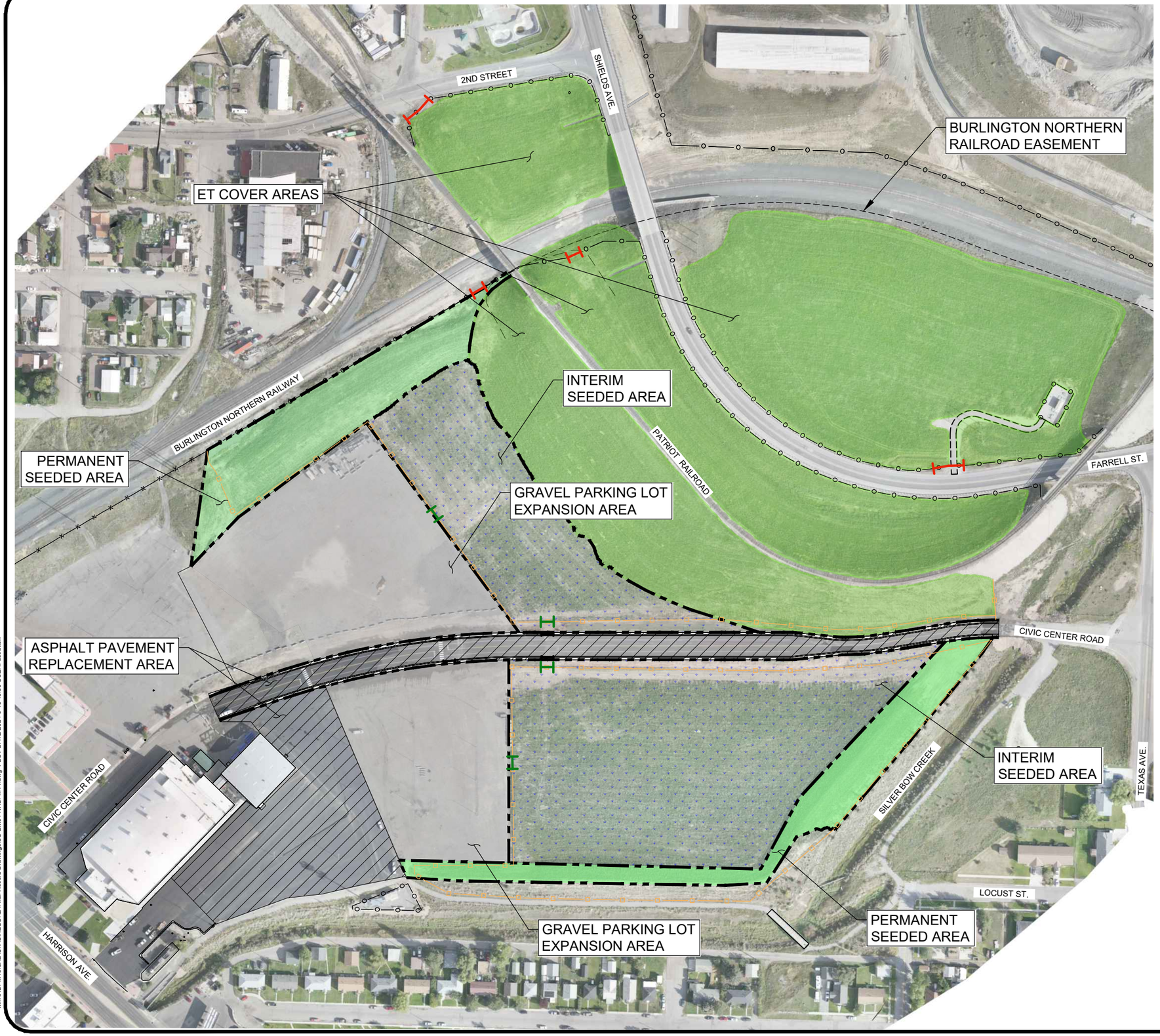

N

HORIZ. SCALE

100 50 0 100 200

IN FEET

NOTES:

1. PARKING LOT ASPHALT PAVEMENT REPLACED PROVIDE MINIMUM SECTION MEETING BUTTE SILVER BOW COUNTY ROAD SPECIFICATIONS AS FOLLOWS:
   - 3-INCHES PG64-28 POLYMER MODIFIED ASPHALT.
   - 6-INCHES PIT RUN GRAVEL (3/4-INCH MINUS) BASE COURSE, <8% PASSING 200 SIEVE IN ACCORDANCE TO MPWSS SECTION 02235.
   - 15-INCHES 2" MINUS SELECT SUB BASE, <8% PASSING 200 SIEVE IN ACCORDANCE WITH MPWSS SECTION 02234 IF UNSUITABLE SUBGRADE MATERIAL PRESENT.
2. GRAVEL PARKING LOT EXPANSION AREAS TO MEET BUTTE SILVER BOW COUNTY STANDARD FOR PARKING LOT AND HAVE GRAVEL SURFACING PROVIDED AND INSTALLED WITH MINIMUM SECTION AS FOLLOWS:
   - 6-INCHES PIT RUN GRAVEL (3/4-INCH MINUS) BASE COURSE, <8% PASSING 200 SIEVE IN ACCORDANCE TO MPWSS SECTION 02235.
   - 15-INCHES 2" MINUS SELECT SUB BASE, <8% PASSING 200 SIEVE IN ACCORDANCE WITH MPWSS SECTION 02234 IF UNSUITABLE SUBGRADE MATERIAL PRESENT.
3. SEEDED AREAS TO FOLLOWED SPECIFICATIONS AND 1999 BUTTE HILL REVEGETATION SPECIFICATIONS AND PAL SEED MIX 2020.
4. PERMANENT SEEDING AREAS CAPPED WITH AN 18-INCH VEGETATIVE CAP PER THE 1999 BUTTE HILL REVEGETATION SPECIFICATIONS, INCLUDING 12-INCHES OF CLEAN FILL, 6-INCHES OF TOP SOIL, AND THE PAL SEED MIX 2020.
5. INTERIM SEEDING AREAS CAPPED WITH AN 18-INCH CAP PER THE 1999 BUTTE HILL REVEGETATION SPECIFICATIONS, INCLUDING 12-INCHES OF CLEAN FILL, 6-INCHES TOP SOIL, AND THE PAL SEED MIX 2020.
6. ET COVER CONSTRUCTED ACCORDING TO SECTION 02485 SOIL COVER.
7. DURING CONSTRUCTION, NRDP AND BSB AGREED NOT TO PAVE ANY PARKING AREAS NORTH OF CIVIC CENTER ROAD. AREAS WHERE EXISTING ASPHALT WAS DISTURBED WERE LEFT AS GRAVEL PARKING. THIS ALLOWED FOR THE PAVING OF A LARGER AREA IN THE SOUTH PARKING LOT. NOTE THAT THE PARROT PROJECT LEFT THE SOUTH PARKING EXPANSION AREA AS GRAVEL PARKING. HOWEVER, BSB PAVED THIS GRAVEL PARKING AREA IN SEPTEMBER 2023 (AFTER PARROT SUBSTANTIAL COMPLETION) TO CREATE A CONTINUOUS PAVED PARKING AREA SOUTH OF CIVIC CENTER ROAD.

LEGEND

POST CONSTRUCTION FENCE

GATES

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No	Description	Date	Drawn By
1	Revised Asphalt Replacement Area	6/1/23	DAS

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MONTANA
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No. 51136 PE
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RECLAMATION PLAN

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-BM01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
11-1

M:\NRDPM15\CAD\CIVIL\RECORD\Final Record Drawings\SC-BM01-NRDPM14.dwg PLOT DATE 2024-6-19 13:50 USER: dstratton

NOTES:

1. PARKING LOT ASPHALT PAVEMENT REPLACED TO PROVIDE MINIMUM SECTION MEETING BUTTE SILVER BOW COUNTY ROAD SPECIFICATIONS AS FOLLOWS:
   - 3-INCHES PG64-28 POLYMER MODIFIED ASPHALT.
   - 6-INCHES PIT RUN GRAVEL (3/4-INCH MINUS) BASE COURSE, <8% PASSING 200 SIEVE IN ACCORDANCE TO MPWSS SECTION 02235.
   - 15-INCHES 2" MINUS SELECT SUB BASE, <8% PASSING 200 SIEVE IN ACCORDANCE WITH MPWSS SECTION 02234 IF UNSUITABLE SUBGRADE MATERIAL PRESENT.

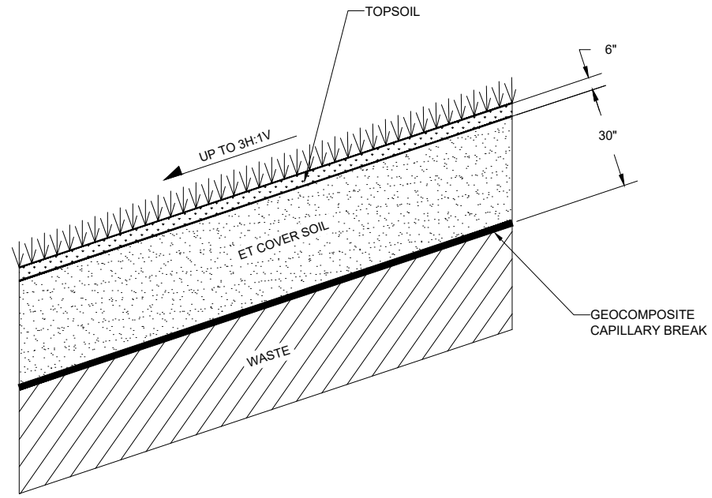
2. GRAVEL PARKING LOT EXPANSION AREAS TO MEET BUTTE SILVER BOW COUNTY STANDARD FOR PARKING LOT AND HAVE GRAVEL SURFACING PROVIDED AND INSTALLED WITH MINIMUM SECTION AS FOLLOWS:
   - 6-INCHES PIT RUN GRAVEL (3/4-INCH MINUS) BASE COURSE, <8% PASSING 200 SIEVE IN ACCORDANCE TO MPWSS SECTION 02235.
   - 15-INCHES 2" MINUS SELECT SUB BASE, <8% PASSING 200 SIEVE IN ACCORDANCE WITH MPWSS SECTION 02234 IF UNSUITABLE SUBGRADE MATERIAL PRESENT.

3. SEEDED AREAS TO FOLLOWED SPECIFICATIONS AND 1999 BUTTE HILL REVEGETATION SPECIFICATIONS AND PAL SEED MIX 2020.

4. PERMANENT SEEDING AREAS CAPPED WITH AN 18-INCH VEGETATIVE CAP PER THE 1999 BUTTE HILL REVEGETATION SPECIFICATIONS, INCLUDING 12-INCHES OF CLEAN FILL, 6-INCHES OF TOP SOIL, AND THE PAL SEED MIX 2020.

5. INTERIM SEEDING AREAS CAPPED WITH AN 18-INCH CAP PER THE 1999 BUTTE HILL REVEGETATION SPECIFICATIONS, INCLUDING 12-INCHES OF CLEAN FILL, 6-INCHES TOP SOIL, AND THE PAL SEED MIX 2020.

6. ET COVER CONSTRUCTED ACCORDING TO SECTION 02485 SOIL COVER.



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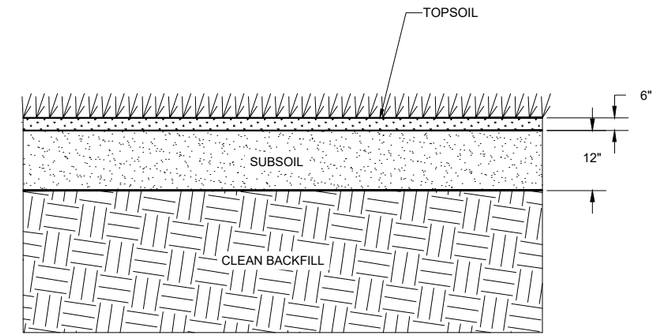
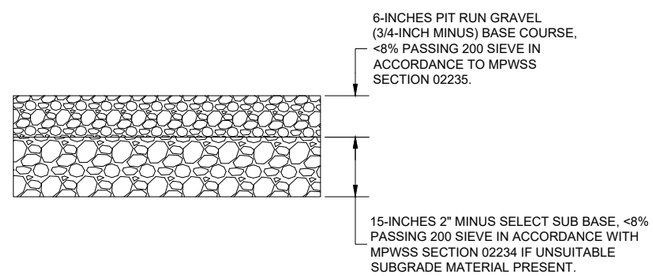
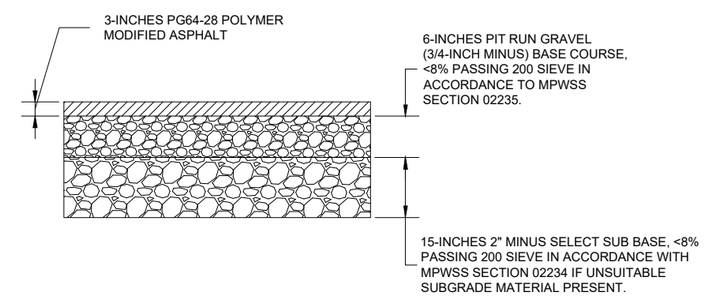
Scale: NTS



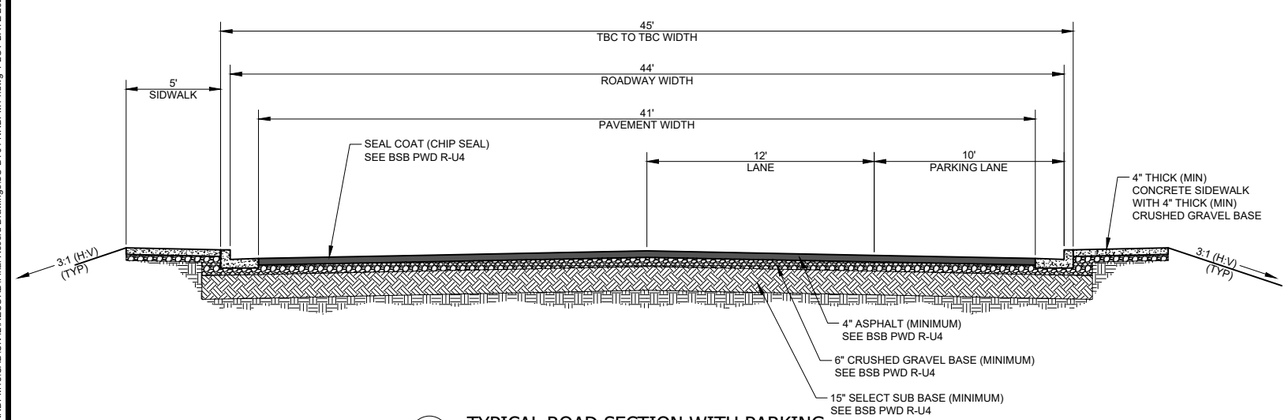
2 TYPICAL INTERIM AND PERMANENT SEEDED AREA SECTION
Scale: NTS



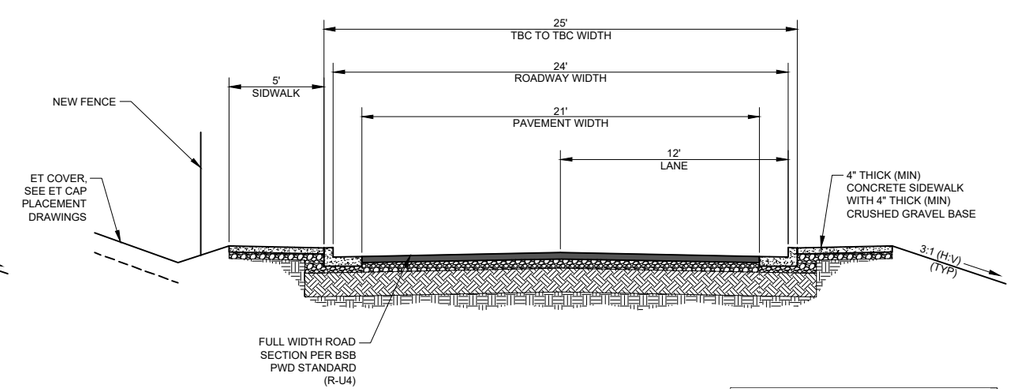
3 TYPICAL GRAVEL PARKING SECTION
Scale: NTS



4 TYPICAL ASPHALT PARKING SECTION
Scale: NTS



5 TYPICAL ROAD SECTION WITH PARKING
Scale: NTS



6 TYPICAL ROAD SECTION
Scale: NTS

RECORD

No	Description	Date	Drawn By

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MONTANA
STEPHEN WILLIAM FRAZEE
No. 51136 PE
LICENSED PROFESSIONAL ENGINEER

SOIL COVER AND ROAD SECTION DETAILS

PROJECT NAME: BAO PARROT TAILINGS REMOVAL
LOCATION: BUTTE, MONTANA
FILE NO. SC-DT01-NRDPM14.dwg

JOB NO:	NRDPM15
DATE:	6/19/24
DRAFTER:	DAS
CHECKED BY:	SF/JV

DRAWING NO.
11-2

M:\NRDPM15\CAD\CIVIL\RECORD\Final Record Drawings\SC-DT01-NRDPM14.dwg PLOT DATE 2024-6-19 14:26 USER: detrafton

Appendix B—Sampling Protocol Memos

To: Jim Ford, Natural Resource Damage Program

From: Josh Vincent, PE, Water & Environmental Technologies
John Trudnowski, PE, Water & Environmental Technologies

Date: September 22, 2021

Re: **Parrot Tailings Waste Removal Project, Waste Identification Criteria Development, and Implementation**

Water & Environmental Technologies

Parrot Tailings Waste Removal Project - Background

Past and ongoing studies have identified the Parrot Tailings Waste Removal Project (Parrot Project) as the primary source of arsenic, cadmium, copper, lead, and zinc to Butte's alluvial groundwater. Left in place, these historic mine wastes allow ongoing releases of contamination to Butte's alluvial groundwater, much of which eventually discharges to Silver Bow and Blacktail Creeks, which are the headwaters of the Clark Fork River. The groundwater leaving the Parrot Project area is more contaminated than the Berkley Pit. This contaminated groundwater discharge degrades the creeks by contaminating the instream sediments, instream sediment pore water, and surface water. State and EPA studies, and investigations have shown, and the recently executed BPSOU Consent Decree has acknowledged, that there are existing unacceptable impacts by groundwater contamination to Blacktail and Silver Bow Creeks that require remedial solutions.

In an effort to reduce this contaminant pathway and its long-term risks to the creeks, the Trustee for the State of Montana, the Governor, decided to implement the Parrot Project through the State's Natural Resource Damage Program (NRDP).

As a general principle, the State believes in mine waste removal as a long-term solution to protect its creeks and rivers statewide. Properly performed waste removal ensures for future generations that wastes will not be re-entrained in fluvial systems during floods or evulsions and that engineered systems will not fail, leaving problems to be dealt with in the future. The State's commitment to removing wastes is demonstrated by the hundreds of millions of dollars it has spent at mining sites such as the Upper Blackfoot Mining Complex ; Milltown Reservoir OU; Clark Fork River OU; Streamside Tailings OU; and now the Parrot Project.

Parrot Project - Waste Identification and Excavation Goals

The primary goals of the Parrot Project waste identification efforts were to identify the locations of the high-concentration wastes so that the excavation could focus on removal of the most contaminated wastes. These wastes were found in the tailings and black clay, which is the old floodplain soils of Silver Bow Creek before it was destroyed by mining and smelting activities.

These wastes are very leachable and are a few orders-of-magnitude higher in contaminant concentrations than the groundwater-saturated alluvial materials (i.e., the "Butte alluvial aquifer"), which at most only slightly exceeded the Waste Criteria for zinc by 10-20%. It was clear that these wastes, and not the alluvial aquifer, are the source of the highly-contaminated groundwater; accordingly, these were the wastes that needed to be removed.

Parrot Project - Waste Identification Criteria

The Parrot Project uses the numeric waste criteria developed for the Streamside Tailing OU Remedial Action in the late 1990's (Table 1).

Table 1: Parrot Project
Waste Identification Criteria:
(Source SSTOU*)

Arsenic	200 mg/kg
Cadmium	20 mg/kg
Copper	1,000 mg/kg
Lead	1,000 mg/kg
Zinc	1,000 mg/kg

*From Field Screen Criteria and Procedures Phase 7 and 8 Remedial Action, SSTOU Subareas 4, Reach R and S (Pioneer 2011). 4 of 6 contaminants need to be below the criteria for area to pass (see DEQ's "Field Screening Criteria and Procedures Remedial Action SSTOU Subarea 3, Reaches M, N, & O" (January 2013)

For the Streamside Tailings OU, if three of the six contaminant criteria listed were exceeded or any one contaminant was above 5,000 mg/kg then, the material was considered tailings, waste, or contaminated soil. For the Parrot Project, if any contaminant was above its criteria, then it was considered "waste" even though the Parrot Project is about a mile from Blacktail or Silver Bow Creeks.

Parrot Project - Implementation

Phase IIA excavation activities (north of Civic Center Road) were completed in 2018. Phase IIB (BSB shop demolition) was conducted during the spring of 2021, and Phase IIC excavation activities (south of Civic Center Road) are currently ongoing.

The Parrot Project defines waste as the products or byproducts of hard rock mining, placer mining, and smelting operations including, but not limited to, mine tailings, contaminated waste rock, contaminated organic clay, and contaminated alluvium as determined by the Engineer in the field. Native soils/overburden mixed with or contaminated by tailings are considered impacted soils and are classified as waste. Overburden mixed with or contaminated by tailings is considered impacted soils and is classified as waste. Waste within the lithological horizons was identified during the design phase using a lithological model derived from historical and recent borehole data. The

design model was used to develop initial volumes, grades, and removal elevations for bidding and planning purposes. However, it is common on mine waste removal projects that the actual lithology in the field over a large area such as the Parrot Project would vary, sometimes considerably, from the model in some areas. As a result, a soil screening procedure was developed in the *Butte Area One, Parrot Tailings Waste Removal Project (Revision 3 – Final, Update Phase IIB, IIC, and III) – Construction Management Quality Assurance Project Plan* (QAPP, Attachment B) to ensure all appropriate waste is removed and clean overburden is not cross-contaminated during removal activities. The soil screening procedure directs waste removal by collecting a combination of environmental, lithological, and geospatial data, including:

Environmental

- Contaminant concentration data for existing cover soils / overburden
- Contaminant concentration data from open excavation to verify waste removal
- Contaminant concentration data for imported soil cover material

Lithological

- Visual determination of tailings and black clay layers in relation to groundwater elevation to ensure that known waste layers are removed

Geospatial

Surveys to document soil sample locations

- LiDAR surveys to document the extent of waste removal

The soil screening procedure includes the acquisition of field and laboratory XRF data from excavation spoils of the various lithological horizons to identify the horizon boundaries and to support the segregation of clean backfill from waste. The soil screening procedure utilizes *in-situ* field portable XRF measurements to determine whether sampling media meets the waste criteria in Table 1. Together, project data identifies, documents, and quantifies which horizons represent "clean" material that may be segregated and used as backfill, and where the waste horizon is located.

This is accomplished by acquiring field XRF data at these interfaces and correlating it with changes in soil horizons (color/texture). Using *in-situ* field data and visual evidence of soil color/texture changes identifies the boundary where soils must be segregated as backfill, slag, and waste. Robust field XRF soil screening throughout the excavation and segregation process aids in confirming waste is not used as backfill. *In-situ* field measurements identify contaminated overburden material that lack visual or textural cues typical of the underlying waste material and promotes real-time soils routing. *In-situ* field measurements are also used to confirm that the excavation has reached its vertical limit when the uncontaminated groundwater-saturated alluvium horizon has been reached and the maximum amount of waste material has been removed. Due to the presence of groundwater, the protocol identifies a vertical elevation limit where excavation is stopped, once the black clay layer has been removed (the deepest lithological unit of known highly contaminated waste). A subset of all field XRF samples are submitted for independent laboratory XRF analysis, to ensure field instruments are operating within the parameters defined in the Parrot Project QAPP.

The current excavation extends from the existing ground surface to the bottom of the black clay layer, which ranges from approximately 11 to 34 feet below ground surface (bgs) throughout the excavation area. Waste is being removed along with underlying impacted alluvium in unsaturated areas to the design vertical excavation limit (March 2018 Groundwater Elevation). The March 2018 groundwater elevation was chosen as the vertical extent because it was the lowest groundwater elevation with a complete groundwater elevation data set across the site. The March 2018 groundwater elevation represents a conservative vertical extent that will allow full removal of waste below the black clay horizon.

Saturated waste found to extend below the vertical excavation limit will be dewatered and excavated until all visual evidence indicates it has been removed. In areas where waste has been completely removed before reaching the vertical excavation limit, the excavation will be discontinued if soil screening data demonstrates the alluvium is below action levels. If the alluvium is above action levels, it will be excavated to the vertical excavation limit. The workflow for this process is included in **Attachment A**.

Sampling Methods

The soil screening pass/fail criteria for classification of waste was adopted from the *Streamside Tailings Operable Unit Subarea 4 Reach T Remedial Action Investigation Sampling and Analysis Plan (SAP)*. The sampling methods described in the Parrot Project QAPP were adapted from the Environmental Protection Agency (EPA)-approved 2018 Anaconda NPL Site Institutional Control Program (ICP) QAPP, which contains detailed information on soil routing decision-making processes and field portable XRF procedures. The 2018 ICP QAPP was derived from the EPA-approved 2015 Anaconda NPL Site Community Soils, Residential Soils/Dust QAPP, which was developed to facilitate soil remediation within residential yard components. The 2015 Community Soils QAPP was based on the EPA's Superfund Lead-Contaminated Residential Sites Handbook published in 2003.

The foundation of these guidance documents requires one subsample per 625 ft^2 to characterize soil Contaminant data within each soil horizon or defined depth interval. The Parrot Project QAPP requires collection of an eight-point composite sampling within each 100-ft by 50-ft excavation component, with a sample frequency of one composite sample for every 400 cubic yards (CY) excavated. The eight sub-samples within the 5,000 ft^2 excavation component matches the 625 ft^2 per subsample EPA guidance requirement exactly.

For the Parrot Project, excavation monitoring and waste removal verification sampling is performed using various approaches depending on the work sequence(s) outlined in the excavation plan. The approaches identified in the Parrot Project QAPP include collection of samples during active excavation, sampling of stockpiles material, or *in-situ* measurements of soil horizons. Previous investigations at the Parrot Project site have revealed that subsurface lithology is a blend of waste types, and the vertical distribution of the various waste forms is not uniform. To ensure sample flexibility, opportunity samples (grab samples) are also utilized to aid in soil characterization. The general approaches outlined in the Parrot Project QAPP have been implemented on-site as described below.

Active Excavation: (Direct Haul)

As different lithological units are excavated (Overburden/Quartz Monzonite Fill/Slag/Tailings/Organic Clay/Alluvial Sediments), *in-situ* XRF field measurements are collected from the active excavation for each haul truck loaded. *In-situ* field measurements are acquired from the bucket of the excavator and simultaneously, a subsample of the material used to produce the i*n-situ* field measurement is collected to create a confirmation sample of the excavated material. This process is repeated ten times, to create ten *in-situ* field measurements and one composite sample, characterizing the soil for ten haul trucks. This sampling methodology provides real-time analytical data for soils routing while maintaining the required sampling frequency of one composite confirmation sample per 400 CY of excavated material. All composite confirmation samples undergo sample preparation and soil processing to increase XRF analytical accuracy. When the excavation encounters a change in lithological unit or soils differ in color, texture, or composition, grab samples are collected to characterize the encountered/underlying material. Grab samples aid in confirming when different soil stratums are reached and help dictate excavation elevations. Grab samples are analyzed *in-situ* to aid in the real-time soil routing decisions and also undergo sample preparation and processing to maintain data quality standards.

It is important to note, *in-situ* field measurements are the least reliable means of acquiring XRF data but vital for the real-time soils routing decision making process necessary on-site. By combining *in-situ* field measurements with prepared and processed composite samples, data quality objectives outlined in the Parrot Project QAPP are maintained. The work sequence outlined in the excavation plan relies heavily on direct hauling and permanently placing excavated material; therefore, real-time soil characterization is vital to ensure proper soils routing.

Active Excavation: (Confirmation of Waste Removal/Vertical Extent)

Following the removal of waste material where the excavation has reached the vertical elevation limit, the footprint of the excavation area is divided into 100-ft by 50-ft sampling components and within each component, eight evenly spaced subsamples are created using ArcGIS software. The eight subsamples within each grid are combined into a single composite sample that undergoes preparation, processing, and field XRF analysis. During sample collection, field personnel visually inspect the excavation floor for waste left in place. If any subsamples contain black clay material, or it is evident that the alluvial sediments have not been reached, the area is over-excavated until all visible waste is removed. If the field XRF analysis identifies exceedances of the criteria within the alluvium, the alluvium is removed to the March 2018 Groundwater elevation.

Stockpiles:

If the work sequence better lends itself to collection of samples from stockpiled material, the stockpile is divided into equal parts, using a pre-defined ArcGIS grid, and one eight-point composite sample is collected from each segment of the stockpile, representing approximately 400 CY of material. The volumes are estimated from the ongoing surveys, which ensures representative samples of all staged material are collected and analyzed.

Results

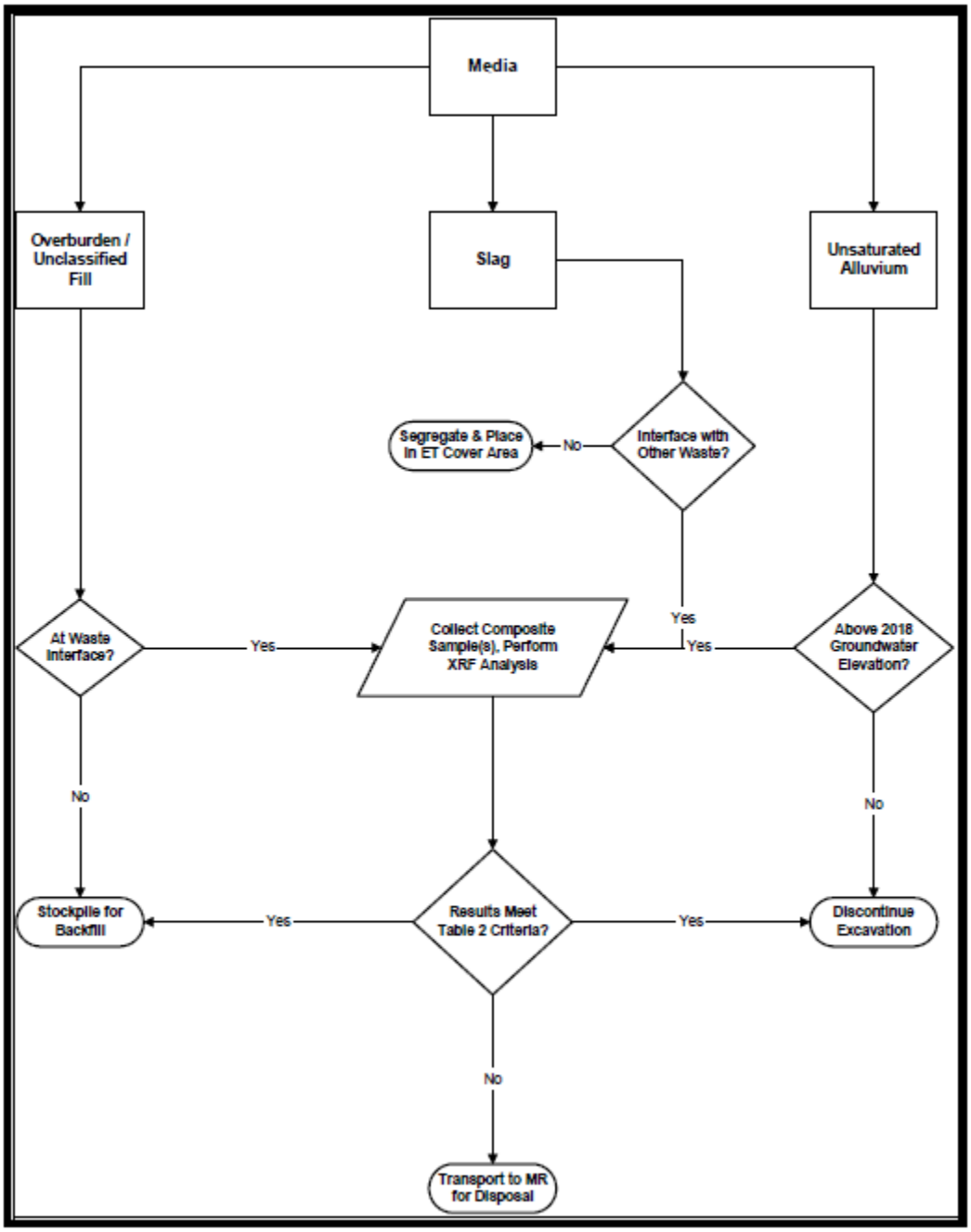
The soil screening procedure discussed above has successfully identified and routed waste to allow for efficient excavation activities and has prevented backfill cross-contamination. Not only has the soil screening procedure confirmed waste horizons, but it has also identified isolated waste pockets and contaminated overburden that would have been considered clean backfill with the lithological model only. The soil screening process has provided a real-time process to identify waste that allows efficient excavation and waste removal.

Attachments:

A. Parrot Tailings Waste Removal Project Decision Tree
B. Parrot Project QAPP

ATTACHMENT A

Parrot Tailings Waste Removal Project Decision Tree



To: Jim Ford, Natural Resource Damage Program

From: Stephen Frazee, PE, Water & Environmental Technologies

CC: Josh Vincent, PE, Water & Environmental Technologies
Josh Trudnowski PE, Water & Environmental Technologies

Date: February 18, 2022

Re: Parrot Tailings Waste Removal Project - **Montana Resources (MR) Lunchroom Dump Borrow Material Sampling Procedures**

Excavation activities at the Parrot Tailings Waste Removal Project have been proceeding for the last several months. Soil screening procedures identified in the *Butte Area One, Parrot Tailings Waste Removal Project (Revision 3 – Final, Update Phase IIB, IIC, and III) – Construction Management Quality Assurance Project Plan* (QAPP) have resulted in a larger volume of overburden material failing waste criteria than anticipated in the original design. This has created an imbalance in the volume of available overburden backfill material. Due to the shortage of clean overburden backfill material within the Parrot Tailings Removal Project site (Site), Intermountain Construction Services (ICS) proposed an alternate backfill source. The borrow source is located on Montana Resources (MR) property as shown on **Figure 1,** known as the "Lunchroom Dump". This borrow material consists of native alluvium stripped from the Montana Resources site and is generally classified as a clayey sand. This memo outlines the sampling procedures utilized to ensure the borrow material meets project specifications.

To determine whether the proposed MR borrow source was a viable option for use at the Parrot Site, the material was sampled according to the soil screening procedures detailed in the QAPP.

Table 3 on Page 11 of the QAPP in Step 5.3 states that *"Imported soils will be considered suitable as fill, topsoil, or ET cover soil if:*

- *Laboratory XRF results indicate that the chemical profile complies with Table 2, and*
- *They meet the chemical and physical characteristics outlined in the Butte Hill Revegetation Specifications, and*
- *Geotechnical and other physical characteristics demonstrate it will function properly for its desired use."*

Table 2 from the QAPP is shown below.

Table 2. Soil Screening Pass/Fail Criteria for Waste Removal

Constituent:	[1]Failure Criteria (mg/Kg)	XRF Failure Criteria (mg/Kg)	XRF Ceiling Criteria (mg/Kg)
Arsenic	200	≥ 241	Any single analyte above 5,000 mg/kg
Cadmium	20	Zinc ≥ 3020	
Copper	1,000	≥ 1,240	
Lead	1,000	≥ 1,090	
Zinc	1,000	≥ 1,330	

[1] Butte Area One site investigations from *Field Screen Criteria and Procedures Phase 7 and 8 Remedial Action, SSTOU Subarea 4, Reaches R and S* (Pioneer 2011)

mg/kg = milligrams per kilogram

The Butte Hill Revegetation Specifications (1999) require at least 3 soil samples and resampling at a minimum every 5,000 cubic yards to verify gradation/texture. However, this applies to cover soil (i.e. topsoil and ET soil) and not general backfill. The project Technical Specifications for imported material such as pit run require testing every 15,000 cubic yards of import.

After reviewing the QAPP and Project Technical Specifications, the Project Team selected a sampling frequency of 1,600 cubic yards (cell size is ~75ft x 75ft x 8ft deep) to confirm that the material meets project action levels for metals. If a sample exceeds project action levels, the material within the sampled cell will be segregated and not imported, or the material will be blended with surrounding clean soils and resampled. An estimated 135,000 cubic yards of this material will be imported which will result in approximately 85 samples.

All sampling methods for the MR Lunchroom Dump borrow material will follow the project QAPP and meet the appropriate Technical Specifications. Additionally, the material was sampled for geotechnical parameters and backfill recommendations were provided by Castle Rock Civil and Geotechnical Engineering confirming its suitability for use as backfill.

Please refer to the memo from Water & Environmental Technologies dated January 7, 2022 for further details/results on the initial sampling results for the MR borrow material.

Water & Environmental TECHNOLOGIES

Phase IIB, IIC, and III
Parrot Site and MR Proposed Borrow Site

Parrot Tailings Removal Project
Butte MT, Silver Bow County

Job#: NRDPM15 Task 2

Date: 1/7/2022

FIGURE 1

Path: E:\NRDPM15\GIS\Figure1_Memo.mxd, Author: sampletech

Appendix C—Soil Sampling Data

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
180503-01	20180502 TP1 0-2	Test Pit 1	Initial Test Pitting Conducted within 4 test pits, using an excavator.	21 Samples collected within the 4 test pits, sample depths varied and samples were collected within each unique soil statification layer observed. All samples were processed and sent for lab XRF analysis. No FPXRF (WET) XRF analaysis was conducted on these samples.	0-2 ft	Yes	NA	NA	NA	NA	NA	10	U15	73	85	259																	
180503-02	20180502 TP1 2-4	Test Pit 1			2-4 ft	Yes	NA	NA	NA	NA	NA	43	U15	456	135	397																	
180503-03	20180502 TP1 4-6	Test Pit 1			4-6 ft	Yes	NA	NA	NA	NA	NA	30	U15	313	273	569																	
180503-04	20180502 TP1 6-8	Test Pit 1			6-8 ft	Yes	NA	NA	NA	NA	NA	40	U15	409	381	813																	
180503-05	20180502 TP1 8-10	Test Pit 1			8-10 ft	Yes	NA	NA	NA	NA	NA	34	U15	348	336	684																	
180503-06	20180502 TP1 10-12	Test Pit 1			10-12 ft	Yes	NA	NA	NA	NA	NA	36	U15	359	381	722																	
180503-07	20180502 TP2 0-2	Test Pit 2			0-2 ft	Yes	NA	NA	NA	NA	NA	18	U15	68	35	101																	
180503-08	20180502 TP3 0-2	Test Pit 3			0-2 ft	Yes	NA	NA	NA	NA	NA	19	U15	111	135	245																	
180503-09	20180502 TP3 2-4	Test Pit 3			2-4 ft	Yes	NA	NA	NA	NA	NA	13	U15	154	163	312																	
180503-10	20180502 TP3 4-4.5	Test Pit 3			4-4.5 ft	Yes	NA	NA	NA	NA	NA	128	U15	461	200	994																	
180503-11	20180502 TP3 4.5-6	Test Pit 3			4.5-6 ft	Yes	NA	NA	NA	NA	NA	67	U15	445	116	927																	
180503-12	20180502 TP3 6-8	Test Pit 3			6-8 ft	Yes	NA	NA	NA	NA	NA	79	U15	426	882	967																	
180503-13	20180502 TP3 8-10	Test Pit 3			8-10 ft	Yes	NA	NA	NA	NA	NA	103	U15	720	509	**1238**																	
180503-14	20180502 TP4 0-2	Test Pit 4			0-2 ft	Yes	NA	NA	NA	NA	NA	9	U15	76	16	118																	
180503-15	20180502 TP4 2-4	Test Pit 4			2-4 ft	Yes	NA	NA	NA	NA	NA	117	U15	183	541	551																	
180503-16	20180502 TP4 4-6	Test Pit 4			4-6 ft	Yes	NA	NA	NA	NA	NA	**250**	U15	217	613	**1298**																	
180503-17	20180502 TP4 6-8	Test Pit 4			6-8 ft	Yes	NA	NA	NA	NA	NA	**221**	U15	393	662	**5269**																	
180503-18	20180502 TP4 8-10	Test Pit 4			8-10 ft	Yes	NA	NA	NA	NA	NA	**234**	U15	**2731**	83	800																	
180503-19	20180502 TP4 10	Test Pit 4			10 ft	Yes	NA	NA	NA	NA	NA	**489**	U15	656	430	**1448**																	
180503-20	20180502 TP4 14	Test Pit 4			14 ft	Yes	NA	NA	NA	NA	NA	30	U15	**1033**	123	**1048**																	
180503-21	20180502 TP4 16	Test Pit 4			16 ft	Yes	NA	NA	NA	NA	NA	**272**	U15	792	511	986																	

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
180531-1	180531-LAB-001	Test Pit 1	20 Test Pits of Surface Soils hand dug.	20 samples of surface soils collected for Lab XRF analysis. No FPXRF (WET) XRF analysis conducted.	Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	59	15U	579	147	702																	
180531-2	180531-LAB-002	Test Pit 2			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	50	15U	82	36	103																	
180531-3	180531-LAB-003	Test Pit 3			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	18	15U	264	62	310																	
180531-4	180531-LAB-004	Test Pit 4			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	**261**	15U	531	258	407																	
180531-5	180531-LAB-005	Test Pit 5			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	6U	15U	100	96	254																	
180531-6	180531-LAB-006	Test Pit 6			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	19	15U	224	207	694																	
180531-7	180531-LAB-007	Test Pit 7			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	28	15U	69	31	81																	
180531-8	180531-LAB-008	Test Pit 8			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	17	15U	63	27	77																	
180531-9	180531-LAB-009	Test Pit 9			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	28	15U	71	34	90																	
180531-10	180531-LAB-010	Test Pit 10			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	38	15U	77	33	104																	
180531-11	180531-LAB-011	Test Pit 11			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	25	15U	60	29	80																	
180531-12	180531-LAB-012	Test Pit 12			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	**419**	15U	854	666	**1904**																	
180531-13	180531-LAB-013	Test Pit 13			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	20	15U	120	197	414																	
180531-14	180531-LAB-014	Test Pit 14			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	24	15U	181	96	419																	
180531-15	180531-LAB-015	Test Pit 15			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	12	15U	72	42	178																	
180531-16	180531-LAB-016	Test Pit 16			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	25	15U	143	62	222																	
180531-17	180531-LAB-017	Test Pit 17			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	21	15U	299	58	417																	
180531-18	180531-LAB-018	Test Pit 18			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	32	15U	402	346	663																	
180531-19	180531-LAB-019	Test Pit 19			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	16	15U	88	43	133																	
180531-20	180531-LAB-020	Test Pit 20			Surface Soils 0-18 inches	Yes	NA	NA	NA	NA	NA	33	15U	932	130	623																	
NA	180716-Parrot-OB-C-001	Stockpile #1	Sampled overburden stockpiles needed to constructed bridge deck encroachments. Sampled other stockpiles on-site at the time to determine how mixing of media effects CoCs.	Overburden material was typical sandy gravel with a brownish coloration. Three eight-point composites samples were collected and field prepped to 10 mesh. Overburden came from the access ramp/road cut into the western side from the trailers to the upper parking area.	Surface Samples 0-1' Into Stockpiles	Yes	29	<LOD	537	131	475																						
							22	<LOD	479	149	441																						
							31	<LOD	520	70	440																						
							27	<LOD	512	117	452																						
NA	180716-Parrot-OB-C-002	Stockpile #2			Surface Samples 0-1' Into Stockpiles	Yes	25	<LOD	349	164	471																						
							31	<LOD	458	256	459																						
							37	<LOD	380	167	586																						
							31	<LOD	396	196	505																						
NA	180716-Parrot-OB-C-003	Stockpile #3			Surface Samples 0-1' Into Stockpiles	Yes	38	<LOD	635	116	681																						
							26	<LOD	496	119	721																						
							31	<LOD	437	147	681																						
							32	<LOD	523	127	694																						
NA	180716-Parrot-OB-G-004	Stockpile #4		Two small stockpiles > 5CY of tailing dug when installing fencing	Surface Samples 0-1' Into Stockpiles	Yes	**328**	<LOD	314	536	434																						
							273	<LOD	317	752	939																						
							340	<LOD	397	669	**1426**																						
							314	<LOD	343	652	933																						
NA	180716-Parrot-OB-G-005	Stockpile #5		Stockpile where excavator dug to unhooked boom for bridge placements	Surface Samples 0-1' Into Stockpiles	Yes	164	<LOD	**2412**	504	667																						
							130	<LOD	**2073**	468	694																						
							252	<LOD	**3150**	558	768																						
							182	<LOD	**2545**	510	710																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180724-Parrot-OB-C-006	Toe slope of the northwest overburden	Overburden Sampling of the northwest overburden and sampling of stockpiles and areas associated the east bridge encroachment	Eight sample points where located from the toe slope up to the benched area	Surface Samples of sloped area	Yes	25	<LOD	434	74	398																						
							22	<LOD	406	62	335																						
							25	<LOD	458	60	393																						
							24	<LOD	433	65	375																						
NA	180724-Parrot-OB-C-007	Benched area of the northwest overburden		Eight sample points where located on the benched area, half of the total sloped elevation	Surface Samples of the benched area	Yes	30	<LOD	540	78	391																						
							28	<LOD	580	62	362																						
							21	<LOD	525	70	332																						
							26	<LOD	548	70	362																						
NA	180724-Parrot-OB-C-008	Upper slope of the northwest overburden		Eight sample points where located on the upper sloped area above the bench	Surface samples of the sloped area	Yes	45	<LOD	780	76	602																						
							36	<LOD	717	67	494																						
							42	<LOD	826	85	577																						
							41	<LOD	774	76	558																						
NA	180724-Parrot-OB-C-009	Current site access road north cut soil		Eight samples points were located along the sloped area of the main access road	Surface samples of the sloped area	Yes	14	<LOD	249	81	250																						
							<LOD	<LOD	185	82	221																						
							15	<LOD	241	55	221																						
							15	<LOD	225	73	231																						
NA	180724-Parrot-OB-C-010			Eight samples points were located along the sloped area of the main access road	Surface samples of the sloped area	Yes	46	<LOD	534	190	754																						
							21	<LOD	515	155	573																						
							19	<LOD	495	164	521																						
							29	<LOD	515	170	616																						
NA	180724-Parrot-OB-G-011	Stockpile located near western bridge adjacent to railroad		Stockpile was sampled per typical protocols for grab sampling. Visible waste present	Surface samples of stockpile slopes	Yes	156	<LOD	**1868**	250	877																						
							95	<LOD	**1198**	222	612																						
							89	<LOD	924	210	487																						
							113	<LOD	**1330**	227	659																						
NA	180724-Parrot-OB-G-012	Stockpile located next to excavation bucket hole. Equipment storage area.		Stockpile was sampled per typical protocols for grab sampling. Visible waste present	Surface samples of stockpile slopes	Yes	**274**	<LOD	**2288**	783	**1375**																						
							208	<LOD	**2293**	625	820																						
							210	<LOD	**2620**	544	970																						
							231	<LOD	**2400**	651	**1055**																						
NA	180724-Parrot-OB-G-013	Stockpile location on GPS. Material originated from eastern bridge area. Volume estimated at 120		Stockpile was sampled per typical protocols for grab sampling	Surface samples of stockpile slopes	Yes	**284**	<LOD	**4780**	424	**1293**																						
							287	<LOD	**5144**	484	**1317**																						
							236	<LOD	**4282**	400	**1143**																						
							269	<LOD	**4735**	436	**1251**																						
NA	180726-Parrot-OB-G-014	Center Stockpile	Stockpile sampling and haul truck routing	10 point composite as hauled. 40 CY per haul truck. Confirmation sample of in-situ work. Same stockpile as stockpile 1, 2, and 3.	Surface samples of stockpile slopes	Yes	23	<LOD	246	93	282																						
							15	<LOD	235	109	301																						
							<LOD	<LOD	234	245	301																						
							19	<LOD	238	149	295																						
NA	180730-Parrot-OB-G-015	North Western Overburden Direct Haul	Overburden soils routing from the northwester corner of project by job trailers	Brown sandy material with no visible contamination present. Toe slope material contains Cu~800 ppm. First 10 truck loads hauled from area ~ 400 CY of material (1-10 hauls) (XL5 data - XL2 malfunction)	From toe slope to upper slope	Yes	12	<LOD	111	78	420																								
							17	<LOD	534	83	388																						
							20	<LOD	559	73	369																						
							16	<LOD	401	78	392																						
NA	180730-Parrot-OB-G-016			Second 10 truck loads hauled from area ~400 CY of Material (11-20 hauls) (XL5 data - XL2 malfunction)	From toe slope to upper slope	Yes	21	<LOD	482	96	403																						
							18	<LOD	358	73	393																						
							27	<LOD	394	66	384																						
							22	<LOD	411	78	393																						
NA	180730-Parrot-OB-G-017			Third 10 truck loads hauled from area ~400 CY of Material (21-30 hauls) (XL5 data - XL2 malfunction)	From toe slope to upper slope	Yes	27	<LOD	657	83	457																						
							30	<LOD	613	79	468																						
							34	<LOD	620	83	476																						
							30	<LOD	630	82	467																						
NA	180730-Parrot-OB-G-018			Forth 10 truck loads hauled from area ~400 CY of Material (31-40 hauls) (XL5 data - XL2 malfunction)	From toe slope to upper slope	Yes	22	<LOD	520	86	341																						
							14	<LOD	552	94	377																						
							23	<LOD	532	99	346																						
							20	<LOD	535	93	355																						
NA	180731-Parrot-OB-G-019	North Western Overburden Direct Haul	Overburden soils routing from the northwester corner of project by job trailers	Fifth 10 truck loads hauled from area ~400 CY of Material (41-50 hauls) (XL5 data - XL2 malfunction)	From toe slope to upper slope	Yes	11	<LOD	195	41	199																						
							16	<LOD	240	37	241																						
							10	<LOD	171	36	202																						
							12	<LOD	202	38	214																						
NA	180731-Parrot-OB-G-020			Sixth 10 truck loads hauled from area ~400 CY of Material (51-60 hauls) (XL5 data - XL2 malfunction)	From toe slope to upper slope	Yes	23	<LOD	370	61	332																						
							25	<LOD	381	49	347																						
							27	<LOD	381	68	387																						
							25	<LOD	377	59	355																						
NA	180716-Parrot-OB-G-004						**328**	<LOD	314	536	434																						
							273	<LOD	317	752	939																						
							340	<LOD	397	669	**1426**																						
							314	<LOD	343	652	933																						
NA	180801-Parrot-Dup-004						**309**	<LOD	224	499	580																						
							274	<LOD	163	396	332																						
							231	<LOD	154	363	281																						
							271	<LOD	180	419	398																115.602	NA	190.0185	155.5644	234.6186		
180912-1	180801-Parrot-Lab-004											**330**	<LOD	309	672	**1022**											105.2072	NA	90.1751	103.0148	109.5391		
NA	180801-Parrot-Sand Blank						3	<LOD	<LOD	<LOD	<LOD																						
							4	<LOD	<LOD	<LOD	<LOD																						
							5	<LOD	<LOD	<LOD	<LOD																						
							4	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a)						104	**50**	108	**1185**	432																						
							90	**51**	105	**1207**	447																						
							94	**53**	104	**1190**	444																						
							96	**51**	106	**1194**	441						107	54.1	140	1400	414	90	95	75	85	107							
NA	180731-Parrot-OB-G-021	North Western Overburden Direct Haul	Overburden soils routing from the northwester corner of project by job trailers	Temporary Note: This sample is the seventh haul sample which only has about half the grab samples needed for the average 400 CY quantity. If done hauling from the area the sample will be prepped and analyzed with a note	From toe slope to upper slope	Yes	8	<LOD	106	31	105																						
							10	<LOD	86	41	114																						
							9	<LOD	136	35	134																						
							9	<LOD	109	36	118																						
NA	180801-Parrot-OB-G-022	North of Ballfield in old parking lot	Soil Screening for direct haul that never materialized. Did QAQC Sampling and XRF cal factors.	Imported pit run gravel. Eight point grab sample from the perimeter of the stockpile area.	Surface samples around stockpile	Yes	<LOD	<LOD	<LOD	31	19																						
							<LOD	<LOD	<LOD	17	20																						
							<LOD	<LOD	<LOD	23	107																						
							<LOD	<LOD	<LOD	24	49																						
NA	180807-Parrot-OB-G-023	RR and perimeter fence the stockpile is located in the northwestern portion of the site	First day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data. One area was identified as hot and was avoided after discovery.	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 1-10	0-12 ft	Yes	86	<LOD	869	165	877																						
							119	<LOD	967	128	850																						
							99	<LOD	745	139	641																						
							101	<LOD	860	144	789																						
NA	180807-Parrot-OB-G-024			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 11-20	0-12 ft	Yes	105	<LOD	623	346	504																						
							129	<LOD	815	153	543																						
							167	<LOD	938	268	866																						
							134	<LOD	792	256	638																						
NA	180807-Parrot-OB-G-025			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 21-30	0-12 ft	Yes	140	<LOD	904	410	561																						
							166	<LOD	**1115**	223	506																						
							163	<LOD	965	144	508																						
							156	<LOD	995	259	525																						
NA	180807-Parrot-OB-G-026			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 31-40	0-12 ft	Yes	103	<LOD	997	136	549																						
							117	<LOD	**1008**	174	449																						
							104	<LOD	**1037**	137	509																						
							108	<LOD	**1014**	149	502																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180807-Parrot-OB-G-027	RR and perimeter fence the stockpile is located in the northwestern portion of the site	First day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data. One area was identified as hot and was avoided after discovery.	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 41-50	0-12 ft	Yes	82	<LOD	649	111	506																						
							73	<LOD	622	149	429																						
							78	<LOD	593	149	349																						
							78	<LOD	621	136	428																						
NA	180807-Parrot-OB-G-028			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 51-60	0-12 ft	Yes	90	<LOD	843	92	443																						
							84	<LOD	907	87	490																						
							95	<LOD	974	98	643																						
							90	<LOD	908	92	525																						
NA	180808-Parrot-OB-G-029	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Second day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data. Wind row and consolidated contamination stockpile were also sampled.	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 61-70	0-12 ft	Yes	86	<LOD	780	188	434																						
							78	<LOD	466	200	386																						
							84	<LOD	435	237	308																						
							83	<LOD	560	208	376																						
NA	180808-Parrot-OB-G-030			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 71-80	0-12 ft	Yes	58	<LOD	223	163	216																						
							58	<LOD	243	181	386																						
							56	<LOD	238	116	308																						
							57	<LOD	235	153	303																						
NA	180808-Parrot-OB-G-031			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 81-90	0-12 ft	Yes	37	<LOD	167	254	847																						
							47	<LOD	206	234	379																						
							52	<LOD	208	396	426																						
							45	<LOD	194	295	551																						
NA	180808-Parrot-OB-G-032			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 91-100	0-12 ft	Yes	40	<LOD	253	100	319																						
							45	<LOD	260	64	299																						
							25	<LOD	216	68	331																						
							37	<LOD	243	77	316																						
NA	180808-Parrot-OB-G-033			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 101-110	0-12 ft	Yes	58	<LOD	329	73	272																						
							59	<LOD	393	80	282																						
							54	<LOD	401	83	271																						
							57	<LOD	374	79	275																						
NA	180808-Parrot-OB-G-034			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 111-120	0-12 ft	Yes	38	<LOD	213	56	200																						
							31	<LOD	198	63	174																						
							41	<LOD	189	63	196																						
							37	<LOD	200	61	190																						
NA	180808-Parrot-OB-G-035			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 121-130	0-12 ft	Yes	48	<LOD	327	93	293																						
							62	<LOD	300	98	270																						
							38	<LOD	295	86	300																						
							49	<LOD	307	92	288																						
NA	180808-Parrot-OB-G-036			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 131-140	0-12 ft	Yes	68	<LOD	276	143	246																						
							45	<LOD	291	188	229																						
							50	<LOD	324	185	268																						
							54	<LOD	297	172	248																						
NA	180808-Parrot-OB-G-037			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 141-150	0-12 ft	Yes	78	<LOD	284	149	133																						
							60	<LOD	289	185	168																						
							53	<LOD	344	190	162																						
							64	<LOD	306	175	154																						
NA	180808-Parrot-OB-G-038			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 151-160	0-12 ft	Yes	35	<LOD	244	277	233																						
							38	<LOD	175	64	204																						
							38	<LOD	196	71	236																						
							37	<LOD	205	137	224																						
NA	180808-Parrot-OB-G-039			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 161-170	0-12 ft	Yes	27	<LOD	180	50	199																						
							27	<LOD	168	36	197																						
							33	<LOD	184	38	172																						
							29	<LOD	177	41	189																						
NA	180808-Parrot-OB-G-040	Wind row 8 pt. composite toward site. Near RR toe slope, this material was created by the dozer		Grad 8-ponit composite because this material was adjacent to known contamination	0-2 feet	Yes	39	<LOD	138	39	154																						
							27	<LOD	141	32	139																						
							26	<LOD	125	30	121																						
							31	<LOD	135	34	138																						
NA	180808-Parrot-OB-G-031						37	<LOD	167	254	847																						
							47	<LOD	206	234	379																						
							52	<LOD	208	396	426																						
							45	<LOD	194	295	551																						
NA	180809-Parrot-Dup-031						37	<LOD	213	206	331																						
							36	<LOD	200	291	366																						
							18	<LOD	218	265	339																						
							30	<LOD	210	254	345																149.4505	NA	92.07607	116.0105	159.4595		
180912-2	180809-Parrot-Lab-031											44	<LOD	239	334	449											97.05882	NA	123.4079	113.3484	81.53753		
NA	180809-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						86	**49**	123	**1410**	398																						
							87	**46**	124	**1412**	404																						
							72	**47**	115	**1408**	405																						
							82	**47**	121	**1410**	402						107	54.1	140	1400	414	76	87	86	101	97							
NA	180808-Parrot-OB-G-041	Wind row 8 pt. composite adjacent to RR toe slope. Near RR toe slope, this material was created by	Second day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data. Wind row and consolidated contamination stockpile were also sampled.	Grab 8-point composite because this material was adjacent to known contamination	0-2 ft	Yes	**276**	<LOD	**1775**	293	707																						
							268	<LOD	**1562**	255	566																						
							351	<LOD	**1622**	258	609																						
							298	<LOD	**1653**	269	627																						
NA	180808-Parrot-OB-G-042	Stockpile adjacent to RR created by dozer to consolidate waste found at the toe slope of the RR		8-Point Grab of stockpile surface. Determined clean due to the mixing of topsoil, but when pile was hauled to the contaminated stockpile the interior of the stockpile exceeded Cu action levels. The entire stockpile was	Surface	Yes	122	<LOD	589	114	454																						
							143	<LOD	778	135	444																						
							109	<LOD	582	130	388																						
							125	<LOD	650	126	429																						
NA	180808-Parrot-OB-G-043	Consolidated contamination stockpile		The stockpile contamination area was consolidated and tested at the end of the day. This stockpile includes the two RR stockpiles created from the bridge excavations, a small stockpile created on 8/7 from the first day of	Surface	Yes	173	<LOD	**1293**	258	642																						
							304	<LOD	**1193**	270	616																						
							221	<LOD	**1204**	278	578																						
							233	<LOD	**1230**	269	612																						
NA	180809-Parrot-OB-G-044	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Third day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data. Began sampling face wall at a frequency of one 8-pt composite sample per 160 linear ft or approximately 3000 CY.	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 171-180	0-12 ft	Yes	77	<LOD	296	136	261																						
							66	<LOD	450	115	214																						
							63	<LOD	310	130	237																						
							69	<LOD	352	127	237																						
NA	180809-Parrot-OB-G-045			Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 181-190	0-12 ft	Yes	47	<LOD	257	85	208																						
							30	<LOD	252	106	204																						
							31	<LOD	280	95	196																						
							36	<LOD	263	95	203																						
NA	180809-Parrot-OB-C-046			Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	54	<LOD	263	147	215																						
							42	<LOD	209	147	232																						
							30	<LOD	175	95	233																						
							42	<LOD	216	130	227																						
NA	180809-Parrot-OB-G-047			Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	159	<LOD	274	225	157																						
							133	<LOD	300	291	181																						
							135	<LOD	327	251	187																						
							142	<LOD	300	256	175																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180809-Parrot-OB-G-048	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Third day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data. Began sampling face wall at a frequency of one 8-pt composite sample per 160 linear ft or approximately 3000 CY.	Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet. This sample was an 6-point composite due to site restrictions	0-12 ft	Yes	42	<LOD	352	162	255																						
							36	<LOD	246	159	207																						
							39	<LOD	378	183	305																						
							39	<LOD	325	168	256																						
NA	180809-Parrot-OB-G-049			Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	43	<LOD	251	106	174																						
							44	<LOD	236	167	252																						
							56	<LOD	310	203	229																						
							48	<LOD	266	159	218																						
NA	180813-Parrot-OB-G-050	ockpile is located in the no	Fourth day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point	(High Wall 2) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	57	<LOD	328	158	238																						
							67	<LOD	319	117	279																						
							69	<LOD	384	137	311																						
							64	<LOD	344	137	276																						
NA	180813-Parrot-Xcon-Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
180912-11	SRM Lab Analysis (2711a) - WET120918 -1											88	**51**	150	**1464**	439	107	54.1	140	1400	414	82	94	107	105	106							
NA	180813-Parrot-OB-G-051	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Fourth day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data.	(Grab #1) Floor of southwest corner by RR and perimeter fences. Slag bench.	Surface	Yes	**454**	<LOD	250	720	409																						
							431	<LOD	300	780	314																						
							451	<LOD	282	802	346																						
							445	<LOD	277	767	356																						
NA	180813-Parrot-OB-G-052			(Grab #2) Floor of southwest corner by RR and perimeter fences. Slag bench.	Surface	Yes	29	<LOD	113	82	409																						
							21	<LOD	88	65	314																						
							43	<LOD	108	72	346																						
							31	<LOD	103	73	356																						
NA	180813-Parrot-OB-G-053			(Grab #3) Floor of southwest corner by RR and perimeter fences (cell #1).	Surface	Yes	111	<LOD	857	185	389																						
							117	<LOD	799	180	690																						
							112	<LOD	909	175	444																						
							113	<LOD	855	180	508																						
NA	180813-Parrot-OB-G-054			(High Wall 1) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	44	<LOD	391	124	232																						
							31	<LOD	334	107	245																						
							44	<LOD	291	97	250																						
							40	<LOD	339	109	242																						
NA	180813-Parrot-OB-G-055			(High Wall 3) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	83	<LOD	282	119	297																						
							119	<LOD	348	119	295																						
							194	<LOD	345	134	305																						
							132	<LOD	325	124	299																						
NA	180813-Parrot-OB-G-056			(Grid A) Floor of southwest corner by RR and perimeter fences (cell #1). Sampled methodically.....	Surface	Yes	41	<LOD	317	112	182																						
							63	<LOD	361	141	201																						
							48	<LOD	358	148	216																						
							51	<LOD	345	134	200																						
NA	180813-Parrot-OB-G-057			(Grid B) Floor of southwest corner by RR and perimeter fences (cell #1). Sampled methodically.....	Surface	Yes	74	<LOD	253	151	210																						
							46	<LOD	208	120	165																						
							129	<LOD	209	153	173																						
							83	<LOD	223	141	183																						
NA	180813-Parrot-OB-G-058			(Grid C) Floor of southwest corner by RR and perimeter fences (cell #1). Sampled methodically.....	Surface	Yes	33	<LOD	191	58	216																						
							27	<LOD	231	131	219																						
							38	<LOD	205	68	216																						
							33	<LOD	209	86	217																						
NA	180813-Parrot-OB-G-059			(High Wall 4) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	89	<LOD	262	150	384																						
							74	<LOD	255	205	317																						
							104	<LOD	214	157	313																						
							89	<LOD	244	171	338																						
NA	180813-Parrot-OB-G-060			(High Wall 5) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	**292**	<LOD	268	137	234																						
							168	<LOD	279	120	213																						
							157	<LOD	282	120	214																						
							206	<LOD	276	126	220																						
NA	180813-Parrot-OB-G-053						111	<LOD	857	185	389																						
							117	<LOD	799	180	690																						
							112	<LOD	909	175	444																						
							113	<LOD	**855**	180	**508**																						
NA	180813-Parrot-Dup-053						111	<LOD	856	177	790																						
							91	<LOD	829	197	433																						
							112	<LOD	829	143	414																						
							105	<LOD	838	172	546																92.35294	NA	98.0117	95.74074	107.4852		
180912-3	180813-Parrot-Lab-053											85	<LOD	723	175	570											75	NA	84.5614	97.22222	112.2784		
NA	180813-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						72	**49**	134	**1456**	392																						
							56	**51**	134	**1431**	398																						
							72	**59**	117	**1419**	397																						
							67	**53**	128	**1435**	396						107	54.1	140	1400	414	62	98	92	103	96							
NA	180813-Parrot-OB-G-061	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Fourth day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data.	Grab brick 1 - Grab 4 (8/13)	Surface	Yes	**2293**	<LOD	**1722**	**1314**	**2084**																						
							2237	<LOD	**1883**	**1119**	**10322**																						
							2036	<LOD	**1946**	993	**2308**																						
							2189	<LOD	**1850**	**1142**	**4905**																						
NA	180813-Parrot-OB-G-062			Grab brick 2	Surface	Yes	**3013**	<LOD	**1971**	**1049**	935																						
							2806	<LOD	**1665**	937	855																						
							2678	<LOD	**1847**	900	761																						
							2832	<LOD	**1828**	962	850																						
NA	180813-Parrot-OB-G-063			PM stockpile Top Monday	Surface	Yes	**392**	<LOD	810	319	479																						
							463	<LOD	533	339	317																						
							438	<LOD	581	289	353																						
							431	<LOD	641	316	383																						
NA	180813-Parrot-OB-G-064			PM stockpile NE side Monday	Surface	Yes	**481**	<LOD	664	199	454																						
							891	<LOD	737	239	363																						
							569	<LOD	915	254	447																						
							647	<LOD	772	231	421																						
NA	180813-Parrot-OB-G-065			PM stockpile SE side Monday	Surface	Yes	**801**	<LOD	734	440	653																						
							695	<LOD	779	443	378																						
							681	<LOD	**1015**	423	441																						
							726	<LOD	843	435	491																						
NA	180813-Parrot-OB-G-066			PM stockpile West side Monday	Surface	Yes	157	<LOD	203	111	165																						
							188	<LOD	240	94	176																						
							148	<LOD	216	75	174																						
							164	<LOD	220	93	172																						

Sampling Labeling Schema

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Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180814-Parrot-OB-G-067	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Fifth day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data. In addition, stockpile of contaminated overburden (Tuesday "PM stockpile") was spot-checked as it was removed by excavator. Consolidated contaminated stockpile was shot in-situ.	(Side wall 6) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	46	<LOD	323	106	311																					
							49	<LOD	420	112	299																						
							48	<LOD	339	105	321																						
							48	<LOD	361	108	310																						
NA	180814-Parrot-OB-G-068			(Side wall 7) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	67	<LOD	356	191	135																					
							45	<LOD	330	180	150																						
							59	<LOD	337	198	154																						
							57	<LOD	341	190	146																						
NA	180814-Parrot-OB-G-069			(High Wall 8) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	51	<LOD	184	68	283																					
							70	<LOD	174	89	293																						
							43	<LOD	225	68	410																						
							55	<LOD	194	75	329																						
NA	180814-Parrot-OB-G-070			(Side Wall 9) Haul of overburden from southeast corner by RR and perimeter fences. Sampled in-situ at same time as 8-pt composite being taken, every 160 linear feet.	0-12 ft	Yes	158	<LOD	156	187	175																					
							175	<LOD	151	172	174																						
							213	<LOD	226	153	157																						
							182	<LOD	178	171	169																						
NA	180814-Parrot-OB-G-071			PM stockpile (Created Monday) hauled to main SP (primarily used to make new ramp)	Surface	Yes	125	<LOD	418	386	289																						
							222	<LOD	436	220	293																						
							380	<LOD	582	246	410																						
							242	<LOD	479	284	331																						
NA	180814-Parrot-OB-G-072			(Grid D) Floor of southwest corner by RR and perimeter fences (cell #1). Sampled methodically.....	Surface	Yes	55	<LOD	475	165	557																					
							45	<LOD	305	144	307																						
							71	<LOD	491	173	355																						
							57	<LOD	424	161	406																						
NA	180814-Parrot-OB-G-073			PM stockpile west side (after contamination removed) Created Tuesday after hauls Mondays Stockpile located in same area)	Surface	Yes	75	<LOD	149	139	158																					
							62	<LOD	120	116	157																						
							75	<LOD	147	117	157																						
							71	<LOD	139	124	157																						
NA	180814-Parrot-OB-G-074			PM stockpile east side (after contamination removed) Created Tuesday after hauls Mondays Stockpile located in same area)	Surface	Yes	21	<LOD	76	26	100																					
							20	<LOD	75	31	105																						
							23	<LOD	122	76	281																						
							21	<LOD	91	44	162																						
NA	180814-Parrot-OB-G-075			PM stockpile south side (after contamination removed) Created Tuesday after hauls Mondays Stockpile located in same area)	Surface	Yes	27	<LOD	95	18	111																					
							53	<LOD	71	26	96																						
							24	<LOD	107	18	103																						
							35	<LOD	91	21	103																						
NA	180814-Parrot-OB-G-076			PM stockpile north side (after contamination removed) Created Tuesday after hauls Mondays Stockpile located in same area)	Surface	Yes	30	<LOD	120	61	132																					
							40	<LOD	171	58	190																						
							44	<LOD	170	77	201																						
							38	<LOD	154	65	174																						
NA	180814-Parrot-OB-G-077			Consolidated contamination on slag (cell #1)	Surface	Yes	**312**	<LOD	**1291**	423	640																						
							303	<LOD	**1438**	424	917																						
							374	<LOD	**1931**	584	929																						
							330	<LOD	**1553**	477	829																						
NA	180815-Parrot-OB-G-078	RR and perimeter fence the stockpile is located in the northwestern portion of the site	First day of hauling second level of overburden at 12-24 feet. Hauls were sampled as trucks dump loads in stockpile. 8 point composites were taken every 400 cy.	(Hauls 1-10) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	59	<LOD	154	59	133																					
							64	<LOD	160	64	186																						
							76	<LOD	145	57	169																						
							66	<LOD	153	60	163																						
NA	180815-Parrot-OB-G-079			(Hauls 11-20) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	67	<LOD	204	74	206																					
							72	<LOD	202	89	208																						
							46	<LOD	178	85	157																						
							62	<LOD	195	83	190																						
NA	180815-Parrot-OB-G-080			(Hauls 21-30) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	80	<LOD	233	121	160																					
							143	<LOD	365	153	268																						
							279	<LOD	451	215	296																						
							167	<LOD	350	163	241																						
NA	180814-Parrot-OB-G-075						27	<LOD	95	18	111																						
							53	<LOD	71	26	96																						
							24	<LOD	107	18	103																						
							35	<LOD	91	21	103																						
NA	180814-Parrot-Dup-075						20	<LOD	60	29	99																						
							26	<LOD	67	23	95																						
							38	<LOD	88	27	100																						
							28	<LOD	72	26	98																			80.76923	NA	78.75458	127.4194	94.83871	
180912-4	180814-Parrot-Lab-075											23	<LOD	68	30	82														66.34615	NA	74.72527	145.1613	79.35484	
NA	180814-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						102	**46**	128	**1394**	407																						
							88	**49**	134	**1421**	413																						
							63	**44**	128	**1432**	396																						
							84	**46**	130	**1416**	405						107	54.1	140	1400	414	79	86	93	101	98							
NA	180815-Parrot-OB-G-081	RR and perimeter fence the stockpile is located in the northwestern portion of the site	First day of hauling second level of overburden at 12-24 feet. Hauls were sampled as trucks dump loads in stockpile. 8 point composites were taken every 400 cy.	(Hauls 31-40) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	114	<LOD	233	111	178																					
							88	<LOD	237	125	199																					
							97	<LOD	209	463	169																					
							100	<LOD	226	233	182																					
NA	180815-Parrot-OB-G-082			(Hauls 41-50) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	61	<LOD	220	115	159																					
							65	<LOD	197	140	161																					
							58	<LOD	196	115	177																					
							61	<LOD	204	123	166																					
NA	180815-Parrot-OB-G-083			(Hauls 51-60) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	100	<LOD	175	124	172																					
							107	<LOD	189	144	158																					
							122	<LOD	193	103	199																					
							110	<LOD	186	124	176																					
NA	180815-Parrot-OB-G-084			(Hauls 61-70) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	76	<LOD	193	89	181																					
							67	<LOD	185	103	192																					
							86	<LOD	210	346	152																					
							76	<LOD	196	179	175																					
NA	180815-Parrot-OB-G-085			(Hauls 71-80) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	87	<LOD	218	70	197																					
							100	<LOD	195	81	171																					
							73	<LOD	167	53	133																					
							87	<LOD	193	68	167																					
NA	180815-Parrot-OB-G-086			(Hauls 81-90) Haul of overburden from southeast corner by RR and perimeter fences	0-12 ft	Yes	52	<LOD	301	117	436																					
							83	<LOD	283	197	346																					
							81	<LOD	269	152	312																					
							72	<LOD	284	155	365																					
NA	180815-Parrot-OB-G-087			(Hauls 91-100) Haul of overburden from southeast corner by RR and perimeter fences	12-24 ft	Yes	100	<LOD	240	73	260																					
							152	<LOD	245	118	274																					
							162	<LOD	231	122	283																					
							138	<LOD	239	104	272																					

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180815-Parrot-OB-G-088	RR and perimeter fence the stockpile is located in the northwestern portion of the site	First day of hauling second level of overburden at 12-24 feet. Hauls were sampled as trucks dump loads in stockpile. 8 point composites were taken every 400 cy.	(Hauls 101-110) Haul of overburden from southeast corner by RR and perimeter fences	12-24 ft	Yes	44	<LOD	342	75	513																						
							39	<LOD	292	75	362																						
							45	<LOD	397	99	433																						
							43	<LOD	344	83	436																						
NA	180815-Parrot-OB-G-089			(Hauls 111-120) Haul of overburden from southeast corner by RR and perimeter fences	12-24 ft	Yes	42	<LOD	321	70	426																						
							51	<LOD	304	75	393																						
							45	<LOD	311	75	398																						
							46	<LOD	312	73	406																						
NA	180816-Parrot-OB-G-090	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Second day of hauling second level of overburden at 12-24 feet. Hauls were sampled as trucks dump loads in stockpile. 8 point composites were taken every 400 cy.	(Hauls 121-130) Haul of overburden from southeast corner by RR and perimeter fences	12-24 ft	Yes	46	<LOD	373	77	392																						
							47	<LOD	427	76	424																						
							62	<LOD	431	110	443																						
							52	<LOD	410	88	420																						
NA	180816-Parrot-OB-G-091			(Hauls 131-140) Haul of overburden from southeast corner by RR and perimeter fences	12-24 ft	Yes	64	<LOD	248	144	261																						
							50	<LOD	222	147	230																						
							65	<LOD	262	171	257																						
							60	<LOD	244	154	249																						
NA	180816-Parrot-OB-G-092			(Hauls 141-150) Haul of overburden from southeast corner by RR and perimeter fences	12-24 ft	Yes	65	<LOD	459	210	257																						
							75	<LOD	451	208	238																						
							91	<LOD	400	213	208																						
							77	<LOD	437	210	234																						
NA	180816-Parrot-OB-G-093			(Hauls 151-160) Haul of overburden from southeast corner by RR and perimeter fences	12-24 ft	Yes	68	<LOD	392	128	336																						
							106	<LOD	384	127	324																						
							65	<LOD	306	132	297																						
							80	<LOD	361	129	319																						
NA	180816-Parrot-OB-G-094			(Hauls 161-170) Haul of overburden from southeast corner by RR and perimeter fences	12-24 ft	Yes	186	<LOD	254	138	209																						
							291	<LOD	274	145	207																						
							170	<LOD	262	103	186																						
							216	<LOD	263	129	201																						
NA	180820-Parrot-TA-G-095	RR and perimeter fence	First day of hauling tailings to MR from 20 ft bgs. of southeast area.	(Hauls 1-10) Haul of tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	**1061**	**191**	**3026**	**1689**	**1495**																						
							631	<LOD	793	**1004**	729																						
							528	<LOD	**1164**	941	**1457**																						
							740	**191**	**1661**	**1211**	**1227**																						
NA	180820-Parrot-TA-G-096			(Hauls 11-20) Haul of tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	**894**	<LOD	916	**1421**	**1395**																						
							1034	<LOD	872	**1560**	**1724**																						
							835	<LOD	**1068**	**1336**	**1212**																						
							921	<LOD	952	**1439**	**1444**																						
NA	180820-Parrot-TA-G-097			(Hauls 21-30) Haul of tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	**934**	<LOD	758	**1610**	**1654**																						
							878	<LOD	680	**1695**	**1890**																						
							734	<LOD	699	**1297**	**1125**																						
							849	<LOD	712	**1534**	**1556**																						
NA	180820-Parrot-CY-G-098			Clay layer below tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	125	<LOD	**3865**	165	872																						
							155	10	**3418**	300	930																						
							199	8	**3404**	245	834																						
							160	9	**3562**	237	879																						
NA	180820-Parrot-TA-G-099			(Hauls 31-40) Haul of tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	**633**	<LOD	883	**1583**	**1316**																						
							836	<LOD	**1148**	**1465**	872																						
							845	<LOD	**1150**	672	663																						
							771	<LOD	**1060**	**1240**	950																						
NA	180820-Parrot-TA-G-100			(Hauls 41-50) Haul of tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	**561**	<LOD	616	**1086**	717																						
							594	<LOD	588	**1633**	830																						
							564	<LOD	581	**1065**	730																						
							573	<LOD	595	**1261**	759																						
NA	180815-Parrot-OB-G-089						42	<LOD	321	70	426																						
							51	<LOD	304	75	393																						
							45	<LOD	311	75	398																						
							46	<LOD	312	73	406																						
NA	180815-Parrot-Dup-089						37	<LOD	309	71	357																						
							43	<LOD	303	139	337																						
							45	<LOD	304	92	362																						
							42	<LOD	305	101	352																90.57971	NA	97.86325	137.2727	86.77075		
180912-5	180815-Parrot-Lab-089											49	<LOD	325	104	408											106.5217	NA	104.1667	141.8182	100.5752		
NA	180820-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2710a) -						**1572**	11	**3793**	**5454**	**4145**																						
							1558	<LOD	**3797**	**5499**	**4102**																						
							1553	17	**3745**	**5458**	**4146**																						
							1561	14	**3778**	**5470**	**4131**						1540	12.3	3420	5520	4180	101	114	110	99	99							
NA	180822-Parrot-Xcon Blank 1						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
180912-12	SRM Lab Analysis (2710a) - WET 120918-2											**1454**	<LOD	**3537**	**5620**	**4165**	1540	12.3	3420	5520	4180	94	NA	103	102	100							
NA	180820-Parrot-TA-G-101	RR and perimeter fence	First day of hauling tailings to MR from 20 ft bgs. of southeast area.	(Hauls 51-60) Haul of tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	**415**	<LOD	**2260**	775	**1092**																						
							1040	<LOD	**4645**	985	**1254**																						
							656	<LOD	**2256**	**1045**	**1855**																						
							704	<LOD	**3054**	935	**1400**																						
NA	180820-Parrot-TA-G-102			(Hauls 61-70) Haul of tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	**316**	12	**1388**	806	**1984**																						
							239	**23**	**3250**	642	**2066**																						
							200	**39**	**6233**	702	**2958**																						
							252	**25**	**3624**	717	**2336**																						
NA	180820-Parrot-TA-G-103			(Hauls 71-80) Haul of tailings from southeast corner by RR and perimeter fences	12-24 ft	Yes	**616**	<LOD	399	773	387																						
							463	<LOD	747	651	524																						
							845	<LOD	546	887	420																						
							641	<LOD	564	770	444																						
NA	180820-Parrot-TA-G-104			(Hauls 81-90) Haul of tailings from southeast corner by RR and perimeter fences. Sample not prepped due to moisture. With prep when dry and sample. Sampled prep on 8/23 and sample was used for QAQC 100-120.	12-24 ft	Yes	**439**	<LOD	525	617	389																						
							759	<LOD	**1173**	**1170**	425																						
							643	<LOD	**1501**	**1140**	**1410**																						
							614	<LOD	**1066**	976	741																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180821-Parrot-OB-G-105	RR and perimeter fence	Second day of hauling tailings to MR from 20 ft bgs. of southeast area Two samples of tailings, hauled in the AM, most of the day was spent removing OB and creating a bench west of the exposed tailings area.	(Hauls 1-10) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	87	<LOD	385	132	769																						
							114	<LOD	470	144	631																						
							88	<LOD	439	162	655																						
							96	<LOD	431	146	685																						
NA	180821-Parrot-TA-G-106			(Hauls 11-20) Haul of tailings from northern portion of southeast corner by RR and perimeter fences	12-24 ft	Yes	132	<LOD	**3528**	489	946																						
							213	<LOD	**7223**	316	754																						
							59	<LOD	526	172	324																						
							135	<LOD	**3759**	326	675																						
NA	180821-Parrot-OB-G-107			(Hauls 21-30) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	55	<LOD	291	93	361																						
							89	<LOD	268	108	248																						
							76	<LOD	265	143	232																						
							73	<LOD	275	115	280																						
NA	180821-Parrot-TA-G-108			(Hauls 31-40) Haul of tailings from northern portion of southeast corner by RR and perimeter fences	12-24 ft	Yes	155	<LOD	788	592	**1810**																						
							174	<LOD	929	563	**1501**																						
							141	<LOD	**1135**	464	**1557**																						
							157	<LOD	951	540	**1623**																						
NA	180821-Parrot-OB-G-109			(Hauls 41-50) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	57	<LOD	322	197	293																						
							61	<LOD	369	147	331																						
							58	<LOD	304	153	258																						
							59	<LOD	332	166	294																						
NA	180821-Parrot-OB-G-110	RR and perimeter fence		(Hauls 51-60) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	84	<LOD	374	144	204																						
							75	<LOD	492	113	296																						
							76	<LOD	388	131	184																						
							78	<LOD	418	129	228																						
NA	180821-Parrot-OB-G-111			(Hauls 61-70) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	69	<LOD	386	152	282																						
							68	<LOD	376	131	226																						
							95	<LOD	391	164	246																						
							77	<LOD	384	149	251																						
NA	180821-Parrot-OB-G-112			(Hauls 71-80) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	117	<LOD	579	225	250																						
							89	<LOD	528	168	441																						
							98	<LOD	561	177	253																						
							101	<LOD	556	190	315																						
NA	180821-Parrot-OB-G-113			(Hauls 81-90) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	135	<LOD	567	305	311																						
							121	<LOD	403	121	325																						
							118	<LOD	443	217	287																						
							125	<LOD	471	214	308																						
NA	180821-Parrot-OB-G-114			(Hauls 91-100) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	108	<LOD	651	209	345																						
							133	<LOD	607	188	358																						
							118	<LOD	867	209	455																						
							120	<LOD	708	202	386																						
NA	180821-Parrot-OB-G-115			(Hauls 101-110) Haul of overburden from northern portion of southeast corner by RR and perimeter fences. OB being moved to access tailings underneath.	12-24 ft	Yes	89	<LOD	413	213	257																						
							96	<LOD	435	176	251																						
							119	<LOD	435	209	273																						
							101	<LOD	428	199	260																						
NA	180822-Parrot-OB-G-116	RR and perimeter fence	AM - Haul OB within second layer to uncover tailing bench, plan to haul tailings in the afternoon after bench is surveyed.	(Hauls 111-120) Haul of overburden from northern portion of southeast corner by RR and perimeter fences.	12-24 ft	Yes	62	<LOD	332	180	245																						
							67	<LOD	356	249	254																						
							75	<LOD	366	192	314																						
							68	<LOD	351	207	271																						
NA	180822-Parrot-OB-G-117			(Hauls 121-130) Haul of overburden from northern portion of southeast corner by RR and perimeter fences.	12-24 ft	Yes	52	<LOD	284	128	278																						
							55	<LOD	308	138	233																						
							51	<LOD	292	126	225																						
							53	<LOD	295	131	245																						
NA	180822-Parrot-OB-G-118			(Hauls 131-140) Haul of overburden from northern portion of southeast corner by RR and perimeter fences.	12-24 ft	Yes	67	<LOD	321	259	309																						
							68	<LOD	287	147	243																						
							90	<LOD	411	390	416																						
							75	<LOD	340	265	323																						
NA	180822-Parrot-OB-G-119			(Hauls 141-150) Haul of overburden from northern portion of southeast corner by RR and perimeter fences.	12-24 ft	Yes	91	<LOD	425	208	331																						
							59	<LOD	307	236	211																						
							72	<LOD	328	253	262																						
							74	<LOD	353	232	268																						
NA	180822-Parrot-OB-G-120			(Hauls 151-160) Haul of overburden from northern portion of southeast corner by RR and perimeter fences.	12-24 ft	Yes	90	<LOD	233	312	135																						
							76	<LOD	236	320	146																						
							126	<LOD	303	273	190																						
							97	<LOD	257	302	157																						
NA	180820-Parrot-TA-G-104						**439**	<LOD	525	617	389																						
							759	<LOD	**1173**	**1170**	425																						
							643	<LOD	**1501**	**1140**	**1410**																						
							614	<LOD	**1066**	976	741																						
NA	180820-Parrot-Dup-104						**653**	<LOD	**1009**	870	**1308**																						
							643	<LOD	**1065**	962	797																						
							540	<LOD	867	857	625																						
							612	<LOD	980	896	910																				99.72841	NA	91.93498	91.86881	122.7518
180912-6	180820-Parrot-Lab-104											**629**	<LOD	**1118**	**1110**	847															102.4986	NA	104.8453	113.7684	114.2536
NA	180822-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						88	**55**	139	**1397**	412																						
							71	**51**	144	**1460**	420																						
							75	**51**	127	**1449**	419																						
							78	**52**	137	**1435**	417						107	54.1	140	1400	414	73	97	98	103	101							
NA	180822-Parrot-OB-G-121	RR and perimeter fence	AM - Haul OB within second layer to uncover tailing bench, plan to haul tailings in the afternoon after bench is surveyed.	(Hauls 161-170) Haul of overburden from northern portion of southeast corner by RR and perimeter fences.	12-24 ft	Yes	72	<LOD	349	207	400																						
							77	<LOD	372	160	345																						
							102	<LOD	423	223	411																						
							84	<LOD	381	197	385																						
R-0414 (Ashe)	180822-Parrot-OB-G-122			(Hauls 171-180) Haul of overburden from northern portion of southeast corner by RR and perimeter fences.	12-24 ft	Yes	69	<LOD	300	184	289																						
							67	<LOD	296	259	271																						
							56	<LOD	227	183	195																						
							64	<LOD	274	209	252	81	<LOD	255	226	237														125.9375	NA	92.95261	108.3067	94.17219	

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180822-Parrot-CY-G-123	RR and perimeter fence	PM - Examination of tailings and clay at bottom of first excavation hole.	First time into excavation hole. Grab samples of unique individual stratifications. (Black clay)	24 ft	Yes	**270**	<LOD	**3031**	223	631																					H18090627-013	3.8 s.u.
							166	<LOD	**3688**	182	726																						
							316	<LOD	**5272**	311	**1014**																						
							251	<LOD	**3997**	239	790																						
NA	180822-Parrot-TA-G-124			First time into excavation hole. Grab samples of unique individual stratifications. (Yellow tailings)	24 ft	Yes	**690**	<LOD	**1244**	**1669**	**2086**																						
							622	<LOD	930	**1742**	**1469**																						
							683	<LOD	819	**1682**	**1127**																						
							665	<LOD	998	**1698**	**1561**																						
NA	180822-Parrot-TA-G-125			First time into excavation hole. Grab samples of unique individual stratifications. (Orange tailings)	24 ft	Yes	**409**	<LOD	**1276**	994	**1095**																						
							493	<LOD	**1548**	629	790																						
							424	<LOD	**1463**	893	335																						
							442	<LOD	**1429**	839	740																						
NA	180822-Parrot-CY-G-126			First time into excavation hole. Grab samples of unique individual stratifications. (Gray clay)	24 ft	Yes	**1194**	10	**22700**	**3723**	**4261**																					H18090627-006	3.1 s.u.
							1330	13	**22400**	**4401**	**4231**																						
							1668	12	**23600**	**5252**	**4409**																						
							1397	12	**22900**	**4459**	**4300**																						
NA	180822-Parrot-CY-G-127			First time into excavation hole. Grab samples of unique individual stratifications. (Center of road)	24 ft	Yes	**254**	<LOD	**4355**	266	**1119**																						
							280	<LOD	**2478**	295	755																						
							238	<LOD	**2854**	319	596																						
							257	<LOD	**3229**	293	823																						
R-0415 (Ashe)	180822-Parrot-RK-G-128			First time into excavation hole. Grab samples of unique individual stratifications. (Gray sand - alluvium) This wasn't alluvium is was tailings, the RK on the sampled is misrepresented.	24 ft	Yes	**898**	12	**25200**	**2656**	**3039**																						
							773	12	**23700**	**2291**	**4321**																						
							722	15	**25500**	**2598**	**2727**																						
							798	13	**24800**	**2515**	**3362**	**1050**	19	**20900**	**1950**	**5120**											131.6339	143.0769	84.27419	77.53479	152.2752		
NA	180823-Parrot-RK-G-129	Bottom of pit on the northern side of the pit. GPSed.	Removal of tailings from SE area	Brown sandy material under tailings layer and sampled just above ground water (1 in). XRF results preliminary, sample needs to be dried and sieved. Sampled prepped on 8/28 with final results.	24 ft	Yes	164	<LOD	**1143**	132	562																						
							184	<LOD	867	75	483																						
							226	<LOD	**3244**		721																						
							191	<LOD	**1751**	104	589																						
NA	180828-Parrot-RK-G-130	Bottom of the pit, on the NE side	Methodically sampled tailings removal area before OB backfill. The area was sampled in areas where similar substrates were present. 3 sample areas contained alluvium and one area contained clay. Also finalized sampled 129 and updated data. Shot in-situ of slag interface near remaining OB stockpile, samples were below action levels.	Brown sandy material under tailings layer and sampled just above ground water (1 in). Eight samples were collected in a 3744 sq. ft area.	24 ft	Yes	**456**	<LOD	**1115**	152	541																						
							666	<LOD	**1444**	172	606																						
							308	<LOD	**1184**	149	594																						
							477	<LOD	**1248**	158	580																						
180912-7	180828-Parrot-RK-G-131	Bottom of the pit, on the SE side		Brown sandy material under tailings layer and sampled just above ground water (1 in). Eight samples were collected in a 4245 sq. ft area.	24 ft	Yes	**303**	<LOD	**2684**	190	503																						
							245	<LOD	**4284**	168	588																						
							419	<LOD	**2538**	132	684																						
							322	<LOD	**3169**	163	592	160	<LOD	**1982**	155	**1017**											49.63806	NA	62.54997	94.89796	171.8873		
NA	180828-Parrot-RK-G-132	Bottom of the pit, on the NW side		Brown sandy material under tailings layer and sampled just above ground water (1 in). Eight samples were collected in a 4331 sq. ft area.	24 ft	Yes	**650**	<LOD	**1226**	131	528																						
							576	<LOD	**1421**	129	617																						
							589	<LOD	**1169**	127	**1091**																						
							605	<LOD	**1272**	129	745																						
NA	180828-Parrot-CY-G-133	Bottom of the pit, on the SW side		Dark brown/black clay material under tailings layer, clay was sampled just above ground water (1 in). Eight samples were collected in a 4352 sq. ft area.	24 ft	Yes	188	<LOD	**1861**	156	960																					H18090627-012	4.3 s.u.
							148	<LOD	**1486**	128	941																						
							174	<LOD	**2257**	168	**1070**																						
							170	<LOD	**1868**	151	990																						
180912-8	180911-Parrot-TA-G-134	Western side wall of current exposed area (GPSed)	In-situ sampled overburden placed in excavated pit area, the OB came from the Brick Area and was deem contaminated. Collected one 8-point composite sample of the alluvium bottom currently exposed and collected 5 grab samples from different strata types near the excavation (tailings and clays). In-situ sampled the OB source area near the Brick Area, OB in this area was considered contaminated.	Orange tailings grab sample	24 ft	Yes	**666**	<LOD	661	344	**1188**																							
							507	<LOD	637	447	**1379**																						
							597	<LOD	585	314	**1035**																						
							590	<LOD	628	368	**1201**	**516**	<LOD	541	454	**1076**											87.45763	NA	86.19225	123.2579	89.61688		
NA	180911-Parrot-TA-G-135	Western side wall of current exposed area (GPSed)		Yellow tailings grab sample	24 ft	Yes	155	<LOD	164	570	146																					H18090627-015	4.1 s.u.
							188	<LOD	162	522	195																						
							140	<LOD	131	476	203																						
							161	<LOD	152	523	181																						
NA	180911-Parrot-TA-G-136	Western side wall of current exposed area (GPSed)		White tailing grab sample	24 ft	Yes	122	<LOD	116	294	413																					H18090627-014	3.5 s.u.
							210	<LOD	161	332	**1229**																						
							159	<LOD	230	512	826																						
							164	<LOD	169	379	823																						
180912-9	180911-Parrot-CY-G-137	Western side wall of current exposed area (GPSed)		Black Clay Grab Sample	24 ft	Yes	33	<LOD	**12000**	161	950																					H18090627-005	4.4 s.u.
							31	<LOD	**13900**	155	919																						
							41	<LOD	**14300**	157	**1017**																						
							35	<LOD	**13400**	158	962	38	<LOD	**13649**	183	**1099**											108.5714	NA	101.8582	116.0677	114.2412		
NA	180911-Parrot-CY-G-138	Western side wall of current exposed area (GPSed)		gray mottled clay with orange sand streaks grab sample	24 ft	Yes	22	<LOD	**1883**	128	837																						
							16	<LOD	**1769**	112	794																						
							24	<LOD	**1946**	119	807																						
							21	<LOD	**1866**	120	813																						
NA	180911-Parrot-RK-C-139	Small bottom area of the pit further west than the pervious samples (GPSed)		Alluvium bottom near ground water	24 ft	Yes	98	8	**2352**	195	993																						
							95	<LOD	**2240**	212	995																						
							117	<LOD	**1964**	234	**1049**																						
							103	8	**2185**	214	**1012**																						
NA	180912-Parrot-RK-C-140	ailing Removal Area (GPSed	Conducted QAQC and lab samples, data entry, and collected a sample and shot in-situ areas via Ron's requests. GPS Survey of the construction	Alluvium Sample 4 ft below clay/tailing layer (sample uncompromised by other layers)	15 ft	Yes	40	<LOD	**1736**	138	952																						
							34	<LOD	**1801**	126	839																						
							33	<LOD	**1637**	132	837																						
							36	<LOD	**1725**	132	876																						
NA	180911-Parrot-RK-C-139						98	8	**2352**	195	993																						
							95	<LOD	**2240**	212	995																						
							117	<LOD	**1964**	234	**1049**																						
							103	8	**2185**	214	**1012**																						
NA	180911-Parrot-Dup-139						101	<LOD	**1921**	164	**1110**																						
							121	<LOD	**2236**	262	**1013**																						
							134	<LOD	**1760**	219	890																						
							119	<LOD	**1972**	215	**1004**																114.8387	NA	90.2532	100.624	99.20975		
180912-10	180911-Parrot-Lab-139											91	<LOD	**1725**	195	868											88.06452	NA	78.93533	91.26365	85.74251		
NA	180911-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						72	**51**	152	**1419**	401																						
							89	**44**	153	**1411**	395																						
							79	**49**	137	**1418**	402																						
							80	**48**	147	**1416**	399						107	54.1	140	1400	414	75	89	105	101	96							
NA	180913-Parrot-RK-C-141	ailing Removal Area (GPSed	Conducted GIS data entry, collected sampled and in-situ samples of the OB area to the northeast by RR	Alluvium Sample near clay/tailings layer (sample compromised by mixing other layers)	12 ft	Yes	**270**	<LOD	**2381**	186	636																					H18090627-001	4.0 s.u.
							344	<LOD	**2721**	208	630																						
							327	<LOD	**4675**	200	652																						
							314	<LOD	**3259**	198	639																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180918-Parrot-RK-C-142	North Eastern Alluvium removal area (GPSed)	In-situ samples and alluvium confirmation samples at various depths below the clay layer to GW interface. Grab Samples of unique stratification layers.	Alluvium Sample at GW interface, 8-pt composite.	30 ft (GW Elevation)	Yes	25	<LOD	929	83	558																					H18090627-003	3.8 s.u.
							30	<LOD	**2056**	116	660																						
							29	<LOD	958	115	757																						
							28	<LOD	**1314**	105	658																						
NA	180918-Parrot-RK-C-143	North Eastern Alluvium removal area (GPSed)		Alluvium Sample at GW interface, 8-pt composite.	30 ft (GW Elevation)	Yes	42	<LOD	**1141**	54	781																						
							44	<LOD	**1114**	54	627																						
							38	<LOD	**1736**	54	733																						
							41	<LOD	**1330**	54	714																						
NA	180918-Parrot-RK-C-144	Central Eastern Alluvium removal area (GPSed)		Alluvium Sample at GW interface, 8-pt composite.	30 ft (GW Elevation)	Yes	111	<LOD	**3553**	143	844																						
							138	<LOD	**3896**	201	961																						
							102	<LOD	**3440**	150	**1043**																						
							117	<LOD	**3630**	165	949																						
NA	180918-Parrot-RK-C-145	North Eastern Alluvium removal area (GPSed)		Alluvium Sample at Clay Interface, 8-pt composite.	20 ft (10 ft from GW	Yes	**492**	<LOD	931	338	561																					H18090627-002	2.2 s.u.
							515	<LOD	**1075**	384	478																						
							397	<LOD	998	490	639																						
							468	<LOD	**1001**	404	559																						
NA	180918-Parrot-RK-C-146	North Eastern Alluvium removal area (GPSed)		Spoils Pile of Alluvium Excavated from areas of samples 142-145, 8 pt. composite.	Spoils Pile (Surface)	Yes	102	<LOD	**2557**	343	937																						
							134	<LOD	**2853**	305	910																						
							125	<LOD	**2402**	320	908																						
							120	<LOD	**2604**	323	918																						
NA	180918-Parrot-TA-G-147	Central Alluvium area (GPSed)		Grab sample of white tailings	25 ft	Yes	**291**	9	870	**1081**	**2972**																						
							266	<LOD	767	**1598**	**1126**																						
							306	<LOD	503	**1177**	597																						
							288	9	713	**1285**	**1565**																						
NA	180918-Parrot-TA-G-148	Central Alluvium area (GPSed)		Grab sample of orange tailings	20 ft	Yes	**1263**	**192**	**35491**	**2415**	**3139**																					H18090627-007	3.8 s.u.
							901	13	**17558**	**1971**	**2000**																						
							963	<LOD	**19552**	**1879**	**1753**																						
							1042	**103**	**24200**	**2088**	**2297**																						
NA	180918-Parrot-TA-G-149	Central Alluvium area (GPSed)		Grab sample of green tailings	23 ft	Yes	**1513**	11	**25572**	**4038**	**2259**																					H18090627-008	4.5 s.u.
							2204	<LOD	**42577**	**6102**	**3705**																						
							1828	<LOD	**38625**	**5816**	**3600**																						
							1848	11	**35591**	**5319**	**3188**																						
NA	180918-Parrot-CY-G-150	Central Alluvium area (GPSed)		Grab sample of black clay	28 ft	Yes	24	<LOD	**16746**	97	**2056**																					H18090627-004	3.4 s.u.
							13	<LOD	**15427**	87	**1793**																						
							68	<LOD	**14645**	124	**1790**																						
							35	<LOD	**15606**	103	**1880**																						
NA	180918-Parrot-Xcon-Blank 100-150						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
181207-9	SRM Lab Analysis (2711a) - WET 180918-3											66	**43**	150	**1490**	429	107	54.1	140	1400	414	62	79	107	106	104							
NA	180918-Parrot-TA-G-151	North Eastern Alluvium removal area (GPSed)		Grab sample of orange tailings	15 ft	Yes	**633**	<LOD	**1289**	725	485																						
							615	<LOD	**1275**	**1195**	720																						
							672	<LOD	**1519**	812	843																						
							640	<LOD	**1361**	911	683																						
NA	180918-Parrot-TA-G-152	North Eastern Alluvium removal area (GPSed)		Grab sample of green tailings	16 ft	Yes	**798**	11	**12865**	**2786**	**1842**																					H18090627-009	4.2 s.u.
							776	<LOD	**14802**	**2597**	**2136**																						
							720	<LOD	**12777**	**2866**	**1821**																						
							765	11	**13481**	**2750**	**1933**																						
R-0416 (Ashe)	180918-Parrot-CY-G-153	North Eastern Alluvium removal area (GPSed)		Grab sample of black clay	19 ft	Yes	**3122**	<LOD	762	165	349																						
							3083	<LOD	760	152	364																						
							2383	<LOD	679	125	326																						
							2863	<LOD	734	147	346	**3190**	<LOD	609	242	364											111.4346	NA	83.00772	164.2534	105.1011		
NA	180918-Parrot-TA-G-154	North Eastern Alluvium removal area (GPSed)		Grab sample of yellow tailings	16 ft	Yes	**939**	<LOD	**1266**	**1783**	799																						
							886	<LOD	**1053**	**2170**	**1353**																						
							1945	<LOD	**1705**	**2127**	**1567**																						
							1257	<LOD	**1341**	**2027**	**1240**																						
NA	180918-Parrot-RK-G-155	North Eastern Alluvium removal area (GPSed)	In-situ samples and alluvium confirmation samples at various depths below the clay layer to GW interface. Grab Samples of unique stratification layers.	Grab Sample of Alluvium at GW elevation	30 ft (GW Elevation)	Yes	53	<LOD	**1952**	177	**1049**																						
							17	<LOD	**1950**	229	752																						
							32	<LOD	**2049**	263	925																						
							34	<LOD	**1984**	223	909																						
NA	180918-Parrot-RK-G-156	North Eastern Alluvium removal area (GPSed)		Grab Sample of Alluvium at GW elevation	31 ft (GW Elevation)	Yes	34	<LOD	**1186**	205	996																						
							29	<LOD	**1093**	204	794																						
							29	<LOD	**1197**	160	782																						
							31	<LOD	**1159**	190	857																						
NA	180918-Parrot-RK-G-157	North Eastern Alluvium removal area (GPSed)		Grab Sample of Alluvium at GW elevation	32 ft (GW Elevation)	Yes	39	<LOD	998	147	620																					H18090627-011	4.1 s.u.
							23	<LOD	810	70	500																						
							31	<LOD	955	71	556																						
							31	<LOD	921	96	559																						
NA	180918-Parrot-RK-G-158	Central Alluvium area (GPSed)		Grab Sample of Alluvium at GW elevation	33 ft (GW Elevation)	Yes	47	<LOD	937	67	761																					H18090627-010	3.8 s.u.
							44	<LOD	**1002**	54	819																						
							39	<LOD	855	53	693																						
							43	<LOD	931	58	758																						
NA	180918-Parrot-RK-G-159	Central Alluvium area (GPSed)		Grab Sample of Alluvium at GW elevation/ area mixed with clay	34 ft (GW Elevation)	Yes	54	<LOD	**2252**	83	830																						
							44	<LOD	**1552**	63	646																						
							21	<LOD	**1299**	58	529																						
							40	<LOD	**1701**	68	668																						
NA	180918-Parrot-RK-G-160	Central Alluvium area (GPSed)		Grab Sample of Alluvium at GW elevation/ area mixed with clay	35 ft (GW Elevation)	Yes	124	<LOD	**3958**	179	937																						
							113	<LOD	**3944**	167	959																						
							106	<LOD	**4231**	153	990																						
							114	<LOD	**4044**	166	962																						
NA	180918-Parrot-CY-G-150						24	<LOD	**16746**	97	**2056**																						
							13	<LOD	**15427**	87	**1793**																						
							68	<LOD	**14645**	124	**1790**																						
							35	<LOD	**15606**	103	**1880**																						
NA	180918-Parrot-Dup-150						24	<LOD	**14100**	95	**1721**																						
							38	<LOD	**14300**	98	**3608**																						
							31	<LOD	**14900**	111	**1818**																						
							31	<LOD	**14433**	101	**2382**																88.57143	NA	92.4858	98.7013	126.7423		
181207-1	180908-Parrot-Lab-150											31	<LOD	**12351**	139	**1751**											88.57143	NA	79.14264	135.3896	93.15481		
NA	180911-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						79	**51**	144	**1386**	377																						
							93	**44**	129	**1357**	391																						
							96	**54**	140	**1373**	397																						
							89	**50**	138	**1372**	388						107	54.1	140	1400	414	83	92	98	98	94							
NA	180918-Parrot-RK-G-161	Central Alluvium area (GPSed)	In-situ samples and alluvium confirmation samples at various depths below the clay layer to GW interface. Grab Samples of unique	Grab Sample of Alluvium at GW elevation/ area mixed with clay	30 ft (GW Elevation)	Yes	**276**	<LOD	**3265**	294	884																						
							287	<LOD	**3412**	299	927																						
							195	<LOD	**3453**	233	884																						
							253	<LOD	**3377**	275	898																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	180919-Parrot-RK-C-162	North Eastern Alluvium removal area (GPSed)	In-situ samples and alluvium confirmation samples at various depths below the clay layer to GW interface.	Alluvium Sample at GW interface, 8-pt composite.	31 ft (GW Elevation)	Yes	83	<LOD	**1995**	181	708																						
							94	<LOD	**2184**	194	947																						
							89	<LOD	**2832**	398	777																						
							89	<LOD	**2337**	258	811																						
R-0418 (Ashe)	180919-Parrot-RK-C-163	North Eastern Alluvium removal area (GPSed)		Alluvium Sample at GW interface, 8-pt composite.	32 ft (GW Elevation)	Yes	37	<LOD	**1380**	182	698																						
							37	<LOD	**1202**	190	893																						
							31	<LOD	940	170	627																						
							35	<LOD	**1174**	181	739	45	<LOD	**1010**	223	668											128.2857	NA	86.03066	123.4317	90.35167		
NA	180919-Parrot-RK-C-164	North Eastern Alluvium removal area (GPSed)		Alluvium Sample at Clay Interface, 8-pt composite.	20 ft (10 ft from GW)	Yes	95	<LOD	**2151**	370	**1290**																						
							55	<LOD	**1451**	206	**1001**																						
							55	<LOD	**1551**	224	986																						
							68	<LOD	**1718**	267	**1092**																						
R-0417 (Ashe)	180920-Parrot-RK-C-165	Central Alluvium area (GPSed)	Alluvium confirmation samples, QAQC, GIS data entry for the week	Alluvium Sample at GW interface, 8-pt composite.	30 ft (GW Elevation)	Yes	64	<LOD	975	219	704																						
							75	<LOD	**1216**	403	741																						
							62	<LOD	836	201	651																						
							67	<LOD	**1009**	274	699	85	<LOD	**1090**	292	820											127.1642	NA	108.0278	106.4399	117.3664		
NA	180928-Parrot-RK-C-166	Western Central Alluvium area (GPSed)	Alluvium confimation samples, QAQC updates, GPS Site for GIS data entry.	Alluvium Sample at GW interface, 8-pt composite. South Area.	30 ft (GW Elevation)	Yes	47	<LOD	759	115	643																						
							65	<LOD	960	143	777																						
							43	<LOD	908	131	894																						
							52	<LOD	876	130	771																						
NA	180928-Parrot-RK-C-167	Western Central Alluvium area (GPSed)		Alluvium Sample at GW interface, 8-pt composite. Middle Area.	30 ft (GW Elevation)	Yes	58	<LOD	**1182**	242	982																						
							51	<LOD	946	193	936																						
							48	<LOD	**1308**	192	996																						
							52	<LOD	**1145**	209	971																						
NA	180928-Parrot-RK-C-168	Western Central Alluvium area (GPSed)		Alluvium Sample at GW interface, 8-pt composite. North Area.	30 ft (GW Elevation)	Yes	48	<LOD	**1121**	195	**1037**																						
							42	<LOD	**1152**	195	**1115**																						
							45	<LOD	**1372**	184	**1109**																						
							45	<LOD	**1215**	191	**1087**																						
NA	180928-Parrot-RK-C-169	Western Central Alluvium area (GPSed)		Alluvium Sample at GW interface, 8-pt composite. Inundated Area.	30 ft (GW Elevation)	Yes	60	<LOD	**1196**	160	986																						
							47	<LOD	**1110**	161	941																						
							56	<LOD	**1168**	151	931																						
							54	<LOD	**1158**	157	953																						
NA	180928-Parrot-RK-C-170	Western Central Alluvium area (GPSed)		Alluvium Sample at GW interface, 8-pt composite. "L" Area	30 ft (GW Elevation)	Yes	31	<LOD	**1032**	178	**1264**																						
							41	<LOD	**1216**	197	**1364**																						
							39	<LOD	**1117**	188	**1087**																						
							37	<LOD	**1122**	188	**1238**																						
NA	180928-Parrot-RK-C-171	Western Central Alluvium area (GPSed)		Alluvium Sample at GW interface, 8-pt composite. Southern "L" Area	30 ft (GW Elevation)	Yes	62	<LOD	597	227	**1144**																						
							51	<LOD	580	211	**1060**																						
							41	<LOD	529	198	**1106**																						
							51	<LOD	569	212	**1103**																						
NA	180928-Parrot-CY-G-172	Western Central Alluvium area (GPSed)		Grab sample of black clay. North face.	25 ft (5 ft from GW)	Yes	67	14	619	235	**5543**																						
							59	16	510	215	**5145**																						
							59	10	541	202	**4965**																						
							62	13	557	217	**5218**																						
NA	180928-Parrot-CY-G-173	Western Central Alluvium area (GPSed)		Grab sample of black clay/with white striping. West face.	25 ft (5 ft from GW)	Yes	46	<LOD	274	198	**2893**																						
							51	<LOD	256	206	**2825**																						
							44	<LOD	262	184	**2632**																						
							47	<LOD	264	196	**2783**																						
NA	180928-Parrot-TA-G-174	Western Central Alluvium area (GPSed)		Grab sample of orange tailings intermixed with slag (10 ft layer above tailings/clay) Southern face.	20 ft (10 ft from GW)	Yes	**213**	<LOD	**1396**	876	**1943**																						
							312	<LOD	**1505**	860	**1466**																						
							219	<LOD	**1420**	705	**1252**																						
							248	<LOD	**1440**	814	**1554**																						
NA	181001-Parrot-RK-C-175	Western Central Alluvium area (GPSed)	Prepped and analyzed samples from 9/28/18, updated GIS, tracking sheets and collected seven samples and GPSed current excavation.	Alluvium Sample at GW interface, 8-pt composite. Area A	30 ft (GW Elevation)	Yes	33	<LOD	458	207	965																						
							32	<LOD	606	265	**1098**																						
							43	<LOD	510	170	**1061**																						
							36	<LOD	525	214	**1041**																						
NA	181001-Parrot-RK-C-176	Western Central Alluvium area (GPSed)		Alluvium Sample at GW interface, 8-pt composite. Area B	30 ft (GW Elevation)	Yes	52	<LOD	**1829**	198	**1456**																						
							51	<LOD	**2034**	238	**1534**																						
							38	<LOD	**1817**	186	**1546**																						
							47	<LOD	**1893**	207	**1512**																						
NA	181001-Parrot-RK-C-177	Western Central Alluvium area (GPSed)		Alluvium Sample at GW interface, 8-pt composite. Area C	30 ft (GW Elevation)	Yes	34	<LOD	764	207	**1091**																						
							66	<LOD	920	207	**1081**																						
							33	<LOD	747	232	**1061**																						
							44	<LOD	810	215	**1078**																						
NA	181001-Parrot-TA-G-178	Western Central Alluvium area (GPSed)		Grab sample of white tailings strips contained in orange tailings	25 ft (5 ft from GW)	Yes	157	<LOD	**1135**	721	854																						
							256	<LOD	561	**1595**	**1420**																						
							260	<LOD	**1281**	822	**1564**																						
							224	<LOD	992	**1046**	**1279**																						
NA	181001-Parrot-TA-G-179	Western Central Alluvium area (GPSed)		Grab sample of light orange tailings	24 ft (6 ft from GW)	Yes	154	<LOD	428	591	**1490**																						
							160	<LOD	397	590	**1230**																						
							181	<LOD	392	513	**1245**																						
							165	<LOD	406	565	**1322**																						
NA	181001-Parrot-CY-G-180	Western Central Alluvium area (GPSed)		Grab sample of black clay layer approximatley 3 ft thick	26 ft (4 ft from GW)	Yes	39	<LOD	216	156	**9011**																						
							40	<LOD	245	187	**9375**																						
							41	<LOD	225	179	**9608**																						
							40	<LOD	229	174	**9331**																						
NA	180928-Parrot-RK-C-166						47	<LOD	759	115	643																						
							65	<LOD	960	143	777																						
							43	<LOD	908	131	894																						
							52	<LOD	876	130	771																						
NA	180928-Parrot-Dup-166						54	<LOD	997	188	858																						
							47	<LOD	812	139	698																						
							46	<LOD	898	134	788																						
							49	<LOD	902	154	781																94.83871	NA	103.0453	118.509	101.2965		
181207-2	180928-Parrot-Lab-166											33	<LOD	703	190	663											63.87097	NA	80.28169	146.5296	85.95506		
NA	181015-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						77	**47**	148	**1440**	420																						
							81	**49**	150	**1453**	419																						
							79	**46**	131	**1382**	392																						
							79	**47**	143	**1425**	410						107	54.1	140	1400	414	74	87	102	102	99							
NA	181001-Parrot-CY-G-181	Western Central Alluvium area (GPSed)	Prepped and analyzed samples from 9/28/18, updated GIS, tracking sheets and collected seven samples and GPSed current excavation.	Grab sample of gray clay on the floor of the pit. Clay looks gleyed with reducing conditions.	30 ft (GW Elevation)	Yes	13	<LOD	901	136	**1184**																						
							18	<LOD	**1405**	150	**1330**																						
							31	<LOD	974	146	**1265**																						
							21	<LOD	**1093**	144	**1260**																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	181002-Parrot-RK-C-182	Western Central Alluvium area (GPSed)	Prepped and analyzed samples from 10/1/18, updated GIS, tracking sheets and collected four samples and GPSed current excavation. QAQCed tracking sheets and sent for review.	8-pt composite. New Ramp Area. Area is the southwester	30 ft (GW Elevation)	Yes	69	<LOD	643	91	472																						
							52	<LOD	565	78	368																						
							78	<LOD	684	184	436																						
							66	<LOD	631	118	425																						
NA	181002-Parrot-RK-C-183	Western Central Alluvium area (GPSed)		rn pit area of removal cell. Area inundated sample was tak	30 ft (GW Elevation)	Yes	82	<LOD	**3408**	134	798																						
							86	<LOD	**3200**	97	798																						
							80	<LOD	**3024**	130	763																						
							83	<LOD	**3211**	120	786																						
NA	181002-Parrot-TA-G-184	Western Central Alluvium area (GPSed)		Grab sample of yellow tailings	25 ft (5 ft from GW)	Yes	**640**	<LOD	**2360**	**2425**	**1234**																						
							542	<LOD	**2011**	**2197**	**1541**																						
							471	9	**1736**	**2417**	**1187**																						
							551	9	**2036**	**2346**	**1321**																						
NA	181002-Parrot-CY-G-185	Western Central Alluvium area (GPSed)		Grab sample of black clay	25 ft (5 ft from GW)	Yes	11	<LOD	170	78	**2068**																						
							20	<LOD	168	49	**2003**																						
							27	<LOD	197	68	**2163**																						
							19	<LOD	178	65	**2078**																						
NA	181009-Parrot-TA-G-186	Directly east of job trailers (Northern Test Pit)	Test Pitting for sewer line replacement, dug to determine extent of contamination in the area adjacent to the job trailers.	Yellow and Orange tailings from Test Pit 1 adjacent and east of the job trailers.Northern Test Pit	2-10 ft	Yes	**214**	<LOD	353	610	917																						
							207	<LOD	292	596	796																						
							289	<LOD	292	462	965																						
							237	<LOD	312	556	893																						
NA	181009-Parrot-CY-G-187			Black clay from Test Pit 1 adjacent and east of the job trailers.Northern Test Pit	10-14 ft	Yes	32	<LOD	**1692**	250	**2952**																						
							41	<LOD	**1649**	217	**2884**																						
							23	<LOD	**1646**	209	**2973**																						
							32	<LOD	**1662**	225	**2936**																						
NA	181009-Parrot-CY-G-188	Directly east of job trailers (Southern Test Pit)		Black clay from Test Pit 2 adjacent and east of the job trailers.Southern Test Pit	10-14 ft	Yes	56	<LOD	331	656	**2596**																						
							39	10	327	688	**2431**																						
							51	10	329	644	**2470**																						
							49	10	329	663	**2499**																						
NA	181009-Parrot-TA-G-189	Directly east of job trailers (Southern Test Pit)		Yellow and Orange tailings from Test Pit 2 adjacent and east of the job trailers. Southern Test Pit	2-10 ft	Yes	36	<LOD	527	531	**1898**																						
							<LOD	<LOD	463	607	**1960**																						
							<LOD	<LOD	429	372	**1859**																						
							36	<LOD	473	503	**1906**																						
NA	181011-Parrot-OB-C-190	GPSed	Sampled OB, approximately 2-3 ft of OB scraped from slag removal area. Stockpile was temporary and in-situ sampling showed the material was below action levels.	OB material scraped from slag removal area. 8 pt composite apporximatle 400 CY - Western Portion of stockpile	Surface on Stockpile	Yes	62	<LOD	265	213	912																						
							45	<LOD	262	255	923																						
							47	<LOD	201	202	674																						
							51	<LOD	243	223	836																						
NA	181011-Parrot-OB-C-191	GPSed		OB material scraped from slag removal area. 8 pt composite apporximatle 400 CY - Eastern Portion of stockpile	Surface on Stockpile	Yes	96	<LOD	340	205	543																						
							81	<LOD	277	159	442																						
							62	<LOD	229	157	769																						
							80	<LOD	282	174	585																						
NA	181016-Parrot-RK-C-192	GPSed. Cell 3 moving west	Sampled bottom floor above ground water, in-situ sampled same area and nine grab samples taken at various heighths located on the northern	Alluvium mixed with clay, approximatly 2 ft above ground water. Sample taken at the alluvium/clay interface.	25 ft (2 ft from GW)	Yes	46	<LOD	970	310	**2434**																						
							62	<LOD	**1050**	434	**2387**																						
							60	<LOD	968	254	**2186**																						
							56	<LOD	996	333	**2336**																						
NA	181018-Parrot-OB-C-193	GPSed	Sampled OB from southwestern area not characterized, samples were taken after material was deposited in placement area and spred by a dozer	8 Point Composite - Taken in placement area - Grid A	Surface on grade	Yes	49	<LOD	426	201	709																						
							40	<LOD	416	228	649																						
							74	<LOD	698	214	593																						
							54	<LOD	513	214	650																						
NA	181018-Parrot-OB-C-194	GPSed		An 8 Point Composite - Taken in placement area - Grid B	Surface on grade	Yes	34	<LOD	350	224	653																						
							31	<LOD	384	231	503																						
							43	<LOD	300	210	483																						
							36	<LOD	345	222	546																						
NA	181018-Parrot-TA-G-195	GPSed		Grab Sample of tailings - Taken in placement area - Grid B	Surface on grade	Yes	**419**	<LOD	247	595	271																						
							357	<LOD	279	666	406																						
							366	<LOD	388	667	365																						
							381	<LOD	305	643	347																						
NA	181018-Parrot-OB-C-196	GPSed		An 8 Point Composite - Taken in placement area - Grid C	Surface on grade	Yes	67	8	338	201	488																						
							45	<LOD	433	186	410																						
							80	<LOD	354	318	583																						
							64	8	375	235	494																						
NA	181018-Parrot-OB-C-197	GPSed		An 8 Point Composite - Taken in placement area - Grid D	Surface on grade	Yes	**235**	<LOD	385	559	580																						
							121	<LOD	418	351	681																						
							112	<LOD	430	379	647																						
							156	<LOD	411	430	636																						
NA	181018-Parrot-OB-C-198	GPSed		An 8 Point Composite - Taken in placement area - Grid E	Surface on grade	Yes	62	<LOD	375	260	608																						
							64	<LOD	388	418	578																						
							58	<LOD	438	231	814																						
							61	<LOD	400	303	667																						
NA	181018-Parrot-OB-C-199	GPSed		An 8 Point Composite - Taken in placement area - Grid F	Surface on grade	Yes	91	<LOD	553	232	564																						
							157	<LOD	372	248	407																						
							83	<LOD	406	234	425																						
							110	<LOD	444	238	465																						
NA	181018-Parrot-OB-C-200	GPSed		An 8 Point Composite - Taken in placement area - Grid G	Surface on grade	Yes	119	<LOD	391	274	454																						
							104	<LOD	424	377	443																						
							62	<LOD	454	319	636																						
							95	<LOD	423	323	511																						
NA	181002-Parrot-TA-G-184						**640**	<LOD	**2360**	**2425**	**1234**																						
							542	<LOD	**2011**	**2197**	**1541**																						
							471	9	**1736**	**2417**	**1187**																						
							551	9	**2036**	**2346**	**1321**																						
NA	181002-Parrot-DUP-184						**604**	<LOD	**2086**	**2029**	**1165**																						
							555	7	**1934**	**2270**	**1140**																						
							602	<LOD	**1975**	**2019**	**1434**																						
							587	7	**1998**	**2106**	**1246**																			106.5336	77.77778	98.16604	89.75707	94.37153
181207-3	181002-Parrot-Lab-184											**687**	<LOD	**2149**	**2392**	**1481**																124.6824	NA	105.5674	101.9463	112.1403
NA	181018-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						70	**46**	127	**1402**	415																						
							85	**54**	167	**1442**	425																						
							75	**56**	151	**1444**	404																						
							77	**52**	148	**1429**	415						107	54.1	140	1400	414	72	96	106	102	100							
NA	181018-Parrot-Xcon-Blank 150-200						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
181207-10	SRM Lab Analysis (2710a) - WET 181018-4											1398	<LOD	3464	5541	4115	1540	12.3	3420	5520	4180	91	NA	101	100	98							

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	181018-Parrot-OB-C-201	GPSed	Sampled OB from southwestern area not characterized, samples were taken after material was deposited in placement area and spred by a dozer	An 8 Point Composite - Taken in placement area - Grid H	Surface on grade	Yes	**230**	<LOD	420	410	807																						
							274	<LOD	340	491	790																						
							188	<LOD	441	316	661																						
							231	<LOD	400	406	753																						
NA	181018-Parrot-OB-C-202	GPSed		An 8 Point Composite - Taken in placement area - Grid I	Surface on grade	Yes	180	<LOD	370	674	560																						
							138	<LOD	422	506	645																						
							121	<LOD	338	451	602																						
							146	<LOD	377	544	602																						
NA	181018-Parrot-OB-C-203	GPSed		An 8 Point Composite - Taken in placement area - Grid J	Surface on grade	Yes	92	<LOD	422	306	769																						
							124	<LOD	424	326	758																						
							108	<LOD	391	342	658																						
							108	<LOD	412	325	728																						
NA	181018-Parrot-OB-C-204	GPSed		An 8 Point Composite - Taken in placement area - Grid K	Surface on grade	Yes	131	<LOD	339	397	582																						
							116	<LOD	315	290	791																						
							327	<LOD	350	632	673																						
							191	<LOD	335	440	682																						
NA	181018-Parrot-OB-C-205	GPSed		An 8 Point Composite - Taken in placement area - Grid L	Surface on grade	Yes	**532**	<LOD	903	311	448																						
							172	<LOD	414	341	591																						
							151	<LOD	467	342	603																						
							285	<LOD	595	331	547																						
NA	181018-Parrot-OB-C-206	GPSed		An 8 Point Composite - Taken in placement area - Grid M	Surface on grade	Yes	148	<LOD	427	464	799																						
							167	<LOD	425	281	558																						
							172	<LOD	420	351	515																						
							162	<LOD	424	365	624																						
NA	181018-Parrot-OB-C-207	GPSed		An 8 Point Composite - Taken in placement area - Grid N	Surface on grade	Yes	90	<LOD	388	261	500																						
							109	<LOD	400	459	571																						
							83	<LOD	385	315	572																						
							94	<LOD	391	345	548																						
NA	181018-Parrot-OB-C-208	GPSed		An 8 Point Composite - Taken in placement area - Grid O	Surface on grade	Yes	100	<LOD	426	366	529																						
							182	<LOD	408	346	640																						
							135	<LOD	438	335	603																						
							139	<LOD	424	349	591																						
NA	181019-Parrot-OB-C-209	GPSed	Sampled OB from southwestern area not characterized, samples were taken after material was deposited in placement area and spred by a dozer	An 8 Point Composite - Taken in placement area - Grid AA	Surface on grade	Yes	**255**	<LOD	356	343	577																						
							290	<LOD	338	315	475																						
							358	<LOD	406	409	332																						
							301	<LOD	367	356	461																						
NA	181019-Parrot-OB-C-210	GPSed		An 8 Point Composite - Taken in placement area - Grid BB	Surface on grade	Yes	146	<LOD	315	202	379																						
							96	<LOD	299	209	346																						
							122	<LOD	359	291	371																						
							121	<LOD	324	234	365																						
NA	181019-Parrot-OB-C-211	GPSed		An 8 Point Composite - Taken in placement area - Grid CC	Surface on grade	Yes	53	<LOD	463	225	600																						
							53	<LOD	434	362	**1104**																						
							82	<LOD	449	250	744																						
							63	<LOD	449	279	816																						
NA	181019-Parrot-OB-C-212	GPSed		An 8 Point Composite - Taken in placement area - Grid DD	Surface on grade	Yes	82	<LOD	390	313	532																						
							103	<LOD	460	381	997																						
							74	<LOD	425	325	555																						
							86	<LOD	425	340	695																						
NA	181019-Parrot-OB-C-213	GPSed		An 8 Point Composite - Taken in placement area - Grid EE	Surface on grade	Yes	109	<LOD	453	341	847																						
							111	<LOD	384	334	609																						
							91	<LOD	421	373	860																						
							104	<LOD	419	349	772																						
NA	181019-Parrot-OB-C-214	GPSed		An 8 Point Composite - Taken in placement area - Grid FF	Surface on grade	Yes	43	<LOD	372	198	530																						
							65	<LOD	345	212	603																						
							40	<LOD	393	235	595																						
							49	<LOD	370	215	576																						
NA	181019-Parrot-OB-C-215	GPSed		An 8 Point Composite - Taken in placement area - Grid GG	Surface on grade	Yes	36	<LOD	340	346	493																						
							66	<LOD	404	263	530																						
							78	<LOD	470	361	541																						
							60	<LOD	405	323	521																						
NA	181019-Parrot-OB-C-216	GPSed		An 8 Point Composite - Taken in placement area - Grid HH	Surface on grade	Yes	75	<LOD	342	268	572																						
							64	<LOD	383	301	634																						
							48	<LOD	288	221	442																						
							62	<LOD	338	263	549																						
NA	181019-Parrot-OB-C-217	GPSed		An 8 Point Composite - Taken in placement area - Grid II	Surface on grade	Yes	42	<LOD	414	289	504																						
							78	<LOD	330	227	538																						
							84	<LOD	460	195	443																						
							68	<LOD	401	237	495																						
NA	181019-Parrot-OB-G-218	GPSed		Grab sample taken of topsoil from northern haul road taken to create haul road surface on overburden cel	Surface on grade	Yes	25	<LOD	151	122	337																						
							22	<LOD	184	115	328																						
							24	<LOD	183	149	361																						
							24	<LOD	173	129	342																						
NA	181022-Parrot-OB-C-219	MH will correct GIS locations made by JS	10/22: Screen floor of middle-west cell. Removal of cell had halted as crew claimed to have found new soil of unknown quality. MH came on site ~11:45 AM and took in-situ shots of cell floor. Test pitting was then performed in the next area to be removed (southwest corner).	8-pt composite of stockpile. Sample taken from spoils pile of test pit excavation (Topsoil 1)	Sample taken from spoils pile of test pit excavations (0-2 ft)	Yes	29	<LOD	341	242	928																								
							25	<LOD	327	247	600																						
							19	<LOD	330	243	653																						
							24	<LOD	333	244	727																						
NA	181022-Parrot-TA-C-220			8-pt composite of stockpile. Sample taken from spoils pile of test pit excavation (Tailings mix 1)	Sample taken from spoils pile of test pit excavations (2-6 ft)	Yes	**834**	<LOD	285	680	571																								
							471	<LOD	237	612	565																						
							699	<LOD	267	590	856																						
							668	<LOD	263	627	664																						
NA	181022-Parrot-TA-C-220						**834**	<LOD	285	680	571																						
							471	<LOD	237	612	565																						
							699	<LOD	267	590	856																						
							668	<LOD	263	627	664																						
NA	181022-Parrot-DUP-220						**598**	<LOD	280	528	819																						
							558	<LOD	238	645	667																						
							610	<LOD	289	566	651																						
							589	<LOD	269	580	712																				88.12375	NA	102.2814	92.4017	107.2791
181207-8	181022-Parrot-Lab-220											**642**	<LOD	321	713	939																96.10778	NA	122.0532	113.6557	141.4157
NA	181022-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						90	**49**	134	**1484**	437																						
							93	**49**	129	**1473**	421																						
							74	**53**	157	**1478**	438																						
							86	**50**	140	**1478**	432						107	54.1	140	1400	414	80	93	100	106	104							
NA	181022-Parrot-RK-C-221	MH will correct GIS locations made by JS	10/22: Screen floor of middle-west cell. Removal of cell had halted as crew claimed to have found new soil of unknown quality. MH came on site	8-pt composite of stockpile. Sample taken from spoils pile of test pit excavation (Alluvial - tailings - clay mix)	Sample taken from spoils pile of test pit excavations (Below 8 ft)	Yes	185	<LOD	942	289	838																								
							345	<LOD	**1521**	407	**1201**																						
							179	<LOD	971	292	737																						
							236	<LOD	**1145**	329	925																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	181022-Parrot-OB-C-222	MH will correct GIS locations made by JS	10/22: Screen floor of middle-west cell. Removal of cell had halted as crew claimed to have found new soil of unknown quality. MH came on site ~11:45 AM and took in-situ shots of cell floor. Test pitting was then performed in the next area to be removed (southwest corner).	8-pt composite of stockpile. Sample taken from spoils pile of test pit excavation (Topsoil 2)	Sample taken from spoils pile of test pit excavations (0-2 ft)	Yes	44	<LOD	**2437**	404	694																						
							27	<LOD	477	255	543																						
							23	<LOD	401	184	507																						
							31	<LOD	**1105**	281	581																						
NA	181022-Parrot-TA-C-223			8-pt composite of stockpile. Sample taken from spoils pile of test pit excavation (Tailings mix 2)	Sample taken from spoils pile of test pit excavations (2-6 ft)	Yes	**469**	<LOD	263	554	469																							
							525	<LOD	431	595	652																						
							527	<LOD	372	576	**1195**																						
							507	<LOD	355	575	772																						
NA	181023-Parrot-OB-C-224	JF will correct GIS locations made by JS	10/23: Screen area to north of where test pits had been dug. JF on site ~8:00 AM and both screened northern ridge and soil surrounding previous day's test pits, as well as processed backlogged samples.	8-pt composite of untouched overburden. (west side)	Surface samples of untouched OB surface	Yes	42	<LOD	260	132	355																							
							32	<LOD	178	175	252																						
							23	<LOD	193	104	262																						
							32	<LOD	210	137	290																						
NA	181023-Parrot-OB-C-225			8-pt composite of untouched overburden. (Topsoil SW ridge, test pit area)	Sample taken from spoils pile of test pit excavations (0-2 ft)	Yes	36	<LOD	417	214	594																							
							78	<LOD	557	**1934**	**1934**																						
							29	<LOD	394	210	673																						
							48	<LOD	456	786	**1067**																						
NA	181026-Parrot-RK-C-226	GPSed	Composite samples and grab samples of the western centeral pit bottom. Took 7 floor composites and 6 grabs at various heights from GW	Pit bottom confirmation samples at final depth of excavation. 8-pt composite were taken in areas were clay/alluvium material was above the water. (Sample Area 1)	25 -30 ft - Sample taken at GW interface	Yes	112	<LOD	**2808**	199	**1360**																							
							105	<LOD	**2344**	206	**1331**																						
							125	<LOD	**2953**	195	**1376**																						
							114	<LOD	**2702**	200	**1356**																						
NA	181026-Parrot-RK-C-227	GPSed		Pit bottom confirmation samples at final depth of excavation. 8-pt composite were taken in areas were clay/alluvium material was above the water. (Sample Area 2)	26 -30 ft - Sample taken at GW interface	Yes	44	<LOD	**1089**	103	**1106**																							
							56	<LOD	**1012**	125	**1107**																						
							47	<LOD	**1006**	98	**1002**																						
							49	<LOD	**1036**	109	**1072**																						
NA	181026-Parrot-RK-C-228	GPSed		Pit bottom confirmation samples at final depth of excavation. 8-pt composite were taken in areas were clay/alluvium material was above the water. (Sample Area 3)	27 -30 ft - Sample taken at GW interface	Yes	61	9	**1176**	100	**1589**																							
							47	<LOD	966	102	**1372**																						
							67	<LOD	958	103	**1291**																						
							58	9	**1033**	102	**1417**																						
NA	181026-Parrot-RK-C-229	GPSed		Pit bottom confirmation samples at final depth of excavation. 8-pt composite were taken in areas were clay/alluvium material was above the water. (Sample Area 4)	28 -30 ft - Sample taken at GW interface	Yes	45	<LOD	987	116	**2016**																							
							36	<LOD	888	143	**2677**																						
							55	<LOD	854	174	**2200**																						
							45	<LOD	910	144	**2298**																						
NA	181026-Parrot-RK-C-230	GPSed		Pit bottom confirmation samples at final depth of excavation. 8-pt composite were taken in areas were clay/alluvium material was above the water. (Sample Area 5)	29 -30 ft - Sample taken at GW interface	Yes	54	<LOD	918	140	**1744**																							
							55	<LOD	936	144	**1756**																						
							34	<LOD	908	156	**1723**																						
							48	<LOD	921	147	**1741**																						
NA	181026-Parrot-RK-C-231	GPSed		Pit bottom confirmation samples at final depth of excavation. 8-pt composite were taken in areas were clay/alluvium material was above the water. (Sample Area 6)	30 -30 ft - Sample taken at GW interface	Yes	68	<LOD	**1762**	220	**2660**																							
							48	<LOD	**1558**	208	**2457**																						
							69	<LOD	**1558**	212	**2420**																						
							62	<LOD	**1626**	213	**2512**																						
NA	181026-Parrot-RK-C-232	GPSed		Pit bottom confirmation samples at final depth of excavation. 8-pt composite were taken in areas were clay/alluvium material was above the water. (Sample Area 7)	31 -30 ft - Sample taken at GW interface	Yes	115	<LOD	**1299**	185	**1420**																							
							87	<LOD	957	166	**1283**																						
							102	<LOD	**1453**	182	**1556**																						
							101	<LOD	**1236**	178	**1420**																						
NA	181026-Parrot-CY-G-233	GPSed		Pit bottom western high wall sampled by depth to ground water. Grab 1	1 ft above GW	Yes	69	<LOD	**1007**	111	**1187**																						
							58	<LOD	973	95	**1128**																						
							57	<LOD	962	97	**1115**																						
							61	<LOD	981	101	**1143**																						
NA	181026-Parrot-CY-G-234	GPSed		Pit bottom western high wall sampled by depth to ground water. Grab 2	2 ft above GW	Yes	71	<LOD	652	282	**2759**																						
							69	<LOD	646	360	**2991**																						
							59	<LOD	435	289	**2554**																						
							66	<LOD	578	310	**2768**																						
NA	181026-Parrot-CY-G-235	GPSed		Pit bottom western high wall sampled by depth to ground water. Grab 3	3 ft above GW	Yes	37	<LOD	661	198	**1416**																						
							69	<LOD	673	306	**1623**																						
							47	<LOD	609	204	**1264**																						
							51	<LOD	648	236	**1434**																						
NA	181026-Parrot-CY-G-236	GPSed		Pit bottom western high wall sampled by depth to ground water. Grab 4	4 ft above GW	Yes	82	<LOD	506	329	**2853**																						
							72	<LOD	544	363	**2972**																						
							69	<LOD	485	329	**2827**																						
							74	<LOD	512	340	**2884**																						
NA	181026-Parrot-CY-G-237	GPSed		Pit bottom western high wall sampled by depth to ground water. Grab 5 (Black Clay)	6 ft above GW	Yes	63	16	**1467**	268	**7864**																						
							60	14	**1609**	269	**7794**																						
							52	14	**1574**	272	**6880**																						
							58	15	**1550**	270	**7513**																						
NA	181026-Parrot-CY-G-238	GPSed		Pit bottom western high wall sampled by depth to ground water. Grab 6 (Gray Clay underlying black clay)	5 ft above GW	Yes	<LOD	10	485	198	**1687**																						
							18	<LOD	440	167	**1451**																						
							28	<LOD	478	178	**1529**																						
							23	10	468	181	**1556**																						
NA	181031-Parrot-OB-G-239	GPSed	(MH) Performed test pitting with JT of northernmost area of site, from east to west. Four pits were dug to depth of tailings or slag. A grab sample was taken of overburden from each test pit, and an additional grab of a brick layer seen in test pit 3 was taken.	Test pit #1. Grab sample. Pit was dug to 11 ft before hitting slag. Slag at 11 ft was powdered, not solid. Overburden was red rock seen consistently before.	ample taken from OB at ~5 ft bg	Yes	192	<LOD	157	585	84																							
							157	<LOD	199	542	74																						
							153	<LOD	211	409	83																						
							167	<LOD	189	512	80																						
NA	181031-Parrot-OB-G-240	GPSed		Test pit #2. Grab sample. Pit was dug to 2 ft before hitting slag. Slag was solid, as seen elsewhere on site. Overburden sampled was topsoil.	Sample taken from OB at ground surface	Yes	<LOD	<LOD	183	151	336																							
							14	<LOD	282	166	557																						
							21	<LOD	216	157	479																						
							18	<LOD	227	158	457																						
NA	181026-Parrot-CY-G-233						69	<LOD	**1007**	111	**1187**																						
							58	<LOD	973	95	**1128**																						
							57	<LOD	962	97	**1115**																						
							61	<LOD	981	101	**1143**																						
NA	181026-Parrot-DUP-233						61	<LOD	**1004**	104	**1175**																						
							54	<LOD	**1029**	98	**1250**																						
							73	8	979	100	**1203**																						
							63	8	**1004**	101	**1209**																				102.1739	NA	102.3793	99.66997	105.7726
181207-5	181026-Parrot-Lab-233											65	<LOD	924	116	**1233**																105.9783	NA	94.22162	114.8515	107.8426
NA	181031-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						89	**54**	144	**1443**	418																						
							75	**55**	140	**1458**	415																						
							88	**56**	140	**1430**	421																						
							84	**55**	141	**1444**	418						107	54.1	140	1400	414	79	102	101	103	101							

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	181031-Parrot-OB-G-241	GPSed	(MH) Performed test pitting with JT of northernmost area of site, from east to west. Four pits were dug to depth of tailings or slag. A grab sample was taken of overburden from each test pit, and an additional grab of a brick layer seen in test pit 3 was taken.	Test pit #3. Grab sample. Pit was dug to 11.5 ft before hitting tailings. No slag seen. Overbuden sampled was mix of topsoil and red rock seen before.	Sample taken from OB at ~5 ft bgs	Yes	20	<LOD	277	77	619																						
							23	<LOD	288	91	386																						
							16	<LOD	313	86	378																						
							20	<LOD	293	85	461																						
NA	181031-Parrot-OB-G-242	GPSed		Test pit #3, second sample. Grab sample. Noticed red brick layer in pit consistent with previous layers containing high arsenic. Took sample to confirm.	Sample taken from brick layer at ~2 ft bgs	Yes	**329**	<LOD	258	333	101																						
							310	<LOD	241	353	95																						
							255	<LOD	234	456	89																						
							298	<LOD	244	381	95																						
NA	181031-Parrot-OB-G-243	GPSed		Test pit #4. Grab sample. 11.5+ ft dug with no slag nor tailings found. Overbuden sampled is yellowish brown, not red rock seen previously. Overburden is consistent from surface to end of test pit. No stratification seen.	Sample taken from OB at ~5 ft bgs	Yes	**214**	<LOD	232	224	145																						
							210	<LOD	192	348	126																						
							260	<LOD	248	270	161																						
							228	<LOD	224	281	144																						
NA	181102-Parrot-Rk-C-244	GPSed	11/02: JF on site. In-situ shots taken in SW corner where tailing of white, yellow and lite red were present . One grab sample taken of yellow tailings near western wooden shaft. 8pt Composite taken in central area of excavation cell at base. North and South ends not sampled due to gw	8 pt composite of alluvium/clay pit bottom, the unsampled areas were below water	25 -30 ft - Sample taken at GW interface	Yes	69	<LOD	**1182**	233	**1670**																						
							61	<LOD	969	221	**1473**																						
							70	<LOD	**1009**	279	**1636**																						
							67	<LOD	**1053**	244	**1593**																						
NA	181102-Parrot-TA-G-245	GPSed		White tailing grab sample near exposed wooded shaft	Exposed Surface Sample	Yes	**357**	<LOD	248	979	397																						
							347	<LOD	233	849	329																						
							382	<LOD	237	761	484																						
							362	<LOD	239	863	403																						
NA	181107-Parrot-OB-C-246	GPSed	Sampled northwestern OB areas, first with in-situ samples requested by JT then followed up by confitmation composite sampleing.	8-point Composit Sample. Red waste rock OB. Sidehill Area 1.	Surface Sample	Yes	51	<LOD	569	177	688																						
							54	<LOD	579	140	572																						
							81	<LOD	582	110	724																						
							62	<LOD	577	142	661																						
NA	181107-Parrot-OB-C-247	GPSed		8-point Composit Sample. Red waste rock OB. Sidehill Area 2.	Surface Sample	Yes	47	<LOD	488	179	524																						
							29	<LOD	410	157	478																						
							44	<LOD	359	207	379																						
							40	<LOD	419	181	460																						
NA	181107-Parrot-OB-C-248	GPSed		8-point Composit Sample. Red waste rock OB. Sidehill Area 3.	Surface Sample	Yes	60	<LOD	398	316	312																						
							60	<LOD	427	378	328																						
							38	<LOD	321	265	231																						
							53	<LOD	382	320	290																						
NA	181107-Parrot-OB-C-249	GPSed		8-point Composit Sample. Bottom of OB/Top of Tailings. Bottom Area 1.	Surface Sample	Yes	114	<LOD	468	183	621																						
							76	<LOD	401	166	571																						
							65	<LOD	357	129	376																						
							85	<LOD	409	159	523																						
NA	181107-Parrot-OB-C-250	GPSed		8-point Composit Sample. Bottom of OB/Top of Tailings. Bottom Area 2.	Surface Sample	Yes	22	<LOD	287	58	159																						
							31	<LOD	405	52	209																						
							31	<LOD	446	60	275																						
							28	<LOD	379	57	214																						
NA	181107-Parrot-Xcon-Blank 200-250						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
181207-11	SRM Lab Analysis (2711a) - WET 181107-5											86	**30**	153	**1490**	431	107	54.1	140	1400	414	80	55	109	106	104							
NA	181107-Parrot-OB-C-251	GPSed	Sampled northwestern OB areas, first with in-situ samples requested by JT then followed up by confitmation composite sampleing.	8-point Composit Sample. Red waste rock OB. Highwall sample of OB from sidehill area to bottom area.	Surface Sample	Yes	173	<LOD	400	207	723																						
							118	<LOD	374	187	399																						
							78	<LOD	386	251	427																						
							123	<LOD	387	215	516																						
NA	181107-Parrot-OB-C-252	GPSed		8-point Composit Sample. Red waste rock OB. Topsoil sample of OB north of bottom area..	Surface Sample	Yes	72	<LOD	840	109	345																						
							66	<LOD	876	98	322																						
							53	<LOD	854	89	347																						
							64	<LOD	857	99	338																						
NA	181109-Parrot-RK-G-253	Southeast portion of pit GPSed	Sampled new western cell next to the job trailers. Analysed samples taken on 11/7/18, entered data and created maps.	Grab sample from Ron's bucket, no access to the pit. Highwalls and small sample area. Sample taken from southeast portion of pit	Pit Bottom (Ground Water Elevation	Yes	61	<LOD	618	169	**1035**																						
							90	<LOD	738	131	**1142**																						
							81	<LOD	716	150	**1208**																						
							77	<LOD	691	150	**1128**																						
NA	181109-Parrot-RK-G-254	Northeast portion of pit GPSed		Grab sample from Lee's bucket, no access to the pit. Highwalls and small sample area. Sample taken from northeast portion of the pit.	Pit Bottom (Ground Water Elevation	Yes	75	<LOD	**1279**	348	**1689**																						
							100	<LOD	**1172**	298	**1487**																						
							74	<LOD	**1318**	386	**1646**																						
							83	<LOD	**1256**	344	**1607**																						
NA	181109-Parrot-RK-C-255	Western portion of pit, GPSed		8-point composite sample of the west portion of the pit in areas above GW elevation.	Pit Bottom (Ground Water Elevation	Yes	61	<LOD	802	255	**1739**																						
							52	<LOD	997	239	**1473**																						
							61	<LOD	975	280	**1588**																						
							58	<LOD	925	258	**1600**																						
NA	181109-Parrot-RK-C-256	South of samples 1-3, GPSed		8-point composite sample of the next exposed removal swath to the south	Pit Bottom (Ground Water Elevation	Yes	145	19	445	311	**1450**																						
							168	<LOD	325	478	883																						
							216	<LOD	454	431	**1112**																						
							176	19	408	407	**1148**																						
NA	181109-Parrot-CY-G-257	GPSed and offset due to highwall		Grab sample of gray clay below the black clay layer.	Pit Bottom (Ground Water Elevation	Yes	38	<LOD	644	120	**1228**																						
							45	<LOD	642	90	**1172**																						
							50	<LOD	661	105	**1221**																						
							44	<LOD	649	105	**1207**																						
NA	181109-Parrot-RK-C-258	GPSed		8-point composite sample taken south of sample 4. Northeast sample area	Pit Bottom (Ground Water Elevation	Yes	105	<LOD	414	206	708																						
							110	<LOD	444	172	760																						
							96	<LOD	405	197	762																						
							104	<LOD	421	192	743																						
NA	181109-Parrot-RK-C-259	GPSed		8-point composite sample taken south of sample 4. Southeast sample area.	Pit Bottom (Ground Water Elevation	Yes	75	<LOD	350	87	601																						
							69	<LOD	361	72	456																						
							49	<LOD	287	125	489																						
							64	<LOD	333	95	515																						
NA	181109-Parrot-RK-C-260	GPSed		8-point composite sample taken in western sample area.	Pit Bottom (Ground Water Elevation	Yes	153	<LOD	484	584	**1289**																						
							150	<LOD	487	302	854																						
							229	<LOD	450	287	857																						
							177	<LOD	474	391	1000																						
NA	181102-Parrot-RK-C-244						69	<LOD	**1182**	233	**1670**																						
							61	<LOD	969	221	**1473**																						
							70	<LOD	**1009**	279	**1636**																						
							67	<LOD	**1053**	**244**	**1593**																						
NA	181102-Parrot-DUP-244						87	<LOD	**1081**	247	**1824**																						
							63	<LOD	943	225	**1590**																						
							60	<LOD	970	202	**1674**																						
							70	<LOD	998	225	**1696**																			105	NA	94.74684	91.95089	106.4658	
181207-6	181102-Parrot-Lab-244											61	<LOD	822	260	**1509**															91.5	NA	78.03797	106.412	94.72693	
NA	181109-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						80	**47**	150	**1462**	400																						
							76	**59**	159	**1449**	408																						
							87	**50**	146	**1451**	402																						
							81	**52**	152	**1454**	403						107	54.1	140	1400	414	76	96	108	104	97							

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	181112-Parrot-RK-C-261	GPSed	Collected samples of south haul removal, prepped samples taken (11/9) and run analysis of samples	8-Pont Composite of pit bottom before cleared of gray and black clay. At alluvuim interface but waste still present. Cleaner the further west.	Pit Bottom (Ground Water Elevation)	Yes	12	<LOD	285	67	272																						
							<LOD	<LOD	267	42	232																						
							12	<LOD	288	45	241																						
							12	<LOD	280	51	248																						
NA	181112-Parrot-RK-C-262	GPSed		8-Pont Composite of pit bottom before cleared of gray and black clay. At alluvuim interface but waste still present.	Pit Bottom (Ground Water Elevation)	Yes	99	**21**	**2385**	195	986																						
							136	**46**	**1682**	201	838																						
							78	18	**1735**	129	758																						
							104	**28**	**1934**	175	861																						
NA	181113-Parrot-RK-C-263	GPSed	Collected samples of south haul removal, 2 grabs of clay layers and 2 composite floor samples, AM de-watering meeting followed by on-site to discuss path forward.	8-point composite of pit bottom good alluvium interface. Before final cleaning	Pit Bottom (Ground Water Elevation)	Yes	66	<LOD	621	141	409																						
							111	<LOD	**1204**	397	680																						
							85	<LOD	816	172	546																						
							87	<LOD	880	237	545																						
NA	181113-Parrot-CY-G-264	GPSed		Grab sample of black clay	3 ft above GW	Yes	49	<LOD	**1091**	306	**2005**																						
							36	<LOD	**1231**	301	**1899**																						
							43	<LOD	**1251**	340	**1958**																						
							43	<LOD	**1191**	316	**1954**																						
NA	181113-Parrot-CY-G-265	GPSed		Grab sample of gray clay	2 ft above GW	Yes	<LOD	<LOD	274	77	615																						
							<LOD	<LOD	297	85	662																						
							11	<LOD	284	66	593																						
							11	<LOD	285	76	623																						
NA	181113-Parrot-RK-C-266	GPSed		8-point composite of pit bottom good alluvium interface.	Pit Bottom (Ground Water Elevation)	Yes	54	**26**	**1395**	129	637																						
							75	13	**1227**	296	620																						
							65	<LOD	982	266	577																						
							65	20	**1201**	230	611																						
NA	181114-Parrot-RK-C-267	GPSed	Worked with Lee all day to dewater east side of pit and sample then dewater west side of pit and sample. Dan D was there to shoot elevations.	8-point sampling, after pit was dewater and grey clay was removed. Sample A	Pit Bottom (Ground Water Elevation)	Yes	37	<LOD	782	53	829																						
							43	<LOD	906	72	908																						
							36	<LOD	780	60	857																						
							39	<LOD	823	62	865																						
NA	181114-Parrot-RK-C-268	GPSed		8-point sampling, after pit was dewater and grey clay was removed. Sample B	Pit Bottom (Ground Water Elevation)	Yes	66	<LOD	736	91	870																						
							67	<LOD	749	87	902																						
							93	<LOD	780	104	941																						
							75	<LOD	755	94	904																						
NA	181114-Parrot-RK-C-269	GPSed		8-point sampling, after pit was dewater and grey clay was removed. Sample C	Pit Bottom (Ground Water Elevation)	Yes	61	<LOD	840	93	681																						
							69	<LOD	800	85	740																						
							75	<LOD	856	79	752																						
							68	<LOD	832	86	724																						
NA	181114-Parrot-RK-C-270	GPSed		8-point sampling, after pit was dewater and grey clay was removed. Sample D	Pit Bottom (Ground Water Elevation)	Yes	44	<LOD	732	20	688																						
							34	<LOD	639	29	652																						
							46	<LOD	**1014**	46	**1015**																						
							41	<LOD	795	32	785																						
NA	181114-Parrot-RK-C-271	GPSed		8-point sampling, after pit was dewater and grey clay was removed. Sample F	Pit Bottom (Ground Water Elevation)	Yes	79	<LOD	800	91	671																						
							96	<LOD	899	101	605																						
							89	<LOD	**1095**	95	750																						
							88	<LOD	931	96	675																						
NA	181114-Parrot-RK-C-272	GPSed		8-point sampling, after pit was dewater and grey clay was removed. Sample E	Pit Bottom (Ground Water Elevation)	Yes	30	<LOD	784	44	857																						
							32	<LOD	715	32	852																						
							28	<LOD	596	51	641																						
							30	<LOD	698	42	783																						
NA	181114-Parrot-RK-C-273	GPSed		8-point sampling, after pit was dewater and grey clay was removed. Sample G	Pit Bottom (Ground Water Elevation)	Yes	55	<LOD	648	75	917																						
							32	<LOD	699	117	734																						
							46	<LOD	627	59	653																						
							44	<LOD	658	84	768																						
NA	181114-Parrot-RK-C-274	GPSed		8-point sampling, after pit was dewater and grey clay was removed. Sample H	Pit Bottom (Ground Water Elevation)	Yes	36	<LOD	616	58	777																						
							28	<LOD	591	47	805																						
							69	<LOD	678	49	877																						
							44	<LOD	628	51	820																						
NA	181115-Parrot-RK-C-275	GPSed	Sample area Lee Dewatered with excavator bucked. Atea was scraped with excavator before samples taken. Dan D surveyed area as sampling was ongoing.	8-point sample after area was dewatered and cleaned by Lee in Excavator. Sample 1	Pit Bottom (Ground Water Elevation)	Yes	44	<LOD	646	73	493																						
							27	<LOD	453	83	402																						
							35	<LOD	592	63	501																						
							35	<LOD	564	73	465																						
NA	181115-Parrot-RK-G-276	GPSed		Grab sample of dark alluvium exposed after area was dewatered and cleaned by Lee in Excavator. Sample 2	Pit Bottom (Ground Water Elevation)	Yes	26	<LOD	**3039**	122	672																						
							28	<LOD	**3374**	70	556																						
							27	<LOD	**3002**	67	574																						
							27	<LOD	**3138**	86	601																						
NA	181115-Parrot-RK-C-277	GPSed		8-point sample after area was dewatered and cleaned by Lee in Excavator. Sample 3	Pit Bottom (Ground Water Elevation)	Yes	52	<LOD	**1446**	74	651																						
							56	<LOD	**2866**	84	700																						
							50	<LOD	**1299**	54	648																						
							53	<LOD	**1870**	71	666																						
NA	181115-Parrot-RK-C-278	GPSed		8-point sample after area was dewatered and cleaned by Lee in Excavator. Sample 4	Pit Bottom (Ground Water Elevation)	Yes	60	<LOD	**3609**	292	731																						
							60	<LOD	**3983**	161	825																						
							85	<LOD	**5075**	165	**1127**																						
							68	<LOD	**4222**	206	894																						
NA	181115-Parrot-RK-C-279	GPSed		8-point sample after area was dewatered and cleaned by Lee in Excavator. Sample 5	Pit Bottom (Ground Water Elevation)	Yes	26	**82**	900	127	**1297**																						
							32	**63**	851	113	**1053**																						
							25	**68**	960	141	**1305**																						
							28	**71**	904	127	**1218**																						
NA	181116-Parrot-RK-G-280	GPSed	Sampled western excavation next to the storm sewer manhole that was left in place. Sample alluvial bottom exposed by road removal. Area in	Grab sample of alluvium bottom from excavator bucket. Hole unsafe to sample any other way. Sample A	Pit Bottom (Ground Water Elevation)	Yes	<LOD	<LOD	406	107	645																						
							19	<LOD	436	106	668																						
							<LOD	<LOD	472	169	736																						
							19	<LOD	438	127	683																						
NA	181112-Parrot-RK-C-262						99	**21**	**2385**	195	986																						
							136	**46**	**1682**	201	838																						
							78	18	**1735**	129	758																						
							104	**28**	**1934**	175	861																						
NA	181112-Parrot-DUP-262						137	16	**2001**	766	958																						
							86	16	**2204**	175	919																						
							101	19	**2722**	212	993																						
							108	17	**2309**	384	957																				103.5144	60	119.3899	219.619	111.1541
181207-7	181112-Parrot-Lab-262											78	<LOD	**1327**	209	686															74.76038	NA	68.61427	119.4286	79.70565
NA	181116-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						84	**49**	152	**1434**	417																						
							85	**51**	153	**1458**	422																						
							95	**53**	141	**1440**	410																						
							88	**51**	149	**1444**	416						107	54.1	140	1400	414	82	94	106	103	101							

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	181116-Parrot-RK-G-281	GPSed	Sampled western excavation next to the storm sewer manhole that was left in place. Sample alluvial bottom exposed by road removal. Area in bottom was ponded in the southwest area. Tim D conducted QAQC that day.	Grab sample of alluvium bottom from excavator bucket. Hole unsafe to sample any other way. Sample B	Pit Bottom (Ground Water Elevation)	Yes	23	<LOD	450	131	595																						
							33	<LOD	445	74	619																						
							19	<LOD	425	159	657																						
							25	<LOD	440	121	624																						
NA	181116-Parrot-RK-G-282	GPSed		Grab sample of alluvium bottom from excavator bucket. Hole unsafe to sample any other way. Sample C	Pit Bottom (Ground Water Elevation)	Yes	40	<LOD	**1329**	92	801																						
							34	<LOD	**1344**	86	795																						
							33	<LOD	**1293**	90	798																						
							36	<LOD	**1322**	89	798																						
NA	181116-Parrot-RK-G-283	GPSed		Grab sample of alluvium bottom from excavator bucket. Hole unsafe to sample any other way. Sample D	Pit Bottom (Ground Water Elevation)	Yes	32	<LOD	664	324	949																						
							23	<LOD	672	148	959																						
							25	<LOD	702	164	995																						
							27	<LOD	679	212	968																						
NA	181116-Parrot-RK-C-284	GPSed		8 point composite of alluvial bottom, excavated but not cleaned with a dozer.	Pit Bottom (Ground Water Elevation)	Yes	44	<LOD	561	105	879																						
							45	<LOD	556	111	866																						
							49	<LOD	542	107	792																						
							46	<LOD	553	108	846																						
NA	181119-Parrot-RK-C-285	GPSed	Sampled as excavator opened up pit floor, sampled before ground water inundated the area but after dozer had clean area of remaining clay.	8-point composite of alluvial bottom evcavated but not yet cleaned with a dozer.	Pit Bottom (Ground Water Elevation)	Yes	52	<LOD	742	142	**1511**																						
							129	<LOD	839	190	**1516**																						
							33	<LOD	778	120	**1412**																						
							71	<LOD	786	151	**1480**																						
NA	181119-Parrot-RK-C-286	GPSed		8-point composite of alluvial bottom evcavated and clay cleared by dozer. Sample sample area same as 285 but with clay removed	Pit Bottom (Ground Water Elevation)	Yes	24	<LOD	472	145	853																						
							22	<LOD	441	79	868																						
							27	<LOD	487	100	992																						
							24	<LOD	467	108	904																						
NA	181119-Parrot-RK-C-287	GPSed		8-point composite of alluvial bottom evcavated and clay cleared by dozer.	Pit Bottom (Ground Water Elevation)	Yes	94	<LOD	906	173	**1294**																						
							100	<LOD	964	167	**1289**																						
							77	<LOD	899	180	**1255**																						
							90	<LOD	923	173	**1279**																						
NA	181120-Parrot-RK-C-288	GPSed	Sampled as excavator opened up pit floor, sampled before ground water inundated the area but after dozer had clean area of remaining clay.	8-point composite of alluvial bottom as excavator removed pond sludge from the area and before ground water inundation.	Pit Bottom (Ground Water Elevation)	Yes	165	<LOD	620	186	703																						
							170	<LOD	615	211	669																						
							154	<LOD	672	197	799																						
							163	<LOD	636	198	724																						
NA	181120-Parrot-RK-C-289	GPSed		8-point composite of alluvial bottom as excavator removed pond sludge from the area and before ground water inundation.	Pit Bottom (Ground Water Elevation)	Yes	76	<LOD	338	157	322																						
							83	<LOD	362	163	348																						
							140	<LOD	435	171	398																						
							100	<LOD	378	164	356																						
NA	181120-Parrot-RK-G-290	GPSed		Grab of alluvial bottom as excavator removed pond sludge from the area and before ground water inundation. Grab due to unsafe pit conditions.	Pit Bottom (Ground Water Elevation)	Yes	110	<LOD	**1464**	163	676																						
							39	<LOD	**1070**	116	439																						
							42	<LOD	934	95	414																						
							64	<LOD	**1156**	125	510																						
NA	181120-Parrot-RK-G-291	GPSed		Grab of alluvial bottom as excavator removed pond sludge from the area and before ground water inundation. Grab due to unsafe pit conditions.	Pit Bottom (Ground Water Elevation)	Yes	71	<LOD	780	133	653																						
							66	<LOD	562	93	462																						
							77	<LOD	566	100	488																						
							71	<LOD	636	109	534																						
NA	181120-Parrot-TA-G-292	GPSed		Grab sample of yellow tailings typical in the area	3 ft above black clay	Yes	**449**	<LOD	303	531	220																						
							459	<LOD	306	521	182																						
							542	<LOD	364	718	454																						
							483	<LOD	324	590	285																						
NA	181120-Parrot-RK-C-293	GPSed		8-point composite of alluvial bottom evcavated and clay cleared by dozer.	Pit Bottom (Ground Water Elevation)	Yes	46	<LOD	553	94	971																						
							39	<LOD	585	138	**1091**																						
							43	<LOD	624	132	**1053**																						
							43	<LOD	587	121	**1038**																						
NA	181120-Parrot-RK-C-294	GPSed		8-point composite of alluvial bottom evcavated and clay cleared by dozer.	Pit Bottom (Ground Water Elevation)	Yes	101	<LOD	639	87	797																						
							77	<LOD	700	254	765																						
							98	<LOD	634	79	729																						
							92	<LOD	658	140	764																						
NA	181120-Parrot-TA-G-295	GPSed		Grab sample of orange tailings intermixed with slag, typical of area	2 ft above black clay	Yes	35	<LOD	494	371	**2205**																						
							28	<LOD	453	407	**2192**																						
							25	<LOD	499	427	**1883**																						
							29	<LOD	482	402	**2093**																						
NA	181120-Parrot-CY-G-296	GPSed		Grab sample of grey clay underlying black clay	1/2 ft above alluvium interface	Yes	45	<LOD	**1032**	273	**3235**																						
							574	<LOD	**1064**	349	**2974**																						
							22	<LOD	999	313	**2961**																						
							214	<LOD	**1032**	312	**3057**																						
NA	181120-Parrot-CY-G-297	GPSed		Grab sample of black clay layer approximatley 3 ft thick	2 ft above alluvium interface	Yes	37	<LOD	216	287	**3483**																						
							42	<LOD	240	385	**3407**																						
							21	<LOD	275	428	**3630**																						
							33	<LOD	244	367	**3507**																						
NA	181128-Parrot-RK-C-298	GPSed	James conducted sampling of floor bottom with JT	8-Point Compsite Sample of excavatioin bottom after tailings removal	Pit Bottom (Ground Water Elevation)	Yes	59	<LOD	**1188**	112	**1195**																						
							71	<LOD	998	146	**1171**																						
							51	<LOD	890	137	861																						
							60	<LOD	**1025**	132	**1076**																						
NA	181129-Parrot-RK-C-299	GPSed	JLS Conducted Floor Sampling	8-Point Compsite Sample of excavatioin bottom after tailings removal, and after clay clean up (same area as sample 300) Sample area 1	Pit Bottom (Ground Water Elevation)	Yes	30	<LOD	372	59	594																						
							42	<LOD	479	55	692																						
							26	<LOD	301	56	513																						
							33	<LOD	384	57	600																						
NA	181129-Parrot-RK-C-300	GPSed		8-Point Compsite Sample of excavatioin bottom after tailings removal but before clay cleaning of area by excavator (same area as sample 299) Sample area 1	Pit Bottom (Ground Water Elevation)	Yes	44	<LOD	971	163	**1556**																						
							38	<LOD	844	143	**1349**																						
							28	<LOD	938	154	**1603**																						
							37	<LOD	918	153	**1503**																						
NA	181119-Parrot-RK-C-287						94	<LOD	906	173	**1294**																						
							100	<LOD	964	167	**1289**																						
							77	<LOD	899	180	**1255**																						
							90	<LOD	923	173	**1279**																						
NA	181119-Parrot-DUP-287						69	<LOD	799	152	**1194**																						
							88	<LOD	895	147	**1258**																						
							99	<LOD	**1019**	173	**1420**																						
							85	<LOD	904	157	**1291**																				94.46494	NA	97.97761	90.76923	100.8859
181207-4	181119-Parrot-Lab-287											68	<LOD	661	194	**1047**																75.27675	NA	71.6143	111.9231	81.8395
NA	181130-Parrot-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) -						100	**47**	149	**1445**	423																						
							98	**52**	156	**1422**	394																						
							94	**51**	144	**1430**	402																						
							97	**50**	150	**1432**	406						107	54.1	140	1400	414	91	92	107	102	98							
NA	181130-Parrot-Xcon-Blank 250-300						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
181207-12	SRM Lab Analysis (2710a) - WET 181206-6											**1458**	<LOD	**3485**	**5523**	**4227**	1540	12.3	3420	5520	4180	95	NA	102	100	101							

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	181129-Parrot-RK-C-301	GPSed	JLS Conducted Floor Sampling	8-Point Compsite Sample of excavatioin bottom after tailings removal. Sample area 2	Pit Bottom (Ground Water Elevation)	Yes	90	<LOD	**1203**	385	**2122**																						
							80	<LOD	**1134**	344	**1989**																						
							79	<LOD	912	354	**1546**																						
							83	<LOD	**1083**	361	**1886**																						
NA	181130-Parrot-RK-C-302	GPSed	Conducted sampling of floor bottom	8-Point Compsite Sample of excavatioin bottom after tailings removal and after clay removal and clean up was performed, area was in the corner and cleanup was problematic due to access issues (east)	Pit Bottom (Ground Water Elevation)	Yes	30	<LOD	655	429	**1112**																						
							26	<LOD	565	233	**1028**																						
							44	<LOD	927	375	**1640**																						
							33	<LOD	716	346	**1260**																						
NA	181130-Parrot-RK-C-303	GPSed		8-Point Compsite Sample of excavatioin bottom after tailings removal and after clay removal and clean up was performed, area was in the corner and cleanup was problematic due to access issues (south)	Pit Bottom (Ground Water Elevation)	Yes	34	<LOD	681	273	**1299**																						
							41	<LOD	864	443	**1555**																						
							<LOD	<LOD	793	379	**1523**																						
							38	<LOD	779	365	**1459**																						
NA	181130-Parrot-RK-C-304	GPSed		8-Point Compsite Sample of excavatioin bottom after tailings removal and after clay removal and clean up was performed, area was in the corner and cleanup was problematic due to access issues (west)	Pit Bottom (Ground Water Elevation)	Yes	43	<LOD	**1526**	365	**2422**																						
							37	<LOD	**2161**	364	**2371**																						
							35	<LOD	**1892**	342	**2375**																						
							38	<LOD	**1860**	357	**2389**																						
NA	190515-ParrotImport-OB-C-001	GPSed - BSB Crusher Stockpile	Collected 5 samples, 8-point compsites from various locations and elevations within proposed barrow area. Samples were processed via 10 mesh screen.	8-Point Composite sample of lower stockpile slope, pit run material.	0.5-1 ft test pits were dug into stockpile.	Yes	17	<LOD	167	63	235																						
							16	<LOD	168	71	341																						
							22	<LOD	194	86	444																						
							18	<LOD	176	73	340																						
190517-1	190515-ParrotImport-OB-C-002	GPSed - BSB Crusher Stockpile		8-Point Composite sample of lower stockpile slope, pit run/some debris material. Darker material than surroundings and looks like slag may be present. This dark material may not be desireable barrow material.	0.5-1 ft test pits were dug into stockpile.	Yes	29	<LOD	370	183	768																						
							22	<LOD	241	122	382																						
							38	<LOD	340	172	788																						
							30	<LOD	317	159	646	36	<LOD	201	207	501											121.3483	NA	63.40694	130.1887	77.55418		
NA	190515-ParrotImport-OB-C-003	GPSed - BSB Crusher Stockpile		8-Point Composite sample of lower stockpile slope, pit run material.	0.5-1 ft test pits were dug into stockpile.	Yes	21	<LOD	160	48	233																						
							36	<LOD	204	48	266																						
							28	<LOD	210	61	310																						
							28	<LOD	191	52	270																						
190517-2	190515-ParrotImport-OB-C-004	GPSed - BSB Crusher Stockpile		8-Point Composite sample of stockpile bench on the nose of the pile, pit run material.	0.5-1 ft test pits were dug into stockpile.	Yes	19	<LOD	252	198	333																						
							18	<LOD	213	82	247																						
							19	<LOD	243	70	320																						
							19	<LOD	236	117	300	21	<LOD	197	91	346											112.5	NA	83.47458	78	115.3333		
NA	190515-ParrotImport-OB-C-005	GPSed - BSB Crusher Stockpile		8-Point Composite sample of upper stockpile slope above the bench, pit run material.	0.5-1 ft test pits were dug into stockpile.	Yes	20	<LOD	197	42	221																						
							16	<LOD	245	77	186																						
							22	<LOD	273	52	225																						
							19	<LOD	238	57	211																						
NA	190619-ParrotImport-OB-006	Data in Survey123	(Day 1) Took samples of fill material that BSB is bringing into site. Took grab samples where soil color changed. Took composite samples across large areas with same soil color. Note: Grab sample #2 not missing; gap from #1 to #3 is due to writing convention error in the field.	Composite sample #1	Surface	Yes	26	<LOD	167	96	367																								
							19	<LOD	129	77	279																						
							31	<LOD	162	50	263																						
							25	<LOD	153	74	303																						
NA	190619-ParrotImport-OB-007	Data in Survey123		Grab sample #1	Surface	Yes	26	<LOD	168	51	292																						
							21	<LOD	172	51	231																						
							26	<LOD	170	56	225																						
							24	<LOD	170	53	249																						
NA	190619-ParrotImport-OB-008	Data in Survey123		Grab sample #3	Surface	Yes	17	<LOD	157	44	193																						
							24	<LOD	476	60	235																						
							19	<LOD	182	57	211																						
							20	<LOD	272	54	213																						
NA	190619-ParrotImport-OB-009	Data in Survey123		Grab sample #4	Surface	Yes	8	<LOD	58	26	109																						
							15	<LOD	63	27	84																						
							10	<LOD	101	27	90																						
							11	<LOD	74	27	94																						
NA	190619-ParrotImport-OB-010	Data in Survey123		Grab sample #5	Surface	Yes	31	<LOD	191	75	306																						
							21	<LOD	190	55	265																						
							27	<LOD	153	70	347																						
							26	<LOD	178	67	306																						
NA	190619-ParrotImport-OB-011	Data in Survey123		Grab sample #6	Surface	Yes	18	<LOD	76	23	143																						
							12	<LOD	150	39	159																						
							15	<LOD	96	37	128																						
							15	<LOD	107	33	143																						
NA	190620-ParrotImport-OB-012	Data in Survey123	(Day 2) Took samples of fill material that BSB is bringing into site. Took grab samples where soil color changed. Took composite samples across large areas with same soil color.	Grab sample #1	Surface	Yes	10	<LOD	103	60	123																						
							11	<LOD	98	41	113																						
							9	<LOD	88	28	122																						
							10	<LOD	96	43	119																						
NA	190620-ParrotImport-OB-013	Data in Survey123		Grab sample #2	Surface	Yes	19	<LOD	148	48	202																						
							24	<LOD	156	42	235																						
							18	<LOD	149	48	209																						
							20	<LOD	151	46	215																						
NA	190620-ParrotImport-OB-014	Data in Survey123		Grab sample #3	Surface	Yes	18	<LOD	148	68	256																						
							21	<LOD	175	87	336																						
							18	<LOD	171	47	219																						
							19	<LOD	165	67	270																						
NA	190620-ParrotImport-OB-015	Data in Survey123		Grab sample #4	Surface	Yes	22	<LOD	139	43	199																						
							13	<LOD	124	50	174																						
							26	<LOD	139	38	204																						
							20	<LOD	134	44	192																						
NA	190621-ParrotImport-OB-016	Data in Survey123	(Day 3) Took samples of fill material that BSB is bringing into site. Took grab samples where soil color changed. Took composite samples across large areas with same soil color.	Grab sample #1	Surface	Yes	15	<LOD	152	51	199																						
							17	<LOD	141	41	161																						
							19	<LOD	173	63	187																						
							17	<LOD	155	52	182																						
NA	190621-ParrotImport-OB-017	Data in Survey123		Grab sample #2	Surface	Yes	29	<LOD	146	45	220																						
							18	<LOD	126	39	189																						
							25	<LOD	126	51	207																						
							24	<LOD	133	45	205																						
NA	190621-ParrotImport-OB-018	Data in Survey123		Composite sample #1	Surface	Yes	29	<LOD	145	51	211																						
							22	<LOD	185	64	217																						
							25	<LOD	182	45	216																						
							25	<LOD	171	53	215																						
NA	190621-ParrotImport-OB-019	Data in Survey123		Composite sample #2	Surface	Yes	16	<LOD	129	48	344																						
							20	<LOD	173	57	297																						
							20	<LOD	183	54	275																						
							19	<LOD	162	53	305																						
NA	190621-ParrotImport-OB-020	Data in Survey123		Composite sample #3	Surface	Yes	21	<LOD	128	37	217																						
							22	<LOD	125	41	287																						
							23	<LOD	131	57	373																						
							22	<LOD	128	45	292																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	190621-ParrotImport-OB-020						21	<LOD	128	37	217																						
							22	<LOD	125	41	287																						
							23	<LOD	131	57	373																						
							22	<LOD	128	45	292																						
NA	190621-ParrotImport-DUP-020						19	<LOD	104	36	187																						
							22	<LOD	117	38	193																						
							23	<LOD	138	39	241																						
							21	<LOD	120	38	207																96.9697	NA	93.48958	83.7037	70.80958		
190624-3	190621-ParrotImport-LAB-020											18	<LOD	107	63	229											81.81818	NA	83.59375	140	78.33523		
190624-1	190621-ParrotImport-Sand Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD																	
NA	SRM (Field XRF) (2711a) -						69	**54**	157	**1472**	411																						
							68	**55**	158	**1482**	420																						
							77	**54**	145	**1491**	441																						
							71	**54**	153	**1482**	424						107	54.1	140	1400	414	67	100	110	106	102							
NA	190621-ParrotImport-OB-021	Data in Survey123	(Day 3) Took samples of fill material that BSB is bringing into site. Took grab samples where soil color changed. Took composite samples across large areas with same soil color.	Composite sample #4	Surface	Yes	22	<LOD	146	41	195																						
							45	<LOD	100	112	181																						
							22	<LOD	131	41	228																						
							30	<LOD	126	65	201																						
NA	190621-ParrotImport-OB-022	Data in Survey123		Composite sample #5	Surface	Yes	16	<LOD	116	45	246																						
							17	<LOD	126	34	209																						
							18	<LOD	151	44	263																						
							17	<LOD	131	41	239																						
NA	190624-ParrotImport-OB-023	Data in Survey123	(Day 4) Took samples of fill material that BSB is bringing into site. Took grab samples where soil color changed.	Grab sample #1	Surface	Yes	22	<LOD	159	45	178																						
							25	<LOD	137	33	172																						
							16	<LOD	156	36	160																						
							21	<LOD	151	38	170																						
NA	190624-ParrotImport-OB-024	Data in Survey123		Grab sample #2	Surface	Yes	16	<LOD	137	56	229																						
							14	<LOD	167	80	234																						
							19	<LOD	156	66	273																						
							16	<LOD	153	67	245																						
NA	190624-ParrotImport-OB-025	Data in Survey123		Grab sample #3	Surface	Yes	19	<LOD	165	51	214																						
							21	<LOD	156	56	254																						
							14	<LOD	151	49	216																						
							18	<LOD	157	52	228																						
NA	190624-ParrotImport-OB-026	Data in Survey123		Grab sample #4	Surface	Yes	25	<LOD	118	38	237																						
							19	<LOD	114	39	177																						
							20	<LOD	135	38	172																						
							21	<LOD	122	38	195																						
NA	190624-ParrotImport-OB-027	Data in Survey123		Grab sample #5	Surface	Yes	18	<LOD	147	45	158																						
							27	<LOD	130	37	188																						
							22	<LOD	157	45	270																						
							22	<LOD	145	42	205																						
NA	190624-ParrotImport-OB-028	Data in Survey123		Grab sample #6	Surface	Yes	24	<LOD	109	68	165																						
							24	<LOD	128	34	183																						
							28	<LOD	151	50	222																						
							25	<LOD	129	51	190																						
NA	190624-ParrotImport-OB-029	Data in Survey123		Grab sample #7	Surface	Yes	20	11	226	84	548																						
							24	<LOD	157	47	257																						
							17	<LOD	162	47	210																						
							20	11	182	59	338																						
NA	190626-ParrotImport-OB-030	Data in Survey123	(Day 5) Took samples of fill material that BSB is bringing into site. Took grab samples where soil color changed. Took composite samples across large areas with same soil color.	Composite #1	Surface	Yes	20	<LOD	165	56	278																						
							20	<LOD	171	44	217																						
							21	<LOD	190	55	325																						
							20	<LOD	175	52	273																						
NA	190626-ParrotImport-OB-031	Data in Survey123		Composite #2	Surface	Yes	18	<LOD	132	53	253																						
							14	<LOD	141	38	238																						
							20	<LOD	159	48	258																						
							17	<LOD	144	46	250																						
NA	190626-ParrotImport-OB-032	Data in Survey123		Composite #3	Surface	Yes	18	<LOD	146	71	331																						
							25	<LOD	130	42	219																						
							22	<LOD	143	39	416																						
							22	<LOD	140	51	322																						
NA	190626-ParrotImport-OB-033	Data in Survey123		Grab #1	Surface	Yes	15	<LOD	117	38	226																						
							34	<LOD	145	38	457																						
							28	<LOD	138	43	344																						
							26	<LOD	133	40	342																						
NA	190626-ParrotImport-OB-034	Data in Survey123		Grab #2	Surface	Yes	19	<LOD	146	42	198																						
							21	<LOD	126	92	195																						
							18	<LOD	165	42	271																						
							19	<LOD	146	59	221																						
NA	190626-ParrotImport-OB-035	Data in Survey123		Grab #3	Surface	Yes	21	<LOD	145	107	209																						
							18	<LOD	120	52	231																						
							25	<LOD	119	42	216																						
							21	<LOD	128	67	219																						
NA	190814-ParrotImport-OB-G-036 (001)	NA (No GPS/GIS Data Associated with this data	JT Brought MH a bucket of topsoil material for testing.	Took grab sample of fill material from bucket. (TOP)	Soil from top of bucket	Yes	<LOD	<LOD	<LOD	9	57																						
							<LOD	<LOD	<LOD	10	60																						
							<LOD	<LOD	<LOD	11	60																						
							<LOD	<LOD	<LOD	10	59																						
NA	190814-ParrotImport-OB-G-037 (002)	NA (No GPS/GIS Data Associated with this data		Took grab sample of fill material from bucket. (MIDDLE)	Soil from top of bucket	Yes	14	<LOD	36	17	67																						
							<LOD	<LOD	27	16	74																						
							<LOD	<LOD	25	16	74																						
							14	<LOD	29	16	72																						
NA	190814-ParrotImport-OB-G-038 (003)	NA (No GPS/GIS Data Associated with this data		Took grab sample of fill material from bucket. (BOTTOM)	Soil from top of bucket	Yes	8	<LOD	<LOD	12	71																						
							7	<LOD	25	15	69																						
							<LOD	<LOD	29	13	64																						
							8	<LOD	27	13	68																						
NA	190826-Geoprobe-Parrot-GP1-5-10-001	GP1	Ten Geoprobe holes were bored to identify the western extent of the Parrot tailings. Composite soil samples were taken of suspect horizons and for general characterization.	light orange, loose, WELL-GRADED SAND WITH GRAVEL, dry, noncohesive, sub-rounded fine-coarse sand, 15% gravel, common biotite flakes	7.5	Yes	<LOD	<LOD	243	375	**1001**																						
							<LOD	<LOD	252	589	**1483**																						
							<LOD	<LOD	252	479	**1093**																						
							<LOD	<LOD	249	481	**1192**																						
NA	190826-Geoprobe-Parrot-GP1-12-13.5-002	GP1		gray, loose, POORLY-GRADED SAND, moist, coarse-grained sand, sub-rounded to sub-angular grains	12.75	Yes	<LOD	<LOD	169	92	361																						
							<LOD	<LOD	178	49	393																						
							<LOD	<LOD	145	39	323																						
							<LOD	<LOD	164	60	359																						

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C1. Parrot Removal Sampled ID - XRF Sampling - Phase2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	Composite Field ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Screened?	Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD					pH - Laboratory Sample ID	pH - Results
							As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn		Soil pH (Saturated Paste)
NA	190826-Geoprobe-Parrot-GP4-8.5-10-007						29	<LOD	465	481	**1691**																						
							24	<LOD	521	566	**1624**																						
							<LOD	<LOD	695	502	**2309**																						
							27	<LOD	560	516	**1875**																						
NA	190826-Geoprobe-Parrot-GP4-8.5-10-007dup						<LOD	<LOD	562	587	**2371**																						
							<LOD	<LOD	490	614	**1813**																						
							<LOD	<LOD	600	838	**2184**																						
							<LOD	<LOD	551	680	**2123**																NA	NA	98.27484	131.6333	113.229		
190830-2	190826-Geoprobe-Parrot-GP4-8.5-10-007											<LOD	<LOD	477	739	**1838**											NA	NA	85.1279	143.1246	98.0441		
NA	FieldBlank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
NA	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																107	54.1	140	1400	414												
NA	190826-Geoprobe-Parrot-GP1-16-18-003	GP1	Ten Geoprobe holes were bored to identify the western extent of the Parrot tailings. Composite soil samples were taken of suspect horizons and for general characterization.	medium brown, loose, WELL-GRADED SAND, wet, non-cohesive, 0-15% silt, trace gravel, crudely-bedded	17	Yes	71	<LOD	388	76	609																						
							96	<LOD	514	105	774																						
							120	<LOD	503	142	762																						
							96	<LOD	468	108	715																						
NA	190826-Geoprobe-Parrot-GP2-18-20-004	GP2		light gray to orange, medium-dense, WELL-GRADED SAND WITH GRAVEL, wet, 10-25% sub-rounded to sub-angular gravel, crudely-bedded	19	Yes	49	<LOD	330	159	526																						
							45	<LOD	305	44	437																						
							33	<LOD	255	58	458																						
							42	<LOD	297	87	474																						
NA	190826-Geoprobe-Parrot-GP3-6-7-005	GP3		light orange-brown, loose, POORLY-GRADED SAND, moist, non-cohesive, 5-20% silt, strong iron oxides, angular medium-coarse sand	6.5	Yes	46	<LOD	364	733	649																						
							60	<LOD	509	**1199**	**1483**																						
							145	<LOD	603	926	680																						
							84	<LOD	492	953	937																						
NA	190826-Geoprobe-Parrot-GP3-15-16-006	GP3		gray brown and orange, loose, WELL-GRADED SAND WITH SILT AND GRAVEL, wet, cohesive, crudely-bedded, 0-20% subrounded gravel, fine to coarse sand, grades downwards to	15.5	Yes	21	<LOD	**1207**	77	493																						
							32	<LOD	**1107**	197	576																						
							59	<LOD	**1177**	68	541																						
							37	<LOD	**1164**	114	537																						
NA	190826-Geoprobe-Parrot-GP4-8.5-10-007	GP4		light orange-brown, loose, SILTY SAND WITH GRAVEL, moist, non-cohesive, 15% gravel, medium-coarse sand	9.25	Yes	29	<LOD	465	481	**1691**																						
							24	<LOD	521	566	**1624**																						
							<LOD	<LOD	695	502	**2303**																						
							27	<LOD	560	516	**1873**																						
NA	190826-Geoprobe-Parrot-GP5-4-5-008	GP5		light yellow orange and white, loose, POORLY-GRADED SAND, dry, non-cohesive, coarse-grained angular sand with jarosite> goethite staining, tailings	4.5	Yes	**318**	<LOD	205	630	737																						
							385	<LOD	239	768	980																						
							391	<LOD	348	635	324																						
							365	<LOD	264	678	680																						
NA	190826-Geoprobe-Parrot-GP7-4-5-009	GP7		fill (debris, wood, silt, gravel, oil-stained rock)	4.5	Yes	105	<LOD	633	839	**1037**																						
							71	12	718	757	**1224**																						
							<LOD	**21**	644	970	**1190**																						
							88	17	665	855	**1150**																						
NA	190826-Geoprobe-Parrot-GP9-8-10-010	GP9		light yellow and white, loose, WELL-GRADED SAND, moist, non-cohesive, fine-coarse jarosite-stained angular silicified chips, tailings	9	Yes	**361**	<LOD	376	**1036**	434																						
							253	<LOD	310	766	375																						
							186	<LOD	266	509	**4052**																						
							267	<LOD	317	770	**1620**																						
NA	190826-Geoprobe-Parrot-GP10-13-14-011	GP10		light yellow and orange, loose, POORLY-GRADED SAND, moist, fine-coarse-grained sand, crudely bedded, jarosite >> goethite stained angular silicifed grains, tailings	13.5	Yes	90	<LOD	230	801	472																						
							91	<LOD	327	**1200**	806																						
							100	<LOD	413	**1271**	842																						
							94	<LOD	323	**1091**	707																						
NA	190826-Geoprobe-Parrot-GP10-15-16-012	GP10		dark brown, medium-dense, LEAN CLAY, moist, cohesive, trace silt and fine sand	15.5	Yes	**631**	**186**	**15200**	395	**2348**																						
							456	<LOD	**8293**	171	**1311**																						
							536	<LOD	**8979**	178	**1334**																						
							541	**186**	**10824**	248	**1664**																						
190624-2	190621-Parrot-Import - X Con Blank						<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD																						
							<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD																	
QC-CHK-2710a	SRM Lab Analysis (2710a)											**1405**	<LOD	**3513**	**5514**	**4157**	1540	12.3	3420	5520	4180	91	NA	103	100	99							

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Project: 80503 WET - Parrot

21 soil samples were received on May 4, 2018 for analysis of arsenic, cadmium, copper, lead, and zinc by XRF.

LAB ID #	Sample ID	Date	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
180503-01	20180502 TP1 0-2	5/16/2018	10	U15	73	85	259
180503-02	20180502 TP1 2-4	5/16/2018	43	U15	456	135	397
180503-03	20180502 TP1 4-6	5/16/2018	30	U15	313	273	569
180503-04	20180502 TP1 6-8	5/16/2018	40	U15	409	381	813
180503-05	20180502 TP1 8-10	5/16/2018	34	U15	348	336	684
180503-06	20180502 TP1 10-12	5/16/2018	36	U15	359	381	722
180503-07	20180502 TP2 0-2	5/16/2018	18	U15	68	35	101
180503-08	20180502 TP3 0-2	5/16/2018	19	U15	111	135	245
180503-09	20180502 TP3 2-4	5/16/2018	13	U15	154	163	312
180503-10	20180502 TP3 4-4.5	5/16/2018	128	U15	461	200	994
180503-11	20180502 TP3 4.5-6	5/16/2018	67	U15	445	116	927
180503-12	20180502 TP3 6-8	5/16/2018	79	U15	426	882	967
180503-13	20180502 TP3 8-10	5/16/2018	103	U15	720	509	1,238
180503-14	20180502 TP4 0-2	5/16/2018	9	U15	76	16	118
180503-15	20180502 TP4 2-4	5/16/2018	117	U15	183	541	551
180503-16	20180502 TP4 4-6	5/16/2018	250	U15	217	613	1,298
180503-17	20180502 TP4 6-8	5/16/2018	221	U15	393	662	5,269
180503-18	20180502 TP4 8-10	5/16/2018	234	U15	2,731	83	800
180503-19	20180502 TP4 10	5/16/2018	489	U15	656	430	1,448
180503-20	20180502 TP4 14	5/16/2018	30	U15	1,033	123	1,048
180503-21	20180502 TP4 16	5/16/2018	272	U15	792	511	986

Project: **180503 WET - Parrot**

QA-QC

21 soil samples were received on May 4, 2018 for analysis of arsenic, cadmium, copper, lead, and zinc by XRF.

			Analyzed, mg/kg					SRM Certified Values, mg/kg					SRM % Recovery					RPD				
LAB ID #	**Sample ID**	**Date**	**As**	**Cd**	**Cu**	**Pb**	**Zn**	**As**	**Cd**	**Cu**	**Pb**	**Zn**	**As**	**Cd**	**Cu**	**Pb**	**Zn**	**As**	**Cd**	**Cu**	**Pb**	**Zn**
QC Chk1 Blank	Blank	5/16/2018	6U	15U	15U	9U	9U															
QC Chk1 2710a	NIST 2710a	5/16/2018	1,365	15U	3,473	5,486	4,121	1,540	12.3	3,420	5,520	4,180	88.6%	-	101.5%	99.4%	98.6%					
180503-10	180502-TP3-4-4.5	5/16/2018	128	15U	461	200	994															
Rep 180503-10	180502-TP3-4-4.5	5/16/2018	126	15U	487	194	966											1.6%	-	5.5%	3.0%	2.9%
180425-1	180418-I90-OB-017	5/16/2018	47	15U	413	68	498															
Dup 180425-1	Dup-180418-I90-OB-017	5/16/2018	47	15U	427	75	487											0.0%	-	3.3%	9.8%	2.2%
QC Chk 2 Blank	Blank	5/16/2018	6U	15U	15U	9U	9U															
QC Chk 2 2710a	NIST 2710a	5/16/2018	1,494	15U	3,642	5,581	4,341	1,540	12.3	3,420	5,520	4,180	97.0%	-	106.5%	101.1%	103.9%					
180503-12	180502 TP3 6-8	5/16/2018	79	15U	426	882	967															
Rep 180503-12	180502 TP3 6-8	5/16/2018	70	15U	431	912	978											12.1%	-	1.2%	3.3%	1.1%
180503-15	180502 TP4 2-4	5/16/2018	117	15U	183	541	551															
Dup 180503-15	Dup-180502 TP4 2-4	5/16/2018	116	15U	179	540	603											0.9%	-	2.2%	0.2%	9.0%

Project No: **180531 WET - Parrot Test Pits**

20 samples were received on June 1, 2018 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Project No.	Date	LAB ID #	Sample ID	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
180531 Parrot Test Pits	6/13/2018	180531-1	180531-LAB-001	59	15U	579	147	702
180531 Parrot Test Pits	6/13/2018	180531-2	180531-LAB-002	50	15U	82	36	103
180531 Parrot Test Pits	6/13/2018	180531-3	180531-LAB-003	18	15U	264	62	310
180531 Parrot Test Pits	6/13/2018	180531-4	180531-LAB-004	261	15U	531	258	407
180531 Parrot Test Pits	6/13/2018	180531-5	180531-LAB-005	6U	15U	100	96	254
180531 Parrot Test Pits	6/13/2018	180531-6	180531-LAB-006	19	15U	224	207	694
180531 Parrot Test Pits	6/13/2018	180531-7	180531-LAB-007	28	15U	69	31	81
180531 Parrot Test Pits	6/13/2018	180531-8	180531-LAB-008	17	15U	63	27	77
180531 Parrot Test Pits	6/13/2018	180531-9	180531-LAB-009	28	15U	71	34	90
180531 Parrot Test Pits	6/13/2018	180531-10	180531-LAB-010	38	15U	77	33	104
180531 Parrot Test Pits	6/13/2018	180531-11	180531-LAB-011	25	15U	60	29	80
180531 Parrot Test Pits	6/13/2018	180531-12	180531-LAB-012	419	15U	854	666	1,904
180531 Parrot Test Pits	6/13/2018	180531-13	180531-LAB-013	20	15U	120	197	414
180531 Parrot Test Pits	6/13/2018	180531-14	180531-LAB-014	24	15U	181	96	419
180531 Parrot Test Pits	6/13/2018	180531-15	180531-LAB-015	12	15U	72	42	178
180531 Parrot Test Pits	6/13/2018	180531-16	180531-LAB-016	25	15U	143	62	222
180531 Parrot Test Pits	6/13/2018	180531-17	180531-LAB-017	21	15U	299	58	417
180531 Parrot Test Pits	6/13/2018	180531-18	180531-LAB-018	32	15U	402	346	663
180531 Parrot Test Pits	6/13/2018	180531-19	180531-LAB-019	16	15U	88	43	133
180531 Parrot Test Pits	6/13/2018	180531-20	180531-LAB-020	33	15U	932	130	623

Project No: **180531 WET - Parrot Test Pits**

20 samples were received on June 1, 2018 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

				Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**Date**	**LAB ID #**	**Sample ID**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
180531 Parrot Test Pits	6/13/2018	180531-12	180531-LAB-012	419	15U	854	666	1,904																		
180531 Parrot Test Pits	6/13/2018	REP-180531-12	REP-180531-LAB-012	445	15U	870	674	1,923														6.0%	-	1.9%	1.2%	1.0%
180531 Parrot Test Pits	6/13/2018	180531-4	180531-LAB-004	261	15U	531	258	407																		
180531 Parrot Test Pits	6/13/2018	DUP-180531-4	DUP-180531-LAB-004	249	15U	556	246	368														4.7%	-	4.6%	4.8%	10.1%
180531 Parrot Test Pits	6/13/2018	QC Chk - 2710a	NIST2710a	1,424	15U	3,488	5,510	4,140		1,540	12.3	3,420	5,520	4,180		92.5%	-	102.0%	99.8%	99.0%						
180531 Parrot Test Pits	6/13/2018	QC Chk - Blank	Silica Blank	6U	15U	15U	9U	9U																		

Project No: 180912 WET - Parrot

12 samples were received on September 12, 2018 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Project No.	Date	LAB ID #	Sample ID	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
180912 Parrot	6/15/2018	180912-1	4	330	15U	309	672	1,022
180912 Parrot	6/15/2018	180912-2	31	44	15U	239	334	449
180912 Parrot	6/15/2018	180912-3	53	85	15U	723	175	570
180912 Parrot	6/15/2018	180912-4	75	23	15U	68	30	82
180912 Parrot	6/15/2018	180912-5	89	49	15U	325	104	408
180912 Parrot	6/15/2018	180912-6	104	629	15U	1,118	1,110	847
180912 Parrot	6/15/2018	180912-7	131	160	15U	1,982	155	1,017
180912 Parrot	6/15/2018	180912-8	134	516	15U	541	454	1,076
180912 Parrot	6/15/2018	180912-9	137	38	15U	13,649	183	1,099
180912 Parrot	6/15/2018	180912-10	139	91	15U	1,725	195	868
180912 Parrot	6/15/2018	180912-11	WET 120918-1	88	51	150	1,464	439
180912 Parrot	6/15/2018	180912-12	WET 120918-2	1,454	15U	3,537	5,620	4,165

Qualifiers: U = Not detected at the method detection limit

Project No: **180912 WET - Parrot**

12 samples were received on September 12, 2018 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

				Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**Date**	**LAB ID #**	**Sample ID**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
180912 Parrot	6/15/2018	180912-CalBlk	Silica Blank	6U	15U	15U	9U	9U																		
180912 Parrot	6/15/2018	180912-InstCalC	SRM - OREAS153b	89	15U	7,568	15	153		79	-	6,780	13	122		112.7%	-	111.6%	114.5%	125.4%						
180912 Parrot	6/15/2018	180912-7	131	160	15U	1,982	155	1,017																		
180912 Parrot	6/15/2018	REP-180912-7	131	153	15U	1,968	159	956														4.5%	-	0.7%	2.5%	6.2%
180912 Parrot	6/15/2018	180912-1	4	330	15U	309	672	1,022																		
180912 Parrot	6/15/2018	DUP-180912-1	4	322	15U	317	680	882														2.5%	-	2.6%	1.2%	14.7%
180912 Parrot	6/15/2018	QC Chk - 2710a	NIST2710a	1,424	15U	3,488	5,510	4,140		1,540	12	3,420	5,520	4,180		92.5%	-	102.0%	99.8%	99.0%						
180912 Parrot	6/15/2018	QC Chk - Blank	Silica Blank	6U	15U	15U	9U	9U																		
180912 Parrot	6/15/2018	CrossContBlank	XChkSilicaBlk	6U	15U	15U	9U	9U																		

Qualifiers: U = Not detected at the method detection limit

ANALYTICAL SUMMARY REPORT

October 03, 2018

Water and Environmental Technologies
480 E Park St Ste 200
Butte, MT 59701-1923

Work Order: H18090627

Project Name: Parrot Tailings Removal

Energy Laboratories Inc Helena MT received the following 15 samples for Water and Environmental Technologies on 9/26/2018 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H18090627-001	180913-Parrot-RK-C-141	09/13/18 12:00	09/26/18	Soil	pH, Saturated Paste Saturated Paste Extraction ASA Soil Preparation USDA1
H18090627-002	180918-Parrot-RK-C-145	09/18/18 12:00	09/26/18	Soil	pH, Saturated Paste Saturated Paste Extraction ASA
H18090627-003	180918-Parrot-RK-C-142	09/18/18 12:00	09/26/18	Soil	Same As Above
H18090627-004	180918-Parrot-CY-G-150	09/18/18 12:00	09/26/18	Soil	Same As Above
H18090627-005	180911-Parrot-CY-G-137	09/11/18 12:00	09/26/18	Soil	Same As Above
H18090627-006	180822-Parrot-CY-G-126	08/22/18 12:00	09/26/18	Soil	Same As Above
H18090627-007	180918-Parrot-TA-G-148	09/18/18 12:00	09/26/18	Soil	Same As Above
H18090627-008	180918-Parrot-TA-G-149	09/18/18 12:00	09/26/18	Soil	Same As Above
H18090627-009	180918-Parrot-TA-G-152	09/18/18 12:00	09/26/18	Soil	Same As Above
H18090627-010	180918-Parrot-RK-G-158	09/18/18 12:00	09/26/18	Soil	Same As Above
H18090627-011	180918-Parrot-RK-G-157	09/18/18 12:00	09/26/18	Soil	Same As Above
H18090627-012	180828-Parrot-CY-G-133	08/28/18 12:00	09/26/18	Soil	Same As Above
H18090627-013	180827-Parrot-CY-G-123	08/22/18 12:00	09/26/18	Soil	Same As Above
H18090627-014	180911-Parrot-TA-G-136	09/11/18 12:00	09/26/18	Soil	Same As Above
H18090627-015	180911-Parrot-TA-G-135	09/11/18 12:00	09/26/18	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-001
Client Sample ID: 180913-Parrot-RK-C-141

Report Date: 10/03/18
Collection Date: 09/13/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	4.0	s.u.		0.1		ASA10-3	10/02/18 10:20 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-002
Client Sample ID: 180918-Parrot-RK-C-145

Report Date: 10/03/18
Collection Date: 09/18/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	2.2	s.u.		0.1		ASA10-3	10/02/18 10:20 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-003
Client Sample ID: 180918-Parrot-RK-C-142

Report Date: 10/03/18
Collection Date: 09/18/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	3.8	s.u.		0.1		ASA10-3	10/02/18 10:21 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-004
Client Sample ID: 180918-Parrot-CY-G-150

Report Date: 10/03/18
Collection Date: 09/18/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	3.4	s.u.		0.1		ASA10-3	10/02/18 10:22 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-005
Client Sample ID: 180911-Parrot-CY-G-137

Report Date: 10/03/18
Collection Date: 09/11/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	4.4	s.u.		0.1		ASA10-3	10/02/18 10:22 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-006
Client Sample ID: 180822-Parrot-CY-G-126

Report Date: 10/03/18
Collection Date: 08/22/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	3.1	s.u.		0.1		ASA10-3	10/02/18 10:23 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-007
Client Sample ID: 180918-Parrot-TA-G-148

Report Date: 10/03/18
Collection Date: 09/18/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	3.8	s.u.		0.1		ASA10-3	10/02/18 10:24 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-008
Client Sample ID: 180918-Parrot-TA-G-149

Report Date: 10/03/18
Collection Date: 09/18/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	4.5	s.u.		0.1		ASA10-3	10/02/18 10:24 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-009
Client Sample ID: 180918-Parrot-TA-G-152

Report Date: 10/03/18
Collection Date: 09/18/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	4.2	s.u.		0.1		ASA10-3	10/02/18 10:25 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-010
Client Sample ID: 180918-Parrot-RK-G-158

Report Date: 10/03/18
Collection Date: 09/18/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	3.8	s.u.		0.1		ASA10-3	10/02/18 10:26 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-011
Client Sample ID: 180918-Parrot-RK-G-157

Report Date: 10/03/18
Collection Date: 09/18/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	4.1	s.u.		0.1		ASA10-3	10/02/18 10:28 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-012
Client Sample ID: 180828-Parrot-CY-G-133

Report Date: 10/03/18
Collection Date: 08/28/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	4.3	s.u.		0.1		ASA10-3	10/02/18 10:29 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-013
Client Sample ID: 180827-Parrot-CY-G-123

Report Date: 10/03/18
Collection Date: 08/22/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	3.8	s.u.		0.1		ASA10-3	10/02/18 10:29 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-014
Client Sample ID: 180911-Parrot-TA-G-136

Report Date: 10/03/18
Collection Date: 09/11/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	3.5	s.u.		0.1		ASA10-3	10/02/18 10:30 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies
Project: Parrot Tailings Removal
Lab ID: H18090627-015
Client Sample ID: 180911-Parrot-TA-G-135

Report Date: 10/03/18
Collection Date: 09/11/18 12:00
DateReceived: 09/26/18
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE							
pH, sat. paste	4.1	s.u.		0.1		ASA10-3	10/02/18 10:31 / swj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies **Report Date:** 10/03/18

Project: Parrot Tailings Removal **Work Order:** H18090627

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: ASA10-3								Analytical Run: SOIL PH METER_181003A		
Lab ID: ICV_1_181002_1	Initial Calibration Verification Standard								10/02/18 10:16	
pH, sat. paste		9.99	s.u.	0.10	100	99	101			
Lab ID: CCV_1_181002_1	Continuing Calibration Verification Standard								10/02/18 10:17	
pH, sat. paste		7.06	s.u.	0.10	101	98.6	101.4			
Lab ID: CCV1_1_181002_1	Continuing Calibration Verification Standard								10/02/18 10:17	
pH, sat. paste		4.06	s.u.	0.10	101	97.5	102.5			
Lab ID: CCV_3_181002_1	Continuing Calibration Verification Standard								10/02/18 10:27	
pH, sat. paste		7.04	s.u.	0.10	101	98.6	101.4			
Lab ID: CCV_4_181002_1	Continuing Calibration Verification Standard								10/02/18 10:32	
pH, sat. paste		7.00	s.u.	0.10	100	98.6	101.4			
Method: ASA10-3										Batch: 43271
Lab ID: LCS-43271	Laboratory Control Sample					Run: SOIL PH METER_181003A			10/02/18 10:19	
pH, sat. paste		7.93	s.u.	0.10	98	95	105			
Lab ID: H18090627-009ADUP	Sample Duplicate					Run: SOIL PH METER_181003A			10/02/18 10:26	
pH, sat. paste		4.24	s.u.	0.10				0.2	20	
Lab ID: H18090627-015ADUP	Sample Duplicate					Run: SOIL PH METER_181003A			10/02/18 10:31	
pH, sat. paste		4.16	s.u.	0.10				0.5	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Water and Environmental Technologies H18090627

Login completed by: Jessica C. Smith
Date Received: 9/26/2018
Reviewed by: BL2000\rtooke
Received by: TLL
Reviewed Date: 9/28/2018
Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	12.9°C No Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

No time on bags. Used time from COC. JCS 09/26/18

Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 2

Account Information (Billing information)

Company/Name	WET
Contact	Jay Slocum
Phone	406.533.8258
Mailing Address	480 E Park St
City, State, Zip	Butte, MT 59701
Email	jslocum@waterenvtech.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	
Quote	
Bottle Order	

Report Information (if different than Account Information)

Company/Name	
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	
Receive Report	☐Hard Copy ☐Email

Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other _____

Comments

Project Information

Project Name, PWSID, Permit, etc.	Parrot Tailings Removal
Sampler Name	Jay Slocum
Sampler Phone	533-8258
Sample Origin State	MT
EPA/State Compliance	☐ Yes ☒ No

MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	pH saturated paste	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	180913-Parrot-RK-C-141	9/13/18	12:00	1	S	X			H18090627
2	180918-Parrot-RK-C-145	9/18/18	12:00	1	S	X			
3	180918-Parrot-RK-C-142	9/18/18	12:00	1	S	X			
4	180918-Parrot-CY-G-150	9/18/18	12:00	1	S	X			
5	180911-Parrot-CY-G-137	9/11/18	12:00	1	S	X			
6	180822-Parrot-CY-G-126	8/22/18	12:00	1	S	X			
7	180918-Parrot-TA-G-148	9/18/18	12:00	1	S	X			
8	180918-Parrot-TA-G-149	9/18/18	12:00	1	S	X			
9	180918-Parrot-TA-G-152	9/18/18	12:00	1	S	X			
10	180918-Parrot-RK-G-158	9/18/18	12:00	1	S	X			

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Jay Slocum	9/25/18 13:30	[signature]	[signature]		
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				[signature]	9/26/18 9:31	[signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
UPS 2SG	4	(Y) N (C) B	(Y) N	12.9 °C	Y (N)	Y (N)	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-12/16 v.1

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT **(Provide as much information as possible.)**

Company Name: WET

Report Mail Address (Required): 480 E Park St, Butte, MT 59701

☑ No Hard Copy Email: jslocum@waterenvtech.com

Invoice Address (Required): WET
Project #: NRDPM04 task 2

☑ No Hard Copy Email:

Special Report/Formats:
☐ DW ☐ POTW/WWTP ☐ State: ☐ Other:
☐ EDD/EDT (Electronic Data) Format:
☐ LEVEL IV ☐ NELAC

Project Name, PWS, Permit, Etc.: Parrot Tailing Removal

Contact Name: Jay Slocum

Phone/Fax: 533-8258

Cell:

Invoice Contact & Phone:

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☑

Sampler: (Please Print) Jay Slocum

Purchase Order:

Quote/Bottle Order:

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	pH saturated paste	SEE ATTACHED
1 180918-Parrot-RK-G-157	9/18/18	12:00	1-S	X	
2 180828-Parrot-C4-G-133	8/28/18	12:00	1-S	X	
3 180822-Parrot-C4-G-123	8/22/18	12:00	1-S	X	
4 180911-Parrot-TA-G-136	9/11/18	12:00	1-S	X	
5 180911-Parrot-TA-G-135	9/11/18	12:00	1-S	X	
6					
7					
8					
9					
10					

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: UPS RSG

Cooler ID(s): 4

Receipt Temp 12.9 °C

On Ice: Y (N)

Custody Seal
On Bottle Y (N)
On Cooler (Y) N
Intact (Y) N
Signature Match (Y) N

LABORATORY USE ONLY H180906 27

Custody Record MUST be Signed

Relinquished by (print): Jay Slocum Date/Time: 9/25/18 13:30 Signature:

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: Date/Time: 9/26/18 9:31 Signature:

Sample Disposal: Return to Client: Lab Disposal:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

TO: WATER & ENVIRONMENTAL TECHNOLOGIES Oct. 11, 2018
Pat Seccomb
Jay Slocum

FROM: ASHE ANALYTICS
JOHN ASHE

SUBJECT: ANALYTICAL REPORT NO. JCD1011R

PROJECT: NRPDMO4 PARROT TAILINGS REMOVAL

FIVE (5) SAMPLES WERE RECEIVED ON
OCT. 01, 2018 FOR TOTAL METALS ANALYSIS (Cd, Cu, As, Pb & Zn) BY XRF.
RESULTS ARE PRESENTED BELOW.

LAB NUMBER	SAMPLE I.D.	Cu (mg/kg)	Cu FLAG	Pb (mg/kg)	Pb FLAG	As (mg/kg)	As FLAG	Cd (mg/kg)	Cd FLAG	Zn (mg/kg)	Zn FLAG	SAMPLE PREP GROUP
R-0414	180822-Parrot-OB-G-122	255		226		80.6		3.7	U	237		9991262
R-0415	180822-Parrot-RK-G-128	20900		1950		1050		18.6		5120		9991262
R-0416	180822-Parrot-CY-G-153	609		242		3190		3.7	U	364		9991262
R-0417	180822-Parrot-RK-C-165	1090		292		85.2		3.7	U	820		9991262
R-0418	180822-Parrot-RK-C-163	1010		223		44.9		3.7	U	668		9991262

TO: WATER & ENVIRONMENTAL TECHNOLOGIES Oct. 11, 2018
Pat Seccomb
Jay Slocum

FROM: ASHE ANALYTICS
JOHN ASHE

SUBJECT: ANALYTICAL REPORT NO. JCQ1011R
LABORATORY QA FOR ANALYTICAL REPORT NO. JCD1011R

PROJECT: NRPDMO4 PARROT TAILINGS REMOVAL

LABORATORY QA

LAB NUMBER	SAMPLE I.D.	AS PPM	CD PPM	CU PPM	PB PPM	ZN PPM
N-2710a	ICV, 101018	1746	13.60	3305	5313	4094
CERTIFIED		1540	12.30	3420	5520	4180
RECOVERY		113.38	110.57	96.64	96.25	97.94
R-0420.1		29.80	0.20	51.10	41.20	107.90
R-0420.2	LAB DUP	30.10	0	42.70	41.20	104.20
R-0420R	LAB REP	26.90	0.40	49.50	41.60	94.10
LAB DUP RPD		1.00	200.00	17.91	0.00	3.49
LAB REP RPD		10.23	66.67	3.18	0.97	13.66
9991262.00	XCS	2.21	0.30	6.40	0	0
9901262.00	BLANK	3.03	0	1.80	0	1.60

ABOVE BLANKS ASSOCIATED WITH SAMPLE PREP GROUP 9991262.
MISSING ENTRIES IMPLY ZERO CONCENTRATION OUTPUT.
ALL READINGS BELOW MDL.

N-2710a	LCS	1768	13.30	3233	5350	4038
CERTIFIED		1540	12.30	3420	5520	4180
RECOVERY		114.81	108.13	94.53	96.92	96.60

ABOVE LCS ASSOCIATED WITH SAMPLES R-0414 THRU R-0418.

Project No: **181207 WET - Parrot**

12 samples were received on December 7, 2018 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Project No.	Date	Time	LAB ID #	Sample ID	As, mg/kg	Flag	Cd, mg/kg	Flag	Cu, mg/kg	Flag	Pb, mg/kg	Flag	Zn, mg/kg	Flag
181207 Parrot	12/17/2018	17:28:32	181207-1	180918-Parrot-LAB-150	31		15	U	12,351		139		1,751	
181207 Parrot	12/17/2018	17:32:42	181207-2	180928-Parrot-LAB-166	33		15	U	703		190		663	
181207 Parrot	12/17/2018	17:34:49	181207-3	181002-Parrot-LAB-184	687		15	U	2,149		2,392		1,481	
181207 Parrot	12/17/2018	17:40:15	181207-4	181119-Parrot-LAB-287	68		15	U	661		194		1,047	
181207 Parrot	12/17/2018	17:43:16	181207-5	181026-Parrot-LAB-233	65		15	U	924		116		1,233	
181207 Parrot	12/17/2018	17:45:33	181207-6	181102-Parrot-LAB-244	61		15	U	822		260		1,509	
181207 Parrot	12/17/2018	17:48:12	181207-7	181112-Parrot-LAB-262	78		15	U	1,327		209		686	
181207 Parrot	12/17/2018	17:50:47	181207-8	181022-Parrot-LAB-220	642		15	U	321		713		939	
181207 Parrot	12/17/2018	17:55:03	181207-9	WET-180918-3	66		43	J	150		1,490		429	
181207 Parrot	12/17/2018	17:58:12	181207-10	WET-181018-4	1,398		15	U	3,464		5,541		4,115	
181207 Parrot	12/17/2018	18:01:16	181207-11	WET-181107-5	86		30	J	153		1,490		431	
181207 Parrot	12/17/2018	18:04:08	181207-12	WET-181206-6	1,458		15	U	3,485		5,523		4,227	

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **181207 WET - Parrot**

12 samples were received on December 7, 2018 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

					Analyzed, mg/kg										SRM Certified Values, mg/kg					SRM % Recovery					RPD				
Project No.	**Date**	**Time**	**LAB ID #**	**Sample ID**	**As**	**Flag**	**Cd**	**Flag**	**Cu**	**Flag**	**Pb**	**Flag**	**Zn**	**Flag**	**As**	**Cd**	**Cu**	**Pb**	**Zn**	**As**	**Cd**	**Cu**	**Pb**	**Zn**	**As**	**Cd**	**Cu**	**Pb**	**Zn**
181207 Parrot	12/17/2018	17:10:10	181207-CalBlk	Silica Blank	6	U	15	U	15	U	9	U	9	U															
181207 Parrot	12/17/2018	17:23:45	181207-InstCalChk	SRM - OREAS152b	42		15	U	4,311		13	J	118		37.7	0.23	3,750	11.7	105	111.4%	-	115.0%	111.1%	112.4%					
181207 Parrot	12/17/2018	17:34:49	181207-3	181002-Parrot-LAB-184	687		15	U	2,149		2,392		1,481																
181207 Parrot	12/17/2018	18:08:13	REP-181207-3	181002-Parrot-LAB-184	692		15	U	2,137		2,351		1,497												0.7%	-	0.6%	1.7%	1.1%
181207 Parrot	12/17/2018	17:50:47	181207-8	181022-Parrot-LAB-220	642		15	U	321		713		939																
181207 Parrot	12/17/2018	18:18:13	DUP-181207-8	181022-Parrot-LAB-220	638		15	U	327		698		835												0.6%	-	1.9%	2.1%	11.7%
181207 Parrot	12/17/2018	18:21:52	QC Chk - 2710a	SRM NIST 2710a	1,789		15	U	3,549		5,574		4,226		1,540	12.3	3,420	5,520	4,180	116.2%	-	103.8%	101.0%	101.1%					
181207 Parrot	12/17/2018	18:23:52	QC CHK-2711a	SRM NIST 2711a	77		47		160		1,480		418		107	54	140	1,400	414	72.0%	86.9%	114.3%	105.7%	101.0%					
181207 Parrot	12/17/2018	18:25:59	QC Chk - Blank	Silica Blank	6	U	15	U	15	U	9	U	9	U															
181207 Parrot	12/17/2018	17:37:13	181207-XContChk	CrossContCheck	8	J	15	U	23	J	19	J	9	U															

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project: **190517 WET - Parrot & I-90**

2 soil samples were received on May 17, 2019 for the analysis of arsenic, cadmium, copper, lead & zinc, and 3 samples for arsenic and copper by XRF.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Flag	Cd, mg/kg	Flag	Cu, mg/kg	Flag	Pb, mg/kg	Flag	Zn, mg/kg	Flag
190517 WET - Parrot & I-90	190517-1	190515ParrotImportOB002	5/21/2019	16:04:31	36		15	U	201		207		501	
190517 WET - Parrot & I-90	190517-2	190515ParrotImportOB004	5/21/2019	16:06:18	21		15	U	197		91		346	
~~190517 WET - Parrot & I-90~~	~~190517-3~~	~~180530I90RSC038~~	~~5/21/2019~~	~~16:08:54~~	~~120~~		~~NA~~		~~865~~		~~NA~~		~~NA~~	
~~190517 WET - Parrot & I-90~~	~~190517-4~~	~~190424I90OBC042~~	~~5/21/2019~~	~~16:11:01~~	~~31~~		~~NA~~		~~278~~		~~NA~~		~~NA~~	
~~190517 WET - Parrot & I-90~~	~~190517-5~~	~~190502I90OBC047~~	~~5/21/2019~~	~~16:13:03~~	~~20~~		~~NA~~		~~153~~		~~NA~~		~~NA~~	

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project: **190517 WET - Parrot & I-90**

QA-QC

					Analyzed, mg/kg											SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Flag**	**Cd**	**Flag**	**Cu**	**Flag**	**Pb**	**Flag**	**Zn**	**Flag**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
190517 WET - Parrot & I-90	190517-CalBlk	Silica Blank	5/21/2019	15:55:22	6	U	15	U	15	U	9	U	9	U																		
190517 WET - Parrot & I-90	190517-InstCalC	SRM - OREAS152b	5/21/2019	16:00:06	42		15	U	4,326		15	J	140			37.7	0.2	3,750	11.7	105		111.4%	-	115.4%	128.2%	133.3%						
190517 WET - Parrot & I-90	190517-5	190502I90OBC047	5/21/2019	16:13:03	20		15	U	153		50		200																			
190517 WET - Parrot & I-90	REP-190517-5	190502I90OBC047	5/21/2019	16:15:30	23		15	U	162		49		197															14.0%	-	5.7%	2.0%	1.5%
190517 WET - Parrot & I-90	190517-2	190515ParrotImportOB004	5/21/2019	16:06:18	21		15	U	197		91		346																			
190517 WET - Parrot & I-90	DUP-190517-2	190515ParrotImportOB004	5/21/2019	16:24:53	21		15	U	205		100		350															0.0%	-	4.0%	9.4%	1.1%
190517 WET - Parrot & I-90	QC CHK-2710a	SRM NIST 2710a	5/21/2019	16:27:19	1,411		15	U	3,486		5,416		4,103			1,540	12.3	3,420	5,520	4,180		91.6%	-	101.9%	98.1%	98.2%						
190517 WET - Parrot & I-90	QC CHK-Blank	Silica Blank	5/21/2019	16:30:00	6	U	15	U	15	U	9	U	9	U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project: **190624 WET - Parrot**

3 soil samples were received on June 24, 2019 for the analysis of arsenic, cadmium, copper, lead & zinc by XRF.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Flag	Cd, mg/kg	Flag	Cu, mg/kg	Flag	Pb, mg/kg	Flag	Zn, mg/kg	Flag
190624 WET - Parrot	190624-1	190621 Parrot Import - Sand Blank	7/6/2019	12:17:56	6	U	15	U	15	U	9	U	9	U
190624 WET - Parrot	190624-2	190621 Parrot Import - X Cont Blank	7/6/2019	12:20:32	6	U	15	U	15	U	9	U	9	U
190624 WET - Parrot	190624-3	190621 Parrot Import - Lab - 020	7/6/2019	12:23:15	18	J	15	U	107		63		229	

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project: **190624 WET - Parrot**

QA-QC

					Analyzed, mg/kg											SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Flag**	**Cd**	**Flag**	**Cu**	**Flag**	**Pb**	**Flag**	**Zn**	**Flag**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
190624 WET - Parrot	190624 -CalBlk	Silica Blank	7/6/2019	12:04:55	6	U	15	U	15	U	9	U	9	U																		
190624 WET - Parrot	190624-InstCalC	SRM OREAS 503b	7/6/2019	12:15:08	17	J	15	U	5,783		29	J	116			18.9	-	5,310	24.3	92		89.9%	-	108.9%	119.3%	126.1%						
190624 WET - Parrot	190624-1	190621 Parrot Import - Sand Blank	7/6/2019	12:17:56	6	U	15	U	15	U	9	U	9	U																		
190624 WET - Parrot	REP-190624-1	190621 Parrot Import - Sand Blank	7/6/2019	12:26:06	6	U	15	U	15	U	9	U	9	U														-	-	-	-	-
190624 WET - Parrot	190624-3	190621 Parrot Import - Lab - 020	7/6/2019	12:23:15	18	J	15	U	107		63		229																			
190624 WET - Parrot	DUP-190624-3	190621 Parrot Import - Lab - 020	7/6/2019	12:42:05	16	J	15	U	95		57		258															11.8%	-	11.9%	10.0%	11.9%
190624 WET - Parrot	QC CHK-2710a	SRM NIST 2710a	7/6/2019	12:45:24	1,398		15	U	3,492		5,484		4,115			1,540	12.3	3,420	5,520	4,180		90.8%	-	102.1%	99.3%	98.4%						
190624 WET - Parrot	QC CHK-Blank	Silica Blank	7/6/2019	12:49:16	6	U	15	U	15	U	9	U	9	U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project: **190830 WET - Parrot**

2 soil samples were received on August 30, 2019 for the analysis of arsenic, cadmium, copper, lead & zinc by XRF.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Flag	Cd, mg/kg	Flag	Cu, mg/kg	Flag	Pb, mg/kg	Flag	Zn, mg/kg	Flag
190830 WET - Parrot	190830-1	190826 Geoprobe XCon	9/23/2019	18:29:47	6	U	15	U	15	U	9	U	9	U
190830 WET - Parrot	190830-2	1900826 Geoprobe GP4 8.5-10-007	9/23/2019	18:31:50	6	U	15	U	477		739		1,838	

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project: **190830 WET - Parrot**

2 soil samples were received on August 30, 2019 for the analysis of arsenic, cadmium, copper, lead & zinc by XRF.

QA-QC

					Analyzed, mg/kg										SRM Certified Values, mg/kg					SRM % Recovery					RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Flag**	**Cd**	**Flag**	**Cu**	**Flag**	**Pb**	**Flag**	**Zn**	**Flag**	**As**	**Cd**	**Cu**	**Pb**	**Zn**	**As**	**Cd**	**Cu**	**Pb**	**Zn**	**As**	**Cd**	**Cu**	**Pb**	**Zn**
190830 WET - Parrot	190830 -CalBlk	Silica Blank	9/23/2019	18:22:07	6	U	15	U	15	U	9	U	9	U															
190830 WET - Parrot	190830-InstCal	SRM OREAS 503b	9/23/2019	18:25:12	15	J	15	U	5,815		26	J	119		18.9	-	5,310	24.3	92	79.4%	-	109.5%	107.0%	129.3%					
190830 WET - Parrot	190830-1	190826 Geoprobe XCon	9/23/2019	18:29:47	6	U	15	U	15	U	9	U	9	U															
190830 WET - Parrot	REP-190830-1	190826 Geoprobe XCon	9/23/2019	18:34:07	6	U	15	U	15	U	9	U	9	U											-	-	-	-	-
190830 WET - Parrot	190830-2	1900826 Geoprobe GP4 8.5-10-007	9/23/2019	18:31:50	6	U	15	U	477		739		1,838																
190830 WET - Parrot	DUP-190830-2	190826 Geoprobe GP4 8.5-10-007	9/23/2019	18:44:01	6	U	15	U	469		731		1,956												-	-	1.7%	1.1%	6.2%
190830 WET - Parrot	QC CHK - 2710a	SRM NIST 2710a	9/23/2019	18:46:30	1,405		15	U	3,513		5,514		4,157		1,540	12.3	3,420	5,520	4,180	91.2%	-	102.7%	99.9%	99.4%					
190830 WET - Parrot	QC CHK - Blank	Silica Blank	9/23/2019	18:48:32	6	U	15	U	15	U	9	U	9	U															

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	Stockpiles 1 -3, after dozer leveled them for excavation and hauling	In-situ samples were taken to ensure overburden stockpiles sampled were below action level	Overburden was below action levels exept one area containing high Zn. This area was marked and painted as exceeding action levels.	Surface Samples After Dozer Leveled original stockpiles	180716-Parrot-OB-InSitu-001	19	<LOD	212	146	311
					180716-Parrot-OB-InSitu-002	37	<LOD	585	155	502
					180716-Parrot-OB-InSitu-003	43	<LOD	860	100	562
					180716-Parrot-OB-InSitu-004	30	<LOD	393	108	334
					180716-Parrot-OB-InSitu-005	18	<LOD	439	133	362
					180716-Parrot-OB-InSitu-006	24	<LOD	107	56	193
					180716-Parrot-OB-InSitu-007	<LOD	<LOD	49	23	92
					180716-Parrot-OB-InSitu-008	29	<LOD	498	311	**1474**
					180716-Parrot-OB-InSitu-009	17	<LOD	146	94	187
					180716-Parrot-OB-InSitu-010	42	<LOD	624	329	**1112**
					180716-Parrot-OB-InSitu-011	29	<LOD	433	153	**1696**
					180716-Parrot-OB-InSitu-012	20	<LOD	283	53	349
					180716-Parrot-OB-InSitu-013	<LOD	<LOD	161	70	178
					180716-Parrot-OB-InSitu-014	15	<LOD	253	102	305
					180716-Parrot-OB-InSitu-015	<LOD	<LOD	60	28	89
					180716-Parrot-OB-InSitu-016	35	<LOD	437	336	922
					180716-Parrot-OB-InSitu-017	23	<LOD	287	171	408
					180716-Parrot-OB-InSitu-018	17	<LOD	189	97	227
TBD	Test Pits were located along the west of the railroad grade in the proposed first cell.	In situ samples were taken from 21 test pits located near the rail line, to help determine overburden depth in the area.	71918 tp 1	Depths Varied, but samples were taken from the top of the test pit first then sampled mid-test pit then at the bottom of the test pit. See Pictures for detailed notes on depths.	180719-Parrot-OB-InSitu-019	17	<LOD	208	31	180
					180719-Parrot-OB-InSitu-020	135	<LOD	126	277	66
					180719-Parrot-OB-InSitu-021	**245**	<LOD	270	149	68
					180719-Parrot-OB-InSitu-022	43	<LOD	85	82	106
					180719-Parrot-OB-InSitu-023	92	<LOD	124	118	93
			71918 tp 2		180719-Parrot-OB-InSitu-024	32	<LOD	126	25	116
					180719-Parrot-OB-InSitu-025	52	<LOD	163	193	113
					180719-Parrot-OB-InSitu-026	**1384**	<LOD	**1952**	**1554**	**1495**
					180719-Parrot-OB-InSitu-027	115	<LOD	482	186	<LOD
			71918 tp 3		180719-Parrot-OB-InSitu-028	9	<LOD	47	<LOD	177
					180719-Parrot-OB-InSitu-029	**905**	<LOD	298	275	123
					180719-Parrot-OB-InSitu-030	**579**	<LOD	251	186	92
					180719-Parrot-OB-InSitu-031	**825**	<LOD	**1428**	786	507
					180719-Parrot-OB-InSitu-032	**453**	<LOD	274	304	149
			71918 tp 4		180719-Parrot-OB-InSitu-033	65	<LOD	178	45	143
					180719-Parrot-OB-InSitu-034	23	<LOD	425	46	100
					180719-Parrot-OB-InSitu-035	37	<LOD	270	83	178
					180719-Parrot-OB-InSitu-036	35	<LOD	565	91	158
					180719-Parrot-OB-InSitu-037	39	<LOD	318	244	221
			71918 tp 5		180719-Parrot-OB-InSitu-038	24	<LOD	136	33	104
					180719-Parrot-OB-InSitu-039	14	<LOD	88	41	340
					180719-Parrot-OB-InSitu-040	17	<LOD	205	81	275
					180719-Parrot-OB-InSitu-041	<LOD	<LOD	240	45	467
					180719-Parrot-OB-InSitu-042	17	<LOD	168	27	125
			71918 tp 6		180719-Parrot-OB-InSitu-043	44	<LOD	195	53	142
					180719-Parrot-OB-InSitu-044	92	<LOD	321	107	143
					180719-Parrot-OB-InSitu-045	37	<LOD	298	187	114

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	Test Pits were located along the west of the railroad grade in the proposed first cell.	In situ samples were taken from 21 test pits located near the rail line, to help determine overburden depth in the area.	71918 tp 7		180719-Parrot-OB-InSitu-046	25	<LOD	190	29	180
					180719-Parrot-OB-InSitu-047	81	<LOD	252	82	265
					180719-Parrot-OB-InSitu-048	14	<LOD	343	33	593
			71918 tp 8		180719-Parrot-OB-InSitu-049	20	<LOD	112	<LOD	83
					180719-Parrot-OB-InSitu-050	14	<LOD	129	27	121
					180719-Parrot-OB-InSitu-051	34	<LOD	181	57	190
			71918 tp 9		180719-Parrot-OB-InSitu-052	19	<LOD	206	<LOD	132
					180719-Parrot-OB-InSitu-053	20	<LOD	196	46	65
					180719-Parrot-OB-InSitu-054	28	<LOD	134	128	51
			71918 tp 10		180719-Parrot-OB-InSitu-055	53	<LOD	502	76	320
					180719-Parrot-OB-InSitu-056	42	<LOD	217	159	141
					180719-Parrot-OB-InSitu-057	36	<LOD	246	73	208
			71918 tp 11		180719-Parrot-OB-InSitu-058	54	<LOD	371	81	174
					180719-Parrot-OB-InSitu-059	122	<LOD	382	147	124
					180719-Parrot-OB-InSitu-060	77	<LOD	308	129	219
					180719-Parrot-OB-InSitu-061	131	<LOD	537	101	382
			71918 tp 12		180719-Parrot-OB-InSitu-062	43	<LOD	262	99	206
					180719-Parrot-OB-InSitu-063	37	<LOD	180	118	43
					180719-Parrot-OB-InSitu-064	39	<LOD	190	141	56
					180719-Parrot-OB-InSitu-065	<LOD	<LOD	<LOD	<LOD	<LOD
			71918 tp 13		180719-Parrot-OB-InSitu-066	56	<LOD	234	200	126
					180719-Parrot-OB-InSitu-067	156	<LOD	326	422	131
					180719-Parrot-OB-InSitu-068	38	<LOD	532	317	180
			71918 tp 14		180719-Parrot-OB-InSitu-069	<LOD	<LOD	133	20	953
					180719-Parrot-OB-InSitu-070	25	<LOD	227	52	631
					180719-Parrot-OB-InSitu-071	<LOD	<LOD	140	17	**1036**
					180719-Parrot-OB-InSitu-072	37	<LOD	197	50	532
					180719-Parrot-OB-InSitu-073	9	<LOD	206	19	874
					180719-Parrot-OB-InSitu-074	**272**	<LOD	224	387	100
			71918 tp 15		180719-Parrot-OB-InSitu-075	<LOD	<LOD	39	20	77
					180719-Parrot-OB-InSitu-076	23	<LOD	196	22	241
					180719-Parrot-OB-InSitu-077	52	<LOD	340	54	423
					180719-Parrot-OB-InSitu-078	29	<LOD	229	19	190
					180719-Parrot-OB-InSitu-079	49	<LOD	399	77	331
					180719-Parrot-OB-InSitu-080	33	<LOD	436	46	517
			71918 tp 16		180719-Parrot-OB-InSitu-081	12	<LOD	360	41	529
					180719-Parrot-OB-InSitu-082	13	<LOD	64	20	79
					180719-Parrot-OB-InSitu-083	<LOD	<LOD	278	122	450
					180719-Parrot-OB-InSitu-084	<LOD	<LOD	<LOD	<LOD	<LOD
			71918 tp 17		180719-Parrot-OB-InSitu-085	37	<LOD	190	38	168
					180719-Parrot-OB-InSitu-086	28	<LOD	203	34	208
					180719-Parrot-OB-InSitu-087	54	<LOD	279	148	405
					180719-Parrot-OB-InSitu-088	42	<LOD	294	38	163
			71918 tp 18		180719-Parrot-OB-InSitu-089	**273**	<LOD	726	566	931
					180719-Parrot-OB-InSitu-090	**970**	<LOD	**1069**	845	**1273**
					180719-Parrot-OB-InSitu-091	42	<LOD	405	64	510
					180719-Parrot-OB-InSitu-092	20	<LOD	153	18	96

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	Test Pits were located along the west of the railroad grade in the proposed first cell.	In situ samples were taken from 21 test pits located near the rail line, to help determine overburden depth in the area.	71918 tp 19		180719-Parrot-OB-InSitu-093	24	<LOD	146	29	127
					180719-Parrot-OB-InSitu-094	**206**	<LOD	228	237	108
					180719-Parrot-OB-InSitu-095	**2469**	<LOD	**1281**	**1078**	**1113**
			71918 tp 20		180719-Parrot-OB-InSitu-096	26	<LOD	95	<LOD	85
					180719-Parrot-OB-InSitu-097	132	<LOD	461	50	165
					180719-Parrot-OB-InSitu-098	**2152**	<LOD	489	656	420
			71918 tp 21		180719-Parrot-OB-InSitu-099	41	<LOD	141	28	133
					180719-Parrot-OB-InSitu-100	**301**	<LOD	199	292	129
					180719-Parrot-OB-InSitu-101	199	<LOD	286	156	215
					180719-Parrot-OB-InSitu-102	147	<LOD	326	151	233
TBD	Overburden stockpiles located in center of site	In situ samples were taken of overburden soils routing	In situ sampling was performed as confirmation for soils routing of the center stockpile	Surface samples of stockpile area	180724-Parrot-OB-InSitu-103	64	<LOD	**1043**	292	741
					180724-Parrot-OB-InSitu-104	42	<LOD	391	319	410
					180724-Parrot-OB-InSitu-105	28	<LOD	200	195	347
					180724-Parrot-OB-InSitu-106	63	<LOD	486	345	690
					180724-Parrot-OB-InSitu-107	<LOD	<LOD	159	185	377
					180724-Parrot-OB-InSitu-108	14	<LOD	117	65	347
					180724-Parrot-OB-InSitu-109	17	<LOD	145	124	232
					180724-Parrot-OB-InSitu-110	22	<LOD	796	194	610
					180724-Parrot-OB-InSitu-111	30	<LOD	272	344	578
					180724-Parrot-OB-InSitu-112	<LOD	<LOD	103	121	141
					180724-Parrot-OB-InSitu-113	33	<LOD	341	118	354
					180724-Parrot-OB-InSitu-114	<LOD	<LOD	188	86	189
					180724-Parrot-OB-InSitu-115	32	<LOD	368	105	285
TBD	Waste adjacent to railroad near west bridge	In situ samples were taken of waste left adjacent haul road	In situ sampling was performed because waste was visible	Surface samples of haul road soil	180724-Parrot-TA-InSitu-116	**247**	<LOD	**2291**	374	**1114**
					180724-Parrot-TA-InSitu-117	**234**	<LOD	**3933**	397	**1160**
					180724-Parrot-TA-InSitu-118	124	<LOD	**1058**	218	552
					180724-Parrot-TA-InSitu-119	**264**	<LOD	**2726**	429	**1146**
	Waste adjacent to railroad near east bridge	In situ samples were taken of native soil under east bridge encroachment	In situ sampling was performed because waste was visible; last three samples were taken on road/mixing zone	Surface samples of soil nearby easy bridge	180724-Parrot-TA-InSitu-120	**249**	<LOD	**3880**	349	**1161**
					180724-Parrot-TA-InSitu-121	**221**	<LOD	**3651**	323	**1022**
					180724-Parrot-TA-InSitu-122	**245**	<LOD	**5622**	300	**1530**
					180724-Parrot-TA-InSitu-123	**212**	<LOD	**5122**	352	**1026**
					180724-Parrot-TA-InSitu-124	**310**	<LOD	**6088**	512	**1498**
					180724-Parrot-TA-InSitu-125	**248**	<LOD	**5680**	462	**2433**
					180724-Parrot-OB-InSitu-126	37	<LOD	603	138	546
					180724-Parrot-OB-InSitu-127	41	<LOD	779	102	499
					180724-Parrot-OB-InSitu-128	**269**	<LOD	**4757**	337	**1118**

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	**Sample Location**	**General Description of Days Field Work**	**Field Notes**	**Sample Depth - From Ground Surface**	**Individual Field ID**	**Field XRF Results, mg/kg**				
						As	**Cd**	**Cu**	**Pb**	**Zn**
TDB	Stockpiles 1-3, direct hauling to create haul road	In-situ and confirmation sampling of overburden in stockpiles and overburden in the northwestern portion of the site	Sampled stockpiles and overburden, brown sandy material no contamination observed	Surface samples of soils in stockpile and in excavations	180726-Parrot-OB-InSitu-129	21	<LOD	340	72	279
					180726-Parrot-OB-InSitu-130	35	<LOD	455	69	375
					180726-Parrot-OB-InSitu-131	38	<LOD	534	178	**1120**
					180726-Parrot-OB-InSitu-132	22	<LOD	372	70	350
					180726-Parrot-OB-InSitu-133	<LOD	<LOD	309	211	533
					180726-Parrot-OB-InSitu-134	16	<LOD	186	74	380
					180726-Parrot-OB-InSitu-135	<LOD	<LOD	93	59	144
					180726-Parrot-OB-InSitu-136	19	<LOD	109	41	174
					180726-Parrot-OB-InSitu-137	23	<LOD	168	92	244
TBD	Northwestern overburden direct hauling soil screening		Sandy brown overburden no visible contamination	Samples taken from excavation from toe to upper slope	180726-Parrot-OB-InSitu-138	<LOD	<LOD	79	52	137
					180726-Parrot-OB-InSitu-139	21	<LOD	212	120	319
					180726-Parrot-OB-InSitu-140	<LOD	<LOD	254	42	321
					180726-Parrot-OB-InSitu-141	23	<LOD	246	93	282
					180726-Parrot-OB-InSitu-142	15	<LOD	235	109	301
					180726-Parrot-OB-InSitu-143	<LOD	<LOD	234	245	301
TBD	Northwestern overburden direct hauling soil screening	In-situ and confirmation sampling of overburden in stockpiles and overburden in the northwestern portion of the site	Sandy brown overburden no visible contamination (XL5 data - XL2 malfunction)	Samples taken from excavation from toe to upper slope	180730-Parrot-OB-InSitu-144	17	<LOD	604	103	521
					180730-Parrot-OB-InSitu-145	28	<LOD	720	72	483
					180730-Parrot-OB-InSitu-146	34	<LOD	798	105	516
					180730-Parrot-OB-InSitu-147	26	<LOD	579	65	371
					180730-Parrot-OB-InSitu-148	13	<LOD	293	63	259
					180730-Parrot-OB-InSitu-149	13	<LOD	239	63	201
					180730-Parrot-OB-InSitu-150	20	<LOD	386	58	315
					180730-Parrot-OB-InSitu-151	14	<LOD	296	70	333
					180730-Parrot-OB-InSitu-152	16	<LOD	337	55	307
					180730-Parrot-OB-InSitu-153	12	<LOD	112	78	420
					180730-Parrot-OB-InSitu-154	32	<LOD	783	78	619
					180730-Parrot-OB-InSitu-155	25	<LOD	902	130	706
					180730-Parrot-OB-InSitu-156	31	<LOD	525	90	531
					180730-Parrot-OB-InSitu-157	43	<LOD	840	76	489
					180730-Parrot-OB-InSitu-158	36	<LOD	754	87	434
					180730-Parrot-OB-InSitu-159	31	<LOD	812	71	342
					180730-Parrot-OB-InSitu-160	16	<LOD	276	51	280
					180730-Parrot-OB-InSitu-161	16	<LOD	379	65	324
					180730-Parrot-OB-InSitu-162	28	<LOD	490	72	308
					180730-Parrot-OB-InSitu-163	49	<LOD	**1035**	86	426
					180730-Parrot-OB-InSitu-164	11	<LOD	774	168	308
					180730-Parrot-OB-InSitu-165	43	<LOD	975	90	530
					180730-Parrot-OB-InSitu-166	38	<LOD	960	93	565
					180730-Parrot-OB-InSitu-167	21	<LOD	284	62	214
					180730-Parrot-OB-InSitu-168	34	<LOD	817	121	378
					180730-Parrot-OB-InSitu-169	18	<LOD	274	55	202
					180730-Parrot-OB-InSitu-170	35	<LOD	663	65	405
					180730-Parrot-OB-InSitu-171	20	<LOD	383	49	284
					180730-Parrot-OB-InSitu-172	14	<LOD	279	54	238
					180730-Parrot-OB-InSitu-173	21	<LOD	220	87	313
					180730-Parrot-OB-InSitu-174	20	<LOD	607	68	349
					180730-Parrot-OB-InSitu-175	11	<LOD	189	52	215
					180730-Parrot-OB-InSitu-176	4	<LOD	31	24	35

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	Northwestern overburden direct hauling soil screening	In-situ and confirmation sampling of overburden in stockpiles and overburden in the northwestern portion of the site	Sandy brown overburden no visible contamination (XL5 data - XL2 malfunction)	Samples taken from excavation from toe to upper slope	180730-Parrot-OB-InSitu-182	27	<LOD	568	72	451
					180730-Parrot-OB-InSitu-183	19	<LOD	495	66	427
					180730-Parrot-OB-InSitu-184	30	<LOD	593	89	428
					180730-Parrot-OB-InSitu-185	32	<LOD	590	75	417
					180730-Parrot-OB-InSitu-186	23	<LOD	749	122	307
					180730-Parrot-OB-InSitu-187	12	<LOD	607	72	341
					180730-Parrot-OB-InSitu-188	17	<LOD	540	95	478
					180730-Parrot-OB-InSitu-189	4	<LOD	242	33	208
					180730-Parrot-OB-InSitu-190	<LOD	<LOD	63	33	75
					180730-Parrot-OB-InSitu-191	8	<LOD	64	26	76
					180730-Parrot-OB-InSitu-192	14	<LOD	709	87	459
					180730-Parrot-OB-InSitu-193	11	<LOD	72	40	133
					180730-Parrot-OB-InSitu-194	75	<LOD	**1168**	117	593
					180730-Parrot-OB-InSitu-195	29	<LOD	433	70	328
					180730-Parrot-OB-InSitu-196	13	<LOD	589	79	451
					180730-Parrot-OB-InSitu-197	25	<LOD	629	105	488
					180730-Parrot-OB-InSitu-198	6	<LOD	140	45	155
					180730-Parrot-OB-InSitu-199	15	<LOD	496	85	464
TBD	Northwestern overburden direct hauling soil screening	In-situ and confirmation sampling of overburden in stockpiles and overburden in the northwestern portion of the site	Sandy brown overburden no visible contamination (XL5 data - XL2 malfunction)	Samples taken from excavation from toe to upper slope	180731-Parrot-OB-InSitu-200	5	<LOD	189	51	178
					180731-Parrot-OB-InSitu-201	30	<LOD	661	86	407
					180731-Parrot-OB-InSitu-202	5	<LOD	253	83	224
					180731-Parrot-OB-InSitu-203	5	<LOD	<LOD	15	21
					180731-Parrot-OB-InSitu-204	6	<LOD	54	24	77
					180731-Parrot-OB-InSitu-205	18	<LOD	695	101	494
					180731-Parrot-OB-InSitu-206	9	<LOD	235	38	238
					180731-Parrot-OB-InSitu-207	2	<LOD	<LOD	20	32
					180731-Parrot-OB-InSitu-208	8	<LOD	111	44	110
					180731-Parrot-OB-InSitu-209	20	<LOD	469	62	322
					180731-Parrot-OB-InSitu-210	16	<LOD	339	87	413
					180731-Parrot-OB-InSitu-211	7	<LOD	30	24	76
					180731-Parrot-OB-InSitu-212	23	<LOD	91	128	276
					180731-Parrot-OB-InSitu-213	17	<LOD	8	14	94
					180731-Parrot-OB-InSitu-214	14	<LOD	8	16	91
					180731-Parrot-OB-InSitu-215	12	<LOD	7	17	94
TBD	Northwestern overburden direct hauling soil screening	In-situ and confirmation sampling of overburden in stockpiles and overburden in the northwestern portion of the site	In-situ from NW OB for 61-70 hauls	Samples taken from excavation from toe to upper slope	180806-Parrot-OB-Insitu-216	12	<LOD	39	17	71
					180806-Parrot-OB-Insitu-217	<LOD	<LOD	<LOD	12	44
					180806-Parrot-OB-Insitu-218	<LOD	<LOD	<LOD	11	34
					180806-Parrot-OB-Insitu-219	<LOD	<LOD	60	44	77
					180806-Parrot-OB-Insitu-220	<LOD	<LOD	<LOD	13	53
					180806-Parrot-OB-Insitu-221	<LOD	<LOD	<LOD	10	36

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	First day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. One area was identified as hot and was avoided after discovery.	Southwest overburden hauls 1-20	0-12 ft	180807-Parrot-OB-Insitu-222	123	<LOD	992	177	936
					180807-Parrot-OB-Insitu-223	54	<LOD	553	179	545
					180807-Parrot-OB-Insitu-224	64	<LOD	562	292	498
					180807-Parrot-OB-Insitu-225	73	<LOD	881	127	**1134**
					180807-Parrot-OB-Insitu-226	61	<LOD	660	190	560
					180807-Parrot-OB-Insitu-227	30	<LOD	309	113	683
					180807-Parrot-OB-Insitu-228	107	<LOD	828	117	720
					180807-Parrot-OB-Insitu-229	36	<LOD	355	98	391
					180807-Parrot-OB-Insitu-230	59	<LOD	446	195	402
					180807-Parrot-OB-Insitu-231	112	<LOD	**1183**	172	662
					180807-Parrot-OB-Insitu-232	54	<LOD	425	100	361
					180807-Parrot-OB-Insitu-233	**201**	<LOD	**1224**	204	**1553**
					180807-Parrot-OB-Insitu-234	130	<LOD	719	126	808
					180807-Parrot-OB-Insitu-235	147	<LOD	993	187	**1265**
					180807-Parrot-OB-Insitu-236	196	21	720	169	764
					180807-Parrot-OB-Insitu-237	62	<LOD	276	239	84
TBD			Southwest overburden hauls 20-40	0-12 ft	180807-Parrot-OB-Insitu-238	105	<LOD	414	146	246
					180807-Parrot-OB-Insitu-239	**207**	<LOD	803	337	291
					180807-Parrot-OB-Insitu-240	126	<LOD	904	180	401
					180807-Parrot-OB-Insitu-241	93	<LOD	509	77	330
					180807-Parrot-OB-Insitu-242	111	<LOD	**1928**	128	359
					180807-Parrot-OB-Insitu-243	46	<LOD	346	118	219
					180807-Parrot-OB-Insitu-244	114	<LOD	444	118	321
					180807-Parrot-OB-Insitu-245	160	<LOD	**1389**	202	730
					180807-Parrot-OB-Insitu-246	72	<LOD	**1289**	296	987
					180807-Parrot-OB-Insitu-247	106	<LOD	889	103	416
					180807-Parrot-OB-Insitu-248	69	<LOD	566	115	321
TBD			Unknown stockpile the Oreo	0-12 ft	180807-Parrot-OB-Insitu-249	79	<LOD	614	118	675
					180807-Parrot-OB-Insitu-250	44	31	254	43	444
					180807-Parrot-OB-Insitu-251	63	<LOD	665	63	471
TBD			SW Corner excavation in-situ to identify where contamination was located and at what depths	0-12 ft	180807-Parrot-OB-Insitu-252	180	<LOD	**1550**	235	473
					180807-Parrot-OB-Insitu-253	28	<LOD	164	<LOD	111
					180807-Parrot-OB-Insitu-254	152	<LOD	**2398**	198	643
					180807-Parrot-OB-Insitu-255	56	<LOD	328	43	226
					180807-Parrot-OB-Insitu-256	36	<LOD	147	25	128
					180807-Parrot-OB-Insitu-257	**214**	<LOD	**1605**	226	773
					180807-Parrot-OB-Insitu-258	138	<LOD	**1224**	169	531
					180807-Parrot-OB-Insitu-259	109	<LOD	**1086**	152	467
					180807-Parrot-OB-Insitu-260	76	<LOD	122	28	110
					180807-Parrot-OB-Insitu-261	72	<LOD	125	32	108

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	First day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. One area was identified as hot and was avoided after discovery.	Hauls 41-60	0-12 ft	180807-Parrot-OB-Insitu-262	<LOD	<LOD	<LOD	22	72
					180807-Parrot-OB-Insitu-263	133	<LOD	738	122	696
					180807-Parrot-OB-Insitu-264	128	<LOD	**1046**	316	454
					180807-Parrot-OB-Insitu-265	39	<LOD	365	95	195
					180807-Parrot-OB-Insitu-266	75	<LOD	**1000**	78	364
					180807-Parrot-OB-Insitu-267	69	<LOD	607	120	393
					180807-Parrot-OB-Insitu-268	35	<LOD	683	138	182
					180807-Parrot-OB-Insitu-269	63	<LOD	496	107	285
					180807-Parrot-OB-Insitu-270	75	<LOD	524	64	388
					180807-Parrot-OB-Insitu-271	49	<LOD	394	77	175
					180807-Parrot-OB-Insitu-272	108	<LOD	**1359**	113	647
					180807-Parrot-OB-Insitu-273	<LOD	<LOD	<LOD	<LOD	<LOD
					180807-Parrot-OB-Insitu-274	99	<LOD	645	89	357
					180807-Parrot-OB-Insitu-275	**220**	<LOD	**2035**	230	955
					180807-Parrot-OB-Insitu-276	**291**	<LOD	**3010**	110	544
					180807-Parrot-OB-Insitu-277	33	<LOD	281	43	193
					180807-Parrot-OB-Insitu-278	54	<LOD	832	83	411
					180807-Parrot-OB-Insitu-279	40	<LOD	325	78	223
					180807-Parrot-OB-Insitu-280	54	<LOD	605	99	337
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Second day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. Wind row and consolidated contamination stockpile were also sampled.	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 61-170	0-12 ft	180808-Parrot-OB-Insitu-281	43	<LOD	373	144	172
					180808-Parrot-OB-Insitu-282	71	<LOD	334	135	162
					180808-Parrot-OB-Insitu-283	32	<LOD	306	59	385
					180808-Parrot-OB-Insitu-284	198	<LOD	321	270	209
					180808-Parrot-OB-Insitu-285	111	<LOD	381	875	100
					180808-Parrot-OB-Insitu-286	74	<LOD	237	330	58
					180808-Parrot-OB-Insitu-287	76	<LOD	415	133	281
					180808-Parrot-OB-Insitu-288	39	<LOD	257	155	137
					180808-Parrot-OB-Insitu-289	21	<LOD	171	80	165
					180808-Parrot-OB-Insitu-290	45	<LOD	288	61	156
					180808-Parrot-OB-Insitu-291	37	<LOD	263	160	136
					180808-Parrot-OB-Insitu-292	98	<LOD	287	123	221
					180808-Parrot-OB-Insitu-293	32	<LOD	158	88	133
					180808-Parrot-OB-Insitu-294	75	<LOD	199	121	120
					180808-Parrot-OB-Insitu-295	35	<LOD	146	139	206
					180808-Parrot-OB-Insitu-296	31	<LOD	336	64	703
					180808-Parrot-OB-Insitu-297	45	<LOD	117	44	117
					180808-Parrot-OB-Insitu-298	58	<LOD	334	215	299
					180808-Parrot-OB-Insitu-299	51	<LOD	122	**1118**	**1720**
					180808-Parrot-OB-Insitu-300	45	<LOD	191	91	287
					180808-Parrot-OB-Insitu-301	28	<LOD	136	38	190
					180808-Parrot-OB-Insitu-302	33	<LOD	271	105	159
					180808-Parrot-OB-Insitu-303	28	<LOD	185	46	172
					180808-Parrot-OB-Insitu-304	36	<LOD	297	53	275
					180808-Parrot-OB-Insitu-305	18	<LOD	278	246	812
					180808-Parrot-OB-Insitu-306	44	<LOD	412	75	408
					180808-Parrot-OB-Insitu-307	54	<LOD	249	118	265
					180808-Parrot-OB-Insitu-308	23	<LOD	146	43	233
					180808-Parrot-OB-Insitu-309	28	<LOD	156	117	230

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Second day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. Wind row and consolidated contamination stockpile were also sampled.	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 61-170	0-12 ft	180808-Parrot-OB-Insitu-310	55	<LOD	356	59	176
					180808-Parrot-OB-Insitu-311	20	<LOD	588	28	524
					180808-Parrot-OB-Insitu-312	25	<LOD	155	37	240
					180808-Parrot-OB-Insitu-313	69	<LOD	139	51	167
					180808-Parrot-OB-Insitu-314	27	28	195	71	235
					180808-Parrot-OB-Insitu-315	22	<LOD	167	37	160
					180808-Parrot-OB-Insitu-316	16	<LOD	243	48	583
					180808-Parrot-OB-Insitu-317	38	<LOD	436	42	373
					180808-Parrot-OB-Insitu-318	64	<LOD	464	136	190
					180808-Parrot-OB-Insitu-319	15	<LOD	126	19	153
					180808-Parrot-OB-Insitu-320	31	<LOD	300	54	254
					180808-Parrot-OB-Insitu-321	45	<LOD	253	43	205
					180808-Parrot-OB-Insitu-322	28	<LOD	326	33	310
					180808-Parrot-OB-Insitu-323	31	<LOD	198	57	260
					180808-Parrot-OB-Insitu-324	38	<LOD	165	55	195
					180808-Parrot-OB-Insitu-325	<LOD	<LOD	231	78	267
					180808-Parrot-OB-Insitu-326	57	<LOD	225	99	154
					180808-Parrot-OB-Insitu-327	25	<LOD	302	48	574
					180808-Parrot-OB-Insitu-328	59	<LOD	397	63	250
					180808-Parrot-OB-Insitu-329	67	<LOD	401	44	261
					180808-Parrot-OB-Insitu-330	114	<LOD	**1553**	129	478
					180808-Parrot-OB-Insitu-331	61	<LOD	514	197	253
					180808-Parrot-OB-Insitu-332	87	<LOD	598	112	384
					180808-Parrot-OB-Insitu-333	119	<LOD	**1351**	151	500
					180808-Parrot-OB-Insitu-334	63	<LOD	526	76	323
					180808-Parrot-OB-Insitu-335	30	<LOD	156	47	200
					180808-Parrot-OB-Insitu-336	30	<LOD	248	83	302
					180808-Parrot-OB-Insitu-337	42	<LOD	205	88	166
					180808-Parrot-OB-Insitu-338	149	<LOD	**1098**	194	447
					180808-Parrot-OB-Insitu-339	31	<LOD	191	46	191
					180808-Parrot-OB-Insitu-340	<LOD	<LOD	<LOD	<LOD	<LOD
					180808-Parrot-OB-Insitu-341	31	<LOD	301	64	187
					180808-Parrot-OB-Insitu-342	40	<LOD	281	60	213
					180808-Parrot-OB-Insitu-343	38	<LOD	217	48	193
					180808-Parrot-OB-Insitu-344	96	<LOD	347	134	262
					180808-Parrot-OB-Insitu-345	33	<LOD	215	85	175
					180808-Parrot-OB-Insitu-346	44	<LOD	245	111	301
					180808-Parrot-OB-Insitu-347	<LOD	<LOD	379	816	144
					180808-Parrot-OB-Insitu-348	26	<LOD	219	142	161
					180808-Parrot-OB-Insitu-349	22	<LOD	171	35	308
					180808-Parrot-OB-Insitu-350	36	<LOD	143	54	144
					180808-Parrot-OB-Insitu-351	33	<LOD	113	30	137
					180808-Parrot-OB-Insitu-352	39	<LOD	180	34	116
					180808-Parrot-OB-Insitu-353	50	<LOD	203	60	178
					180808-Parrot-OB-Insitu-354	58	<LOD	289	68	171
					180808-Parrot-OB-Insitu-355	49	<LOD	188	122	96
					180808-Parrot-OB-Insitu-356	78	<LOD	302	116	140
					180808-Parrot-OB-Insitu-357	33	<LOD	182	41	229

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Second day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. Wind row and consolidated contamination stockpile were also sampled.	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 61-170	0-12 ft	180808-Parrot-OB-Insitu-358	66	<LOD	341	105	170
					180808-Parrot-OB-Insitu-359	42	<LOD	334	35	397
					180808-Parrot-OB-Insitu-360	<LOD	<LOD	262	49	349
					180808-Parrot-OB-Insitu-361	32	<LOD	250	57	379
					180808-Parrot-OB-Insitu-362	29	<LOD	191	35	287
					180808-Parrot-OB-Insitu-363	38	<LOD	189	30	267
					180808-Parrot-OB-Insitu-364	34	<LOD	197	44	131
					180808-Parrot-OB-Insitu-365	11	<LOD	542	17	505
					180808-Parrot-OB-Insitu-366	41	<LOD	222	56	171
					180808-Parrot-OB-Insitu-367	87	<LOD	928	109	206
					180808-Parrot-OB-Insitu-368	102	<LOD	589	212	312
					180808-Parrot-OB-Insitu-369	57	<LOD	273	78	132
					180808-Parrot-OB-Insitu-370	59	<LOD	313	155	222
					180808-Parrot-OB-Insitu-371	85	<LOD	353	105	344
					180808-Parrot-OB-Insitu-372	30	<LOD	346	85	302
					180808-Parrot-OB-Insitu-373	67	<LOD	365	166	170
					180808-Parrot-OB-Insitu-374	153	<LOD	466	302	324
					180808-Parrot-OB-Insitu-375	26	<LOD	146	57	128
					180808-Parrot-OB-Insitu-376	36	<LOD	403	122	270
					180808-Parrot-OB-Insitu-377	60	<LOD	245	95	193
					180808-Parrot-OB-Insitu-378	71	<LOD	298	218	148
					180808-Parrot-OB-Insitu-379	<LOD	<LOD	<LOD	<LOD	<LOD
					180808-Parrot-OB-Insitu-380	72	<LOD	312	106	157
					180808-Parrot-OB-Insitu-381	45	<LOD	243	133	130
					180808-Parrot-OB-Insitu-382	43	<LOD	263	272	158
					180808-Parrot-OB-Insitu-383	82	<LOD	304	235	131
					180808-Parrot-OB-Insitu-384	54	<LOD	248	160	148
					180808-Parrot-OB-Insitu-385	92	<LOD	293	246	119
					180808-Parrot-OB-Insitu-386	44	<LOD	297	147	193
					180808-Parrot-OB-Insitu-387	111	<LOD	371	221	137
					180808-Parrot-OB-Insitu-388	74	<LOD	319	243	171
					180808-Parrot-OB-Insitu-389	47	<LOD	215	100	142
					180808-Parrot-OB-Insitu-390	174	<LOD	223	196	193
					180808-Parrot-OB-Insitu-391	59	<LOD	275	152	258
					180808-Parrot-OB-Insitu-392	77	<LOD	285	113	297
					180808-Parrot-OB-Insitu-393	<LOD	<LOD	<LOD	<LOD	<LOD
					180808-Parrot-OB-Insitu-394	55	<LOD	237	101	320
					180808-Parrot-OB-Insitu-395	43	<LOD	170	120	183
					180808-Parrot-OB-Insitu-396	41	<LOD	207	80	199
					180808-Parrot-OB-Insitu-397	42	<LOD	211	57	229
					180808-Parrot-OB-Insitu-398	38	<LOD	198	57	312
					180808-Parrot-OB-Insitu-399	25	<LOD	180	36	105
					180808-Parrot-OB-Insitu-400	36	<LOD	192	46	273
					180808-Parrot-OB-Insitu-401	33	<LOD	146	34	117
					180808-Parrot-OB-Insitu-402	39	<LOD	212	63	221
					180808-Parrot-OB-Insitu-403	37	<LOD	267	107	241
					180808-Parrot-OB-Insitu-404	39	<LOD	132	28	168
					180808-Parrot-OB-Insitu-405	44	<LOD	243	55	248

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Second day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. Wind row and consolidated contamination stockpile were also sampled.	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 61-170	0-12 ft	180808-Parrot-OB-Insitu-406	26	<LOD	206	52	226
					180808-Parrot-OB-Insitu-407	17	<LOD	122	28	143
					180808-Parrot-OB-Insitu-408	43	<LOD	246	45	260
					180808-Parrot-OB-Insitu-409	39	<LOD	239	38	210
					180808-Parrot-OB-Insitu-410	29	<LOD	137	27	158
					180808-Parrot-OB-Insitu-411	25	<LOD	148	31	130
					180808-Parrot-OB-Insitu-412	27	<LOD	201	49	208
					180808-Parrot-OB-Insitu-413	49	<LOD	145	61	176
					180808-Parrot-OB-Insitu-414	36	<LOD	174	48	244
					180808-Parrot-OB-Insitu-415	**1527**	<LOD	**3785**	**5524**	**4205**
					180808-Parrot-OB-Insitu-416	13	<LOD	<LOD	8	87
					180808-Parrot-OB-Insitu-417	<LOD	<LOD	<LOD	<LOD	<LOD
					180808-Parrot-OB-Insitu-418	8	<LOD	<LOD	10	95
					180808-Parrot-OB-Insitu-419	**1523**	10	**3722**	**5420**	**4103**
					180808-Parrot-OB-Insitu-420	9	<LOD	<LOD	14	91
					180808-Parrot-OB-Insitu-421	<LOD	<LOD	<LOD	<LOD	<LOD
					180808-Parrot-OB-Insitu-422	78	<LOD	284	149	133
					180808-Parrot-OB-Insitu-423	60	<LOD	289	185	168
					180808-Parrot-OB-Insitu-424	192	<LOD	**2418**	474	893
					180808-Parrot-OB-Insitu-425	181	<LOD	**3087**	642	817
					180808-Parrot-OB-Insitu-426	63	<LOD	332	177	200
					180808-Parrot-OB-Insitu-427	64	<LOD	285	144	174
					180808-Parrot-OB-Insitu-428	94	<LOD	334	201	165
					180808-Parrot-OB-Insitu-429	53	<LOD	344	190	162
					180808-Parrot-OB-Insitu-430	27	<LOD	180	50	199
					180808-Parrot-OB-Insitu-431	27	<LOD	168	36	197
					180808-Parrot-OB-Insitu-432	33	<LOD	184	38	172
					180808-Parrot-OB-Insitu-433	35	<LOD	244	277	233
					180808-Parrot-OB-Insitu-434	38	<LOD	175	64	204
					180808-Parrot-OB-Insitu-435	38	<LOD	196	71	236
			Contaminated stockpile area initial screening data	Surface/Stockpile	180808-Parrot-TA-Insitu-436	**241**	<LOD	**1553**	221	595
					180808-Parrot-TA-Insitu-437	**218**	<LOD	**1666**	222	658
					180808-Parrot-TA-Insitu-438	189	<LOD	**1292**	215	466

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	**Sample Location**	**General Description of Days Field Work**	**Field Notes**	**Sample Depth - From Ground Surface**	**Individual Field ID**	**Field XRF Results, mg/kg**				
						As	**Cd**	**Cu**	**Pb**	**Zn**
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Second day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. Wind row and consolidated contamination stockpile were also sampled.	Stockpile adjacent to RR toe slope with confirmed contamination from the day before	Surface/Stockpile	180808-Parrot-OB-Insitu-439	83	<LOD	694	92	437
					180808-Parrot-OB-Insitu-440	63	<LOD	407	85	301
					180808-Parrot-OB-Insitu-441	70	<LOD	673	91	432
					180808-Parrot-OB-Insitu-442	86	<LOD	727	107	427
					180808-Parrot-OB-Insitu-443	38	<LOD	265	32	200
					180808-Parrot-OB-Insitu-444	29	<LOD	162	32	135
			Contaminated stockpile on the west edge where clean material was placed	Surface/Stockpile	180808-Parrot-OB-Insitu-445	43	<LOD	387	60	270
					180808-Parrot-OB-Insitu-446	42	<LOD	213	58	180
					180808-Parrot-OB-Insitu-447	57	<LOD	381	79	272
					180808-Parrot-OB-Insitu-448	67	<LOD	457	67	223
					180808-Parrot-OB-Insitu-449	139	<LOD	**1557**	182	587
					180808-Parrot-OB-Insitu-450	101	<LOD	461	85	497
					180808-Parrot-OB-Insitu-451	69	<LOD	323	95	235
					180808-Parrot-OB-Insitu-452	62	<LOD	**1811**	237	554
					180808-Parrot-OB-Insitu-453	77	<LOD	344	80	240
			Small contaminated stockpile "Oreo"	Surface/Stockpile	180808-Parrot-OB-Insitu-454	166	<LOD	**2084**	275	712
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Third day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. Began sampling face wall at a frequency of one 8-pt composite sample per 1600 linear ft	Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 171-180	0-12 ft	180809-Parrot-OB-Insitu-455	71	<LOD	346	203	155
					180809-Parrot-OB-Insitu-456	80	<LOD	213	101	283
					180809-Parrot-OB-Insitu-457	81	<LOD	457	102	307
					180809-Parrot-OB-Insitu-458	72	<LOD	348	123	246
					180809-Parrot-OB-Insitu-459	57	25	253	207	105
					180809-Parrot-OB-Insitu-460	18	<LOD	155	29	669
					180809-Parrot-OB-Insitu-461	30	<LOD	340	95	126
					180809-Parrot-OB-Insitu-462	31	<LOD	206	43	170
					180809-Parrot-OB-Insitu-463	46	<LOD	410	116	134
					180809-Parrot-OB-Insitu-464	25	<LOD	179	45	94
					180809-Parrot-OB-Insitu-465	29	<LOD	166	48	167
					180809-Parrot-OB-Insitu-466	114	<LOD	360	133	121
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site		Haul of overburden from southeast corner by RR and perimeter fence. Sampled in-situ per load and 10 point composites per 10 loads ~ 400 CY stockpile composite samples Hauls 181-190	0-12 ft	180809-Parrot-OB-Insitu-467	94	<LOD	197	291	104
					180809-Parrot-OB-Insitu-468	75	<LOD	402	64	167
					180809-Parrot-OB-Insitu-469	38	<LOD	382	91	513
					180809-Parrot-OB-Insitu-470	40	<LOD	385	147	141
					180809-Parrot-OB-Insitu-471	32	<LOD	356	14	629
					180809-Parrot-OB-Insitu-472	30	<LOD	182	37	148
					180809-Parrot-OB-Insitu-473	16	<LOD	192	47	239
					180809-Parrot-OB-Insitu-474	42	<LOD	97	28	90
					180809-Parrot-OB-Insitu-475	37	<LOD	124	78	190
					180809-Parrot-OB-Insitu-476	28	<LOD	319	282	122
					180809-Parrot-OB-Insitu-477	27	<LOD	300	28	222

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site	Third day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 10 point composites to confirm data. Began sampling face wall at a frequency of one 8-pt composite sample per 1600 linear ft	In-situ of first high wall shots, these shot consisted of the first high wall composite	0-10 ft	180809-Parrot-OB-Insitu-478	61	<LOD	176	231	94
					180809-Parrot-OB-Insitu-479	36	<LOD	461	38	500
					180809-Parrot-OB-Insitu-480	97	<LOD	242	183	160
					180809-Parrot-OB-Insitu-481	47	<LOD	258	170	150
					180809-Parrot-OB-Insitu-482	16	<LOD	92	26	151
					180809-Parrot-OB-Insitu-483	8	<LOD	59	20	130
					180809-Parrot-OB-Insitu-484	14	<LOD	322	51	572
					180809-Parrot-OB-Insitu-485	22	<LOD	261	56	310
TBD	RR and perimeter fence the stockpile is located in the northwestern portion of the site. Consolidated contamination stockpile located on west side next to main stockpile.	Fifth day of hauling overburden at 0-12 feet. Hauls were sampled as trucks dump loads in stockpile. Truck loads were shot in-situ with 8 point composites to confirm data. In addition, stockpile of contaminated overburden (Tuesday "PM stockpile") was spot-checked as it was removed by excavator. Consolidated contaminated stockpile was shot in-situ.	In situ of main consolidated contamination pile	Surface	180814-Parrot-TA-Insitu-486	139	<LOD	241	97	221
					180814-Parrot-TA-Insitu-487	**449**	<LOD	**2249**	426	666
					180814-Parrot-TA-Insitu-488	**489**	<LOD	633	267	418
					180814-Parrot-TA-Insitu-489	117	<LOD	311	107	239
					180814-Parrot-TA-Insitu-490	**3004**	41	**3327**	**1735**	**1430**
					180814-Parrot-TA-Insitu-491	**696**	<LOD	**1570**	743	**1356**
					180814-Parrot-TA-Insitu-492	61	<LOD	792	154	477
					180814-Parrot-TA-Insitu-493	54	<LOD	481	131	309
					180814-Parrot-TA-Insitu-494	80	26	463	193	389
					180814-Parrot-TA-Insitu-495	165	<LOD	**1057**	209	482
					180814-Parrot-TA-Insitu-496	134	19	**1068**	125	424
					180814-Parrot-TA-Insitu-497	81	<LOD	**1107**	109	384
					180814-Parrot-TA-Insitu-498	136	<LOD	**1187**	198	487
					180814-Parrot-TA-Insitu-499	**246**	<LOD	**3255**	298	**1068**
					180814-Parrot-TA-Insitu-500	60	<LOD	726	164	438
					180814-Parrot-TA-Insitu-501	**227**	<LOD	550	130	316
					180814-Parrot-TA-Insitu-502	75	<LOD	871	166	460
					180814-Parrot-TA-Insitu-503	**311**	<LOD	272	136	173
					180814-Parrot-TA-Insitu-504	150	<LOD	417	114	248
					180814-Parrot-TA-Insitu-505	**401**	<LOD	533	280	295
					180814-Parrot-TA-Insitu-506	**856**	<LOD	624	657	498
					180814-Parrot-TA-Insitu-507	**2352**	<LOD	198	67	116
					180814-Parrot-TA-Insitu-508	149	<LOD	204	81	173
TBD	100 ft west of perimeter fence and 300 ft north of south fence	First day of hauling second layer of overburden at 12-24 ft.	Green dirt noticed by excavator operator. Thought to be tailings but were not. Only exceedance on darkest green parts of dirt. JF suggests green is oxidized iron from decayed tree (wood was also present).	20 ft	180815-Parrot-OB-Insitu-509	54	<LOD	269	59	316
					180815-Parrot-OB-Insitu-510	40	<LOD	349	125	327
					180815-Parrot-OB-Insitu-511	38	<LOD	291	86	218
					180815-Parrot-OB-Insitu-512	35	<LOD	195	92	132
					180815-Parrot-OB-Insitu-513	55	<LOD	189	72	147
					180815-Parrot-OB-Insitu-514	**577**	<LOD	101	124	30
	RR and perimeter fence the stockpile is located in the northwestern portion of the site. Consolidated contamination stockpile located on west side next		In situ of overburden being added to main stockpile	12-24 ft	180815-Parrot-OB-Insitu-515	15	<LOD	307	30	820
					180815-Parrot-OB-Insitu-516	31	<LOD	236	44	354
					180815-Parrot-OB-Insitu-517	12	<LOD	282	22	616
					180815-Parrot-OB-Insitu-518	70	<LOD	**1143**	204	499
					180815-Parrot-OB-Insitu-519	62	<LOD	222	138	269
					180815-Parrot-OB-Insitu-520	110	<LOD	271	143	313

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	SE Corner. GPSed	Hauling tailings from the SE corner of site to ground water level	Sampled alluvium brown sand at groundwater interface (1 in above)	24 ft	180823-Parrot-RK-Insitu-521	120	<LOD	**1490**	82	802
					180823-Parrot-RK-Insitu-522	**417**	<LOD	578	53	275
					180823-Parrot-RK-Insitu-523	**2905**	<LOD	**1659**	78	589
					180823-Parrot-RK-Insitu-524	65	<LOD	**4722**	139	973
					180823-Parrot-RK-Insitu-525	**473**	<LOD	**1665**	248	592
					180823-Parrot-RK-Insitu-526	<LOD	<LOD	**1285**	<LOD	429
					180823-Parrot-RK-Insitu-527	162	<LOD	**1657**	251	551
					180823-Parrot-RK-Insitu-528	**694**	<LOD	**1228**	77	500
					180823-Parrot-RK-Insitu-529	**207**	<LOD	**1678**	46	920
					180823-Parrot-RK-Insitu-530	**219**	<LOD	**1908**	40	698
					180823-Parrot-RK-Insitu-531	**403**	<LOD	**1591**	79	741
					180823-Parrot-RK-Insitu-532	13	<LOD	**2587**	28	701
					180823-Parrot-RK-Insitu-533	53	<LOD	**2573**	47	864
					180823-Parrot-RK-Insitu-534	162	<LOD	**6462**	212	**1488**
					180823-Parrot-RK-Insitu-535	23	<LOD	**1753**	59	621
					180823-Parrot-RK-Insitu-536	66	<LOD	**1234**	49	434
					180823-Parrot-RK-Insitu-537	52	<LOD	810	17	589
TBD	Wester Slag Cell One	Methodical sampling of pit floor, sample was requested by engineer	Topsoil scraped from top-of-slag and stockpile on west end of Slag Cell 1	Surface	180828-Parrot-OB-Insitu-538	15	<LOD	109	19	86
					180828-Parrot-OB-Insitu-539	27	<LOD	119	26	101
					180828-Parrot-OB-Insitu-540	61	<LOD	188	50	202
TBD	South central pit area near fenced street. Area was GPSed	In-situ of misplaced OB and methodical sampling of alluvium	OB from the Brick Area was placed in the pit excavation, visible contaminated areas as well as "normal" looking areas were elevated	Surface	180911-Parrot-TA-Insitu-541	**1706**	<LOD	857	371	447
					180911-Parrot-TA-Insitu-542	**1731**	<LOD	**1098**	977	780
					180911-Parrot-TA-Insitu-543	**1513**	<LOD	**2544**	763	**1323**
					180911-Parrot-TA-Insitu-544	**1743**	<LOD	**3884**	918	**1425**
					180911-Parrot-TA-Insitu-545	**2328**	<LOD	**1489**	617	792
					180911-Parrot-TA-Insitu-546	**990**	<LOD	822	399	482
					180911-Parrot-TA-Insitu-547	**699**	<LOD	571	317	309
					180911-Parrot-TA-Insitu-548	**1177**	<LOD	541	110	175
					180911-Parrot-TA-Insitu-549	**3414**	<LOD	550	261	190
					180911-Parrot-TA-Insitu-550	**620**	<LOD	537	273	311
					180911-Parrot-TA-Insitu-551	**993**	<LOD	883	879	450
					180911-Parrot-TA-Insitu-552	**722**	<LOD	493	287	397
					180911-Parrot-TA-Insitu-553	**299**	<LOD	263	160	192
					180911-Parrot-TA-Insitu-554	**905**	<LOD	693	137	262
TBD	South central pit area near fenced street. Area was GPSed		Alluvium layer was mixed with clays and was at the ground water elevation, pooling observed.	Surface	180911-Parrot-CY-Insitu-555	106	<LOD	**3645**	142	977
					180911-Parrot-CY-Insitu-556	**1271**	<LOD	**1642**	135	763
					180911-Parrot-CY-Insitu-557	<LOD	<LOD	**2466**	909	872
					180911-Parrot-CY-Insitu-558	**235**	<LOD	**2013**	171	638
					180911-Parrot-CY-Insitu-559	<LOD	<LOD	**1684**	229	**1955**
					180911-Parrot-CY-Insitu-560	**399**	<LOD	**3198**	126	**1030**
					180911-Parrot-CY-Insitu-561	<LOD	<LOD	**1721**	104	777
					180911-Parrot-CY-Insitu-562	77	<LOD	**1889**	230	**1420**
					180911-Parrot-CY-Insitu-563	102	<LOD	**3155**	309	**1173**
					180911-Parrot-CY-Insitu-564	90	<LOD	**2764**	162	930
					180911-Parrot-CY-Insitu-565	<LOD	<LOD	**3505**	112	**1562**
					180911-Parrot-CY-Insitu-566	54	<LOD	**1910**	125	**2752**

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	South central pit area near fenced street. Area was GPSed	In-situ of misplaced OB and methodical sampling of alluvium	Tailing adjacent to the alluvium sampled	Surface	180911-Parrot-TA-Insitu-567	**347**	<LOD	471	263	892
					180911-Parrot-TA-Insitu-568	**583**	<LOD	**1376**	325	**1947**
					180911-Parrot-TA-Insitu-569	125	<LOD	258	457	388
					180911-Parrot-TA-Insitu-570	**247**	<LOD	355	759	505
					180911-Parrot-TA-Insitu-571	181	<LOD	314	514	827
					180911-Parrot-TA-Insitu-572	**509**	<LOD	385	748	**1073**
TBD	North of Brick Area, near RR toe slope, GPSed		OB berm north of the Brick area. Some looked "normal" and some contained visible contamination, area was determined to be contaminated	Surface	180911-Parrot-TA-Insitu-573	146	<LOD	334	86	194
					180911-Parrot-TA-Insitu-574	195	<LOD	**3307**	227	308
					180911-Parrot-TA-Insitu-575	180	<LOD	270	45	171
					180911-Parrot-TA-Insitu-576	**421**	<LOD	246	70	184
					180911-Parrot-TA-Insitu-577	**1155**	<LOD	346	110	229
					180911-Parrot-TA-Insitu-578	**856**	<LOD	311	131	182
					180911-Parrot-TA-Insitu-579	162	<LOD	560	180	253
					180911-Parrot-TA-Insitu-580	**313**	<LOD	353	145	235
					180911-Parrot-TA-Insitu-581	**385**	<LOD	650	261	343
					180911-Parrot-TA-Insitu-582	**634**	<LOD	708	214	409
TBD	Tailing Removal Area (GPSed)	Conducted QAQC and lab samples, data entry, and collected a sample and shot in-situ areas via Ron's requests. GPS Survey of the construction footprint	Ron requested sample of interface between tailing/clay layer and underlying alluvium. Alluvium layer exceeded action levels.	Surface	180912-Parrot-CY-Insitu-583	40	<LOD	**1554**	136	**1965**
					180912-Parrot-CY-Insitu-584	**203**	<LOD	**3361**	852	**6998**
					180912-Parrot-CY-Insitu-585	**287**	<LOD	**4796**	356	**2059**
					180912-Parrot-CY-Insitu-586	46	<LOD	**4424**	232	**1022**
					180912-Parrot-CY-Insitu-587	<LOD	<LOD	**4445**	309	601
					180912-Parrot-CY-Insitu-588	57	<LOD	974	134	952
					180912-Parrot-CY-Insitu-589	47	<LOD	**1185**	152	962
					180912-Parrot-CY-Insitu-590	**267**	<LOD	592	136	332
					180912-Parrot-CY-Insitu-591	**898**	<LOD	924	201	493
					180912-Parrot-CY-Insitu-592	**1463**	<LOD	914	119	484
					180912-Parrot-CY-Insitu-593	**381**	<LOD	798	228	668
					180912-Parrot-CY-Insitu-594	**327**	<LOD	904	256	443
					180912-Parrot-CY-Insitu-595	**607**	<LOD	**15853**	935	671
					180912-Parrot-CY-Insitu-596	**900**	<LOD	**1241**	355	407
					180912-Parrot-CY-Insitu-597	**471**	<LOD	**4747**	145	361
					180912-Parrot-CY-Insitu-598	**380**	<LOD	**4353**	165	539
					180912-Parrot-CY-Insitu-599	20	<LOD	826	140	**1070**
					180912-Parrot-CY-Insitu-600	83	<LOD	**1441**	324	**2114**
					180912-Parrot-CY-Insitu-601	78	<LOD	932	359	**1151**
					180912-Parrot-CY-Insitu-602	<LOD	<LOD	**4013**	<LOD	**2884**
					180912-Parrot-CY-Insitu-603	26	<LOD	**3442**	134	**1355**
					180912-Parrot-CY-Insitu-604	51	<LOD	**4575**	245	**1642**
					180912-Parrot-CY-Insitu-605	66	<LOD	**4236**	149	**1301**

Sampling Labeling Schema

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Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Days Field Work	Field Notes	Sample Depth - From Ground Surface	Individual Field ID	Field XRF Results, mg/kg				
						As	Cd	Cu	Pb	Zn
TBD	OB removal area on northeast by RR (GPSed)	Conducted GIS data entry, collected sampled and in-situ samples of the OB area to the northeast by RR	OB removal area at interface with tailings layer, some intermixing but not a lot	Surface of OB and tailings	180913-Parrot-TA-Insitu-606	**392**	<LOD	226	200	87
					180913-Parrot-TA-Insitu-607	**201**	<LOD	333	189	371
					180913-Parrot-TA-Insitu-608	**615**	<LOD	314	139	130
					180913-Parrot-TA-Insitu-609	**227**	<LOD	297	120	271
					180913-Parrot-TA-Insitu-610	54	<LOD	371	97	148
					180913-Parrot-TA-Insitu-611	**253**	<LOD	383	129	278
					180913-Parrot-TA-Insitu-612	**495**	<LOD	259	107	143
					180913-Parrot-TA-Insitu-613	144	<LOD	219	121	274
					180913-Parrot-TA-Insitu-614	**238**	<LOD	310	127	333
				Sidewall of OB	180913-Parrot-TA-Insitu-615	126	<LOD	216	60	115
					180913-Parrot-TA-Insitu-616	18	<LOD	249	107	329
					180913-Parrot-TA-Insitu-617	14	<LOD	142	67	298
					180913-Parrot-TA-Insitu-618	**1094**	<LOD	227	137	101
					180913-Parrot-TA-Insitu-619	**1123**	<LOD	466	330	300
					180913-Parrot-TA-Insitu-620	111	<LOD	227	54	114
					180913-Parrot-TA-Insitu-621	123	<LOD	276	84	184
TBD	OB removal area on northeast by RR (GPSed)		OB removed at varying depths following the OB and tailings interface.	12 ft at interface between OB and Tailings	180913-Parrot-OB-Insitu-622	**468**	<LOD	**2283**	738	**1248**
					180913-Parrot-OB-Insitu-623	115	<LOD	**1901**	460	825
					180913-Parrot-OB-Insitu-624	156	<LOD	**2300**	602	**5573**
					180913-Parrot-OB-Insitu-625	195	<LOD	**1466**	420	868
					180913-Parrot-OB-Insitu-626	**499**	<LOD	**1518**	518	508
					180913-Parrot-OB-Insitu-627	**234**	<LOD	**1787**	460	728
					180913-Parrot-OB-Insitu-628	**221**	<LOD	**1732**	509	689
					180913-Parrot-OB-Insitu-629	**305**	<LOD	**1439**	945	476
					180913-Parrot-OB-Insitu-630	<LOD	<LOD	**1478**	368	728
					180913-Parrot-OB-Insitu-631	**242**	<LOD	**1523**	538	581
					180913-Parrot-OB-Insitu-632	65	<LOD	**1451**	342	592
					180913-Parrot-OB-Insitu-633	178	<LOD	**1768**	662	725
					180913-Parrot-OB-Insitu-634	**234**	<LOD	**1310**	703	596
					180913-Parrot-OB-Insitu-635	93	<LOD	**1506**	585	930
					180913-Parrot-OB-Insitu-636	**254**	58	**1477**	813	667
					180913-Parrot-OB-Insitu-637	**363**	<LOD	**1739**	504	759
TBD	Northeastern cell adjacent to RR tracks. First excavator pass at depth, GPSed.	Alluvium samples in-situ followed by 8-PT composite confirmation samples at GW elevation	Samples of alluvium bench and bottom of pit near GW. As elevated at clay/alluvium and drops at depth.	12 ft at below clay layer and 8-ft below clay layer at GW elevation	180918-Parrot-RK-Insitu-638	**593**	<LOD	499	231	410
					180918-Parrot-RK-Insitu-639	**373**	<LOD	778	**1174**	**1508**
					180918-Parrot-RK-Insitu-640	**598**	<LOD	648	355	551
					180918-Parrot-RK-Insitu-641	**1741**	<LOD	**1104**	161	553
					180918-Parrot-RK-Insitu-642	**486**	<LOD	940	801	535
					180918-Parrot-RK-Insitu-643	**1191**	<LOD	491	**1191**	**1553**
					180918-Parrot-RK-Insitu-644	**1183**	<LOD	627	152	413
					180918-Parrot-RK-Insitu-645	25	<LOD	**1947**	240	684
					180918-Parrot-RK-Insitu-646	**674**	<LOD	**12737**	**2516**	**2355**
					180918-Parrot-RK-Insitu-647	51	<LOD	**1042**	243	500
					180918-Parrot-RK-Insitu-648	31	<LOD	937	159	474
					180918-Parrot-RK-Insitu-649	152	<LOD	**10643**	185	**1093**
					180918-Parrot-RK-Insitu-650	**268**	<LOD	**2063**	291	650
					180918-Parrot-RK-Insitu-651	32	<LOD	**1233**	161	**1258**
					180918-Parrot-RK-Insitu-652	**239**	<LOD	**5129**	256	**1362**

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Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	**Sample Location**	**General Description of Days Field Work**	**Field Notes**	**Sample Depth - From Ground Surface**	**Individual Field ID**	**Field XRF Results, mg/kg**				
						As	**Cd**	**Cu**	**Pb**	**Zn**
TBD	Bench between alluvium elevations (GPSed)	In-situ to determine alluvium excavation depth	Lee requested samples, JT requested excavation to go to GW	4 ft below clay interface/4 ft above GW	180919-Parrot-RK-Insitu-653	32	<LOD	**1164**	183	357
					180919-Parrot-RK-Insitu-654	103	<LOD	**1842**	173	428
TBD	Pit Bottom on second excavating pass in northeastern corner (GPSed)		In-situ samples to determine if GW elevation excavation was justified	Bottom of Pit at GW	180919-Parrot-RK-Insitu-655	22	<LOD	627	139	615
					180919-Parrot-RK-Insitu-656	67	<LOD	**1578**	160	500
					180919-Parrot-RK-Insitu-657	65	<LOD	**1350**	185	454
					180919-Parrot-RK-Insitu-658	64	<LOD	**4762**	161	835
					180919-Parrot-RK-Insitu-659	34	<LOD	**1406**	200	505
					180919-Parrot-RK-Insitu-660	132	<LOD	**4033**	391	**1346**
					180919-Parrot-RK-Insitu-661	164	<LOD	**1845**	254	509
					180919-Parrot-RK-Insitu-662	39	<LOD	**1004**	135	525
					180919-Parrot-RK-Insitu-663	59	<LOD	**5071**	181	**1102**
					180919-Parrot-RK-Insitu-664	**257**	<LOD	**1374**	791	950
					180919-Parrot-RK-Insitu-665	128	<LOD	**2631**	234	617
TBD	Southwestern corner of next removal cell.	Sampling of alluvium bottom, followed by composite samples. Sampled OB stockpile that was used as backfill in the ramp area.	Clay was not removed effectively, XRF showed additional removal was necessary	At clay interface near GW	181002-Parrot-RK-Insitu-666	<LOD	<LOD	**1296**	346	<LOD
					181002-Parrot-RK-Insitu-667	<LOD	<LOD	**1199**	552	**1018**
					181002-Parrot-RK-Insitu-668	<LOD	<LOD	**1414**	565	812
					181002-Parrot-RK-Insitu-669	<LOD	<LOD	**1579**	485	847
					181002-Parrot-RK-Insitu-670	<LOD	<LOD	**1627**	476	**1087**
					181002-Parrot-RK-Insitu-671	<LOD	<LOD	**1621**	454	949
					181002-Parrot-RK-Insitu-672	<LOD	<LOD	**1294**	519	896
					181002-Parrot-RK-Insitu-673	<LOD	<LOD	**1559**	695	582
TBD	Sothwestern corner of next removal cell.		Stockpile did contain some hot areas but the overall average was below action levels. Stockpile contained asphalt, this pile was buried next to the alluvium that was excavated that same day.	Stockpile of OC scraped from southwest of the site. Top of original ground.	181002-Parrot-OB-Insitu-674	<LOD	<LOD	**1263**	464	808
					181002-Parrot-OB-Insitu-675	<LOD	<LOD	**1327**	468	830
					181002-Parrot-OB-Insitu-676	<LOD	<LOD	**1256**	460	921
					181002-Parrot-OB-Insitu-677	<LOD	<LOD	**1414**	396	736
					181002-Parrot-OB-Insitu-678	82	<LOD	138	**1441**	412
					181002-Parrot-OB-Insitu-679	64	<LOD	550	51	387
					181002-Parrot-OB-Insitu-680	99	<LOD	**1885**	164	481
					181002-Parrot-OB-Insitu-681	40	<LOD	279	84	389
					181002-Parrot-OB-Insitu-682	<LOD	<LOD	179	98	326
					181002-Parrot-OB-Insitu-683	<LOD	<LOD	202	70	306
					181002-Parrot-OB-Insitu-684	32	<LOD	163	70	367
					181002-Parrot-OB-Insitu-685	<LOD	<LOD	150	104	612
					181002-Parrot-OB-Insitu-686	35	<LOD	262	124	548
					181002-Parrot-OB-Insitu-687	25	<LOD	184	108	393
					181002-Parrot-OB-Insitu-688	<LOD	<LOD	<LOD	<LOD	248
TBD	Northern 1/3 of Cell 3 heading west. Area GPSed	In-situ samples of the pit floor and the northern high wall were collected and sampled. The highwall was sample to see if excavation was below the clay layer. It does not apprear to be…	Samples of alluvium /clay mixture approximately 2' from Ground Water, sample northern 1/3 of pit, the southern 2/3 of the pit was inundated with no access.	Pit floor -2 ft from ground water (25 ft)	181016-Parrot-RK-Insitu-689	17	<LOD	420	208	**1103**
					181016-Parrot-RK-Insitu-690	66	<LOD	929	228	**1774**
					181016-Parrot-RK-Insitu-691	34	<LOD	719	254	**1906**
					181016-Parrot-RK-Insitu-692	27	<LOD	568	135	**1595**
					181016-Parrot-RK-Insitu-693	25	<LOD	337	169	**1174**
					181016-Parrot-RK-Insitu-694	46	<LOD	727	206	**1576**
					181016-Parrot-RK-Insitu-695	64	<LOD	**3384**	226	**1980**
					181016-Parrot-RK-Insitu-696	25	<LOD	392	207	**1083**
					181016-Parrot-RK-Insitu-697	40	<LOD	298	161	**1283**
					181016-Parrot-RK-Insitu-698	29	<LOD	625	153	**1436**
					181016-Parrot-RK-Insitu-699	24	<LOD	461	152	**1255**
					181016-Parrot-RK-Insitu-700	21	<LOD	821	144	**1585**

Sampling Labeling Schema

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Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	**Sample Location**	**General Description of Days Field Work**	**Field Notes**	**Sample Depth - From Ground Surface**	**Individual Field ID**	**Field XRF Results, mg/kg**				
						As	**Cd**	**Cu**	**Pb**	**Zn**
TBD	North High Wall sampled at various heights	In-situ samples of the pit floor and the northern high wall were collected and sampled. The highwall was sample to see if excavation was below the clay layer. It does not apprear to be…	Samples of Northern High Wall at various heighs to determine clay extent. Samples were collected and scaned 3 times with the average shown.	2 ft Above Pit Elevation NE	181016-Parrot-CY-Insitu-701	43	<LOD	510	213	**4982**
				5 ft Above Pit Elevation NE	181016-Parrot-CY-Insitu-702	56	<LOD	**4038**	248	**3210**
				8 ft Above Pit Elevation NE	181016-Parrot-CY-Insitu-703	64	<LOD	574	373	**1153**
				2 ft Above Pit Elevation NW	181016-Parrot-CY-Insitu-704	52	<LOD	**2491**	294	**1613**
				4 ft Above Pit Elevation NW	181016-Parrot-CY-Insitu-705	59	<LOD	**4774**	228	**3129**
				6 ft Above Pit Elevation NW	181016-Parrot-CY-Insitu-706	50	<LOD	**2651**	339	**1826**
				2 ft Above Pit Elevation NC	181016-Parrot-CY-Insitu-707	65	<LOD	570	260	**2727**
				3 ft Above Pit Elevation NC	181016-Parrot-CY-Insitu-708	108	<LOD	**1390**	731	**1566**
				5 ft Above Pit Elevation NC	181016-Parrot-CY-Insitu-709	65	<LOD	**1846**	275	**4007**
TBD	Tailing Bench in OB removal area	Defined tailings bench area and started sampling OB that was being removed a placed in final pit placement area.	Exposed tailings bench when hauling OB, tailings were orange and visable.	Surface sample of tailings bench	181018-Parrot-TA-Insitu-710	**473**	<LOD	499	467	472
					181018-Parrot-TA-Insitu-711	**788**	<LOD	286	605	226
					181018-Parrot-TA-Insitu-712	**758**	<LOD	296	660	202
TBD	High wall OB removal area, GPSed		Some brick a mining debris within OB removal area, some samples were hot but overall area was clean	Surface samples of the high wall OB area that was being removed	181018-Parrot-OB-Insitu-713	101	<LOD	627	250	569
					181018-Parrot-OB-Insitu-714	61	<LOD	538	97	373
					181018-Parrot-OB-Insitu-715	**246**	<LOD	543	243	761
					181018-Parrot-OB-Insitu-716	**549**	<LOD	319	209	285
					181018-Parrot-OB-Insitu-717	131	<LOD	354	610	79
					181018-Parrot-OB-Insitu-718	**239**	<LOD	501	385	232
					181018-Parrot-OB-Insitu-719	161	<LOD	633	296	428
					181018-Parrot-OB-Insitu-720	**248**	<LOD	801	466	911
					181018-Parrot-OB-Insitu-721	95	<LOD	563	152	524
					181018-Parrot-OB-Insitu-722	94	<LOD	862	378	930
					181018-Parrot-OB-Insitu-723	77	<LOD	617	589	**1023**
					181018-Parrot-OB-Insitu-724	60	<LOD	460	104	339
					181018-Parrot-OB-Insitu-725	71	<LOD	455	209	445
					181018-Parrot-OB-Insitu-726	84	26	293	91	406
TBD	Final OB placement areas. GPSed		Sampling was conducted because unclassified OB was being hauled directly into final placement area without characterization. Initial sampling effort followed by multiple composite samples.	Surface samples of OB placement area.	181018-Parrot-OB-Insitu-727	<LOD	<LOD	149	135	389
					181018-Parrot-OB-Insitu-728	92	<LOD	429	218	713
					181018-Parrot-OB-Insitu-729	80	<LOD	426	276	348
					181018-Parrot-OB-Insitu-730	66	<LOD	606	336	648
					181018-Parrot-OB-Insitu-731	22	<LOD	665	427	373
					181018-Parrot-OB-Insitu-732	20	<LOD	309	93	889
					181018-Parrot-OB-Insitu-733	37	<LOD	256	107	371
					181018-Parrot-OB-Insitu-734	121	<LOD	500	289	661
					181018-Parrot-OB-Insitu-735	**1106**	<LOD	802	860	**1257**
					181018-Parrot-OB-Insitu-736	**618**	<LOD	400	831	507
					181018-Parrot-OB-Insitu-737	29	<LOD	284	239	716
TBD	MH will correct JS GIS	10/22: Screen floor of middle-west cell. Removal of cell had halted as crew claimed to have found new soil of unknown quality. MH came on site ~11:45 AM and took in-situ shots of cell floor. Test pitting was then performed in the next area to be removed (southwest corner). Composite samples were taken of various excavated test pit soils.	Middle-west floor (lower lens on morthern most end)	Surface floor samples -lowest level	181022-Parrot-RK-Insitu-738	67	<LOD	**2309**	329	**2518**
					181022-Parrot-RK-Insitu-739	140	<LOD	**6462**	466	**2240**
					181022-Parrot-RK-Insitu-740	59	<LOD	**2016**	255	**2180**
TBD	MH will correct JS GIS		Middle - west floor (northern half)	Surface floor samples -mid level	181022-Parrot-RK-Insitu-741	48	<LOD	597	271	**1321**
					181022-Parrot-RK-Insitu-742	48	<LOD	568	276	**1292**
					181022-Parrot-RK-Insitu-743	36	<LOD	846	642	**1733**
					181022-Parrot-RK-Insitu-744	87	<LOD	**1708**	477	**2408**
					181022-Parrot-RK-Insitu-745	47	<LOD	**1303**	256	**1149**
TBD	MH will correct JS GIS		Middle - west floor (southern half)	Surface floor samples - mid level	181022-Parrot-RK-Insitu-746	38	8	**10143**	196	**1555**
					181022-Parrot-RK-Insitu-747	39	61	**6901**	73	**7265**
					181022-Parrot-RK-Insitu-748	**214**	<LOD	**7919**	143	**1680**

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	**Sample Location**	**General Description of Days Field Work**	**Field Notes**	**Sample Depth - From Ground Surface**	**Individual Field ID**	**Field XRF Results, mg/kg**				
						As	**Cd**	**Cu**	**Pb**	**Zn**
TBD	MH will correct JS GIS	10/22: Screen floor of middle-west cell. Removal of cell had halted as crew claimed to have found new soil of unknown quality. MH came on site ~11:45 AM and took in-situ shots of cell floor. Test pitting	Middle west floor (white tailings)	Middle- west floor - tailings wall	181022-Parrot-TA-Insitu-749	<LOD	<LOD	259	**1188**	**1650**
					181022-Parrot-TA-Insitu-750	**279**	25	**9031**	509	**6681**
					181022-Parrot-TA-Insitu-751	**390**	<LOD	**9077**	917	**2837**
TBD	JF will correct JS GIS	10/23: Screen area to north of where test pits had been dug. JF on site ~8:00 AM and both screened northern ridge and soil surrounding previous day's test pits, as well as processed backlogged samples.	Southwest ridge (test pit locations) - shots taken every 10 ft from lathe at fence	Surface OB	181023-Parrot-OB-Insitu-752	28	<LOD	213	210	578
					181023-Parrot-OB-Insitu-753	41	<LOD	404	266	816
					181023-Parrot-OB-Insitu-754	36	<LOD	470	126	489
					181023-Parrot-OB-Insitu-755	33	<LOD	339	215	583
					181023-Parrot-OB-Insitu-756	34	<LOD	398	216	665
					181023-Parrot-OB-Insitu-757	176	<LOD	538	158	504
					181023-Parrot-OB-Insitu-758	54	<LOD	993	78	474
					181023-Parrot-OB-Insitu-759	9	<LOD	70	22	78
TBD	Tailings insitu shots SW Corner	11/02: JF on site. In-situ shots taken in SW corner where tailing of white, yellow and lite red were present . One grab sample taken of yellow tailings near western wooden shaft. 8pt Composite taken in central area of excavation cell at base. North and South ends not sampled due to gw ponding and high wall instability. Samples left to dry overnight. Pictures uploaded to 11/02 folder of both	Stark White Tailings	Surface Tailings Progressing from NW to SE across the exposed tailings cell	181102-Parrot-TA-Insitu-760	56	< LOD	76	379	**1586**
			Light Red Tailings		181102-Parrot-TA-Insitu-761	187	< LOD	262	656	825
			Yellow Tailings		181102-Parrot-TA-Insitu-762	**428**	< LOD	528	550	**1074**
			Light Yellow Tailings		181102-Parrot-TA-Insitu-763	113	< LOD	134	819	289
			Stark White Tailings		181102-Parrot-TA-Insitu-764	84	< LOD	78	**1020**	716
			Stark White Tailings		181102-Parrot-TA-Insitu-765	85	< LOD	74	**1216**	**1854**
			Yellow Tailings		181102-Parrot-TA-Insitu-766	167	< LOD	232	712	796
			Yellow Tailings		181102-Parrot-TA-Insitu-767	135	< LOD	315	**1220**	853
			Yellow Tailings		181102-Parrot-TA-Insitu-768	**649**	< LOD	433	791	422
TBD	OB areas located in the northwest portion on the site, areas GPSed	Sampled northwestern OB areas, first with in-situ samples requested by JT then followed up by confitmation composite sampleing.	Sampled exposed OB with JT to see if any tailings packets were left in place. None were found.	Surface samples of OB excavation areas.	181107-Parrot-OB-Insitu-769	51	< LOD	328	56	219
					181107-Parrot-OB-Insitu-770	22	< LOD	488	42	516
					181107-Parrot-OB-Insitu-771	76	< LOD	410	90	485
					181107-Parrot-OB-Insitu-772	95	< LOD	661	166	530
					181107-Parrot-OB-Insitu-773	43	< LOD	319	330	194
					181107-Parrot-OB-Insitu-774	59	< LOD	821	37	744
					181107-Parrot-OB-Insitu-775	40	< LOD	307	51	349
					181107-Parrot-OB-Insitu-776	43	< LOD	854	84	392
					181107-Parrot-OB-Insitu-777	19	< LOD	165	68	223
					181107-Parrot-OB-Insitu-778	< LOD	< LOD	53	< LOD	70
NA	GPS locations presented on sampling figure	BSB Crusher Overburden Soil Investigation	Soil screening of the BSB crusher area. Initial XRF shots to characterize the area, followed by five composite samples. Shots were taken around the base of the stockpile in Compostie Sample Areas 1-3.	Surface Samples	190515-ParrotImport-OB-Insitu-001	41	< LOD	236	93	409
					190515-ParrotImport-OB-Insitu-002	< LOD	< LOD	< LOD	17	51
					190515-ParrotImport-OB-Insitu-003	34	< LOD	247	52	209
					190515-ParrotImport-OB-Insitu-004	10	< LOD	128	23	99
					190515-ParrotImport-OB-Insitu-005	58	< LOD	558	193	812
					190515-ParrotImport-OB-Insitu-006	23	< LOD	321	97	319
					190515-ParrotImport-OB-Insitu-007	18	< LOD	178	78	262
					190515-ParrotImport-OB-Insitu-008	28	< LOD	149	50	223
					190515-ParrotImport-OB-Insitu-009	21	< LOD	83	30	159
					190515-ParrotImport-OB-Insitu-010	< LOD	< LOD	119	39	123

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C3. Parrot Removal In-Situ - XRF Sampling - Phase 2A

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	**Sample Location**	**General Description of Days Field Work**	**Field Notes**	**Sample Depth - From Ground Surface**	**Individual Field ID**	**Field XRF Results, mg/kg**				
						As	**Cd**	**Cu**	**Pb**	**Zn**
NA	Southern Aspect of Western Stockpile	Analysed 47 in-siitu soil screening XRF samples on two major stockpile locations and one small stockpile. The two major stockpiles were seperated into four quadrants with each quadrant sampled 5 times. Composite samples were collected from each quadrant following soils screaning analysis. The two major stockpiles have 20 screening results and 4 composite samples each. The small stockpile had 5 screening samples with one compsite collected. The two remaining samples were taken along the excavation wall where suspected waste material was observed. The orange colored material present along the wall was below action levels.	In-situ screening samples 1-5, with composite sample taken (001)	Surface Sample - West Stockpile	191204-ParrotImport2-OB-Insitu-001	<LOD	<LOD	322	688	**1787**
					191204-ParrotImport2-OB-Insitu-002	<LOD	<LOD	356	320	978
					191204-ParrotImport2-OB-Insitu-003	52	<LOD	407	**1777**	**2114**
					191204-ParrotImport2-OB-Insitu-004	30	<LOD	335	677	**1429**
					191204-ParrotImport2-OB-Insitu-005	35	<LOD	322	627	**2141**
	East Aspect of Western Stockpile		In-situ screening samples 6-10, with composite sample taken (002)	Surface Sample - West Stockpile	191204-ParrotImport2-OB-Insitu-006	<LOD	<LOD	271	434	**1681**
					191204-ParrotImport2-OB-Insitu-007	<LOD	<LOD	341	734	**1802**
					191204-ParrotImport2-OB-Insitu-008	<LOD	<LOD	320	648	**1825**
					191204-ParrotImport2-OB-Insitu-009	51	<LOD	356	761	**2049**
					191204-ParrotImport2-OB-Insitu-010	<LOD	<LOD	255	581	**1734**
	Northern Aspect of Western Stockpile		In-situ screening samples 11-15, with composite sample taken (003)	Surface Sample - West Stockpile	191204-ParrotImport2-OB-Insitu-011	<LOD	<LOD	318	505	**1301**
					191204-ParrotImport2-OB-Insitu-012	62	<LOD	361	567	**1909**
					191204-ParrotImport2-OB-Insitu-013	<LOD	<LOD	366	623	**1721**
					191204-ParrotImport2-OB-Insitu-014	28	<LOD	333	610	**1902**
					191204-ParrotImport2-OB-Insitu-015	34	<LOD	345	624	**1897**
	Western Aspect of Western Stockpile		In-situ screening samples 16-20, with composite sample taken (004)	Surface Sample - West Stockpile	191204-ParrotImport2-OB-Insitu-016	<LOD	<LOD	308	649	**1709**
					191204-ParrotImport2-OB-Insitu-017	<LOD	<LOD	265	579	**1808**
					191204-ParrotImport2-OB-Insitu-018	33	<LOD	370	667	**2428**
					191204-ParrotImport2-OB-Insitu-019	<LOD	<LOD	319	572	**1807**
					191204-ParrotImport2-OB-Insitu-020	<LOD	<LOD	336	571	**1689**
	Western Aspect of Eastern Stockpile		In-situ screening samples 21-25, with composite sample taken (005)	Surface Sample - East Stockpile	191204-ParrotImport2-OB-Insitu-021	46	<LOD	507	978	**2695**
					191204-ParrotImport2-OB-Insitu-022	<LOD	<LOD	405	906	**2663**
					191204-ParrotImport2-OB-Insitu-023	25	<LOD	298	473	**1607**
					191204-ParrotImport2-OB-Insitu-024	23	<LOD	334	445	**1345**
					191204-ParrotImport2-OB-Insitu-025	<LOD	<LOD	318	457	943
	Northern Aspect of Eastern Stockpile		In-situ screening samples 26-30, with composite sample taken (006)	Surface Sample - East Stockpile	191204-ParrotImport2-OB-Insitu-026	<LOD	<LOD	362	668	**2058**
					191204-ParrotImport2-OB-Insitu-027	<LOD	<LOD	422	826	**2601**
					191204-ParrotImport2-OB-Insitu-028	51	<LOD	435	649	**1871**
					191204-ParrotImport2-OB-Insitu-029	<LOD	<LOD	271	498	**1299**
					191204-ParrotImport2-OB-Insitu-030	77	<LOD	378	387	**1237**
	Eastern Aspect of Eastern Stockpile		In-situ screening samples 31-35, with composite sample taken (007)	Surface Sample - East Stockpile	191204-ParrotImport2-OB-Insitu-031	66	<LOD	665	854	**2190**
					191204-ParrotImport2-OB-Insitu-032	49	<LOD	400	663	**1914**
					191204-ParrotImport2-OB-Insitu-033	55	<LOD	582	765	**1790**
					191204-ParrotImport2-OB-Insitu-034	36	<LOD	506	961	**1775**
					191204-ParrotImport2-OB-Insitu-035	<LOD	<LOD	441	639	**2150**
	Southern Aspect of Eastern Stockpile		In-situ screening samples 36-40, with composite sample taken (008)	Surface Sample - East Stockpile	191204-ParrotImport2-OB-Insitu-036	<LOD	<LOD	344	732	**2122**
					191204-ParrotImport2-OB-Insitu-037	40	<LOD	383	328	**1209**
					191204-ParrotImport2-OB-Insitu-038	51	<LOD	433	660	**1961**
					191204-ParrotImport2-OB-Insitu-039	<LOD	<LOD	386	732	**2193**
					191204-ParrotImport2-OB-Insitu-040	<LOD	<LOD	352	659	**1975**
	All Aspects of Small Stockpile		In-situ screening samples 41-45, with grab sample taken (009)	Surface Sample - Small Stockpile located near job trailer	191204-ParrotImport2-OB-Insitu-041	115	<LOD	369	782	**1827**
					191204-ParrotImport2-OB-Insitu-042	<LOD	<LOD	240	742	**1413**
					191204-ParrotImport2-OB-Insitu-043	25	<LOD	379	299	**1009**
					191204-ParrotImport2-OB-Insitu-044	28	<LOD	384	716	**2017**
					191204-ParrotImport2-OB-Insitu-045	35	<LOD	285	424	**1538**
	Southeast wall of excavation		In-situ samples of the excavation wall in orange material that looked like suspected waste, but	2' below asphalt	191204-ParrotImport2-OB-Insitu-046	19	<LOD	420	116	356
					191204-ParrotImport2-OB-Insitu-047	17	<LOD	444	110	355

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = In-Situ), (Sample Number = 001)

Note: Values in bold exceed action levels .

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
H21050584-001	1	20210525-Parrot-ET-C-001		NWE ET Area #1	2 Composite samples were taken in the NWE ET cover area of the subgrade material. The 2 composites were split and sent to Energy Lab for analytics. Per BSB Cover Material Spec. every 5,000cyds of ET material hauled in has to be sampled for Texture,	WET took 2 composite samples from NWE ET area of the subgrade material prior Cap. Break installation. The parcel was broken into 2 polygons and each were sampled. No sloughing, settling or erosion present. No visible trash, lumps, stumps, brush or vegetaion present.No rocks > 6" in diameter present. Material is a loamy type of material.	Subgrade floor: 36" bgs	Yes	8	<LOD	<LOD	<LOD	72	6	<LOD	20	13	54											144.4444	NA	NA	61.53846	135.1852
									10	<LOD	<LOD	8	71																				
									8	<LOD	<LOD	<LOD	76																				
									9	<LOD	<LOD	8	73																				
H21050584-002	2	20210525-Parrot-ET-C-002		NWE ET Area #2			Subgrade floor: 36" bgs	Yes	10	<LOD	251	37	196	9	<LOD	148	41	119											137.037	NA	174.7748	85.36585	156.3025
									13	<LOD	299	35	188																				
									14	<LOD	226	33	174																				
									12	<LOD	259	35	186																				
NA	3	20210617-Parrot-OB-C-003		OB Placement Area	10 composite samples were taken in N/NE OB area. Composite 003 was hauls 1-10. Composites 004-012 were hauls 11-110.	Sample taken from already placed soils in phase 1 OB area	Surface soils of already hauled material	Yes	84	<LOD	469	230	383																				
									67	<LOD	512	275	310																				
									73	<LOD	537	207	360																				
									75	<LOD	506	237	351																				
NA	4	20210617-Parrot-OB-C-004		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	86	<LOD	419	198	249																				
									103	<LOD	406	247	241																				
									79	<LOD	440	157	304																				
									89	<LOD	422	201	265																				
NA	5	20210617-Parrot-OB-C-005		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	71	<LOD	413	150	508																				
									65	<LOD	547	155	510																				
									58	<LOD	407	149	573																				
									65	<LOD	456	151	530																				
NA	6	20210617-Parrot-OB-C-006		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	73	<LOD	379	164	552																				
									80	<LOD	481	198	620																				
									61	<LOD	372	170	521																				
									71	<LOD	411	177	564																				
NA	7	20210617-Parrot-OB-C-007		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	59	<LOD	363	126	382																				
									66	<LOD	328	304	390																				
									58	<LOD	276	122	309																				
									61	<LOD	322	184	360																				
NA	8	20210617-Parrot-OB-C-008		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	40	<LOD	413	130	313																				
									32	<LOD	326	199	332																				
									45	<LOD	297	96	351																				
									39	<LOD	345	142	332																				
NA	9	20210617-Parrot-OB-C-009		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	55	<LOD	313	120	323																				
									37	<LOD	284	88	293																				
									34	<LOD	277	115	290																				
									42	<LOD	291	108	302																				
NA	10	20210617-Parrot-OB-C-010		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	54	<LOD	200	158	226																				
									40	<LOD	270	134	233																				
									51	<LOD	242	162	357																				
									48	<LOD	237	151	272																				
NA	11	20210617-Parrot-OB-C-011		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	43	<LOD	497	136	511																				
									73	<LOD	508	130	527																				
									44	<LOD	515	176	543																				
									53	<LOD	507	147	527																				
NA	12	20210617-Parrot-OB-C-012		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	47	<LOD	288	205	457																				
									53	<LOD	326	166	480																				
									44	<LOD	303	227	556																				
									48	<LOD	306	199	498																				
NA	13	20210618-Parrot-OB-C-013		OB Removal Strip 1	Comfirmation sample of OB of strip 1 removal area, OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck, approximately 400 CY. Hauls 111-230.	Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	30	<LOD	178	89	255																						
									29	<LOD	179	117	182																				
									32	<LOD	241	149	357																				
									30	<LOD	199	118	265																				
NA	14	20210618-Parrot-OB-C-014		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	13	<LOD	124	41	127																				
									13	<LOD	111	56	279																				
									16	<LOD	104	35	119																				
									14	<LOD	113	44	175																				
NA	15	20210618-Parrot-OB-C-015		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	38	<LOD	426	144	318																				
									44	<LOD	382	142	315																				
									40	<LOD	360	115	622																				
									41	<LOD	389	134	418																				
NA	16	20210618-Parrot-OB-C-016		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	42	<LOD	336	139	335																				
									60	<LOD	386	131	449																				
									53	<LOD	370	111	352																				
									52	<LOD	364	127	379																				
NA	17	20210618-Parrot-OB-C-017		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	60	<LOD	394	115	402																				
									74	<LOD	382	140	381																				
									61	<LOD	368	116	484																				
									65	<LOD	381	124	422																				
NA	18	20210618-Parrot-OB-C-018		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	28	<LOD	150	44	177																				
									23	<LOD	136	61	126																				
									24	<LOD	138	32	129																				
									25	<LOD	141	46	144																				
NA	19	20210618-Parrot-OB-C-019		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	33	<LOD	109	51	119																				
									24	7	74	75	88																				
									27	<LOD	95	47	109																				
									28	7	93	58	105																				
NA	20	20210618-Parrot-OB-C-020		OB Removal Strip 1		Direct Haul of overburden into phase 1 area	0-8 ft.	Yes	47	<LOD	208	102	243																				
									42	<LOD	160	114	193																				
									84	<LOD	179	93	227																				
									58	<LOD	182	103	221																				
NA	21	20210617-Parrot-OB-C-011							43	<LOD	497	136	511																				
									73	<LOD	508	130	527																				
									44	<LOD	515	176	543																				
									53	<LOD	507	147	527																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in **bold** exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
210720-15	22	20210617-Parrot-Dup-011							56	<LOD	652	172	855	50	15U	374	174	528															
									47	<LOD	536	129	516																				
									37	<LOD	432	109	425																				
									47	<LOD	540	137	599																114.2857	NA	93.82716	107.8049	88.02895
210720-1	23	20210607-Parrot-Lab-011	[Reserved for QA/QC]											45	15U	420	167	507											84.375	NA	82.89474	113.3484	96.20493
210720-16	24	20210618-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD	7J	15U	41J	9U	9U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	25	SRM (Field XRF) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	26	20210618-Parrot-OB-C-021		OB removal strip 1	Comfirmation sample of OB of strip 1 removal area, OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck, approximately 400 CY. Hauls 111-230.	Direct haul of overburden to phase I area	0-8ft	Yes	47	<LOD	452	130	471																					
									83	<LOD	475	184	444																				
									58	<LOD	447	118	482																				
									63	<LOD	458	144	466																				
NA	27	20210618-Parrot-OB-C-022		OB removal strip 1		Direct haul of overburden to phase I area	0-8ft	Yes	91	<LOD	622	173	591																				
									101	<LOD	602	194	538																				
									83	<LOD	587	154	573																				
									92	<LOD	604	174	567																				
NA	28	20210618-Parrot-OB-C-023		OB removal strip 1		Direct haul of overburden to phase I area	0-8ft	Yes	56	<LOD	482	134	371																				
									69	<LOD	495	138	422																				
									60	<LOD	392	125	389																				
									62	<LOD	456	132	394																				
NA	29	20210618-Parrot-OB-C-024		OB removal strip 1		Direct haul of overburden to phase I area	0-8ft	Yes	27	<LOD	154	73	145																				
									36	<LOD	148	57	176																				
									34	8	165	69	160																				
									32	8	156	66	160																				
NA	30	20210621-Parrot-OB-C-025		OB removal strip 1	Confirmation sample of OB of strip 1 removal area, OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10	Direct haul of overburden to phase I area	0-8ft	Yes	151	<LOD	658	243	574																				
									128	<LOD	717	230	578																				
									173	<LOD	806	228	477																				
									151	<LOD	727	234	543																				
NA	31	20210621-Parrot-OB-C-026		OB removal strip 1	Confirmation sample of OB of strip 1 removal area, OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck. Hauls 241-260.	Direct haul of overburden to phase I area	0-8ft	Yes	98	<LOD	446	298	490																				
									97	<LOD	464	164	463																				
									87	<LOD	543	175	618																				
									94	<LOD	484	212	524																				
NA	32	20210621-Parrot-OB-C-027		OB removal strip 1		Direct haul of overburden to phase I area	0-8ft	Yes	56	<LOD	206	101	375																				
									90	<LOD	194	192	409																				
									93	<LOD	203	152	304																				
									80	<LOD	201	148	363																				
NA	33	20210621-Parrot-TA-C-028		OB removal strip 1	Confirmation sample of TA of strip 1 removal area, TA direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10	Direct haul of overburden to phase I area	0-8ft	Yes	77	<LOD	363	123	701																				
									56	<LOD	272	92	634																				
									111	<LOD	474	191	**2409**																				
									81	<LOD	370	135	**1248**																				
NA	34	20210621-Parrot-OB-C-029		OB removal strip 2		Direct haul of overburden to phase I area	0-8ft	Yes	69	<LOD	273	98	234																				
									50	<LOD	248	112	238																				
									48	<LOD	235	77	182																				
									56	<LOD	252	96	218																				
NA	35	20210621-Parrot-OB-C-030		OB removal strip 2	Confirmation sample of OB of strip 1 removal area, OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck. Hauls 271-310.	Direct haul of overburden to phase I area	0-8ft	Yes	66	<LOD	236	179	182																				
									39	<LOD	216	227	170																				
									53	<LOD	259	151	174																				
									53	<LOD	237	186	175																				
NA	36	20210621-Parrot-OB-C-031		OB removal strip 2		Direct haul of overburden to phase I area	0-8ft	Yes	23	<LOD	155	86	128																				
									42	<LOD	147	156	118																				
									36	<LOD	165	156	161																				
									34	<LOD	156	133	136																				
NA	37	20210621-Parrot-OB-C-032		OB removal strip 2		Direct haul of overburden to phase I area	0-8ft	Yes	30	<LOD	170	85	186																				
									36	<LOD	157	53	372																				
									26	<LOD	174	81	177																				
									31	<LOD	167	73	245																				
NA	38	20210621-Parrot-OB-C-033		OB removal strip 2	Confirmation sample of OB of strip 1 removal area, OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10	Direct haul of overburden to phase I area	0-8ft	Yes	26	<LOD	197	94	280																				
									23	<LOD	210	115	418																				
									32	<LOD	188	84	333																				
									27	<LOD	198	98	344																				
NA	39	20210621-Parrot-TA-C-034		OB removal strip 2	Confirmation sample of TA of strip 1 removal area, TA direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck. Hauls 321-350.	Direct haul of overburden to phase I area	0-8ft	Yes	44	<LOD	372	197	**1222**																				
									46	<LOD	316	147	915																				
									39	<LOD	387	198	877																				
									43	<LOD	358	181	**1005**																				
NA	40	20210621-Parrot-TA-C-035		OB removal strip 2		Direct haul of overburden to phase I area	0-8ft	Yes	41	<LOD	329	147	860																				
									25	<LOD	271	121	**1123**																				
									55	<LOD	383	175	**1573**																				
									40	<LOD	328	148	**1185**																				
NA	41	20210621-Parrot-OB-C-036		OB removal strip 2		Direct haul of overburden to phase I area	0-8ft	Yes	21	<LOD	236	84	278																				
									21	<LOD	230	63	293																				
									20	<LOD	154	63	226																				
									21	<LOD	207	70	266																				
NA	42	20210622-Parrot-OB-C-037		OB removal strip 2	Confirmation sample of OB of strip 2 removal area, OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck. Hauls 351-410.	Direct haul of overburden to phase I area	0-8ft	Yes	45	<LOD	198	115	408																				
									34	<LOD	179	142	354																				
									30	<LOD	176	92	401																				
									36	<LOD	184	116	388																				
NA	43	20210622-Parrot-OB-C-038		OB removal strip 2		Direct haul of overburden to phase I area	0-8ft	Yes	67	8	260	140	369																				
									77	<LOD	379	582	985																				
									46	<LOD	220	99	392																				
									63	8	286	274	582																				
NA	44	20210622-Parrot-OB-C-039		OB removal strip 2		Direct haul of overburden to phase I area	0-8ft	Yes	36	<LOD	261	148	459																				
									30	<LOD	159	98	316																				
									46	<LOD	254	166	674																				
									37	<LOD	225	137	483																				
NA	45	20210622-Parrot-OB-C-040		OB removal strip 2		Direct haul of overburden to phase I area	0-8ft	Yes	34	<LOD	172	150	365																				
									27	<LOD	153	74	196																				
									33	<LOD	199	80	276																				
									31	<LOD	175	101	279																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	46	20210621-Parrot-TA-C-028							77	<LOD	363	123	701																				
									56	<LOD	272	92	634																				
									111	<LOD	474	191	**2409**																				
									81	<LOD	370	135	**1248**																				
NA	47	20210621-Parrot-Dup-028							64	<LOD	273	93	627																				
									83	<LOD	343	110	723																				
									81	<LOD	422	193	**1292**																				
									76	<LOD	346	132	881																93.44262	NA	93.59784	97.53695	70.56624
210720-2	48	20210621-Parrot-Lab-028	[Reserved for QA/QC]											74	15U	404	186	**1703**											90.98361	NA	109.2876	137.4384	136.4583
NA	49	20210622-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	50	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	51	20210622-Parrot-OB-C-041		OB Removal Strip 2	Confirmation sample of OB of strip 2 removal area, OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck. Hauls 411-480.	Direct haul to phase 1 area	0-8 ft	Yes	67	<LOD	390	275	910																				
									48	<LOD	280	187	596																				
									50	<LOD	295	237	607																				
									55	<LOD	322	233	704																				
NA	52	20210622-Parrot-OB-C-042		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	48	<LOD	280	160	486																				
									44	<LOD	259	163	427																				
									54	<LOD	244	147	499																				
									49	<LOD	261	157	471																				
NA	53	20210622-Parrot-OB-C-043		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	38	9	215	137	422																				
									36	<LOD	236	133	478																				
									46	<LOD	255	131	532																				
									40	9	235	134	477																				
NA	54	20210622-Parrot-OB-C-044		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	29	<LOD	169	119	276																				
									38	<LOD	197	127	428																				
									29	<LOD	162	80	346																				
									32	<LOD	176	109	350																				
NA	55	20210622-Parrot-OB-C-045		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	21	<LOD	128	68	199																				
									11	<LOD	93	57	185																				
									16	<LOD	92	61	147																				
									16	<LOD	104	62	177																				
NA	56	20210622-Parrot-OB-C-046		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	11	<LOD	64	42	110																				
									11	<LOD	75	47	105																				
									20	<LOD	59	36	95																				
									14	<LOD	66	42	103																				
NA	57	20210622-Parrot-OB-C-047		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	24	<LOD	93	73	194																				
									18	<LOD	87	63	147																				
									11	<LOD	57	52	81																				
									18	<LOD	79	63	141																				
NA	58	20210622-Parrot-OB-C-048		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	25	<LOD	58	36	95																				
									10	<LOD	72	43	117																				
									14	<LOD	72	42	112																				
									16	<LOD	67	40	108																				
NA	59	20210622-Parrot-OB-C-049		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	12	<LOD	48	45	101																				
									11	<LOD	63	41	144																				
									10	<LOD	63	41	110																				
									11	<LOD	58	42	118																				
NA	60	20210622-Parrot-OB-C-050		OB Removal Strip 2		Direct haul to phase 1 area	0-8 ft	Yes	24	<LOD	111	73	228																				
									26	<LOD	135	89	240																				
									24	<LOD	152	105	185																				
									25	<LOD	133	89	218																				
NA	61	20210623-Parrot-Xcon-Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
210720-3	62	SRM (Lab Analysis) (2711a)												67	39J	148	**1483**	423	107	54.1	140	1400	414	63	NA	106	106	102					
NA	63	20210623-Parrot-OB-C-051		OB Removal Strip 2	Confirmation sample of OB of strip 2 removal area. OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 481-610	Direct Haul to Phase 1 Area	0-8 ft.	Yes	30	<LOD	74	41	90																				
									19	<LOD	72	37	102																				
									21	<LOD	56	42	82																				
									23	<LOD	67	40	91																				
NA	64	20210623-Parrot-OB-C-052		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	14	<LOD	61	51	101																				
									19	<LOD	94	63	149																				
									18	<LOD	79	39	105																				
									17	<LOD	78	51	118																				
NA	65	20210623-Parrot-OB-C-053		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	34	<LOD	266	69	193																				
									28	<LOD	125	79	223																				
									39	<LOD	123	91	214																				
									34	<LOD	171	80	210																				
NA	66	20210623-Parrot-OB-C-054		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	21	<LOD	74	66	146																				
									25	<LOD	115	77	242																				
									23	<LOD	81	58	120																				
									23	<LOD	90	67	169																				
NA	67	20210623-Parrot-OB-C-055		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	14	<LOD	91	44	177																				
									25	<LOD	112	51	212																				
									15	<LOD	82	51	143																				
									18	<LOD	95	49	177																				
NA	68	20210623-Parrot-OB-C-056		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	22	<LOD	102	74	137																				
									20	<LOD	81	64	119																				
									13	<LOD	75	89	109																				
									18	<LOD	86	76	122																				
NA	69	20210623-OB-C-057		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	17	<LOD	124	60	156																				
									21	<LOD	138	72	239																				
									16	<LOD	145	65	202																				
									18	<LOD	136	66	199																				
NA	70	20210623-Parrot-OB-C-058		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	29	<LOD	167	112	275																				
									16	<LOD	162	48	210																				
									22	<LOD	156	76	282																				
									22	<LOD	162	79	256																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	71	20210623-Parrot-OB-C-059		OB Removal Strip 2	Confirmation sample of OB of strip 2 removal area. OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 481-610	Direct Haul to Phase 1 Area	0-8 ft.	Yes	38	<LOD	114	98	190																				
									23	<LOD	102	84	192																				
									25	<LOD	119	65	257																				
									29	<LOD	112	82	213																				
NA	72	20210623-Parrot-OB-C-060		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	32	<LOD	228	79	436																				
									55	<LOD	150	92	255																				
									30	<LOD	124	59	271																				
									39	<LOD	167	77	321																				
NA	73	20210622-Parrot-OB-C-041							67	<LOD	390	275	910																				
									48	<LOD	280	187	596																				
									50	<LOD	295	237	607																				
									55	<LOD	322	233	704																				
NA	74	20210622-Parrot-Dup-041							63	<LOD	321	264	769																				
									62	<LOD	273	189	617																				
									60	<LOD	343	254	828																				
									62	<LOD	312	236	738																112.1212	NA	97.09845	101.1445	104.7799
210720-4	75	20210622-Parrot-Lab-041	[Reserved for QA/QC]											45	15U	311	255	856											81.81818	NA	96.68394	109.4421	121.5334
NA	76	20210623-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	77	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	78	20210623-Parrot-OB-C-061		OB Removal Strip 2	Confirmation sample of OB of strip 2 removal area. OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 481-610	Direct Haul to Phase 1 Area	0-8 ft.	Yes	41	<LOD	157	90	395																				
									49	<LOD	200	107	321																				
									58	<LOD	188	83	437																				
									49	<LOD	182	93	384																				
NA	79	20210623-Parrot-OB-C-062		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	136	<LOD	776	228	901																				
									117	<LOD	667	202	727																				
									104	<LOD	564	224	624																				
									119	<LOD	669	218	751																				
NA	80	20210623-Parrot-OB-C-063		OB Removal Strip 2		Direct Haul to Phase 1 Area	0-8 ft.	Yes	142	<LOD	741	199	614																				
									104	<LOD	697	225	518																				
									91	<LOD	619	158	428																				
									112	<LOD	686	194	520																				
NA	81	20210624-Parrot-TA-C-064		TA Removal Strip 1 (to MR)		Direct Haul to MR Stockpile Location	0-4ft	Yes	40	<LOD	363	141	**1057**																				
									43	<LOD	482	158	961																				
									42	<LOD	460	179	**1542**																				
									42	<LOD	435	159	**1187**																				
NA	82	20210624-Parrot-OB-C-065		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	61	<LOD	221	136	454																				
									52	<LOD	270	122	513																				
									51	<LOD	245	105	493																				
									55	<LOD	245	121	487																				
NA	83	20210624-Parrot-OB-C-066		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	45	<LOD	183	94	365																				
									40	<LOD	244	102	340																				
									35	<LOD	173	69	329																				
									40	<LOD	200	88	345																				
NA	84	20210624-Parrot-OB-C-067		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	46	<LOD	291	133	431																				
									38	<LOD	256	96	446																				
									31	<LOD	262	111	520																				
									38	<LOD	270	113	466																				
NA	85	20210624-Parrot-TA-C-068		TA Removal Strip 1 (to MR)	Confirmation sample of OB of strip 2 removal area. OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 681 - 720. Confirmation sample of TA Strip 1. TA direct haulked to MR placement area. Sampling consisted of one compostite sample/10 haul truck. Hauls 611 - 680.	Direct Haul to MR Stockpile Location	0-4ft	Yes	68	<LOD	725	230	**2409**																				
									85	<LOD	657	347	**3540**																				
									80	<LOD	690	264	**2143**																				
									78	<LOD	691	280	**2697**																				
NA	86	20210624-Parrot-TA-C-069		TA Removal Strip 1 (to MR)		Direct Haul to MR Stockpile Location	0-4ft	Yes	82	<LOD	746	345	**1895**																				
									66	<LOD	**1024**	381	**3037**																				
									140	<LOD	**1445**	542	**4433**																				
									96	<LOD	**1072**	423	**3122**																				
NA	87	20210624-Parrot-OB-C-070		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	46	<LOD	327	139	811																				
									53	<LOD	571	200	**1302**																				
									41	<LOD	395	124	693																				
									47	<LOD	431	154	935																				
NA	88	20210624-Parrot-OB-C-071		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	55	<LOD	207	65	354																				
									67	<LOD	193	82	396																				
									59	<LOD	245	108	629																				
									60	<LOD	215	85	460																				
NA	89	20210624-Parrot-OB-C-072		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	65	<LOD	215	106	348																				
									85	<LOD	226	273	330																				
									84	<LOD	216	103	334																				
									78	<LOD	219	161	337																				
NA	90	20210624-Parrot-OB-C-073		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	96	<LOD	316	147	294																				
									68	<LOD	230	180	232																				
									39	<LOD	265	110	282																				
									68	<LOD	270	146	269																				
NA	91	20210624-Parrot-OB-C-074		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	116	<LOD	484	198	430																				
									79	<LOD	418	142	379																				
									88	<LOD	427	216	365																				
									94	<LOD	443	185	391																				
NA	92	20210625-Parrot-TA-C-075		TA Removal Strip 1 (to MR)	Confirmation sample of TA Strip 1. TA direct hauled to MR placement area. Sampling consisted of one compostite sample/10 haul truck. Hauls 721-740.	Direct Haul to MR Stockpile Location	0-4 ft	Yes	148	6	**1966**	664	**4743**																				
									143	<LOD	**1845**	607	**4412**																				
									123	<LOD	**1393**	704	**4131**																				
									138	6	**1735**	658	**4429**																				
NA	93	20210625-Parrot-TA-C-076		TA Removal Strip 1 (to MR)		Direct Haul to MR Stockpile Location	0-4 ft	Yes	59	<LOD	690	232	**1481**																				
									72	<LOD	617	226	**1422**																				
									102	6	882	321	**2350**																				
									78	6	730	260	**1751**																				
NA	94	20210625-Parrot-OB-C-077		OB Removal Strip 2	Confirmation sample of OB of strip 2 removal area. OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10	Direct Haul to Phase 1 Area	4-8ft	Yes	100	<LOD	465	120	411																				
									97	<LOD	490	93	472																				
									688	<LOD	540	117	439																				
									295	<LOD	498	110	441																				

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	95	20210625-Parrot-OB-C-078		OB Removal Strip 2	Confirmation sample of OB of strip 2 removal area. OB direct hauled to phase 1 placement area. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 741-780	Direct Haul to Phase 1 Area	4-8ft	Yes	63	<LOD	438	122	856																				
									44	<LOD	327	87	425																				
									49	<LOD	343	77	469																				
									52	<LOD	369	95	583																				
NA	96	20210625-Parrot-OB-C-079		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	39	<LOD	294	76	397																				
									45	<LOD	236	118	303																				
									42	<LOD	226	109	602																				
									42	<LOD	252	101	434																				
NA	97	20210625-Parrot-OB-C-080		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	55	<LOD	348	125	491																				
									37	<LOD	208	88	466																				
									105	<LOD	392	128	970																				
									66	<LOD	316	114	642																				
NA	98	20210624-Parrot-TA-C-069							82	<LOD	746	345	**1895**																				
									66	<LOD	**1024**	381	**3037**																				
									140	<LOD	**1445**	542	**4433**																				
									96	<LOD	**1072**	423	**3122**																				
NA	99	20210624-Parrot-Dup-069							102	<LOD	**1263**	496	**4988**																				
									86	<LOD	684	264	**1604**																				
									91	<LOD	**1003**	370	**2552**																				
									93	<LOD	983	377	**3048**															96.875	NA	91.75739	89.11672	97.64015
210720-5	100	20210624-Parrot-Lab-069	[Reserved for QA/QC]											135	15U	**1553**	711	**5314**											140.625	NA	144.9145	168.2177	170.2296
NA	101	20210625-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	102	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	103	20210625-Parrot-SP-C-081 (OB Sample From Landscaping Area- Clean, Directed to Phase 1).		NE Landscape Area	Confirmation sample of OB landscape stockpile area. Hauls 781-790	Direct Haul to Phase 1 Area	4-8ft	Yes	29	<LOD	216	103	382																				
									25	<LOD	178	73	268																				
									27	<LOD	164	73	267																				
									27	<LOD	186	83	306																				
NA	104	20210625-Parrot-OB-C-082		OB Removal Strip 2	Confirmation sample of OB. Hauls 781-790	Direct Haul to Phase 1 Area	4-8ft	Yes	176	<LOD	701	180	762																				
									145	<LOD	871	200	737																				
									121	<LOD	907	201	815																				
									147	<LOD	826	194	771																				
NA	105	20210625-Parrot-TA-C-083		TA Removal Strip 1 (to MR)	Confirmation sample of TA Strip 1 and TA hole in NE corner. TA direct hauled to MR placement area. Sampling consisted of one	Direct Haul to MR Stockpile Location	0-4ft	Yes	81	<LOD	982	358	**2161**																				
									96	<LOD	958	431	**2345**																				
									129	<LOD	943	415	**2698**																				
									102	<LOD	961	401	**2401**																				
NA	106	20210628-Parrot-TA-C-084		TA Removal Strip 2 (to MR)	Confirmation samples of tailings/slag surface layer and underlying OB waste rock material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. Visible waste material was routed to MR and OB to the Phase I placement area. Seven composite samples were collected from hauls 800 to 870.	Direct Haul to MR Stockpile Location	0-4ft	Yes	52	<LOD	814	293	**2926**																						
									77	<LOD	949	342	**3224**																				
									67	9	944	346	**3855**																				
									65	9	902	327	**3335**																				
NA	107	20210628-Parrot-OB-C-085		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	117	<LOD	346	166	306																				
									128	<LOD	400	119	387																				
									76	<LOD	263	89	428																				
									107	<LOD	336	125	374																				
NA	108	20210628-Parrot-OB-C-086		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	93	<LOD	301	151	379																				
									201	<LOD	376	101	365																				
									185	<LOD	350	91	379																				
									160	<LOD	342	114	374																				
NA	109	20210628-Parrot-OB-C-087		OB Removal Strip 2		Direct Haul to Phase 1 Area	4-8ft	Yes	50	<LOD	280	86	409																				
									97	<LOD	384	96	373																				
									56	<LOD	310	94	328																				
									68	<LOD	325	92	370																				
NA	110	20210628-Parrot-TA-C-088		TA Removal Strip 2 (to MR)		Direct Haul to MR Stockpile Location/Visible waste and insitu XRF results initiated the soil routing decision	0-4ft	Yes	87	<LOD	476	176	559																				
									88	<LOD	551	186	534																				
									88	<LOD	485	165	388																				
									88	<LOD	504	176	494																				
NA	111	20210628-Parrot-TA-C-089		TA Removal Strip 2 (to MR)		Direct Haul to MR Stockpile Location	0-4ft	Yes	**660**	<LOD	**1316**	899	**2991**																				
									176	<LOD	**1882**	297	**2583**																				
									158	<LOD	915	340	**3583**																				
									331	<LOD	**1371**	512	**3052**																				
NA	112	20210628-Parrot-TA-C-090		TA Removal Strip 2 (to MR)		Direct Haul to MR Stockpile Location	0-4ft	Yes	**339**	10	**2275**	883	**6478**																				
									615	<LOD	**1551**	580	**4698**																				
									391	<LOD	**1203**	470	**2987**																				
									448	10	**1676**	644	**4721**																				
NA	113	20210629-Parrot-OB-C-091		OB Removal Strip 2	Confirmation samples of tailings/slag surface layer and underlying OB waste rock material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. Visible waste material was routed to MR and OB to the Phase I placement area. Three composite samples were collected from hauls 871 to 900.	Direct Haul to Phase 1 Area	4-8ft	Yes	112	<LOD	729	617	433																						
									177	<LOD	850	578	542																				
									122	<LOD	807	442	489																				
									137	<LOD	795	546	488																				
NA	114	20210629-Parrot-TA-C-092		TA Removal Strip 2 (to MR)		Direct Haul to MR Stockpile Location.	0-4ft	Yes	93	<LOD	812	300	**1662**																				
									55	<LOD	559	232	**1089**																				
									53	<LOD	415	238	859																				
									67	<LOD	595	257	**1203**																				
NA	115	20210629-Parrot-TA-C-093		TA Removal Strip 2 (to MR)		Direct Haul to MR Stockpile Location	0-4ft	Yes	111	<LOD	829	696	**1740**																				
									132	<LOD	980	533	**2240**																				
									187	<LOD	**1063**	725	**2181**																				
									143	<LOD	957	651	**2054**																				
NA	116	20210629-Parrot-OB-C-094		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. Visible waste material was routed to MR (approx. 4 loads) and OB to the Phase I placement area. Seven composite samples were collected from hauls 901 to 970.	Direct Haul to Phase 1 Area	8-20ft	Yes	168	<LOD	809	403	801																						
									122	<LOD	546	344	548																				
									85	<LOD	343	171	254																				
									125	<LOD	566	306	534																				
NA	117	20210629-Parrot-OB-C-095		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	108	<LOD	559	196	357																				
									129	<LOD	575	155	347																				
									149	<LOD	617	197	300																				
									129	<LOD	584	183	335																				
NA	118	20210629-Parrot-OB-C-096		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	61	<LOD	701	147	301																				
									103	<LOD	743	167	253																				
									85	<LOD	649	164	243																				
									83	<LOD	698	159	266																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	119	20210629-Parrot-OB-C-097		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. Visible waste material was routed to MR (approx. 4 loads) and OB to the Phase I placement area. Seven composite samples were collected from hauls 901 to 970.	Direct Haul to Phase 1 Area	8-20ft	Yes	87	<LOD	434	145	286																						
									56	<LOD	718	157	279																				
									64	<LOD	487	159	287																				
									69	<LOD	546	154	284																				
NA	120	20210629-Parrot-OB-C-098		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	67	<LOD	648	146	211																				
									73	<LOD	777	127	204																				
									52	<LOD	771	127	258																				
									64	<LOD	732	133	224																				
NA	121	20210629-Parrot-OB-C-099		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	71	<LOD	347	226	260																				
									111	<LOD	438	208	287																				
									98	<LOD	325	183	250																				
									93	<LOD	370	206	266																				
NA	122	20210629-Parrot-OB-C-100		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	42	<LOD	290	119	303																				
									78	<LOD	338	94	368																				
									53	<LOD	333	151	370																				
									58	<LOD	320	121	347																				
NA	123	20210628-Parrot-TA-C-089							**660**	<LOD	**1316**	899	**2991**																				
									176	<LOD	**1882**	297	**2583**																				
									158	<LOD	915	340	**3583**																				
									331	<LOD	**1371**	512	**3052**																				
210720-17	124	20210628-Parrot-Dup-089							**273**	<LOD	885	325	**2171**																				
									272	12	837	301	**2075**	**328**	15U	832	343	**2877**																
									272	<LOD	**1226**	328	**2649**																				
									272	12	983	318	**2298**																82.19316	NA	71.67518	62.10938	75.29759
210720-6	125	20210628-Parrot-Lab-089	[Reserved for QA/QC]											**357**	15U	877	342	**2858**											107.7465	NA	63.96791	66.79688	93.63329
210720-18	126	20210629-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15U	39J	9U	9U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	127	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	128	20210629-Parrot-Xcon-Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
210720-7	129	SRM (Lab Analysis) (2711a)												67	**46**	155	**1455**	427	107	54.1	140	1400	414	63	85	111	104	103					
NA	130	20210630-Parrot-OB-C-101		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. Ten composite OB samples were collected from hauls 971 to 1070. Two grab samples of the underlying tailings were collected and analyzed along with one 8 point composite sample of the ET cover area.	Direct Haul to Phase 1 Area	8-20ft	Yes	42	<LOD	366	84	384																						
									70	<LOD	342	77	260																				
									73	<LOD	391	92	322																				
									62	<LOD	366	84	322																				
NA	131	20210630-Parrot-TA-G-102		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Yellow Coloration)	21ft	Yes	**928**	<LOD	**1312**	**1332**	720																				
									950	<LOD	951	**1809**	**1016**																				
									772	<LOD	819	**1576**	650																				
									883	<LOD	**1027**	**1572**	795																				
NA	132	20210630-Parrot-TA-G-103		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Orange Coloration)	21ft	Yes	**805**	<LOD	483	905	553																				
									847	<LOD	816	829	750																				
									633	<LOD	494	744	613																				
									762	<LOD	598	826	639																				
H21060877-001	133	20210630-Parrot-ET-C-104		NWE ET cover area		8 Point Composite, of 5,000 CY - 3rd sample at approximately 15,000 total CY placement. Butte soil action levels not parrot.	Surface	Yes	9	9	27	10	83																				
									14	<LOD	<LOD	13	83	7	<LOD	77	11	59											171.4286	NA	35.06494	93.93939	139.548
									13	<LOD	<LOD	8	81																				
									12	9	27	10	82																				
NA	134	20210630-Parrot-OB-C-105		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	52	<LOD	319	81	385																				
									70	<LOD	382	103	516																				
									79	<LOD	367	94	370																				
									67	<LOD	356	93	424																				
NA	135	20210630-Parrot-OB-C-106		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	57	<LOD	334	85	382																				
									38	<LOD	284	79	387																				
									45	<LOD	390	144	269																				
									47	<LOD	336	103	346																				
NA	136	20210630-Parrot-OB-C-107		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	33	<LOD	284	85	296																				
									45	<LOD	283	95	314																				
									59	<LOD	290	77	359																				
									46	<LOD	286	86	323																				
NA	137	20210630-Parrot-OB-C-108		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	53	<LOD	309	133	283																				
									57	<LOD	403	176	315																				
									42	<LOD	324	161	239																				
									51	<LOD	345	157	279																				
NA	138	20210630-Parrot-OB-C-109		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	45	<LOD	294	127	245																				
									33	<LOD	265	114	215																				
									57	<LOD	282	114	181																				
									45	<LOD	280	118	214																				
NA	139	20210630-Parrot-OB-C-110		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	50	<LOD	348	178	245																				
									52	<LOD	371	174	310																				
									101	<LOD	334	228	205																				
									68	<LOD	351	193	253																				
NA	140	20210630-Parrot-OB-C-111		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	51	<LOD	317	171	326																				
									43	<LOD	253	149	337																				
									35	<LOD	243	89	400																				
									43	<LOD	271	136	354																				
NA	141	20210630-Parrot-OB-C-112		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	40	<LOD	278	111	264																				
									44	<LOD	288	106	252																				
									38	<LOD	269	136	226																				
									41	<LOD	278	118	247																				
NA	142	20210630-Parrot-OB-C-113		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	34	<LOD	235	75	376																				
									50	<LOD	253	128	419																				
									50	<LOD	232	92	287																				
									45	<LOD	240	98	361																				
NA	143	20210701-Parrot-OB-C-114		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited	Direct Haul to Phase 1 Area	8-20ft	Yes	40	<LOD	228	109	343																				
									36	<LOD	297	87	383																				
									43	<LOD	276	97	360																				
									40	<LOD	267	98	362																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	144	20210701-Parrot-OB-C-115		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. Nine composite OB samples were collected from hauls 1071 to 1160. Two grab samples of the underlying tailings were collected and placed back in excavation for future removal.	Direct Haul to Phase 1 Area	8-20ft	Yes	55	<LOD	318	166	238																						
									60	<LOD	309	168	323																				
									80	<LOD	362	209	299																				
									65	<LOD	330	181	287																				
NA	145	20210701-Parrot-OB-C-116		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	44	<LOD	249	112	299																				
									43	<LOD	243	96	279																				
									36	<LOD	241	91	320																				
									41	<LOD	244	100	299																				
NA	146	20210701-Parrot-TA-G-117		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Yellow Coloration)	21ft	Yes	**700**	<LOD	**1811**	**1684**	**1157**																				
									560	10	474	**1603**	**1901**																				
									592	8	395	**1718**	**2641**																				
									617	9	893	**1668**	**1900**																				
NA	147	20210701-Parrot-TA-G-118		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Orange Coloration)	21ft	Yes	**1067**	<LOD	625	**1663**	805																				
									976	<LOD	549	**1351**	796																				
									1254	<LOD	717	**2009**	**2478**																				
									1099	<LOD	630	**1674**	**1360**																				
NA	148	20210701-Parrot-OB-C-119		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	50	<LOD	351	118	387																				
									57	<LOD	328	106	358																				
									44	<LOD	238	73	339																				
									50	<LOD	306	99	361																				
NA	149	20210701-Parrot-OB-C-120		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	70	<LOD	299	124	425																				
									89	<LOD	299	171	290																				
									76	<LOD	390	170	501																				
									78	<LOD	329	155	405																				
NA	150	20210630-Parrot-TA-G-102							**928**	<LOD	**1312**	**1332**	720																				
									950	<LOD	951	**1809**	**1016**																				
									772	<LOD	819	**1576**	650																				
									883	<LOD	**1027**	**1572**	795																				
210720-19	151	20210630-Parrot-Dup-102							**654**	<LOD	722	**1430**	**1154**																				
									582	<LOD	798	**1928**	615	**343**	15U	482	919	615															
									625	<LOD	**1038**	**1312**	455																				
									620	<LOD	853	**1557**	741																				
210720-8	152	20210630-Parrot-Lab-102	[Reserved for QA/QC]											**405**	15U	529	**1219**	776											70.22642	NA	82.99805	99.0036	93.21039
																													45.84906	NA	51.49254	77.52809	97.56915
210720-20	153	20210701-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15U	19J	9U	9U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	154	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	155	20210701-Parrot-OB-C-121		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. Nine composite OB samples were collected from hauls 1070 to 1160. Two grab samples of the underlying tailings were collected and placed back in excavation for future removal.	Direct Haul to Phase 1 Area	8-20ft	Yes	61	<LOD	270	107	317																						
									45	<LOD	275	67	259																				
									52	<LOD	299	65	372																				
									53	<LOD	281	80	316																				
NA	156	20210701-Parrot-OB-C-122		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	38	<LOD	337	121	219																				
									33	<LOD	340	188	247																				
									63	<LOD	417	127	210																				
									45	<LOD	365	145	225																				
NA	157	20210701-Parrot-OB-C-123		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	51	<LOD	265	183	411																				
									51	<LOD	273	129	345																				
									93	<LOD	296	181	452																				
									65	<LOD	278	164	403																				
NA	158	20210701-Parrot-OB-C-124		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	42	<LOD	261	127	298																				
									48	<LOD	346	124	389																				
									75	<LOD	302	115	381																				
									55	<LOD	303	122	356																				
NA	159	20210702-Parrot-OB-C-125		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. 12 composite OB samples were collected from hauls 1161 to 1280. Two grab samples of the underlying tailings were collected and placed back in excavation for future removal.	Direct Haul to Phase 1 Area	8-20ft	Yes	45	<LOD	206	124	144																						
									34	<LOD	280	111	185																				
									42	<LOD	193	123	147																				
									40	<LOD	226	119	159																				
NA	160	20210702-Parrot-OB-C-126		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	67	<LOD	248	136	127																				
									35	<LOD	150	171	106																				
									59	<LOD	220	156	146																				
									54	<LOD	206	154	126																				
NA	161	20210702-Parrot-OB-C-127		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	58	<LOD	211	73	247																				
									59	<LOD	278	99	156																				
									81	<LOD	184	227	207																				
									66	<LOD	224	133	203																				
NA	162	20210702-Parrot-OB-C-128		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	36	<LOD	230	102	307																				
									60	<LOD	290	185	332																				
									27	<LOD	250	214	293																				
									41	<LOD	257	167	311																				
NA	163	20210702-Parrot-OB-C-129		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	29	<LOD	206	117	378																				
									121	<LOD	260	161	368																				
									63	<LOD	240	353	318																				
									71	<LOD	235	210	355																				
NA	164	20210702-Parrot-TA-G-130		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Orange Coloration)	21ft	Yes	**534**	<LOD	448	**1455**	227																				
									547	<LOD	636	**1253**	273																				
									568	<LOD	526	**1584**	245																				
									550	<LOD	537	**1431**	248																				
NA	165	20210702-Parrot-TA-C-131		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Yellow Coloration)	21ft	Yes	**285**	8	348	**1480**	**1452**																				
									317	<LOD	359	**1435**	**1314**																				
									277	<LOD	315	**1395**	**1606**																				
									293	8	341	**1437**	**1457**																				
NA	166	20210702-Parrot-OB-C-132		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	30	<LOD	194	100	351																				
									27	<LOD	218	98	347																				
									29	<LOD	220	116	406																				
									29	<LOD	211	105	368																				
NA	167	20210702-Parrot-OB-C-133		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	46	<LOD	221	114	132																				
									48	<LOD	227	105	167																				
									44	<LOD	217	80	170																				
									46	<LOD	222	100	156																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	168	20210702-Parrot-OB-C-134		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. 12 composite OB samples were collected from hauls 1161 to 1280. Two grab samples of the underlying tailings were collected and placed back in excavation for future removal.	Direct Haul to Phase 1 Area	8-20ft	Yes	41	<LOD	263	101	420																					
									51	<LOD	346	133	501																				
									37	<LOD	253	103	424																				
									43	<LOD	287	112	448																				
NA	169	20210702-Parrot-OB-C-135		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	32	<LOD	285	100	527																				
									44	<LOD	325	106	436																				
									38	<LOD	343	102	519																				
									38	<LOD	318	103	494																				
NA	170	20210702-Parrot-OB-C-136		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	37	<LOD	313	110	518																				
									37	<LOD	229	110	311																				
									49	<LOD	357	117	386																				
									41	<LOD	300	112	405																				
NA	171	20210702-Parrot-OB-C-137		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	107	<LOD	375	257	252																				
									100	<LOD	389	153	265																				
									73	<LOD	350	175	282																				
									93	<LOD	371	195	266																				
NA	172	20210702-Parrot-OB-C-138		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	124	<LOD	337	229	327																				
									85	<LOD	263	141	265																				
									71	<LOD	282	138	334																				
									93	<LOD	294	169	309																				
NA	173	20210706-Parrot-OB-C-139		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. 13	Direct Haul to Phase 1 Area	8-20ft	Yes	56	<LOD	279	125	449																				
									65	<LOD	253	380	508																				
									69	<LOD	239	146	357																				
									63	<LOD	257	217	438																				
NA	174	20210706-Parrot-OB-C-140		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	37	<LOD	239	112	665																				
									47	<LOD	229	101	387																				
									38	<LOD	220	167	476																				
									41	<LOD	229	127	509																				
NA	175	20210701-Parrot-OB-C-123							51	<LOD	265	183	411																				
									51	<LOD	273	129	345																				
									93	<LOD	296	181	452																				
									65	<LOD	278	164	403																				
NA	176	20210701-Parrot-Dup-123							55	<LOD	320	203	350																				
									31	<LOD	266	121	493																				
									66	<LOD	276	145	350																				
									51	<LOD	287	156	398																				
210720-9	177	20210701-Parrot-Lab-123	[Reserved for QA/QC]											59	15U	291	190	350											77.94872	NA	103.3573	95.13185	98.75828
																													90.76923	NA	104.6763	115.6187	86.92053
NA	178	20210706-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	179	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	180	20210706-Parrot-OB-C-141		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	155	<LOD	253	240	200																				
									160	<LOD	210	209	198																				
									160	<LOD	212	188	214																				
									158	<LOD	225	212	204																				
NA	181	20210706-Parrot-OB-C-142		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	109	<LOD	239	270	352																				
									111	<LOD	289	240	672																				
									176	<LOD	340	373	446																				
									132	<LOD	289	294	490																				
NA	182	20210706-Parrot-OB-C-143		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	65	<LOD	329	103	446																				
									73	<LOD	319	99	418																				
									55	<LOD	302	96	436																				
									64	<LOD	317	99	433																				
NA	183	20210706-Parrot-OB-C-144		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	55	<LOD	281	73	325																				
									62	<LOD	301	88	514																				
									69	<LOD	281	94	311																				
									62	<LOD	288	85	383																				
NA	184	20210706-Parrot-OB-C-145		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	76	<LOD	285	95	294																				
									66	<LOD	260	102	353																				
									46	<LOD	268	78	240																				
									63	<LOD	271	92	296																				
NA	185	20210706-Parrot-OB-C-146		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	77	<LOD	266	87	371																				
									78	<LOD	272	144	321																				
									57	<LOD	245	75	270																				
									71	<LOD	261	102	321																				
NA	186	20210706-Parrot-OB-C-147		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	152	<LOD	374	321	237																				
									110	<LOD	279	360	171																				
									144	<LOD	343	359	476																				
									135	<LOD	332	347	295																				
NA	187	20210706-Parrot-TA-G-148		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Green Coloration)	21 ft	Yes	**268**	8	357	**1285**	836																				
									247	<LOD	433	**1578**	702																				
									214	<LOD	372	**1155**	675																				
									243	8	387	**1339**	738																				
NA	188	20210706-Parrot-TA-G-149		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Yellow Coloration)	21 ft	Yes	**292**	<LOD	295	**1257**	289																				
									405	<LOD	586	**1317**	268																				
									427	<LOD	426	**1271**	251																				
									375	<LOD	436	**1282**	269																				
NA	189	20210706-Parrot-OB-C-150		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	146	<LOD	308	142	268																				
									121	<LOD	229	73	285																				
									79	<LOD	295	121	277																				
									115	<LOD	277	112	277																				
NA	190	20210709-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
210720-10	191	SRM (Lab Analysis) (2711a)												79	36J	143	**1440**	426	107	54.1	140	1400	414	74	NA	102	103	103					

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	192	20210706-Parrot-OB-C-151		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. 13 composite OB samples were collected from hauls 1281 to 1410. Two grab samples of the underlying tailings were collected	Direct Haul to Phase 1 Area	8-20ft	Yes	55	<LOD	367	79	436																					
									69	8	400	156	313																			
									68	<LOD	408	93	471																			
									64	8	392	109	407																			
NA	193	20210706-Parrot-OB-C-152		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	86	<LOD	366	161	293																			
									63	<LOD	371	97	320																			
									47	<LOD	342	161	419																			
									65	<LOD	360	140	344																			
NA	194	20210706-Parrot-OB-C-153		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	196	<LOD	247	320	199																			
									81	<LOD	284	113	245																			
									64	<LOD	244	107	219																			
									114	<LOD	258	180	221																			
NA	195	20210707-Parrot-OB-C-154		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. 11 composite OB samples were collected from hauls 1411 to 1521. Two grab samples of the underlying tailings were collected and placed back in excavation for future removal.	Direct Haul to Phase 1 Area	8-20ft	Yes	39	<LOD	230	60	322																					
									73	<LOD	306	106	311																			
									36	<LOD	299	68	298																			
									49	<LOD	278	78	310																			
NA	196	20210707-Parrot-OB-C-155		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	43	<LOD	295	63	310																			
									33	<LOD	300	66	270																			
									40	<LOD	317	82	295																			
									39	<LOD	304	70	292																			
NA	197	20210707-Parrot-OB-C-156		OB removal to TA interface		Direct Haul to Phase 1 Area	8-20ft	Yes	56	<LOD	333	96	350																			
									61	<LOD	346	99	370																			
									65	<LOD	368	160	490																			
									61	<LOD	349	118	403																			
NA	198	20210707-Parrot-OB-C-157		OB removal to TA interface		Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	97	<LOD	355	134	320																			
									78	<LOD	394	116	315																			
									185	<LOD	361	311	276																			
									120	<LOD	370	187	304																			
NA	199	20210707-Parrot-OB-C-158		OB removal to TA interface		Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	195	<LOD	267	83	196																			
									174	<LOD	316	82	292																			
									556	<LOD	302	92	276																			
									308	<LOD	295	86	255																			
NA	200	20210707-Parrot-OB-C-159		OB removal to TA interface		Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	92	<LOD	220	119	365																			
									74	<LOD	268	88	351																			
									96	<LOD	220	115	276																			
									87	<LOD	236	107	331																			
NA	201	20210707-Parrot-OB-C-160		OB removal to TA interface		Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	171	<LOD	355	95	376																			
									214	<LOD	250	115	327																			
									78	<LOD	354	83	316																			
									154	<LOD	320	98	340																			
NA	202	20210706-Parrot-TA-G-148							**268**	8	357	**1285**	836																			
									247	<LOD	433	**1578**	702																			
									214	<LOD	372	**1155**	675																			
									243	8	387	**1339**	738																			
NA	203	20210706-Parrot-Dup-148							**270**	<LOD	377	**1499**	**1208**																			
									298	<LOD	365	**1719**	**1144**																			
									197	<LOD	257	**1104**	**1371**																			
									255	<LOD	333	**1441**	**1241**															104.9383	NA	85.97246	107.566	168.2332
210720-11	204	20210706-Parrot-Lab-148	[Reserved for QA/QC]											152	15U	279	**1048**	938											62.55144	NA	72.03098	78.24788	127.1577
NA	205	20210707-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	206	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	207	20210707-Parrot-OB-C-161		OB removal to TA interface	Confirmation samples of OB waste rock material and the top of tailings interface. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. OB was routed to the Phase I placement area. 11 composite OB samples were collected from hauls 1411 to 1520. Two grab samples of the underlying tailings were collected and placed back in excavation for future removal.	Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	**241**	<LOD	241	313	268																					
									299	<LOD	253	541	334																			
									236	<LOD	265	650	254																			
									259	<LOD	253	501	285																			
NA	208	20210707-Parrot-OB-C-162		OB removal to TA interface		Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	60	<LOD	244	70	329																			
									66	<LOD	285	85	285																			
									85	<LOD	261	90	263																			
									70	<LOD	263	82	292																			
NA	209	20210707-Parrot-OB-C-163		OB removal to TA interface		Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	83	<LOD	229	76	317																			
									191	<LOD	312	340	363																			
									89	<LOD	283	96	297																			
									121	<LOD	275	171	326																			
NA	210	20210707-Parrot-TA-G-164		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Dark Green Coloration)	8-20ft	Yes	**778**	<LOD	362	925	568																			
									583	<LOD	349	961	367																			
									712	<LOD	395	674	366																			
									691	<LOD	369	853	434																			
NA	211	20210707-Parrot-TA-G-165		OB removal to TA interface		Grab sample of tailings below OB/TA interface, tailings placed back in excavation for future removal (Green Coloration)	8-20ft	Yes	**288**	11	281	**1322**	**1655**																			
									279	<LOD	279	**1107**	981																			
									245	8	281	**1025**	**2827**																			
									271	10	280	**1151**	**1821**																			
NA	212	20210707-Parrot-OB-C-166		OB removal to TA interface		Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	89	<LOD	354	110	246																			
									183	<LOD	251	204	220																			
									73	<LOD	255	116	245																			
									115	<LOD	287	143	237																			
NA	213	20210707-Parrot-OB-C-167		OB removal to TA interface		Direct Haul to Phase 1 Area or Temporary Contaminated Stockpile Area dependant on insitu sample results	8-20ft	Yes	**294**	<LOD	322	145	334																			
									297	<LOD	315	145	303																			
									245	<LOD	296	103	360																			
									279	<LOD	311	131	332																			
NA	214	20210708-Parrot-OB-C-168		OB removal to TA interface	One confirmation sample of OB waste rock material from the top of tailings interface. Remaining 8 samples of the tailings and clay material directed to MR. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY	Direct Haul to Phase 1 Area	8-20ft	Yes	170	<LOD	267	844	134																			
									237	<LOD	235	475	160																			
									259	<LOD	216	589	160																			
									222	<LOD	239	636	151																			
NA	215	20210708-Parrot-TA-C-169		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**1046**	<LOD	**2377**	**1350**	752																			
									903	<LOD	**1907**	**1288**	732																			
									921	<LOD	**2099**	**1381**	617																			
									957	<LOD	**2128**	**1340**	700																			

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
210720-23	216	20210708-Parrot-CY-G-170		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	One confirmation sample of OB waste rock material from the top of tailings interface. Remaining 8 samples of the tailings and clay material directed to MR. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA/CY/RK were confirmed above action level and were routed to MR. 11 samples were collected from hauls 1521 to 1630. Two grab samples of the underlying Clay and Alluvium were collected and placed back in excavation for future removal.	Grab sample of Clay below TA/CY interface, Clay placed back in excavation for future removal (Black Coloration)	31 ft	Yes	**618**	12	**47600**	214	**1477**	**606**	15U	**28655**	123	**1379**											106.8155	NA	80.19123	90	107.2039
									574	15	**33600**	102	**1212**																				
									510	13	**26000**	94	**1170**																				
									567	13	**35733**	137	**1286**																				
NA	217	20210708-Parrot-TA-C-171		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**894**	<LOD	**3515**	**1290**	**1181**																					
									694	<LOD	**2362**	**1391**	**1077**																				
									669	<LOD	**2191**	**1409**	**1084**																				
									752	<LOD	**2689**	**1363**	**1114**																				
210720-24	218	20210708-Parrot-RK-G-172		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Grab sample of Alluvium below TA/CY interface, Alluvium placed back in excavation for future removal (Grey Coloration)	33 ft	Yes	**1327**	<LOD	418	39	306	**1157**	15U	385	57	288										76.79204	NA	88.57362	124.8175	90.85174
									1756	<LOD	472	55	336																				
									1437	<LOD	414	43	309																				
									1507	<LOD	435	46	317																				
NA	219	20210708-Parrot-TA-C-173		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**661**	<LOD	**1553**	**1207**	864																				
									833	<LOD	**1631**	**1609**	**1084**																				
									767	<LOD	**1899**	**1187**	949																				
									754	<LOD	**1694**	**1334**	966																				
NA	220	20210708-Parrot-TA-C-174		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**987**	<LOD	**1423**	**1498**	**1091**																				
									792	<LOD	**1538**	**1495**	**1888**																				
									998	<LOD	**1921**	**1375**	**1018**																				
									926	<LOD	**1627**	**1456**	**1332**																				
NA	221	20210708-Parrot-TA-C-175		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**824**	<LOD	**1481**	**1614**	**1333**																				
									881	<LOD	**1856**	**2210**	**2236**																				
									741	<LOD	**5825**	**1398**	**2160**																				
									815	<LOD	**3054**	**1741**	**1910**																				
NA	222	20210708-Parrot-TA-C-176		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**723**	10	**2382**	**1466**	**1963**																				
									750	8	**1396**	**1191**	**2568**																				
									686	<LOD	**2107**	**1422**	**2034**																				
									720	9	**1962**	**1360**	**2188**																				
NA	223	20210708-Parrot-TA-C-177		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**1092**	<LOD	**3102**	860	**1053**																				
									615	<LOD	**2279**	731	**2704**																				
									676	<LOD	**1927**	**1057**	971																				
									794	<LOD	**2436**	883	**1576**																				
NA	224	20210708-Parrot-TA-C-178		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**515**	<LOD	**2315**	851	709																				
									525	<LOD	**2157**	687	938																				
									606	<LOD	**2269**	686	582																				
									549	<LOD	**2247**	741	743																				
NA	225	20210709-Parrot-TA-C-179		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 13 composite TA samples were collected from hauls	Direct Haul to MR Stockpile Location	20-30ft	Yes	**625**	<LOD	922	922	**1182**																						
									475	<LOD	588	814	825																				
									513	<LOD	951	716	758																				
									538	<LOD	820	817	922																				
NA	226	20210709-Parrot-TA-C-180		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**701**	<LOD	598	776	**1423**																				
									589	<LOD	488	808	948																				
									544	8	469	816	**1130**																				
									611	8	518	800	**1167**																				
NA	227	20210708-Parrot-OB-C-168							170	<LOD	267	844	134																				
									237	<LOD	235	475	160																				
									259	<LOD	216	589	160																				
									222	<LOD	239	636	151																				
NA	228	20210708-Parrot-Dup-168							**219**	<LOD	258	521	158																				
									169	<LOD	309	**1440**	134																				
									172	<LOD	200	466	131																				
									187	<LOD	256	809	141																				
211007-12	229	20210708-Parrot-Lab-168	[Reserved for QA/QC]											**303**	15U	265	589	144											84.08408	NA	106.8245	127.2013	93.17181
																													136.4865	NA	110.7242	92.61006	95.15419
NA	230	20210709-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	231	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	232	20210709-Parrot-TA-C-181		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 13 composite TA samples were collected from hauls 1631 to 1760.	Direct Haul to MR Stockpile Location	20-30ft	Yes	**527**	<LOD	790	**1151**	**1758**																						
									693	<LOD	884	**1367**	**1348**																				
									706	9	**1146**	**1093**	**2000**																				
									642	9	940	**1204**	**1702**																				
NA	233	20210709-Parrot-TA-C-182		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**504**	<LOD	527	943	**1366**																				
									943	<LOD	**1290**	846	**1026**																				
									514	<LOD	466	**1094**	**3076**																				
									654	<LOD	761	961	**1823**																				
NA	234	20210709-Parrot-TA-C-183		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**478**	9	566	976	**2248**																				
									362	<LOD	572	919	**1636**																				
									479	10	464	805	**1513**																				
									440	10	534	900	**1799**																				
NA	235	20210709-Parrot-TA-C-184		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**800**	<LOD	**2148**	**1446**	**3139**																				
									753	<LOD	**1486**	**1448**	**2839**																				
									647	8	**1301**	**1646**	**1624**																				
									733	8	**1645**	**1513**	**2534**																				
NA	236	20210709-Parrot-TA-C-185		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**431**	9	610	**1450**	**2582**																				
									767	<LOD	**2128**	**1557**	**1650**																				
									528	11	815	**1339**	**4553**																				
									575	10	**1184**	**1449**	**2928**																				
NA	237	20210709-Parrot-TA-C-186		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**740**	<LOD	**2707**	**1260**	**1951**																				
									462	<LOD	473	956	**1490**																				
									496	<LOD	545	**1059**	**1872**																				
									566	<LOD	**1242**	**1092**	**1771**																				
NA	238	20210709-Parrot-TA-C-187		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**426**	<LOD	491	923	921																				
									468	<LOD	774	813	619																				
									456	<LOD	456	751	774																				
									450	<LOD	574	829	771																				
NA	239	20210709-Parrot-TA-C-188		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**548**	<LOD	583	930	**1084**																				
									539	<LOD	653	890	835																				
									547	<LOD	615	**1002**	**1343**																				
									545	<LOD	617	941	**1087**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	240	20210709-Parrot-TA-C-189		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 13 composite TA samples were collected from hauls 1631 to 1760.	Direct Haul to MR Stockpile Location	20-30ft	Yes	**608**	<LOD	**1217**	**1255**	**1686**																				
									492	<LOD	834	**1107**	**1929**																				
									653	<LOD	**2165**	**1094**	**2007**																				
									584	<LOD	**1405**	**1152**	**1874**																				
NA	241	20210709-Parrot-TA-C-190		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**574**	<LOD	837	**1569**	**1879**																				
									535	8	797	**1392**	**2572**																				
									470	<LOD	801	**1373**	**1867**																				
									526	8	812	**1445**	**2106**																				
NA	242	20210709-Parrot-TA-C-191		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**412**	12	511	**1428**	**2260**																				
									527	8	483	**1444**	**3296**																				
									452	10	579	**1350**	**3183**																				
									464	10	524	**1407**	**2913**																				
NA	243	20210712-Parrot-TA-C-192		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**525**	<LOD	571	923	**1522**																				
									516	<LOD	464	980	**1212**																				
									584	<LOD	446	872	880																				
									542	<LOD	494	925	**1205**																				
NA	244	20210712-Parrot-TA-C-193		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**514**	<LOD	538	**1043**	**1221**																				
									465	<LOD	670	**1089**	**1284**																				
									456	<LOD	513	**1106**	**1587**																				
									478	<LOD	574	**1079**	**1364**																				
NA	245	20210709-Parrot-TA-C-194		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**481**	<LOD	492	**1197**	772																				
									487	<LOD	617	**1165**	**1214**																				
									408	<LOD	609	**1023**	**1488**																				
									459	<LOD	573	**1128**	**1158**																				
NA	246	20210712-Parrot-TA-C-195		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 10 composite TA samples were collected from hauls 1761-1870. One (1) 8 point composite OB sample was collected from a stockpile area associated with *Building 2* .	Direct Haul to MR Stockpile Location	20-30ft	Yes	**496**	10	400	**1211**	**1070**																				
									747	**38**	**2903**	**1554**	**2413**																				
									487	<LOD	571	**1377**	**1338**																				
									577	**24**	**1291**	**1381**	**1607**																				
NA	247	20210712-Parrot-TA-C-196		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**426**	<LOD	413	**1182**	**2269**																				
									481	<LOD	496	**1222**	**2318**																				
									414	<LOD	464	**1266**	**1912**																				
									440	<LOD	458	**1223**	**2166**																				
NA	248	20210712-Parrot-TA-C-197		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**390**	<LOD	686	**1184**	**1612**																				
									336	<LOD	463	965	**2020**																				
									415	10	615	**1382**	**1793**																				
									380	10	588	**1177**	**1808**																				
NA	249	20210712-Parrot-TA-C-198		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**420**	<LOD	567	**1303**	**2064**																				
									458	<LOD	619	**1166**	**1450**																				
									402	<LOD	655	**1091**	**1682**																				
									427	<LOD	614	**1187**	**1732**																				
NA	250	20210712-Parrot-TA-C-199		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**500**	<LOD	945	**1169**	**2420**																				
									545	8	514	**1699**	**1748**																				
									450	<LOD	520	**1423**	**2494**																				
									498	8	660	**1430**	**2221**																				
NA	251	20210712-Parrot-OB-C-200		Overburden transportation from *Building 2* to phase 1		Direct haul to Phase 1 area/Scraped OB fine material for placement in Phase I for grading purposes. Stockpile was approx. 200-300 CY.	0-0.5 ft	Yes	39	<LOD	241	80	300																				
									20	<LOD	177	184	242																				
									33	<LOD	180	92	302																				
									31	<LOD	199	119	281																				
NA	252	20210712-Parrot-TA-C-199							**500**	<LOD	945	**1169**	**2420**																				
									545	8	514	**1699**	**1748**																				
									450	<LOD	520	**1423**	**2494**																				
									498	8	660	**1430**	**2221**																				
210720-21	253	20210712-Parrot-Dup-199							**480**	<LOD	460	**1341**	**1818**																				
									401	<LOD	622	**1561**	**3044**	**364**	15U	475	**1348**	**1549**															
									413	<LOD	404	**1480**	**1798**																				
									431	<LOD	495	**1461**	**2220**																				
210720-13	254	20210712-Parrot-Lab-199	[Reserved for QA/QC]											**367**	15U	422	**1368**	**1613**											86.55518	NA	75.08843	102.1207	99.96998
																													73.64548	NA	63.9717	95.64204	72.63585
210720-22	255	20210712-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15U	32J	9U	9U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	256	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	257	20210709-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
210720-14	258	SRM (Lab Analysis) (2711a)												79	15U	154	**1506**	429	107	54.1	140	1400	414	74	NA	110	108	104					
NA	259	20210712-Parrot-TA-C-201		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 10 composite TA samples were collected from hauls 1871-1950.	Direct Haul to MR Stockpile Location	20-30ft	Yes	**420**	<LOD	504	**1579**	**1498**																				
									504	<LOD	576	**1502**	901																				
									490	<LOD	494	**1417**	**1864**																				
									471	<LOD	525	**1499**	**1421**																				
NA	260	20210712-Parrot-TA-C-202		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**397**	<LOD	484	**1314**	970																				
									454	<LOD	538	**1293**	**2759**																				
									459	9	430	**1362**	**1172**																				
									437	9	484	**1323**	**1634**																				
NA	261	20210713-Parrot-TA-C-203		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**451**	<LOD	608	**1234**	720																				
									519	<LOD	789	**1555**	767																				
									449	<LOD	603	**1506**	915																				
									473	<LOD	667	**1432**	801																				
NA	262	20210713-Parrot-TA-C-204		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**308**	9	404	**1383**	**1243**																				
									392	<LOD	517	**1395**	**1513**																				
									347	<LOD	378	**1402**	**1547**																				
									349	9	433	**1393**	**1434**																				
NA	263	20210713-Parrot-TA-C-205		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**435**	<LOD	925	963	738																				
									285	<LOD	762	**1034**	**1848**																				
									288	<LOD	665	969	829																				
									336	<LOD	784	989	**1138**																				
NA	264	20210713-Parrot-TA-C-206		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**322**	<LOD	995	**1071**	991																				
									347	<LOD	844	**1079**	**1061**																				
									336	<LOD	680	**1052**	**1181**																				
									335	<LOD	840	**1067**	**1078**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	265	20210713-Parrot-TA-C-207		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 8 composite TA samples were collected from hauls 1871-1950.	Direct Haul to MR Stockpile Location	20-30ft	Yes	**262**	<LOD	379	**1209**	**1762**																				
									315	<LOD	414	**1375**	**1439**																			
									274	<LOD	391	**1309**	**2004**																			
									284	<LOD	395	**1298**	**1735**																			
NA	266	20210713-Parrot-TA-C-208		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**348**	<LOD	483	**1023**	680																			
									403	<LOD	726	**1170**	667																			
									426	<LOD	470	**1161**	632																			
									392	<LOD	560	**1118**	660																			
NA	267	20210713-Parrot-TA-C-209		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**523**	<LOD	455	**1247**	528																			
									519	<LOD	376	**1072**	522																			
									588	<LOD	458	**1316**	602																			
									543	<LOD	430	**1212**	551																			
NA	268	20210713-Parrot-TA-C-210		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**346**	<LOD	669	855	954																			
									380	<LOD	551	955	757																			
									370	<LOD	607	855	767																			
									365	<LOD	609	888	826																			
NA	269	20210714-Parrot-TA-C-211		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 8 composite TA samples were collected from hauls 1951-2030. One (1) 8 point composite OB sample was collected from a stockpile area associated with Building 2.	Direct Haul to MR Stockpile Location	20-30ft	Yes	**364**	<LOD	413	**1321**	993																					
									392	<LOD	455	**1460**	**1556**																			
									415	<LOD	630	**1503**	846																			
									390	<LOD	499	**1428**	**1132**																			
NA	270	20210714-Parrot-TA-C-212		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**445**	<LOD	357	**1157**	598																			
									418	<LOD	360	**1116**	638																			
									503	<LOD	338	**1315**	636																			
									455	<LOD	352	**1196**	624																			
NA	271	20210714-Parrot-TA-C-213		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**416**	<LOD	423	**1001**	469																			
									354	<LOD	430	813	872																			
									441	<LOD	371	863	715																			
									404	<LOD	408	892	685																			
NA	272	20210714-Parrot-TA-C-214		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**553**	<LOD	392	966	739																			
									567	<LOD	496	846	478																			
									518	<LOD	487	836	543																			
									546	<LOD	458	883	587																			
NA	273	20210714-Parrot-TA-C-215		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**398**	<LOD	362	**1067**	910																			
									398	<LOD	370	**1041**	615																			
									482	<LOD	354	959	561																			
									426	<LOD	362	**1022**	695																			
NA	274	20210714-Parrot-TA-C-216		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**278**	<LOD	282	835	758																			
									265	<LOD	316	**1082**	**1699**																			
									224	<LOD	266	**1028**	**2114**																			
									256	<LOD	288	982	**1524**																			
NA	275	20210714-Parrot-TA-C-217		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**345**	<LOD	399	909	709																			
									344	<LOD	356	884	690																			
									386	<LOD	409	**1045**	677																			
									358	<LOD	388	946	692																			
NA	276	20210714-Parrot-TA-C-218		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30ft	Yes	**352**	<LOD	427	900	879																			
									356	<LOD	385	**1129**	877																			
									412	<LOD	370	**1040**	**1299**																			
									373	<LOD	394	**1023**	**1018**																			
NA	277	20210714-Parrot-OB-C-219		Overburden transportation from *Building 2* to phase 1		Direct haul to Phase 1 area/Scraped OB fine material for placement in Phase I for grading purposes. Stockpile was approx. 200-300 CY.	0-0.5 ft	Yes	25	<LOD	241	43	303																			
									32	<LOD	267	69	523																			
									22	<LOD	253	51	303																			
									26	<LOD	254	54	376																			
NA	278	20210715-Parrot-TA-C-220		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal	Direct Haul to MR Stockpile Location	20-30ft	Yes	**322**	<LOD	412	968	**1282**																			
									295	<LOD	483	819	**1362**																			
									279	<LOD	331	866	920																			
									299	<LOD	409	884	**1188**																			
NA	279	20210715-Parrot-TA-C-220							**322**	<LOD	412	968	**1282**																			
									295	<LOD	483	819	**1362**																			
									279	<LOD	331	866	920																			
									299	<LOD	409	884	**1188**																			
210902-1	280	20210715-Parrot-Dup-220							**361**	<LOD	452	978	**1506**																			
									320	<LOD	418	812	**1730**	**294**	15U	523	833	**1277**														
									320	<LOD	425	880	**1059**																			
									334	<LOD	432	890	**1432**																111.7188	NA	105.6281	100.6408	120.5107
210902-2	281	20210715-Parrot-Lab-220	[Reserved for QA/QC]											**288**	15U	518	860	**1206**											103.7037	NA	78.89318	102.8295	98.50746
210902-3	282	20210715-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15U	27J	9U	9U														
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	283	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																														
																			107	54.1	140	1400	414									
NA	284	20210715-Parrot-OB-C-221		Berm constructed for spill containment near trailers		Bermed area sampled contains visable waste material near the surface, OB is thin in this area. When this is removed soils routing/screening is recommended.	Surface	Yes	69	<LOD	200	236	406																			
									77	<LOD	262	273	392																			
									86	<LOD	253	301	545																			
									77	<LOD	238	270	448																			
NA	285	20210715-Parrot-TA-C-222		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 8 composite TA samples were collected from hauls 2051-2120. 2 of 8 samples were taken to the vertical extent.	Direct Haul to MR Stockpile Location	20-30 ft.	Yes	**426**	<LOD	712	431	884																					
									249	<LOD	694	455	900																			
									282	<LOD	927	662	977																			
									319	<LOD	778	516	920																			
NA	286	20210715-Parrot-TA-C-223		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30 ft.	Yes	**338**	<LOD	516	764	977																			
									301	<LOD	556	628	**1022**																			
									318	<LOD	649	761	**1025**																			
									319	<LOD	574	718	**1008**																			
NA	287	20210715-Parrot-TA-C-224		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30 ft.	Yes	**521**	<LOD	472	826	**1126**																			
									419	<LOD	349	728	**3835**																			
									317	<LOD	325	618	625																			
									419	<LOD	382	724	**1862**																			
NA	288	20210715-Parrot-TA-C-225		Tailings and Clay removal to alluvium approx. 4 ft above vertical extent		Direct Haul to MR Stockpile Location	20-30 ft.	Yes	**405**	<LOD	981	839	819																			
									437	<LOD	**1171**	643	775																			
									591	<LOD	**1577**	795	**1012**																			
									478	<LOD	**1243**	759	869																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	289	20210715-Parrot-TA-C-226		Tailings and Clay removal to alluvium to vertical extent.	Confirmation samples of TA waste material. Sub-samples taken one per truck load and composited every 10 loads to equal approximately 400 CY stockpiles samples. TA was routed to the MR stockpile area. 8 composite TA samples were collected from hauls 2051-2120. 2 of 8 samples were	Direct Haul to MR Stockpile Location	30-40 ft.	Yes	**453**	<LOD	864	973	705																				
									552	<LOD	622	891	507																				
									711	<LOD	**1042**	971	**1111**																				
									572	<LOD	843	945	774																				
NA	290	20210715-Parrot-TA-C-227		Tailings and Clay removal to alluvium to vertical extent.		Direct Haul to MR Stockpile Location	30-40 ft.	Yes	140	<LOD	404	231	321																				
									126	<LOD	458	254	485																				
									216	<LOD	512	358	503																				
									161	<LOD	458	281	436																				
NA	291	20210719-Parrot-RK-C-228	20210719-Parrot-RK-C-229	50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent	8 pt. composite samples along with individual grab samples were collected at the surface of the vertical extent within the main excavation area. 6 samples of the 50 ft. x 100 ft. sampling grid were collected with 4 grab samples collected of unique soil types found near the vertical extent of the excavation. The toe slope of the floor was surveyed before the sampling grid was overlayed on the excavation footprint and ramdom sample locations were generated in GIS for each composite sample collected within each sampling grid.	8 pt. Composite Sample of the Surface at the Vertical Extent- Before Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	13	8	**1276**	95	712																				
									21	<LOD	**1691**	80	854																				
									17	<LOD	**1243**	74	790																				
									17	8	**1403**	83	785																				
NA	292	20210719-Parrot-RK-C-229		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent		8 pt. Composite Sample of the Surface at the Vertical Extent- Before Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	64	<LOD	617	188	**1505**																				
									38	<LOD	677	100	**1200**																				
									39	<LOD	620	100	**1079**																				
									47	<LOD	638	129	**1261**																				
NA	293	20210719-Parrot-RK-C-230		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent		8 pt. Composite Sample of the Surface at the Vertical Extent- Before Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	69	16	784	106	909																				
									72	20	817	127	858																				
									78	14	771	112	851																				
									73	17	791	115	873																				
NA	294	20210719-Parrot-RK-C-231		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent		8 pt. Composite Sample of the Surface at the Vertical Extent- Before Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	31	<LOD	873	121	**1491**																				
									25	<LOD	655	112	**1210**																				
									30	<LOD	752	112	**1223**																				
									29	<LOD	760	115	**1308**																				
NA	295	20210719-Parrot-CY-G-232		Surface Material at Vertical Extent		Surface Grab of Black Clay Requiring Further Excavation	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	25	<LOD	318	100	545																				
									30	<LOD	305	96	534																				
									36	<LOD	308	94	522																				
									30	<LOD	310	97	534																				
NA	296	20210719-Parrot-RK-G-233		Surface Material at Vertical Extent		Alluvial Sample Approximately 1 ft. Below Black Clay Layer	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	30	<LOD	402	139	782																				
									17	<LOD	396	123	782																				
									25	<LOD	437	115	829																				
									24	<LOD	412	126	798																				
NA	297	20210719-Parrot-RK-G-234		Surface Material at Vertical Extent		Surface Grab of Orange Alluvium	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	63	<LOD	465	58	195																				
									62	<LOD	533	87	235																				
									69	<LOD	530	73	238																				
									65	<LOD	509	73	223																				
NA	298	20210719-Parrot-CY-G-235		Surface Material at Vertical Extent		Surface Grab of Grey Clay Material Typically Found Below the Black Clay Layer	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	40	<LOD	773	98	834																				
									34	<LOD	817	103	844																				
									33	<LOD	799	107	852																				
									36	<LOD	796	103	843																				
NA	299	20210719-Parrot-RK-C-236		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent		8 pt. Composite Sample of the Surface at the Vertical Extent- Before Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	55	<LOD	644	154	837																				
									50	<LOD	575	176	650																				
									46	<LOD	639	185	833																				
									50	<LOD	619	172	773																				
NA	300	20210719-Parrot-RK-C-237		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent		8 pt. Composite Sample of the Surface at the Vertical Extent- Before Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	147	<LOD	717	147	570																				
									139	<LOD	714	150	455																				
									133	<LOD	788	127	479																				
									140	<LOD	740	141	501																				
NA	301	20210720-Parrot-RK-C-238		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent	8 pt. composite samples were collected at the surface of the vertical extent. 1 samples of the 50 ft. x 100 ft. sampling grid were	8 pt. Composite Sample of the Surface at the Vertical Extent- After Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	157	<LOD	**1245**	293	790																				
									113	<LOD	**1013**	194	707																				
									182	<LOD	**1105**	257	784																				
									151	<LOD	**1121**	248	760																				
NA	302	20210721-Parrot-RK-C-239		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent	8 pt. composite samples were collected at the surface of the vertical extent. 3 samples of the 50 ft. x 100 ft. sampling grid were collected. Random sample locations were generated in GIS for each composite sample collected within each sampling grid.	8 pt. Composite Sample of the Surface at the Vertical Extent- After Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	**371**	<LOD	**1375**	125	778																				
									380	<LOD	**1157**	162	705																				
									342	<LOD	**1228**	121	741																				
									364	<LOD	**1253**	136	741																				
NA	303	20210721-Parrot-RK-C-240		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent		8 pt. Composite Sample of the Surface at the Vertical Extent- After Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	83	<LOD	**2658**	121	**1020**																				
									83	<LOD	**2855**	131	**1234**																				
									81	<LOD	**2600**	137	**1178**																				
									82	<LOD	**2704**	130	**1144**																				
NA	304	20210721-Parrot-RK-C-240							83	<LOD	**2658**	121	**1020**																				
									83	<LOD	**2855**	131	**1234**																				
									81	<LOD	**2600**	137	**1178**																				
									82	<LOD	**2704**	130	**1144**																				
NA	305	20210721-Parrot-DUP-240							86	<LOD	**1817**	133	**1185**																				
									82	<LOD	**1913**	133	**1318**																				
									87	<LOD	**2288**	109	**1067**																				
									85	<LOD	**2006**	125	**1190**																				
210902-4	306	20210721-Parrot-LAB-240	[Reserved for QA/QC]											76	15 U	**2,489**	123	**1,058**											96.86275	NA	134.8122	103.7333	96.13445
																													92.30769	NA	92.03747	94.85861	92.48252
NA	307	20210721-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	308	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414	0	0	0	0	0					
NA	309	20210721-Parrot-RK-C-241		50 ft. By 100 ft. Sampling Grids of the Excavation at the Vertical Extent	8 pt. composite samples were collected at the surface of the vertical extent. 3 samples of the 50 ft. x 100 ft. sampling grid were	8 pt. Composite Sample of the Surface at the Vertical Extent- After Dozer Cleanup	Approx. 40 ft. bgs - Elevation 5460 ft	Yes	96	**25**	**5533**	165	839																				
									90	20	**4528**	155	906																				
									92	**27**	**4833**	165	872																				
									93	**24**	**4965**	162	873																				
NA	310	20210721-Parrot-OB-C-242		West Overburden Knob	7 Confirmation samples of OB of West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor). Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2121-2180.	10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8 ft. bgs.	Yes	95	<LOD	383	313	333																				
									85	<LOD	373	218	333																				
									73	<LOD	397	278	387																				
									84	<LOD	384	270	351																				
NA	311	20210721-Parrot-OB-C-243		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8 ft. bgs.	Yes	75	<LOD	386	232	740																				
									95	<LOD	347	188	294																				
									81	<LOD	388	190	361																				
									84	<LOD	374	203	465																				
NA	312	20210721-Parrot-OB-C-244		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8 ft. bgs.	Yes	75	<LOD	286	134	329																				
									95	<LOD	286	155	355																				
									85	<LOD	292	181	316																				
									85	<LOD	288	157	333																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	313	20210721-Parrot-OB-C-245		West Overburden Knob	7 Confirmation samples of OB of West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor). Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2121-2180.	10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8 ft. bgs.	Yes	104	<LOD	301	185	317																				
									113	<LOD	264	192	387																				
									174	<LOD	286	691	298																				
									130	<LOD	284	356	334																				
NA	314	20210721-Parrot-OB-C-246		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8 ft. bgs.	Yes	73	<LOD	239	155	300																		
									109	<LOD	225	367	336																				
									85	<LOD	227	205	341																				
									89	<LOD	230	242	326																				
NA	315	20210721-Parrot-OB-C-247		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8 ft. bgs.	Yes	99	<LOD	194	135	188																		
									83	<LOD	216	284	276																				
									111	<LOD	232	159	207																				
									98	<LOD	214	193	224																				
NA	316	20210721-Parrot-OB-C-248		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8 ft. bgs.	Yes	50	<LOD	255	152	212																		
									73	<LOD	314	209	272																				
									81	<LOD	323	138	273																				
									68	<LOD	297	166	252																				
H21070691-001	E317	20210721-Parrot-ET-C-249		ET Cover	12 Confirmation samples of OB of West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor), or, to a stockpile area to be hauled to MR at a later date. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls	8 pt. Composite Sample of OB near ET Cover- To be sampled at a later date	Surface	Yes	16	<LOD	29	7	73	6	<LOD	20	9	37											238.8889	NA	167.5	77.77778	185.5856
									13	9	38	<LOD	69																				
									14	<LOD	<LOD	<LOD	64																				
									14	9	34	7	69																				
NA	318	20210722-Parrot-OB-C-250		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8 ft. bgs.	Yes	97	<LOD	460	252	904																		
									94	<LOD	524	185	**1044**																				
									81	<LOD	425	152	702																				
									91	<LOD	470	196	883																				
NA	319	20210722-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
210902-22	320	SRM (Lab Analysis) (2710a)												**1,458**	15 U	**3,527**	**5,519**	**4,148**	1540	12.3	3420	5520	4180	95	NA	103	100	99					
NA	321	20210722-Parrot-OB-C-251		West Overburden Knob	12 Confirmation samples of OB of West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor), or, to a stockpile area to be hauled to MR at a later date. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2191-2310.	10 pt. Composite Sample of OB at Ground Surface, Hauled to MR Stockpile	Approx. 0 ft. - 8ft. Bgs	Yes	160	<LOD	606	383	**1293**																				
									119	<LOD	506	207	942																				
									117	<LOD	**1470**	269	**1861**																				
									132	<LOD	861	286	**1365**																				
NA	322	20210722-Parrot-OB-C-252		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Hauled to MR Stockpile	Approx. 0 ft. - 8ft. Bgs	Yes	74	<LOD	737	215	**1297**																		
									74	<LOD	595	235	**1285**																				
									106	<LOD	710	300	**1617**																				
									85	<LOD	681	250	**1400**																				
NA	323	20210722-Parrot-OB-C-253		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Hauled to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	118	<LOD	447	182	707																		
									114	<LOD	478	130	767																				
									69	<LOD	391	121	558																				
									100	<LOD	439	144	677																				
NA	324	20210722-Parrot-OB-C-254		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	113	<LOD	494	314	375																		
									115	<LOD	525	224	511																				
									201	<LOD	562	249	**1073**																				
									143	<LOD	527	262	653																				
NA	325	20210722-Parrot-OB-C-255		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	162	<LOD	505	305	353																		
									117	<LOD	385	266	404																				
									126	<LOD	394	213	325																				
									135	<LOD	428	261	361																				
NA	326	20210722-Parrot-OB-C-256		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	112	<LOD	269	134	264																		
									81	<LOD	766	183	382																				
									64	<LOD	287	216	308																				
									86	<LOD	441	178	318																				
NA	327	20210722-Parrot-OB-C-257		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	**384**	<LOD	553	211	385																		
									251	<LOD	379	195	356																				
									270	<LOD	407	235	384																				
									302	<LOD	446	214	375																				
NA	328	20210722-Parrot-OB-C-258		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	88	<LOD	373	96	321																		
									135	<LOD	418	131	285																				
									116	<LOD	441	144	357																				
									113	<LOD	411	124	321																				
NA	329	20210722-Parrot-OB-C-259		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	87	<LOD	617	124	357																		
									49	<LOD	414	144	444																				
									57	<LOD	433	167	373																				
									64	<LOD	488	145	391																				
NA	330	20210722-Parrot-OB-C-260		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	55	<LOD	531	160	329																		
									53	<LOD	467	199	372																				
									62	<LOD	464	164	325																				
									57	<LOD	487	174	342																				
NA	331	20210722-Parrot-OB-C-260							55	<LOD	531	160	329																				
									53	<LOD	467	199	372																				
									62	<LOD	464	164	325																				
									57	<LOD	487	174	342																				
NA	332	20210722-Parrot-Dup-260							51	<LOD	534	156	316																				
									38	<LOD	518	267	378																				
									81	<LOD	492	341	297																				
									57	<LOD	515	255	330															100	NA	105.6088	146.0803	96.58869
210902-5	333	20210722-Parrot-LAB-260	[Reserved for QA/QC]											66	15 U	459	235	367											116.4706	NA	94.18605	134.7992	107.3099
NA	334	20210722-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	335	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	336	20210722-Parrot-OB-C-261		West Overburden Knob	12 Confirmation samples of OB of West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor),	10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	121	<LOD	261	144	290																		
									200	<LOD	261	189	326																				
									131	<LOD	318	263	291																				
									151	<LOD	280	199	302																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	337	20210723-Parrot-OB-C-262		West Overburden Knob	12 Confirmation samples of OB of West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor). Additionally, 2 grab samples were taken from the floor of the first OB lift. These samples were used to determine an approximate boundary of the "dirty" soil. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2311-2440	10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	50	<LOD	321	137	359																						
									53	<LOD	387	109	317																				
									70	<LOD	341	99	316																				
									58	<LOD	350	115	331																				
NA	338	20210723-Parrot-OB-C-263		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	126	<LOD	273	103	318																				
									176	<LOD	291	142	388																				
									135	<LOD	260	204	380																				
									146	<LOD	275	150	362																				
NA	339	20210723-Parrot-OB-C-264		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	84	<LOD	262	75	346																				
									103	<LOD	291	105	552																				
									86	<LOD	295	77	428																				
									91	<LOD	283	86	442																				
NA	340	20210723-Parrot-OB-C-265		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	49	<LOD	398	122	351																				
									53	<LOD	433	96	382																				
									57	<LOD	581	124	430																				
									53	<LOD	471	114	388																				
NA	341	20210723-Parrot-OB-C-266		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	36	<LOD	260	124	352																				
									43	<LOD	257	90	311																				
									54	<LOD	341	92	336																				
									44	<LOD	286	102	333																				
NA	342	20210723-Parrot-OB-C-267		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	63	<LOD	302	99	377																				
									67	<LOD	340	144	263																				
									65	<LOD	332	136	290																				
									65	<LOD	325	126	310																				
NA	343	20210723-Parrot-OB-C-268		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	52	<LOD	409	114	425																				
									49	<LOD	397	101	335																				
									42	<LOD	346	99	443																				
									48	<LOD	384	105	401																				
NA	344	20210723-Parrot-OB-G-269		West Overburden Knob		Grab Sample of OB/Waste from 0-3 ft	Approx. 0 ft. - 3 ft. Bgs	Yes	**210**	<LOD	711	472	424																				
									198	<LOD	851	472	479																				
									208	<LOD	602	539	375																				
									205	<LOD	721	494	426																				
NA	345	20210723-Parrot-OB-G-270		West Overburden Knob		Grab Sample of OB under waste stream	Approx. 8 ft. bgs	Yes	87	<LOD	286	130	430																				
									87	<LOD	289	118	392																				
									88	<LOD	277	154	384																				
									87	<LOD	284	134	402																				
NA	346	20210723-Parrot-OB-C-271		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	32	<LOD	372	133	328																				
									25	<LOD	490	128	555																				
									36	<LOD	352	205	420																				
									31	<LOD	405	155	434																				
NA	347	20210723-Parrot-OB-C-272		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	33	<LOD	334	155	342																				
									35	<LOD	422	138	416																				
									26	<LOD	275	123	367																				
									31	<LOD	344	139	375																				
NA	348	20210723-Parrot-OB-C-273		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	33	<LOD	312	96	441																				
									64	<LOD	336	86	426																				
									47	<LOD	424	95	559																				
									48	<LOD	357	92	475																				
NA	349	20210723-Parrot-OB-C-274		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	38	<LOD	397	75	409																				
									43	<LOD	355	90	405																				
									38	<LOD	352	76	473																				
									40	<LOD	368	80	429																				
NA	350	20210723-Parrot-OB-C-275		West Overburden Knob		10 pt. Composite Sample of OB at Ground Surface, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	42	<LOD	359	103	434																				
									70	<LOD	430	127	502																				
									57	<LOD	409	116	452																				
									56	<LOD	399	115	463																				
NA	351	20210726-Parrot-TA-C-276		West Overburden Knob	11 Confirmation samples of OB from West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor). Sample numbers 279-281 contained waste which was routed to MR per truck load by insitu sampling. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2441-2560	10 pt. Composite Sample within the first cut of OB within the cell, Direct Haul to MR	Approx. 0 ft. - 3 ft. Bgs	Yes	97	<LOD	384	120	588																						
									95	<LOD	422	139	641																				
									622	<LOD	674	111	691																				
									271	<LOD	493	123	640																				
NA	352	20210726-Parrot-OB-C-277		West Overburden Knob		10 pt. Composite Sample within the first cut of OB within the cell, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	70	<LOD	422	97	331																				
									62	<LOD	294	54	320																				
									51	<LOD	420	82	389																				
									61	<LOD	379	78	347																				
NA	353	20210726-Parrot-OB-C-278		West Overburden Knob		10 pt. Composite Sample within the first cut of OB within the cell, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	35	<LOD	243	74	289																				
									37	<LOD	308	92	286																				
									77	<LOD	287	88	283																				
									50	<LOD	279	85	286																				
NA	354	20210726-Parrot-OB-C-279		West Overburden Knob		10 pt. Composite Sample within the first cut of OB within the current cell, Insitu sampling directed loads to both MR and Phase II. Waste was intermixed with the OB and routed appropriately.	Approx. 0 ft. - 8ft. Bgs	Yes	**498**	<LOD	317	136	247																				
									348	<LOD	340	113	277																				
									381	<LOD	302	163	211																				
									409	<LOD	320	137	245																				
NA	355	20210726-Parrot-OB-C-280		West Overburden Knob		10 pt. Composite Sample within the first cut of OB within the current cell, Insitu sampling directed loads to both MR and Phase II. Waste was intermixed with the OB and routed appropriately.	Approx. 0 ft. - 8ft. Bgs	Yes	58	<LOD	505	122	569																				
									104	<LOD	540	142	481																				
									84	<LOD	526	135	574																				
									82	<LOD	524	133	541																				
NA	356	20210727-Parrot-OB-C-290							67	<LOD	537	223	460																				
									43	<LOD	457	269	418																				
									135	<LOD	487	168	506																				
									82	<LOD	494	220	461																				
NA	357	20210727-Parrot-Dup-290							102	<LOD	426	217	419																				
									128	<LOD	489	174	371																				
									71	<LOD	395	233	397																				
									100	<LOD	437	208	396																				
210902-6	358	20210727-Parrot-Lab-290	[Reserved for QA/QC]											96	15 U	480	232	405											122.8571	NA	88.45375	94.54545	85.7659
																													117.551	NA	97.2316	105.4545	87.78902
NA	359	20210727-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	360	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	361	20210726-Parrot-OB-C-281		West Overburden Knob	11 Confirmation samples of OB from West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor). Sample numbers 279-281 contained waste which was routed to MR per truck load by insitu sampling. Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2391-2500	10 pt. Composite Sample within the first cut of OB within the current cell, Insitu sampling directed loads to both MR and Phase II. Waste was intermixed with the OB and routed appropriately.	Approx. 0 ft. - 8ft. Bgs	Yes	91	<LOD	494	178	416																						
									82	<LOD	501	234	543																				
									82	<LOD	520	111	417																				
									85	<LOD	505	174	459																				
NA	362	20210726-Parrot-OB-C-282		West Overburden Knob		10 pt. Composite Sample within the first cut of OB within the cell, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	84	<LOD	464	127	479																				
									139	<LOD	467	157	564																				
									141	<LOD	563	309	853																				
									121	<LOD	498	198	632																				
NA	363	20210726-Parrot-OB-C-283		West Overburden Knob		10 pt. Composite Sample within the first cut of OB within the cell, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	51	<LOD	348	104	555																				
									70	<LOD	296	77	442																				
									47	<LOD	343	85	425																				
									56	<LOD	329	89	474																				
NA	364	20210726-Parrot-OB-C-284		West Overburden Knob		10 pt. Composite Sample within the first cut of OB within the cell, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	72	<LOD	411	176	675																				
									75	<LOD	402	217	713																				
									98	<LOD	442	167	621																				
									82	<LOD	418	187	670																				
NA	365	20210726-Parrot-OB-C-285		West Overburden Knob		10 pt. Composite Sample within the first cut of OB within the cell, Direct Haul to Phase II	Approx. 0 ft. - 8ft. Bgs	Yes	129	<LOD	405	328	692																				
									109	<LOD	419	296	702																				
									142	<LOD	417	373	640																				
									127	<LOD	414	332	678																				
NA	366	20210726-Parrot-OB-C-286		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	103	<LOD	348	231	328																				
									141	<LOD	371	558	248																				
									75	<LOD	347	227	289																				
									106	<LOD	355	339	288																				
NA	367	20210727-Parrot-OB-C-287		West Overburden Knob	15 Confirmation samples of OB from West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor). Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2501-2650	10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	79	<LOD	288	188	271																				
									103	<LOD	311	205	238																				
									53	<LOD	271	171	244																				
									78	<LOD	290	188	251																				
NA	368	20210727-Parrot-OB-C-288		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	71	<LOD	383	126	338																				
									76	<LOD	421	137	462																				
									62	<LOD	369	167	349																				
									70	<LOD	391	143	383																				
NA	369	20210727-Parrot-OB-C-289		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	109	<LOD	266	149	272																				
									148	<LOD	358	150	325																				
									135	<LOD	330	235	326																				
									131	<LOD	318	178	308																				
NA	370	20210727-Parrot-OB-C-290		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	67	<LOD	537	223	460																				
									43	<LOD	457	269	418																				
									135	<LOD	487	168	506																				
									82	<LOD	494	220	461																				
NA	371	20210727-Parrot-OB-C-291		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	79	<LOD	484	189	308																				
									67	<LOD	424	150	287																				
									96	<LOD	557	517	325																				
									81	<LOD	488	285	307																				
NA	372	20210727-Parrot-OB-C-292		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	90	<LOD	330	197	326																				
									99	<LOD	324	223	305																				
									104	<LOD	364	173	335																				
									98	<LOD	339	198	322																				
NA	373	20210727-Parrot-OB-C-293		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	130	<LOD	423	184	390																				
									147	<LOD	385	322	358																				
									61	<LOD	376	347	326																				
									113	<LOD	395	284	358																				
NA	374	20210727-Parrot-OB-C-294		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	104	<LOD	400	190	693																				
									83	<LOD	351	183	518																				
									88	<LOD	392	177	561																				
									92	<LOD	381	183	591																				
NA	375	20210727-Parrot-OB-C-295		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	63	<LOD	359	124	296																				
									98	<LOD	425	243	305																				
									106	<LOD	389	187	272																				
									89	<LOD	391	185	291																				
NA	376	20210727-Parrot-OB-C-296		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	70	<LOD	388	218	183																				
									95	<LOD	402	238	256																				
									85	<LOD	366	209	220																				
									83	<LOD	385	222	220																				
NA	377	20210727-Parrot-OB-C-297		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	69	<LOD	421	190	369																				
									90	<LOD	496	217	606																				
									86	<LOD	410	212	490																				
									82	<LOD	442	206	488																				
NA	378	20210727-Parrot-OB-C-298		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	74	<LOD	341	187	247																				
									87	<LOD	392	303	287																				
									73	<LOD	310	195	290																				
									78	<LOD	348	228	275																				
NA	379	20210727-Parrot-OB-C-299		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	65	<LOD	323	168	313																				
									86	<LOD	408	259	436																				
									73	<LOD	361	178	336																				
									75	<LOD	364	202	362																				
NA	380	20210727-Parrot-OB-C-300		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	90	<LOD	379	188	250																				
									53	<LOD	305	133	250																				
									54	<LOD	323	207	385																				
									66	<LOD	336	176	295																				
NA	381	20210727-Parrot-OB-C-300							90	<LOD	379	188	250																				
									53	<LOD	305	133	250																				
									54	<LOD	323	207	385																				
									66	<LOD	336	176	295																				
210902-7	382	20210727-Parrot-Dup-300							139	<LOD	331	175	266																				
									49	<LOD	299	87	192	72	15 U	341	157	246														
									69	<LOD	351	126	200																				
									86	<LOD	327	129	219																				
210902-8	383	20210727-Parrot-Lab-300	[Reserved for QA/QC]											79	15 U	329	160	266											130.4569	NA	95.89443	82.37792	89.15989
																													120.3046	NA	98.0139	90.90909	90.16949
210902-9	384	20210727-Parrot-Field Blank-1							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	17 J	9 U	9 U														
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	385	20210727-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
210902-21	386	SRM (Lab Analysis) (2710a)												**1,446**	15 U	**3,553**	**5,570**	**4,224**	1540	12.3	3420	5520	4180	94	NA	104	101	101					
NA	387	20210727-Parrot-OB-C-301		West Overburden Knob	15 Confirmation samples of OB from West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation	10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	129	<LOD	384	196	242																				
									84	<LOD	363	113	258																				
									93	<LOD	422	110	255																				
									102	<LOD	390	140	252																				
NA	388	20210728-Parrot-OB-C-302		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	149	<LOD	418	172	339																				
									198	<LOD	777	492	510																				
									161	<LOD	662	188	400																				
									169	<LOD	619	284	416																				
NA	389	20210728-Parrot-OB-C-303		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	183	<LOD	322	133	235																				
									136	<LOD	306	166	253																				
									124	<LOD	265	165	269																				
									148	<LOD	298	155	252																				
NA	390	20210728-Parrot-OB-C-304		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	81	<LOD	265	92	314																				
									109	<LOD	314	114	378																				
									70	<LOD	253	77	281																				
									87	<LOD	277	94	324																				
NA	391	20210728-Parrot-OB-C-305		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	195	<LOD	285	154	268																				
									182	<LOD	312	154	270																				
									173	<LOD	325	151	252																				
									183	<LOD	307	153	263																				
NA	392	20210728-Parrot-OB-C-306		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	106	<LOD	273	94	260																				
									112	<LOD	267	154	256																				
									104	<LOD	230	160	284																				
									107	<LOD	257	136	267																				
NA	393	20210728-Parrot-OB-C-307		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	42	<LOD	364	238	298																				
									66	<LOD	334	234	364																				
									63	<LOD	476	201	472																				
									57	<LOD	391	224	378																				
NA	394	20210728-Parrot-OB-C-308		West Overburden Knob	13 Confirmation samples of OB from West Overburden Knob removal area. OB direct hauled to phase II area (on top of excavation floor). Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2651-2800	10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	89	<LOD	336	242	334																				
									89	<LOD	335	294	332																				
									89	<LOD	366	303	387																				
									89	<LOD	346	280	351																				
NA	395	20210728-Parrot-OB-C-309		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	57	<LOD	264	159	311																				
									68	<LOD	244	156	368																				
									72	<LOD	261	199	285																				
									66	<LOD	256	171	321																				
NA	396	20210728-Parrot-OB-C-310		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	106	<LOD	285	131	288																				
									82	<LOD	249	89	447																				
									94	<LOD	275	83	259																				
									94	<LOD	270	101	331																				
NA	397	20210728-Parrot-OB-C-311		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	150	<LOD	334	274	198																				
									84	<LOD	375	235	223																				
									88	<LOD	363	297	219																				
									107	<LOD	357	269	213																				
NA	398	20210728-Parrot-OB-C-312		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	68	<LOD	325	154	347																				
									72	<LOD	362	138	371																				
									52	<LOD	313	142	430																				
									64	<LOD	333	145	383																				
NA	399	20210728-Parrot-OB-C-313		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	**202**	<LOD	296	117	257																				
									92	<LOD	254	113	245																				
									105	<LOD	309	106	269																				
									133	<LOD	286	112	257																				
NA	400	20210728-Parrot-OB-C-314		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	42	<LOD	528	117	281																				
									51	<LOD	488	112	357																				
									39	<LOD	480	151	372																				
									44	<LOD	499	127	337																				
NA	401	20210728-Parrot-OB-C-315		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	47	<LOD	390	107	282																				
									57	<LOD	436	95	303																				
									45	<LOD	377	87	334																				
									50	<LOD	401	96	306																				
NA	402	20210729-Parrot-OB-C-316		West Overburden Knob	11 Confirmation samples of OB from West Overburden Knob removal area and 2 Grab samples from underlying tailings. OB direct hauled to phase II area (on top of excavation floor). Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2801-2910	10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	73	<LOD	354	101	320																				
									76	<LOD	377	72	334																				
									92	<LOD	423	121	300																				
									80	<LOD	385	98	318																				
NA	403	20210729-Parrot-OB-C-317		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	41	<LOD	255	112	394																				
									75	<LOD	306	298	278																				
									37	<LOD	270	76	354																				
									51	<LOD	277	162	342																				
NA	404	20210729-Parrot-OB-C-318		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	43	<LOD	283	97	284																				
									46	<LOD	310	95	324																				
									39	<LOD	298	75	292																				
									43	<LOD	297	89	300																				
NA	405	20210729-Parrot-OB-C-319		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	39	<LOD	455	127	597																				
									62	<LOD	505	100	402																				
									34	<LOD	361	82	339																				
									45	<LOD	440	103	446																				
NA	406	20210729-Parrot-OB-C-320		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	39	<LOD	243	62	228																				
									36	<LOD	261	67	291																				
									44	<LOD	282	87	248																				
									40	<LOD	262	72	256																				
NA	407	20210729-Parrot-OB-C-320							39	<LOD	243	62	228																				
									36	<LOD	261	67	291																				
									44	<LOD	282	87	248																				
									40	<LOD	262	72	256																				
210902-10	408	20210729-Parrot-Dup-320							30	<LOD	233	83	220																				
									46	<LOD	273	81	227	37	15 U	290	120	248															
									39	<LOD	302	107	233																				
									38	<LOD	269	90	227															96.63866	NA	102.799	125.463	91.39785
210902-11	409	20210729-Parrot-Lab-320	[Reserved for QA/QC]											44	15 U	296	96	248											110.9244	NA	112.9771	133.3333	97.0013

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
210902-12	410	20210729-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	27 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	411	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	412	20210729-Parrot-OB-G-321		West Overburden Knob	11 Confirmation samples of OB from West Overburden Knob removal area and 2 Grab samples from underlying tailings. OB direct hauled to phase II area (on top of excavation floor). Sampling consists of 1 composite sample/10 haul truck, approx. 400 CY. Hauls 2801-2910	Grab Sample of green TA underlying OB	Approx. 22 ft. Bgs	Yes	**269**	<LOD	215	**1097**	**1522**																					
									196	<LOD	175	564	**2591**																				
									283	<LOD	404	**1015**	**1898**																				
									249	<LOD	265	892	**2004**																				
NA	413	20210729-Parrot-OB-G-322		West Overburden Knob		Grab Sample of red/brown TA underlying OB	Approx. 22 ft. Bgs	Yes	**411**	<LOD	**1030**	734	**1078**																				
									446	<LOD	**1132**	917	833																				
									442	<LOD	**1065**	818	961																				
									433	<LOD	**1076**	823	957																				
NA	414	20210729-Parrot-OB-C-323		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	31	<LOD	553	114	320																				
									52	<LOD	431	91	284																				
									60	<LOD	574	97	276																				
									48	<LOD	519	101	293																				
NA	415	20210729-Parrot-OB-C-324		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	31	<LOD	290	209	267																				
									26	<LOD	312	65	257																				
									34	<LOD	329	79	267																				
									30	<LOD	310	118	264																				
NA	416	20210729-Parrot-OB-C-325		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	38	<LOD	**1777**	86	278																				
									41	<LOD	316	142	282																				
									34	<LOD	288	75	262																				
									38	<LOD	794	101	274																				
NA	417	20210729-Parrot-OB-C-326		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	41	<LOD	271	77	458																				
									83	<LOD	511	108	380																				
									47	<LOD	262	189	345																				
									57	<LOD	348	125	394																				
NA	418	20210729-Parrot-OB-C-327		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	35	<LOD	346	170	432																				
									47	<LOD	309	73	464																				
									43	<LOD	285	74	453																				
									42	<LOD	313	106	450																				
NA	419	20210729-Parrot-OB-C-328		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	27	<LOD	297	50	467																				
									33	<LOD	360	71	630																				
									50	<LOD	319	66	405																				
									37	<LOD	325	62	501																				
NA	420	20210730-Parrot-OB-C-329		West Overburden Knob	9 Confirmation samples of OB, 4 from West Overburden Knob removal area and 5 from the southeast OB ramp area. 2 Grab samples were collected from underlying waste near the waste interface of the west knob removal area. OB direct hauled to phase II area (on top of excavation floor). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 2911-3000	10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	67	<LOD	421	163	417																					
									87	<LOD	468	120	445																				
									90	<LOD	408	114	399																				
									81	<LOD	432	132	420																				
NA	421	20210730-Parrot-OB-C-330		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	103	<LOD	362	176	365																				
									84	<LOD	638	114	367																				
									104	<LOD	303	153	253																				
									97	<LOD	434	148	328																				
NA	422	20210730-Parrot-OB-C-331		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	91	<LOD	395	150	406																				
									88	<LOD	349	140	299																				
									100	<LOD	363	122	390																				
									93	<LOD	369	137	365																				
NA	423	20210730-Parrot-OB-C-332		West Overburden Knob		10 pt. Composite Sample within the second cut of OB within the cell, Direct Haul to Phase II	Approx. 8 ft. to 22 ft. Bgs	Yes	124	<LOD	358	453	360																				
									199	<LOD	332	419	370																				
									193	<LOD	306	429	324																				
									172	<LOD	332	434	351																				
NA	424	20210730-Parrot-OB-C-333		South East overburden ramp		10 pt. Composite Sample within the first cut of OB within the third cell, Direct Haul to Phase II	0-8 ft bgs	Yes	44	<LOD	203	107	344																				
									51	<LOD	214	86	352																				
									54	<LOD	243	110	337																				
									50	<LOD	220	101	344																				
NA	425	20210730-Parrot-OB-C-334		South East overburden ramp		10 pt. Composite Sample within the first cut of OB within the third cell, Direct Haul to Phase II	0-8 ft bgs	Yes	39	<LOD	172	78	240																				
									35	<LOD	207	110	340																				
									40	<LOD	185	106	295																				
									38	<LOD	188	98	292																				
NA	426	20210730-Parrot-OB-C-335		South East overburden ramp		10 pt. Composite Sample within the first cut of OB within the third cell, Direct Haul to Phase II	0-8 ft bgs	Yes	32	<LOD	225	198	212																				
									35	<LOD	328	145	210																				
									33	<LOD	199	98	221																				
									33	<LOD	251	147	214																				
NA	427	20210730-Parrot-OB-C-336		South East overburden ramp		10 pt. Composite Sample within the first cut of OB within the third cell, Direct Haul to Phase II	0-8 ft bgs	Yes	48	<LOD	195	124	251																				
									34	<LOD	171	116	220																				
									31	<LOD	171	108	249																				
									38	<LOD	179	116	240																				
NA	428	20210730-Parrot-OB-C-337		South East overburden ramp		10 pt. Composite Sample within the first cut of OB within the third cell, Direct Haul to Phase II	0-8 ft bgs	Yes	48	<LOD	227	137	406																				
									78	<LOD	208	126	311																				
									47	<LOD	282	194	312																				
									58	<LOD	239	152	343																				
NA	429	20210730-Parrot-CY-G-338		West Overburden Knob		Grab Sample of grey clay underlying OB	Approx. 22 ft. to 24 ft. Bgs	Yes	14	<LOD	200	32	243																				
									19	9	183	34	230																				
									13	<LOD	242	37	263																				
									15	9	208	34	245																				
NA	430	20210730-Parrot-TA-G-339		West Overburden Knob		Grab Sample of mixed TA underlying OB	Approx. 22 ft. to 24 ft. Bgs	Yes	**215**	<LOD	928	741	**1472**																				
									208	<LOD	938	480	**1400**																				
									211	<LOD	890	504	**1063**																				
									211	<LOD	919	575	**1312**																				
NA	431	20210802-Parrot-TA-C-340		West Knob	9 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. The first 5 haul trucks were	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to Phase II or MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**311**	<LOD	495	390	305																				
									184	<LOD	556	258	349																				
									238	<LOD	568	321	376																				
									244	<LOD	540	323	343																				
NA	432	20210802-Parrot-TA-C-340							**311**	<LOD	495	390	305																				
									184	<LOD	556	258	349																				
									238	<LOD	568	321	376																				
									244	<LOD	540	323	343																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	433	20210802-Parrot-Dup-340							**298**	<LOD	521	319	304																				
									285	<LOD	476	341	368																				
									309	<LOD	566	401	502																				
									297	<LOD	521	354	391																121.6917	NA	96.54107	109.4943	113.9806
210902-13	434	20210802-Parrot-Lab-340	[Reserved for QA/QC]											**268**	15 U	585	345	381											109.6862	NA	108.4002	106.8111	110.9709
NA	435	20210802-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	436	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	437	20210802-Parrot-TA-C-341		West Knob	9 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. The first 5 haul trucks were deemed clean after insitu testing and were directed to Phase II placement area. Every subsequent haul was direct haul to MR. In addition, 1 grab sample of underlying CY was collected from the underlying clay layer. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3001-3081	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**453**	<LOD	876	961	482																			
									430	<LOD	853	868	**1323**																				
									456	<LOD	840	924	364																				
									446	<LOD	856	918	723																				
NA	438	20210802-Parrot-TA-C-342		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**460**	<LOD	**1672**	**1092**	988																				
									448	9	**1772**	**1158**	945																				
									539	<LOD	**1825**	**1071**	889																				
									482	9	**1756**	**1107**	941																				
NA	439	20210802-Parrot-TA-C-343		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**633**	8	**1713**	**1324**	**1503**																				
									446	<LOD	**1107**	**1398**	**2720**																				
									391	<LOD	734	**1489**	**1531**																				
									490	8	**1185**	**1404**	**1918**																				
NA	440	20210802-Parrot-TA-C-344		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**494**	<LOD	491	**1601**	993																				
									548	<LOD	666	**1686**	825																				
									526	<LOD	514	**1486**	691																				
									523	<LOD	557	**1591**	836																				
NA	441	20210802-Parrot-TA-C-345		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**440**	<LOD	864	**1405**	**2995**																				
									381	8	682	**1322**	**1176**																				
									397	<LOD	820	**1277**	612																				
									406	8	789	**1335**	**1594**																				
NA	442	20210802-Parrot-TA-C-346		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**417**	<LOD	661	**1277**	**1018**																				
									430	<LOD	703	**1664**	943																				
									354	<LOD	465	975	993																				
									400	<LOD	610	**1305**	985																				
NA	443	20210802-Parrot-TA-C-347		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**297**	9	834	**1065**	**1171**																				
									359	<LOD	**1049**	836	**1320**																				
									811	<LOD	**2234**	972	**2517**																				
									489	9	**1372**	958	**1669**																				
NA	444	20210802-Parrot-TA-C-348		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**457**	<LOD	877	985	**1277**																				
									458	<LOD	692	**1046**	**1736**																				
									471	<LOD	**1045**	887	952																				
									462	<LOD	871	973	**1322**																				
NA	445	20210802-Parrot-CY-G-349		West Knob		Grab Sample of Clay underlying OB	Approx. 22 ft. - 30 ft. Bgs	Yes	40	<LOD	274	104	756																				
									37	<LOD	245	107	735																				
									31	<LOD	232	102	704																				
									36	<LOD	250	104	732																				
NA	446	20210803-Parrot-TA-C-350		West Knob	9 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. Every haul was direct haul to MR.	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**456**	<LOD	803	**1502**	**1857**																				
									367	7	784	**1346**	**2185**																				
									339	<LOD	758	**1283**	**2271**																				
									387	7	782	**1377**	**2104**																				
NA	447	20210803-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
210902-20	448	SRM (Lab Analysis) (2710a)												**1,461**	15 U	**3,500**	**5,489**	**4,142**	1540	12.3	3420	5520	4180	95	NA	102	99	99					
NA	449	20210803-Parrot-TA-C-351		West Knob	9 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. Every haul was direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3081-3170	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**401**	<LOD	624	**1041**	**1387**																			
									451	<LOD	643	**1156**	**2272**																				
									483	<LOD	781	**1308**	**1352**																				
									445	<LOD	683	**1168**	**1670**																				
NA	450	20210803-Parrot-TA-C-352		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**391**	<LOD	413	978	950																				
									392	<LOD	512	**1027**	966																				
									442	<LOD	770	**1165**	**2062**																				
									408	<LOD	565	**1057**	**1326**																				
NA	451	20210803-Parrot-TA-C-353		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**455**	<LOD	592	**1136**	**1188**																				
									534	<LOD	797	**1193**	934																				
									486	<LOD	591	**1227**	985																				
									492	<LOD	660	**1185**	**1036**																				
NA	452	20210803-Parrot-TA-C-354		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**584**	<LOD	**1910**	**1170**	**1003**																				
									490	<LOD	**2226**	**1216**	**1051**																				
									419	<LOD	**2026**	**1037**	**1106**																				
									498	<LOD	**2054**	**1141**	**1053**																				
NA	453	20210803-Parrot-TA-C-355		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**355**	<LOD	**2216**	926	776																				
									372	<LOD	**2144**	739	**1065**																				
									330	<LOD	**1660**	814	**1114**																				
									352	<LOD	**2007**	826	985																				
NA	454	20210803-Parrot-TA-C-356		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**332**	9	560	**1174**	**3386**																				
									358	<LOD	559	940	**1187**																				
									400	<LOD	770	**1036**	**1007**																				
									363	9	630	**1050**	**1860**																				
NA	455	20210803-Parrot-TA-C-357		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**632**	<LOD	749	**1281**	882																				
									326	9	462	914	**1127**																				
									380	<LOD	702	**1067**	**1009**																				
									446	9	638	**1087**	**1006**																				
NA	456	20210803-Parrot-TA-C-358		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**458**	<LOD	535	859	893																				
									363	8	454	682	783																				
									327	10	546	721	763																				
									383	9	512	754	813																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	457	20210804-Parrot-TA-C-359		West Knob	15 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3171-3320	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**423**	<LOD	866	746	853																				
									415	<LOD	832	727	988																				
									464	<LOD	897	844	**1553**																				
									434	<LOD	865	772	**1131**																				
NA	458	20210804-Parrot-TA-C-360		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**372**	8	645	949	**1503**																				
									349	<LOD	684	692	**1299**																				
									303	11	625	705	**3516**																				
									341	10	651	782	**2106**																				
NA	459	20210804-Parrot-TA-C-360							**372**	8	645	949	**1503**																				
									349	<LOD	684	692	**1299**																				
									303	11	625	705	**3516**																				
									341	10	651	782	**2106**																				
NA	460	20210804-Parrot-DUP-360							**426**	<LOD	**1439**	819	**2341**																				
									316	<LOD	593	592	**1698**																				
									313	10	525	677	**2012**																				
									352	10	852	696	**2017**																103.0273	105.2632	130.8598	89.00256	95.77398
210902-14	461	20210804-Parrot-Lab-360	[Reserved for QA/QC]											**312**	15 U	660	716	**1,700**											91.40625	NA	101.3306	91.5601	80.72175
NA	462	20210804-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	463	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	464	20210804-Parrot-TA-C-361		West Knob	15 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3171-3320	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**327**	<LOD	488	863	**1526**																				
									336	<LOD	495	783	848																				
									347	<LOD	438	877	**1029**																				
									337	<LOD	474	841	**1134**																				
NA	465	20210804-Parrot-TA-C-362		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**300**	10	433	718	736																				
									312	8	589	712	**1132**																				
									290	<LOD	555	627	977																				
									301	9	526	686	948																				
NA	466	20210804-Parrot-TA-C-363		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**333**	<LOD	764	725	972																				
									341	<LOD	386	797	896																				
									298	<LOD	427	706	955																				
									324	<LOD	526	743	941																				
NA	467	20210804-Parrot-TA-C-364		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**330**	<LOD	389	858	751																				
									311	<LOD	565	845	740																				
									324	<LOD	682	908	909																				
									322	<LOD	545	870	800																				
NA	468	20210804-Parrot-TA-C-365		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**353**	<LOD	488	682	771																				
									411	<LOD	494	574	**1260**																				
									312	<LOD	428	606	789																				
									359	<LOD	470	621	940																				
NA	469	20210804-Parrot-TA-C-366		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**309**	<LOD	547	886	831																				
									342	<LOD	637	909	**1238**																				
									368	<LOD	576	870	738																				
									340	<LOD	587	888	936																				
NA	470	20210804-Parrot-TA-C-367		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**321**	<LOD	389	838	680																				
									331	<LOD	380	**1045**	**1148**																				
									305	<LOD	391	784	884																				
									319	<LOD	387	889	904																				
NA	471	20210804-Parrot-TA-C-368		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**390**	<LOD	621	894	827																				
									301	<LOD	559	788	766																				
									378	<LOD	558	735	818																				
									356	<LOD	579	806	804																				
NA	472	20210804-Parrot-TA-C-369		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**506**	<LOD	393	592	479																				
									367	<LOD	416	590	517																				
									457	<LOD	416	640	873																				
									443	<LOD	408	607	623																				
NA	473	20210804-Parrot-TA-C-370		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**482**	<LOD	919	683	871																				
									378	<LOD	463	652	**1275**																				
									377	<LOD	632	683	**1226**																				
									412	<LOD	671	673	**1124**																				
NA	474	20210804-Parrot-TA-C-371		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	171	**332**	<LOD	**1106**	783	**1825**																				
									297	<LOD	607	742	**1342**																				
									263	9	601	734	**1253**																				
									297	9	771	753	**1473**																				
NA	475	20210804-Parrot-TA-C-372		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**251**	7	940	669	814																				
									300	<LOD	515	677	923																				
									314	<LOD	682	799	754																				
									288	7	712	715	830																				
NA	476	20210804-Parrot-TA-C-373		West Knob		6 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**283**	<LOD	367	849	**1307**																				
									191	<LOD	286	759	664																				
									256	<LOD	332	713	502																				
									243	<LOD	328	774	824																				
NA	477	20210805-Parrot-TA-C-374		West Knob	10 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3420	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**386**	<LOD	366	664	580																				
									468	<LOD	744	743	656																				
									455	<LOD	382	738	770																				
									436	<LOD	497	715	669																				
NA	478	20210805-Parrot-TA-C-375		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**313**	<LOD	520	597	932																				
									320	<LOD	539	555	635																				
									391	<LOD	560	665	837																				
									341	<LOD	540	606	801																				
NA	479	20210805-Parrot-TA-C-376		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**355**	<LOD	437	595	**1266**																				
									274	<LOD	383	632	**1529**																				
									290	<LOD	392	646	**2332**																				
									306	<LOD	404	624	**1709**																				
NA	480	20210805-Parrot-TA-C-377		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**338**	<LOD	462	722	823																				
									361	<LOD	505	641	946																				
									445	<LOD	563	692	**1452**																				
									381	<LOD	510	685	**1074**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	481	20210805-Parrot-TA-C-378		West Knob	10 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3420	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**315**	<LOD	707	520	842																				
									318	12	501	494	667																				
									480	<LOD	**1563**	623	687																				
									371	12	924	546	732																				
NA	482	20210805-Parrot-TA-C-379		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**465**	<LOD	621	890	764																				
									298	<LOD	293	574	492																				
									391	<LOD	449	768	982																				
									385	<LOD	454	744	746																				
NA	483	20210805-Parrot-TA-C-380		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**396**	<LOD	504	615	851																				
									457	<LOD	755	684	862																				
									419	<LOD	580	623	891																				
									424	<LOD	613	641	868																				
NA	484	20210805-Parrot-TA-C-380							**396**	<LOD	504	615	851																				
									457	<LOD	755	684	862																				
									419	<LOD	580	623	891																				
									424	<LOD	613	641	868																				
NA	485	20210805-Parrot-DUP-380							**405**	<LOD	688	786	**1324**																				
									398	<LOD	509	652	755																				
									391	<LOD	500	686	703																				
									398	<LOD	566	708	927																93.86792	NA	92.27841	110.5099	106.8356
210902-15	486	20210805-Parrot-Lab-380	[Reserved for QA/QC]											**377**	15 U	541	650	752											88.91509	NA	88.25449	101.4568	86.63594
NA	487	20210805-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	488	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	489	20210805-Parrot-TA-C-381		West Knob	10 Confirmation samples of TA from the first cut of underlying waste of the West Overburden Knob area. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3420	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**313**	<LOD	471	710	723																				
									311	8	472	937	**1049**																				
									291	<LOD	532	852	**1450**																				
									305	8	492	833	**1074**																				
NA	490	20210805-Parrot-TA-C-382		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**270**	<LOD	228	797	887																				
									266	<LOD	220	839	**1718**																				
									254	<LOD	265	877	934																				
									263	<LOD	238	838	**1180**																				
NA	491	20210805-Parrot-TA-C-383		West Knob		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. Bgs	Yes	**221**	<LOD	216	745	528																				
									250	<LOD	213	854	513																				
									283	<LOD	216	808	590																				
									251	<LOD	215	802	544																				
NA	492	20210809-Parrot-RK-C-384		West Knob	6 8 Point composite samples from the tailing's floor were taken. Sampling locations were chosen randomly using a 50 x 100 ft. grid overlain on the tailings floor in GIS. All material overlying the tailings floor was direct hauled to MR.	8 Pt. Composite sample at the vertical extent of the cell- Before Dozer cleanup	Approx. 30 ft Bgs	Yes	26	<LOD	674	99	727																				
									24	<LOD	623	109	888																				
									30	<LOD	608	90	573																				
									27	<LOD	635	99	729																				
NA	493	20210809-Parrot-RK-C-385		West Knob		8 Pt. Composite sample at the vertical extent of the cell- Before Dozer cleanup	Approx. 30 ft Bgs	Yes	46	<LOD	**1335**	93	730																				
									45	<LOD	**1477**	129	936																				
									52	<LOD	**1372**	148	899																				
									48	<LOD	**1395**	123	855																				
NA	494	20210809-Parrot-RK-C-386		West Knob		8 Pt. Composite sample at the vertical extent of the cell- Before Dozer cleanup	Approx. 30 ft Bgs	Yes	34	<LOD	**1247**	114	912																				
									45	9	912	110	884																				
									28	9	892	97	774																				
									36	9	**1017**	107	857																				
NA	495	20210809-Parrot-RK-C-387		West Knob		8 Pt. Composite sample at the vertical extent of the cell- After Dozer cleanup	Approx. 30 ft Bgs	Yes	37	8	**1054**	114	836																				
									25	<LOD	844	111	639																				
									30	<LOD	**1210**	102	822																				
									31	8	**1036**	109	**766**																				
NA	496	20210809-Parrot-RK-C-388		West Knob		8 Pt. Composite sample at the vertical extent of the cell- After Dozer cleanup	Approx. 30 ft Bgs	Yes	25	<LOD	655	144	841																				
									29	14	748	106	944																				
									22	<LOD	771	84	653																				
									25	14	725	111	813																				
NA	497	20210809-Parrot-RK-C-389		West Knob		8 Pt. Composite sample at the vertical extent of the cell- After Dozer cleanup	Approx. 30 ft Bgs	Yes	35	<LOD	384	86	**1030**																				
									39	<LOD	385	84	926																				
									39	<LOD	372	72	969																				
									38	<LOD	380	81	975																				
NA	498	20210810-Parrot-OB-C-390		Pit Run Backfill (Buttana) Stockpile	3 8-Point composite samples from the tailing's floor were taken. Sampling locations were chosen randomly using a 50 x 100 ft. grid overlain on the tailings floor in GIS. All material overlying the tailings floor was direct hauled to MR. Additionally, an 8-point composite of backfill material from Buttana was taken. Sample was only shot one time due to the low values and time constraints.	8 pt. Composite sample of Pit Run Backfill stockpile	Surface	Yes	11	<LOD	<LOD	12	29																				
									11	<LOD	<LOD	12	29																				
NA	499	20210810-Parrot-RK-C-391		West Knob		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft. Bgs	Yes	32	13	544	68	760																				
									24	<LOD	495	68	847																				
									30	8	572	174	886																				
									29	11	537	103	831																				
NA	500	20210810-Parrot-RK-C-392		West Knob		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft. Bgs	Yes	24	<LOD	**1851**	92	474																				
									26	<LOD	**2300**	108	357																				
									26	<LOD	**1678**	104	553																				
									25	<LOD	**1943**	101	461																				
NA	501	20210810-Parrot-RK-C-393		West Knob		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft. Bgs	Yes	28	<LOD	**1812**	160	599																				
									22	<LOD	**1485**	93	427																				
									31	<LOD	**1729**	134	534																				
									27	<LOD	**1675**	129	520																				
NA	502	20210811-Parrot-RK-C-394		West Knob	5 8-point composite samples from the tailing's floor were taken. All five samples were above action level. Sampling locations were chosen randomly using a 50 x 100 ft. grid overlain on the tailings floor in GIS. All material overlying the tailings floor was direct hauled to MR. Backfilling of overburden into cell 2 began on the west end of the cell.	8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft. Bgs	Yes	21	<LOD	**1971**	135	660																				
									51	<LOD	**1914**	126	842																				
									31	<LOD	**1941**	79	622																				
									34	<LOD	**1942**	113	708																				
NA	503	20210811-Parrot-RK-C-395		West Knob		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft. Bgs	Yes	110	<LOD	**1907**	195	810																				
									101	<LOD	**2357**	149	729																				
									158	<LOD	**2081**	206	822																				
									123	<LOD	**2115**	183	787																				
NA	504	20210811-Parrot-RK-C-396		West Knob		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft. Bgs	Yes	86	<LOD	**1395**	84	567																				
									42	<LOD	**1728**	80	597																				
									49	<LOD	**2070**	96	577																				
									59	<LOD	**1731**	87	580																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	505	20210811-Parrot-RK-C-397		West Knob	5 8-point composite samples from the tailing's floor were taken. All five samples were above action level. Sampling locations were chosen randomly using a 50 x 100 ft. grid overlain on the tailings floor in GIS. All material overlying the tailings floor was direct hauled to 12 Confirmation samples of OB, 4 from cell 3 moving towards the east. OB direct hauled to phase II area (on top of excavation floor) placed in cell 2. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3421-3540	8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft. Bgs	Yes	36	<LOD	**2063**	122	696																				
									33	<LOD	**1868**	106	613																				
									46	<LOD	**2185**	94	560																				
									38	<LOD	**2039**	107	623																				
NA	506	20210811-Parrot-RK-C-398		West Knob		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft. Bgs	Yes	41	<LOD	**2891**	184	818																				
									37	<LOD	**1739**	105	**1506**																				
									50	<LOD	**2919**	181	897																				
									43	<LOD	**2516**	157	**1074**																				
NA	507	20210812-Parrot-OB-C-399		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	40	<LOD	179	96	306																				
									36	<LOD	161	88	349																				
									23	<LOD	152	87	274																				
									33	<LOD	164	90	310																				
NA	508	20210812-Parrot-OB-C-400		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	25	<LOD	152	70	276																				
									24	<LOD	129	70	207																				
									26	<LOD	129	71	230																				
									25	<LOD	137	70	238																				
NA	509	20210812-Parrot-OB-C-400							25	<LOD	152	70	276																				
									24	<LOD	129	70	207																				
									26	<LOD	129	71	230																				
									25	<LOD	137	70	238																				
210902-16	510	20210812-Parrot-DUP-400							27	<LOD	148	81	234																				
									15	<LOD	101	57	288	25	15 U	134	82	239															
									19	<LOD	131	56	166																				
									20	<LOD	127	65	229																				
210902-17	511	20210812-Parrot-Lab-400	[Reserved for QA/QC]											22	15 U	135	89	231											81.33333	NA	94.52736	78.86179	95.95537
																													88	NA	98.78049	126.5403	97.19495
210902-18	512	20210812-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	26 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	513	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	514	20210812-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
210902-19	515	SRM (Lab Analysis) (2710a)												**1,450**	15 U	**3,560**	**5,606**	**4,250**	1540	12.3	3420	5520	4180	94	NA	104	102	102					
NA	516	20210812-Parrot-OB-C-401		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	45	<LOD	22	113	351																				
									39	<LOD	202	108	384																				
									37	<LOD	225	134	395																				
									40	<LOD	150	118	377																				
NA	517	20210812-Parrot-OB-C-402		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	45	<LOD	163	123	286																				
									34	<LOD	183	106	345																				
									101	<LOD	605	146	385																				
									60	<LOD	317	125	339																				
NA	518	20210812-Parrot-OB-C-403		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	53	<LOD	156	419	177																				
									26	<LOD	126	110	193																				
									29	<LOD	121	65	197																				
									36	<LOD	134	198	189																				
NA	519	20210812-Parrot-OB-C-404		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	36	<LOD	153	66	214																				
									42	<LOD	174	78	235																				
									40	<LOD	145	89	223																				
									39	<LOD	157	78	224																				
NA	520	20210812-Parrot-OB-C-405		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	29	<LOD	122	100	358																				
									35	<LOD	144	86	333																				
									32	<LOD	149	101	376																				
									32	<LOD	138	96	356																				
NA	521	20210812-Parrot-OB-C-406		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	24	<LOD	125	67	204																				
									25	<LOD	139	74	267																				
									31	<LOD	135	76	185																				
									27	<LOD	133	72	219																				
NA	522	20210812-Parrot-OB-C-407		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	27	<LOD	182	131	609																				
									26	<LOD	156	135	401																				
									25	<LOD	191	108	267																				
									26	<LOD	176	125	426																				
NA	523	20210812-Parrot-OB-C-408		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	33	<LOD	81	50	174																				
									30	<LOD	117	83	448																				
									36	<LOD	111	59	206																				
									33	<LOD	103	64	276																				
NA	524	20210812-Parrot-OB-C-409		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	32	<LOD	221	310	581																				
									57	<LOD	325	495	756																				
									49	<LOD	276	536	899																				
									46	<LOD	274	447	745																				
NA	525	20210812-Parrot-OB-C-410		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	34	<LOD	133	129	391																				
									28	<LOD	172	139	409																				
									23	<LOD	210	172	479																				
									28	<LOD	172	147	426																				
NA	526	20210813-Parrot-OB-C-411		Cell Three	9 Confirmation samples of OB from cell 3 moving towards the east. OB direct hauled to phase II area (on top of excavation floor) placed in cell 2. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3541-3630	10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	46	<LOD	333	144	**1267**																				
									41	<LOD	191	124	451																				
									40	<LOD	210	112	374																				
									42	<LOD	245	127	697																				
NA	527	20210813-Parrot-OB-C-412		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	41	<LOD	178	91	345																				
									27	<LOD	116	81	260																				
									28	<LOD	160	72	407																				
									32	<LOD	151	81	337																				
NA	528	20210813-Parrot-OB-C-413		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	53	<LOD	292	109	488																				
									60	<LOD	345	313	831																				
									44	<LOD	217	102	427																				
									52	<LOD	285	175	582																				
NA	529	20210813-Parrot-OB-C-414		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	58	<LOD	188	284	426																				
									41	<LOD	199	156	425																				
									43	<LOD	232	243	750																				
									47	<LOD	206	228	534																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	530	20210813-Parrot-OB-C-415		Cell Three	9 Confirmation samples of OB from cell 3 moving towards the east. OB direct hauled to phase II area (on top of excavation floor) placed in cell 2. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3541-3630	10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	35	<LOD	187	182	433																				
									43	<LOD	191	190	429																				
									48	<LOD	184	162	487																				
									42	<LOD	187	178	450																				
NA	531	20210813-Parrot-OB-C-416		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	32	<LOD	124	103	321																		
									32	<LOD	134	85	282																				
									26	<LOD	129	85	234																				
									30	<LOD	129	91	279																				
NA	532	20210813-Parrot-OB-C-417		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	25	<LOD	120	89	194																		
									39	<LOD	134	122	259																				
									28	<LOD	147	125	256																				
									31	<LOD	134	112	236																				
NA	533	20210813-Parrot-OB-C-418		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	48	<LOD	171	293	471																		
									41	<LOD	103	118	235																				
									24	<LOD	101	152	269																				
									38	<LOD	125	188	325																				
NA	534	20210813-Parrot-OB-C-419		Cell Three		10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	55	<LOD	121	212	371																		
									38	<LOD	129	94	271																				
									40	<LOD	125	92	300																				
									44	<LOD	125	133	314																				
NA	535	20210816-Parrot-OB-C-420		Cell Three	2 Confirmation samples of OB from cell 3. OB direct hauled to phase II (cell 2). Sampling consists of 1 composite sample/10 haul trucks,	10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	52	<LOD	230	169	491																		
									46	<LOD	205	146	392																				
									58	<LOD	282	174	581																				
									52	<LOD	239	163	488																				
NA	536	20210816-Parrot-OB-C-420							52	<LOD	230	169	491																				
									46	<LOD	205	146	392																				
									58	<LOD	282	174	581																				
									52	<LOD	239	163	488																				
211022-16	537	20210816-Parrot-DUP-420							33	<LOD	177	121	414																				
									40	<LOD	199	119	423	32	15 U	188	167	498															
									46	<LOD	168	95	314																				
									40	<LOD	181	112	384																			80.67227	NA	103.6765	149.5522	129.8002
211022-17	538	20210816-Parrot-LAB-420	[Reserved for QA/QC]											34	15 U	194	174	547														65.38462	NA	81.17155	106.7485	112.0902
211022-18	539	20210816-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15 U	26 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	540	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	541	20210816-Parrot-OB-C-421		Cell Three	2 Confirmation samples of OB from cell 3. OB direct hauled to phase II (cell 2). Sampling consists of 1 composite sample/10 haul trucks,	10 pt. Composite Sample of first cut of OB, Direct Haul to West Knob	Approx. 0 ft. - 8 ft. bgs	Yes	55	<LOD	294	191	966																		
									36	<LOD	263	148	537																				
									38	<LOD	461	177	693																				
									43	<LOD	339	172	732																				
NA	542	20210816-Parrot-TA-C-422		Cell Three	5 Confirmation samples of waste material from cell 3 within the first cut of OB layer. Waste material direct hauled to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3651-3700	10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	62	<LOD	481	210	**1549**																		
									72	<LOD	586	263	**2115**																				
									81	<LOD	610	302	**1385**																				
									72	<LOD	559	258	**1683**																				
NA	543	20210816-Parrot-TA-C-423		Cell Three		10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	98	<LOD	752	269	**1639**																		
									63	<LOD	698	301	**1495**																				
									50	<LOD	558	237	**1358**																				
									70	<LOD	669	269	**1497**																				
NA	544	20210816-Parrot-TA-C-424		Cell Three		10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	66	<LOD	938	356	**1904**																		
									68	<LOD	844	406	**2134**																				
									63	<LOD	661	300	**1986**																				
									66	<LOD	814	354	**2008**																				
NA	545	20210816-Parrot-TA-C-425		Cell Three		10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	61	<LOD	578	204	981																		
									70	<LOD	686	283	**1751**																				
									67	<LOD	575	182	**1196**																				
									66	<LOD	613	223	**1309**																				
NA	546	20210816-Parrot-TA-C-426		Cell Three		10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	73	<LOD	**1138**	473	**3106**																		
									92	<LOD	**1327**	689	**3033**																				
									151	11	**1413**	655	**3846**																				
									105	11	**1293**	606	**3328**																				
NA	547	20210817-Parrot-TA-C-427		Cell Three	5 Confirmation samples of waste material from cell 3 within the first cut of OB layer. Waste material direct hauled to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3701-3750. 3 Confrimation samples of OB from cell 3. OB direct hauled to phase II (cell 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3751-3780.	10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	84	<LOD	**1024**	419	**1902**																		
									106	<LOD	975	514	**2499**																				
									66	<LOD	720	331	**1817**																				
									85	<LOD	906	421	**2073**																				
NA	548	20210817-Parrot-TA-C-428		Cell Three		10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	107	<LOD	997	412	**2488**																		
									111	<LOD	938	572	**2059**																				
									95	<LOD	**1093**	602	**2252**																				
									104	<LOD	**1009**	529	**2266**																				
NA	549	20210817-Parrot-TA-C-429		Cell Three		10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	54	<LOD	838	292	**2848**																		
									55	<LOD	810	303	**2807**																				
									57	<LOD	801	292	**2867**																				
									55	<LOD	816	296	**2841**																				
NA	550	20210817-Parrot-TA-C-430		Cell Three		10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	84	8	**1215**	357	**2102**																		
									59	<LOD	**1095**	319	**1431**																				
									44	9	**1084**	307	**1413**																				
									62	9	**1131**	328	**1649**																				
NA	551	20210817-Parrot-TA-C-431		Cell Three		10 pt. Composite Sample of first cut of OB- TA Found, Direct Haul to MR	Approx. 0 ft. - 8 ft. bgs	Yes	94	<LOD	**1318**	541	**2470**																		
									96	<LOD	**1315**	556	**2766**																				
									104	<LOD	**1413**	583	**3089**																				
									98	<LOD	**1349**	560	**2775**																				
NA	552	20210817-Parrot-OB-C-432		Cell Three		10 pt. Composite Sample of first cut of OB- Direct haul to Cell 2	Approx. 0 ft. - 8 ft. bgs	Yes	20	<LOD	179	165	354																		
									31	<LOD	190	90	234																				
									39	<LOD	199	101	567																				
									30	<LOD	189	119	385																				
NA	553	20210817-Parrot-OB-C-433		Cell Three		10 pt. Composite Sample of first cut of OB- Direct haul to Cell 2	Approx. 0 ft. - 8 ft. bgs	Yes	25	<LOD	169	89	282																		
									31	<LOD	185	92	250																				
									27	<LOD	172	79	238																				
									28	<LOD	175	87	257																				

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	554	20210817-Parrot-OB-C-434		Cell Three		10 pt. Composite Sample of first cut of OB- Direct haul to Cell 2	Approx. 0 ft. - 8 ft. bgs	Yes	54	<LOD	237	112	336																					
									49	<LOD	217	110	365																				
									44	<LOD	262	258	812																				
									49	<LOD	239	160	504																				
NA	555	20210818-Parrot-OB-C-435		Cell Three	8 Confrimation samples of OB, 2 from the first and 6 from the second cut of cell 3. OB direct hauled to phase II (cell 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3781-3860	10 pt. Composite Sample of first cut of OB- Direct haul to Cell 2	Approx. 0 ft. - 8 ft. bgs	Yes	33	<LOD	229	126	312																					
									32	<LOD	186	81	254																				
									42	<LOD	250	117	325																				
									36	<LOD	222	108	297																				
NA	556	20210818-Parrot-OB-C-436		Cell Three		10 pt. Composite Sample of first cut of OB- Direct haul to Cell 2	Approx. 0 ft. - 8 ft. bgs	Yes	29	<LOD	229	103	250																					
									46	<LOD	296	131	262																				
									47	<LOD	271	168	340																				
									41	<LOD	265	134	284																				
NA	557	20210818-Parrot-OB-C-437		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	54	<LOD	328	124	355																					
									42	<LOD	284	111	287																				
									56	<LOD	322	166	368																				
									51	<LOD	311	134	337																				
NA	558	20210818-Parrot-OB-C-438		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	67	<LOD	320	96	417																					
									52	<LOD	269	99	307																				
									45	<LOD	295	72	267																				
									55	<LOD	295	89	330																				
NA	559	20210818-Parrot-OB-C-439		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	84	<LOD	307	97	433																					
									46	<LOD	352	99	384																				
									86	<LOD	453	116	364																				
									72	<LOD	371	104	394																				
NA	560	20210818-Parrot-OB-C-440		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	76	<LOD	342	142	362																					
									93	<LOD	365	155	338																				
									59	<LOD	263	153	368																				
									76	<LOD	323	150	356																				
NA	561	20210818-Parrot-OB-C-440							76	<LOD	342	142	362																				
									93	<LOD	365	155	338																				
									59	<LOD	263	153	368																				
									76	<LOD	323	150	356																				
NA	562	20210818-Parrot-Dup-440							60	<LOD	323	169	401																				
									73	<LOD	313	117	387																				
									144	<LOD	315	140	351																				
									92	<LOD	317	142	380															121.4912	NA	98.04124	94.66667	106.6479
211022-1	563	20210818-Parrot-Lab-440	[Reserved for QA/QC]											62	15 U	314	158	480											81.57895	NA	97.1134	105.3333	134.8315
NA	564	20210818-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	565	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	566	20210818-Parrot-OB-C-441		Cell Three	8 Confrimation samples of OB, 2 from the first and 6 from the second cut of cell 3. OB direct hauled to phase II (cell 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3781-3860	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	35	<LOD	228	153	216																					
									50	<LOD	314	172	213																				
									50	<LOD	273	163	352																				
									45	<LOD	272	163	260																				
NA	567	20210818-Parrot-OB-C-442		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	114	<LOD	246	177	205																					
									142	<LOD	236	211	291																				
									105	<LOD	268	186	212																				
									120	<LOD	250	191	236																				
NA	568	20210823-Parrot-OB-C-443		Cell Three	10 Confrimation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3861-3960	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	50	<LOD	282	150	221																					
									71	<LOD	301	183	237																				
									62	<LOD	314	201	221																				
									61	<LOD	299	178	226																				
NA	569	20210823-Parrot-OB-C-444		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	69	<LOD	283	178	275																					
									110	<LOD	281	206	200																				
									88	<LOD	277	223	148																				
									89	<LOD	280	202	208																				
NA	570	20210823-Parrot-OB-C-445		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	43	<LOD	289	94	370																					
									61	<LOD	295	111	346																				
									62	<LOD	318	119	339																				
									55	<LOD	301	108	352																				
NA	571	20210823-Parrot-OB-C-446		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	60	<LOD	323	95	304																					
									66	<LOD	230	104	232																				
									50	<LOD	290	225	348																				
									59	<LOD	281	141	295																				
NA	572	20210823-Parrot-OB-C-447		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	147	<LOD	325	206	199																					
									97	<LOD	348	196	216																				
									72	<LOD	294	183	236																				
									105	<LOD	322	195	217																				
NA	573	20210823-Parrot-OB-C-448		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	91	<LOD	365	255	238																					
									84	<LOD	342	204	239																				
									65	<LOD	444	227	376																				
									80	<LOD	384	229	284																				
NA	574	20210823-Parrot-OB-C-449		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	68	<LOD	305	164	322																					
									115	<LOD	389	188	363																				
									65	<LOD	323	112	287																				
									83	<LOD	339	155	324																				
NA	575	20210823-Parrot-OB-C-450		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	44	<LOD	313	152	363																					
									39	<LOD	241	172	279																				
									47	<LOD	225	100	290																				
									43	<LOD	260	141	311																				
NA	576	20210823-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
211022-19	577	SRM (Lab Analysis) (2711a)												86	**56**	161	**1,463**	429	107	54.1	140	1400	414	80	104	115	105	104					

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	578	20210823-Parrot-OB-C-451		Cell Three	10 Confrimation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3861-3960	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	50	<LOD	214	168	174																				
									49	<LOD	276	183	200																			
									51	<LOD	251	201	189																			
									50	<LOD	247	184	188																			
NA	579	20210823-Parrot-OB-C-452		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	39	<LOD	231	219	253																		
									47	<LOD	328	175	238																			
									37	<LOD	310	201	205																			
									41	<LOD	290	198	232																			
NA	580	20210824-Parrot-OB-C-453		Cell Three	11 Confrimation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell1 & 2). 6 Loads of mixed waste/OB was directed to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3961-4070	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	33	<LOD	196	54	409																				
									73	<LOD	291	104	370																			
									54	<LOD	230	91	402																			
									53	<LOD	239	83	394																			
NA	581	20210824-Parrot-OB-C-454		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	33	<LOD	251	82	405																		
									20	<LOD	235	122	408																			
									38	<LOD	543	115	388																			
									30	<LOD	343	106	400																			
NA	582	20210824-Parrot-OB-C-455		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	28	<LOD	323	105	266																		
									33	<LOD	233	106	212																			
									32	<LOD	270	139	322																			
									31	<LOD	275	117	267																			
NA	583	20210824-Parrot-OB-C-456		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	39	<LOD	211	97	229																		
									34	<LOD	242	123	273																			
									31	<LOD	194	85	216																			
									35	<LOD	216	102	239																			
NA	584	20210824-Parrot-OB-C-457		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	62	<LOD	240	164	241																		
									37	<LOD	258	113	257																			
									40	<LOD	226	101	300																			
									46	<LOD	241	126	266																			
NA	585	20210824-Parrot-OB-C-458		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	40	<LOD	182	175	254																		
									43	<LOD	204	106	234																			
									76	<LOD	168	144	305																			
									53	<LOD	185	142	264																			
NA	586	20210824-Parrot-OB-C-459		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	49	<LOD	220	113	317																		
									54	<LOD	228	100	344																			
									81	<LOD	257	118	276																			
									61	<LOD	235	110	312																			
NA	587	20210824-Parrot-OB-C-460		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	37	<LOD	246	113	225																		
									56	<LOD	262	145	192																			
									45	<LOD	224	168	154																			
									46	<LOD	244	142	190																			
NA	588	20210824-Parrot-OB-C-460							37	<LOD	246	113	225																			
									56	<LOD	262	145	192																			
									45	<LOD	224	168	154																			
									46	<LOD	244	142	190																			
NA	589	20210824-Parrot-DUP-460							45	<LOD	226	112	207																			
									45	<LOD	199	132	181																			
									61	<LOD	221	125	186																			
									50	<LOD	215	123	191															109.4203	NA	88.25137	86.61972	100.5254
211022-2	590	20210824-Parrot-LAB-460	[Reserved for QA/QC]											48	15 U	248	152	203											104.3478	NA	101.6393	107.0423	106.655
NA	591	20210824-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	592	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	593	20210824-Parrot-OB-C-461		Cell Three	11 Confrimation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell1 & 2). 6 Loads of mixed waste/OB was directed to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 3961-4070	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	61	<LOD	200	274	225																				
									53	<LOD	198	145	206																			
									40	<LOD	172	129	202																			
									51	<LOD	190	183	211																			
NA	594	20210824-Parrot-OB-C-462		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	40	<LOD	199	106	276																		
									47	<LOD	224	151	378																			
									40	<LOD	230	130	296																			
									42	<LOD	218	129	317																			
NA	595	20210824-Parrot-OB-C-463		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	39	<LOD	199	136	217																		
									57	<LOD	293	123	201																			
									48	<LOD	205	137	226																			
									48	<LOD	232	132	215																			
NA	596	20210825-Parrot-OB-C-464		Cell Three	12 Confrimation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell1 & 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4071-4190	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	31	<LOD	379	150	220																				
									54	<LOD	308	163	203																			
									28	<LOD	369	120	230																			
									38	<LOD	352	144	218																			
NA	597	20210825-Parrot-OB-C-465		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	36	<LOD	249	149	314																		
									37	<LOD	257	233	376																			
									29	<LOD	219	186	424																			
									34	<LOD	242	189	371																			
NA	598	20210825-Parrot-OB-C-466		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	21	<LOD	239	90	236																		
									27	<LOD	234	142	200																			
									34	<LOD	244	108	246																			
									27	<LOD	239	113	227																			
NA	599	20210825-Parrot-OB-C-467		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	46	<LOD	223	211	312																		
									68	<LOD	253	292	709																			
									87	<LOD	198	277	260																			
									67	<LOD	225	260	427																			
NA	600	20210825-Parrot-OB-C-468		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	85	<LOD	239	121	221																		
									53	<LOD	241	146	301																			
									74	<LOD	273	162	314																			
									71	<LOD	251	143	279																			
NA	601	20210825-Parrot-OB-C-469		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	52	<LOD	236	128	431																		
									62	<LOD	256	115	302																			
									52	<LOD	245	108	284																			
									55	<LOD	246	117	339																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	602	20210825-Parrot-OB-C-470		Cell Three	12 Confirmation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell1 & 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4071-4190	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	96	<LOD	231	185	275																				
									65	<LOD	217	112	337																				
									76	<LOD	242	126	312																				
									79	<LOD	230	141	308																				
NA	603	20210825-Parrot-OB-C-471		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	187	<LOD	271	197	260																				
									196	<LOD	256	194	225																				
									77	<LOD	211	170	194																				
									153	<LOD	246	187	226																				
NA	604	20210825-Parrot-OB-C-472		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	69	<LOD	229	211	313																				
									104	<LOD	307	239	366																				
									98	<LOD	302	198	412																				
									90	<LOD	279	216	364																				
NA	605	20210825-Parrot-OB-C-473		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	143	<LOD	223	204	255																				
									156	<LOD	292	233	261																				
									270	<LOD	250	326	219																				
									190	<LOD	255	254	245																				
NA	606	20210825-Parrot-OB-C-474		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	111	<LOD	304	162	455																				
									97	<LOD	266	307	309																				
									72	<LOD	250	249	346																				
									93	<LOD	273	239	370																				
NA	607	20210825-Parrot-OB-C-475		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	103	<LOD	243	160	325																				
									88	<LOD	239	198	247																				
									98	<LOD	264	266	312																				
									96	<LOD	249	208	295																				
NA	608	20210826-Parrot-OB-C-476		Cell Three	5 Confirmation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell1 & 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4191-4240	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	33	<LOD	289	61	339																				
									37	<LOD	286	76	407																				
									22	<LOD	284	70	414																				
									31	<LOD	286	69	387																				
NA	609	20210826-Parrot-OB-C-477		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	28	<LOD	425	81	484																				
									30	<LOD	376	115	506																				
									32	<LOD	318	89	625																				
									30	<LOD	373	95	538																				
NA	610	20210826-Parrot-OB-C-478		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	66	<LOD	303	247	239																				
									58	<LOD	293	170	287																				
									47	<LOD	231	139	272																				
									57	<LOD	276	185	266																				
NA	611	20210826-Parrot-OB-C-479		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	140	<LOD	241	93	213																				
									102	<LOD	270	129	283																				
									88	<LOD	306	118	219																				
									110	<LOD	272	113	238																				
NA	612	20210826-Parrot-OB-C-480		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	56	<LOD	271	238	453																				
									68	<LOD	242	168	382																				
									77	<LOD	270	172	343																				
									67	<LOD	261	193	393																				
NA	613	20210826-Parrot-OB-C-480							56	<LOD	271	238	453																				
									68	<LOD	242	168	382																				
									77	<LOD	270	172	343																				
									67	<LOD	261	193	393																				
NA	614	20210826-Parrot-DUP-480							54	<LOD	220	186	315																				
									68	<LOD	243	175	230																				
									71	<LOD	247	213	341																				
									64	<LOD	237	191	295															96.0199	NA	90.67688	99.30796	75.21222
211022-3	615	20210826-Parrot-LAB-480	[Reserved for QA/QC]											74	15 U	278	257	461											110.4478	NA	106.5134	133.391	117.4024
NA	616	20210826-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	617	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	618	20210827-Parrot-OB-C-481		Cell Three	6 Confirmation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell1 & 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4241-4300 / 4 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4301-4340	10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	105	<LOD	295	124	300																				
									127	<LOD	292	166	335																				
									105	<LOD	286	149	355																				
									112	<LOD	291	146	330																				
NA	619	20210827-Parrot-OB-C-482		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	185	<LOD	283	325	212																				
									114	<LOD	257	212	226																				
									166	<LOD	261	231	224																				
									155	<LOD	267	256	221																				
NA	620	20210827-Parrot-OB-C-483		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	116	<LOD	282	116	855																				
									80	<LOD	269	93	968																				
									151	<LOD	265	198	618																				
									116	<LOD	272	136	814																				
NA	621	20210827-Parrot-OB-C-484		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	107	<LOD	299	122	353																				
									115	<LOD	302	122	439																				
									76	<LOD	295	103	402																				
									99	<LOD	299	116	398																				
NA	622	20210827-Parrot-OB-C-485		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	90	<LOD	409	183	335																				
									92	<LOD	399	170	531																				
									134	<LOD	404	196	351																				
									105	<LOD	404	183	406																				
NA	623	20210827-Parrot-OB-C-486		Cell Three		10 pt. Composite Sample of second cut of OB- Direct haul to Cell 1 and 2. Excavation depth to top of tailings.	Approx. 8 ft. - 22 ft. bgs	Yes	101	<LOD	638	235	392																				
									173	<LOD	337	205	342																				
									90	<LOD	373	331	386																				
									121	<LOD	449	257	373																				
NA	624	20210827-Parrot-TA-C-487		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**391**	<LOD	379	715	559																				
									433	<LOD	316	844	570																				
									451	<LOD	431	933	745																				
									425	<LOD	375	831	625																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	625	20210827-Parrot-TA-C-488		Cell Three	6 Confirmation samples of OB from the second cut of cell 3. OB direct hauled to phase II (cell1 & 2). Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4241-4300 / 4 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4301-4340	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**408**	<LOD	389	927	**1415**																				
									404	<LOD	407	863	**1335**																				
									425	<LOD	433	900	**1005**																				
									412	<LOD	410	897	**1252**																				
NA	626	20210827-Parrot-TA-C-489		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**440**	<LOD	300	750	766																				
									414	<LOD	316	793	**1061**																				
									436	<LOD	306	665	712																				
									430	<LOD	307	736	846																				
NA	627	20210827-Parrot-TA-C-490		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**402**	<LOD	425	867	**1942**																				
									373	<LOD	433	685	**1298**																				
									363	<LOD	453	721	**1115**																				
									379	<LOD	437	758	**1452**																				
NA	628	20210830-Parrot-TA-C-491		Cell Three	12 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4341-4460	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**419**	<LOD	296	635	937																				
									410	<LOD	280	728	**1549**																				
									444	<LOD	349	655	**1303**																				
									424	<LOD	308	673	**1263**																				
NA	629	20210830-Parrot-TA-C-492		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**364**	<LOD	316	534	888																				
									363	<LOD	376	585	821																				
									293	<LOD	338	540	**2525**																				
									340	<LOD	343	553	**1411**																				
NA	630	20210830-Parrot-TA-C-493		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**526**	<LOD	341	759	795																				
									525	<LOD	341	842	916																				
									375	<LOD	351	941	**1199**																				
									475	<LOD	344	847	970																				
NA	631	20210830-Parrot-TA-C-494		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**447**	<LOD	330	931	914																				
									503	<LOD	407	938	**1050**																				
									433	<LOD	469	953	966																				
									461	<LOD	402	941	977																				
NA	632	20210830-Parrot-TA-C-495		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**410**	<LOD	330	921	**1102**																				
									350	<LOD	490	850	**1341**																				
									360	<LOD	448	777	**1279**																				
									373	<LOD	423	849	**1241**																				
NA	633	20210830-Parrot-TA-C-496		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**411**	<LOD	311	886	**1533**																				
									507	<LOD	307	**1017**	**1303**																				
									447	<LOD	273	934	846																				
									455	<LOD	297	946	**1227**																				
NA	634	20210830-Parrot-TA-C-497		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**483**	<LOD	512	**1162**	**1511**																				
									415	<LOD	386	**1029**	928																				
									374	<LOD	372	900	**2065**																				
									424	<LOD	423	**1030**	**1501**																				
NA	635	20210830-Parrot-TA-C-498		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**356**	<LOD	431	783	**1870**																				
									361	<LOD	452	892	**1489**																				
									344	<LOD	362	838	**2082**																				
									354	<LOD	415	838	**1814**																				
NA	636	20210830-Parrot-TA-C-499		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**418**	<LOD	384	881	847																				
									497	<LOD	450	932	**1296**																				
									453	<LOD	748	967	**2668**																				
									456	<LOD	527	927	**1604**																				
NA	637	20210830-Parrot-TA-C-500		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**419**	<LOD	444	**1249**	**1199**																				
									428	<LOD	500	**1217**	**1440**																				
									525	<LOD	591	**1749**	**1935**																				
									457	<LOD	512	**1405**	**1525**																				
NA	638	20210830-Parrot-TA-C-500							**419**	<LOD	444	**1249**	**1199**																				
									428	<LOD	500	**1217**	**1440**																				
									525	<LOD	591	**1749**	**1935**																				
									457	<LOD	512	**1405**	**1525**																				
211022-4	639	20210830-Parrot-DUP-500							**396**	<LOD	375	**1277**	857																				
									561	<LOD	475	**1653**	**1279**	**331**	15 U	435	**1,246**	**1,670**															
									412	<LOD	482	**1327**	**1408**																				
									456	<LOD	444	**1419**	**1181**																100.2191	NA	115.2402	99.01339	129.0632
211022-5	640	20210830-Parrot-LAB-500	[Reserved for QA/QC]											**376**	15 U	503	**1322**	**1400**											82.21574	NA	98.30619	94.09253	91.82335
211022-6	641	20210830-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD	6U	15 U	16 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	642	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	643	20210830-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
211022-20	644	SRM (Lab Analysis) (2711a)												78	43 J	150	**1476**	429	107	54.1	140	1400	414	73	NA	107	105	104					
NA	645	20210830-Parrot-TA-C-501		Cell Three	12 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4341-4460	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**304**	<LOD	258	823	**2088**																				
									360	<LOD	366	947	**2148**																				
									411	<LOD	335	**1014**	**2185**																				
									358	<LOD	320	928	**2140**																				
NA	646	20210830-Parrot-TA-C-502		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**331**	8	446	967	**1102**																				
									380	<LOD	616	967	**1042**																				
									279	<LOD	547	948	**1095**																				
									330	8	536	961	**1080**																				
NA	647	20210831-Parrot-OB-C-503		Cell Three	2 Confirmation samples of OB from the 1st cut of cell 4. OB direct hauled to phase I. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4461-4480 / 6 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4481-4540	10 pt. Composite Sample within the first cut of OB within the cell 4, Direct Haul to Phase I	Approx. 0 ft. - 4 ft. bgs	Yes	12	<LOD	326	123	414																				
									30	<LOD	383	215	581																				
									14	<LOD	301	149	460																				
									19	<LOD	337	162	485																				
NA	648	20210831-Parrot-OB-C-504		Cell Three		10 pt. Composite Sample within the first cut of OB within the cell 4, Direct Haul to Phase I	Approx. 0 ft. - 4 ft. bgs	Yes	22	<LOD	424	147	504																				
									18	<LOD	421	128	430																				
									25	<LOD	327	120	446																				
									22	<LOD	391	132	460																				
NA	649	20210831-Parrot-TA-C-505		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**355**	<LOD	429	949	801																				
									573	<LOD	**2543**	947	572																				
									386	<LOD	523	982	936																				
									438	<LOD	**1165**	959	770																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	650	20210831-Parrot-TA-C-506		Cell Three	2 Confirmation samples of OB from the 1st cut of cell 4. OB direct hauled to phase I. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4461-4480 / 6 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4481-4540	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**398**	<LOD	423	**1038**	**1907**																				
									335	<LOD	621	836	**1027**																			
									322	<LOD	617	740	589																			
									352	<LOD	554	871	**1174**																			
NA	651	20210831-Parrot-TA-C-507		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**300**	<LOD	399	909	624																			
									439	<LOD	515	**1025**	831																			
									423	<LOD	465	**1346**	**1324**																			
									387	<LOD	460	**1093**	926																			
NA	652	20210831-Parrot-TA-C-508		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**403**	<LOD	543	**1119**	969																			
									344	<LOD	500	944	959																			
									351	9	529	**1113**	974																			
									366	9	524	**1059**	967																			
NA	653	20210831-Parrot-TA-C-509		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**312**	<LOD	395	**1045**	**2017**																			
									393	<LOD	431	**1165**	**2622**																			
									363	<LOD	411	**1100**	**1376**																			
									356	<LOD	412	**1103**	**2005**																			
NA	654	20210831-Parrot-TA-C-510		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**373**	<LOD	572	**1058**	**1295**																			
									295	<LOD	464	733	**1210**																			
									349	<LOD	559	904	**1659**																			
									339	<LOD	532	898	**1388**																			
NA	655	20210901-Parrot-TA-C-511		Cell Three	14 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4541-4680.	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**373**	<LOD	659	785	**1722**																				
									309	9	462	**1246**	**2577**																			
									304	<LOD	377	**1035**	**1173**																			
									329	9	499	**1022**	**1824**																			
NA	656	20210901-Parrot-TA-C-512		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**348**	<LOD	445	**1085**	**1680**																			
									260	<LOD	377	767	**1035**																			
									352	<LOD	511	888	**1440**																			
									320	<LOD	444	913	**1385**																			
NA	657	20210901-Parrot-TA-C-513		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**358**	<LOD	282	**1314**	**1292**																			
									360	10	361	**1284**	**3710**																			
									355	<LOD	326	**1207**	**2375**																			
									358	10	323	**1268**	**2459**																			
NA	658	20210901-Parrot-TA-C-514		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**332**	<LOD	560	925	**1263**																			
									317	<LOD	450	922	**1495**																			
									354	<LOD	486	**1075**	**1417**																			
									334	<LOD	499	974	**1392**																			
NA	659	20210901-Parrot-TA-C-515		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**238**	<LOD	357	789	**1784**																			
									283	<LOD	411	859	**1104**																			
									240	<LOD	372	**1093**	**1643**																			
									254	<LOD	380	914	**1510**																			
NA	660	20210901-Parrot-TA-C-516		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**357**	<LOD	398	**1066**	**1044**																			
									326	<LOD	467	915	**1134**																			
									333	<LOD	476	**1045**	**1011**																			
									339	<LOD	447	**1009**	**1063**																			
NA	661	20210901-Parrot-TA-C-517		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**271**	<LOD	326	**1189**	**1891**																			
									322	7	315	**1286**	**1245**																			
									242	<LOD	339	**1118**	891																			
									278	7	327	**1198**	**1342**																			
NA	662	20210901-Parrot-TA-C-518		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**280**	<LOD	390	904	775																			
									326	<LOD	506	950	**1118**																			
									297	<LOD	495	923	**1206**																			
									301	<LOD	464	926	**1033**																			
NA	663	20210901-Parrot-TA-C-519		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**237**	<LOD	348	**1478**	**1414**																			
									263	<LOD	353	**1078**	**1344**																			
									184	<LOD	303	993	**1482**																			
									228	<LOD	335	**1183**	**1413**																			
NA	664	20210901-Parrot-TA-C-520		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**259**	<LOD	389	**1023**	**1351**																			
									244	<LOD	374	**1111**	**1371**																			
									295	9	558	891	**1154**																			
									266	9	440	**1008**	**1292**																			
NA	665	20210901-Parrot-TA-C-520							**259**	<LOD	389	**1023**	**1351**																			
									244	<LOD	374	**1111**	**1371**																			
									295	9	558	891	**1154**																			
									266	9	440	**1008**	**1292**																			
211022-7	666	20210901-Parrot-DUP-520							**266**	<LOD	364	**1148**	**1728**																			
									230	<LOD	480	**1024**	**2229**	**215**	15 U	542	880	**1626**														
									260	<LOD	575	875	998																			
									252	<LOD	473	**1016**	**1652**																105.5556	NA	114.5877	86.6426	98.44601
211022-8	667	20210901-Parrot-LAB-520												**228**	15 U	484	969	**1578**												85.71429	NA	109.9167	96.09917	122.1362
211022-9	668	20210901-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15 U	28 J	9 U	9 U														
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	669	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																														
																			107	54.1	140	1400	414									
NA	670	20210901-Parrot-TA-C-521		Cell Three	14 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4541-4680.	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**286**	<LOD	557	**1017**	**1646**																			
									290	<LOD	610	**1021**	**1076**																			
									274	<LOD	742	922	**2421**																			
									283	<LOD	636	987	**1714**																			
NA	671	20210901-Parrot-TA-C-522		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**279**	<LOD	449	**1040**	**1659**																			
									251	<LOD	489	865	**1586**																			
									236	<LOD	457	**1053**	**1881**																			
									255	<LOD	465	986	**1709**																			
NA	672	20210901-Parrot-TA-C-523		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**331**	<LOD	395	**1263**	**1022**																			
									261	9	368	976	**2196**																			
									212	<LOD	363	942	**1181**																			
									268	9	375	**1060**	**1466**																			
NA	673	20210901-Parrot-TA-C-524		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**267**	<LOD	348	**1076**	**1109**																			
									305	<LOD	439	**1102**	**1523**																			
									267	<LOD	458	**1139**	**1711**																			
									280	<LOD	415	**1106**	**1448**																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	674	20210902-Parrot-TA-C-525		Cell Three	8 Confirmation samples of TA from the first cut of underlying waste of cell 3. All samples were direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4681-4760.	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**239**	<LOD	512	982	**1346**																				
									269	8	543	**1098**	**2656**																			
									247	<LOD	778	904	**1748**																			
									252	8	611	995	**1917**																			
NA	675	20210902-Parrot-TA-C-526		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**309**	<LOD	390	**1185**	**1536**																			
									297	<LOD	405	**1117**	**1527**																			
									298	<LOD	482	**1096**	**1076**																			
									301	<LOD	426	**1133**	**1380**																			
NA	676	20210902-Parrot-TA-C-527		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**409**	<LOD	712	**1219**	**2011**																			
									343	<LOD	435	**1341**	**1514**																			
									310	<LOD	358	**1184**	**1987**																			
									354	<LOD	502	**1248**	**1837**																			
NA	677	20210902-Parrot-TA-C-528		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**368**	<LOD	584	**1011**	**1399**																			
									354	<LOD	553	**1413**	**1445**																			
									302	<LOD	618	**1251**	**1377**																			
									341	<LOD	585	**1225**	**1407**																			
NA	678	20210902-Parrot-TA-C-529		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**257**	<LOD	690	779	977																			
									251	<LOD	533	934	**1052**																			
									254	<LOD	421	920	964																			
									254	<LOD	548	878	998																			
NA	679	20210902-Parrot-TA-C-530		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**272**	<LOD	450	**1142**	**1715**																			
									265	<LOD	468	**1256**	**1850**																			
									230	<LOD	522	898	**1446**																			
									256	<LOD	480	**1099**	**1670**																			
NA	680	20210902-Parrot-TA-C-531		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**258**	<LOD	494	**1037**	**1709**																			
									266	<LOD	597	721	873																			
									306	<LOD	606	917	**1164**																			
									277	<LOD	566	892	**1249**																			
NA	681	20210902-Parrot-TA-C-532		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	180	<LOD	475	891	734																			
									196	<LOD	503	919	**1403**																			
									238	<LOD	553	928	**1096**																			
									205	<LOD	510	913	**1078**																			
NA	682	20210903-Parrot-TA-C-533		Cell Three	1 Confirmation sample of TA from the first cut of underlying waste of cell 3. Sample was direct haul to MR. Sampling consists of 1	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**230**	<LOD	511	753	727																			
									217	<LOD	488	794	**1455**																			
									284	<LOD	582	866	813																			
									244	<LOD	527	804	998																			
NA	683	20210907-Parrot-TA-C-534		Cell Three	4 Confirmation sample of TA from the first cut of underlying waste of cell 3. Sample was direct haul to MR. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4771-4810.	10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**261**	<LOD	545	597	**1008**																			
									249	<LOD	502	591	834																			
									189	<LOD	472	631	968																			
									233	<LOD	506	606	937																			
NA	684	20210907-Parrot-TA-C-535		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**289**	<LOD	465	835	**1218**																			
									230	<LOD	524	633	873																			
									217	<LOD	441	802	**1122**																			
									245	<LOD	477	757	**1071**																			
NA	685	20210907-Parrot-TA-C-536		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**227**	8	409	874	**2230**																			
									267	<LOD	411	898	**1007**																			
									268	<LOD	349	884	918																			
									254	8	390	885	**1385**																			
NA	686	20210907-Parrot-TA-C-537		Cell Three		10 pt. Composite Sample within the first cut of TA within the cell, Direct Haul to MR	Approx. 22 ft. - 30 ft. bgs	Yes	**317**	<LOD	496	**1110**	**1147**																			
									365	<LOD	506	680	875																			
									378	<LOD	483	812	**1899**																			
									353	<LOD	495	867	**1307**																			
NA	687	20210909-Parrot-RK-C-538		Cell Three	11-8 Point composite samples from the tailing's floor were taken. Sampling locations were chosen randomly using a 50 x 100 ft. grid overlain on the tailings floor in GIS. All material overlying the tailings floor was direct hauled to MR.	8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	23	<LOD	672	149	572																			
									25	<LOD	721	72	570																			
									38	<LOD	614	114	634																			
									29	<LOD	669	112	592																			
NA	688	20210909-Parrot-RK-C-539		Cell Three		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	50	<LOD	659	87	531																			
									52	<LOD	642	112	568																			
									55	<LOD	701	97	569																			
									52	<LOD	667	99	556																			
NA	689	20210909-Parrot-RK-C-540		Cell Three		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	61	<LOD	609	83	477																			
									78	<LOD	640	94	513																			
									51	<LOD	645	105	527																			
									63	<LOD	631	94	506																			
NA	690	20210909-Parrot-RK-C-540							61	<LOD	609	83	477																			
									78	<LOD	640	94	513																			
									51	<LOD	645	105	527																			
									63	<LOD	631	94	506																			
NA	691	20210909-Parrot-DUP-540							70	<LOD	831	104	607																			
									54	<LOD	809	96	628																			
									55	<LOD	664	113	559																			
									60	<LOD	768	104	598															94.21053	NA	121.6473	110.9929	118.2597
211022-10	692	20210909-Parrot-Lab-540	[Reserved for QA/QC]											47	15 U	581	97	498											74.21053	NA	92.02746	103.1915	98.48385
NA	693	20210909-Parrot-Field Blank-540							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	694	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																														
																			107	54.1	140	1400	414									
NA	695	20210909-Parrot-RK-C-541		Cell Three	11-8 Point composite samples from the tailing's floor were taken. Sampling locations were chosen randomly using a 50 x 100 ft. grid overlain on the tailings floor in GIS. All material overlying the tailings floor was direct hauled to MR.	8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	36	<LOD	555	58	456																			
									35	<LOD	523	65	475																			
									57	<LOD	635	97	597																			
									43	<LOD	571	73	509																			
NA	696	20210909-Parrot-RK-C-542		Cell Three		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	75	<LOD	505	103	439																			
									78	<LOD	425	114	450																			
									60	<LOD	374	93	396																			
									71	<LOD	435	103	428																			
NA	697	20210909-Parrot-RK-C-543		Cell Three		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	37	<LOD	436	49	485																			
									23	<LOD	371	46	349																			
									34	<LOD	452	52	463																			
									31	<LOD	420	49	432																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	698	20210909-Parrot-RK-C-544		Cell Three	11-8 Point composite samples from the tailing's floor were taken. Sampling locations were chosen randomly using a 50 x 100 ft. grid overlain on the tailings floor in GIS. All material overlying the tailings floor was direct hauled to MR.	8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	21	<LOD	305	36	278																					
									39	<LOD	399	45	338																				
									27	<LOD	353	42	342																				
									29	<LOD	352	41	319																				
NA	699	20210909-Parrot-RK-C-545		Cell Three		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	69	<LOD	632	58	404																				
									60	<LOD	532	57	322																				
									53	<LOD	623	60	427																				
									61	<LOD	596	58	384																				
NA	700	20210909-Parrot-RK-C-546		Cell Three		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	52	<LOD	347	41	296																				
									101	<LOD	419	38	308																				
									58	<LOD	308	43	235																				
									70	<LOD	358	41	280																				
NA	701	20210909-Parrot-RK-C-547		Cell Three		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	48	<LOD	378	116	273																				
									30	<LOD	283	36	217																				
									41	<LOD	348	51	261																				
									40	<LOD	336	68	250																				
NA	702	20210909-Parrot-RK-C-548		Cell Three		8 pt. Composite sample of vertical extent of the cell- After Dozer cleanup	Approx. 30 ft.-35 ft. bgs	Yes	52	<LOD	298	37	261																				
									77	<LOD	273	28	209																				
									70	<LOD	302	39	274																				
									66	<LOD	291	35	248																				
NA	703	20210910-Parrot-OB-C-549		Cell Four	6 Confrimation samples of OB from the first cut of cell 4. OB direct hauled to cell 3. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4811-4870.	10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	93	<LOD	260	211	370																				
									97	<LOD	316	390	794																				
									91	<LOD	264	184	261																				
									94	<LOD	280	262	475																				
NA	704	20210910-Parrot-OB-C-550		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	80	<LOD	305	141	451																				
									64	<LOD	279	166	375																				
									73	<LOD	311	155	384																				
									72	<LOD	298	154	403																				
NA	705	20210909-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
211022-21	706	SRM (Lab Analysis) (2711a)												66	35 J	138	**1459**	415	107	54.1	140	1400	414	62	NA	99	104	100					
NA	707	20210910-Parrot-OB-C-551		Cell Four	6 Confrimation samples of OB from the first cut of cell 4. OB direct hauled to cell 3. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4811-4870.	10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	62	<LOD	230	235	397																				
									63	<LOD	295	140	422																				
									44	<LOD	276	147	322																				
									56	<LOD	267	174	380																				
NA	708	20210910-Parrot-OB-C-552		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	58	<LOD	295	205	382																				
									70	<LOD	302	150	396																				
									52	<LOD	277	156	472																				
									60	<LOD	291	170	417																				
NA	709	20210910-Parrot-OB-C-553		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	63	<LOD	323	213	788																				
									90	<LOD	397	242	**1267**																				
									79	<LOD	451	401	**1105**																				
									77	<LOD	390	285	**1053**																				
NA	710	20210910-Parrot-OB-C-554		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	57	<LOD	400	286	364																				
									42	<LOD	331	154	246																				
									47	<LOD	331	137	263																				
									49	<LOD	354	192	291																				
NA	711	20210913-Parrot-OB-C-555		Cell Four	12 Confrimation samples of OB from the first cut of cell 4. OB direct hauled to cell 3. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4871-4990	10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	36	<LOD	435	146	356																				
									33	<LOD	413	152	341																				
									35	<LOD	432	184	395																				
									35	<LOD	427	161	364																				
NA	712	20210913-Parrot-OB-C-556		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	56	<LOD	249	156	345																				
									44	<LOD	319	158	282																				
									53	<LOD	278	146	273																				
									51	<LOD	282	153	300																				
NA	713	20210913-Parrot-OB-C-557		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	24	10	414	206	519																				
									36	<LOD	432	154	473																				
									41	<LOD	454	155	488																				
									34	10	433	172	493																				
NA	714	20210913-Parrot-OB-C-558		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	71	<LOD	278	178	292																				
									37	<LOD	289	164	293																				
									55	<LOD	299	220	401																				
									54	<LOD	289	187	329																				
NA	715	20210913-Parrot-OB-C-559		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	32	<LOD	470	108	484																				
									29	<LOD	372	77	300																				
									28	<LOD	389	130	358																				
									30	<LOD	410	105	381																				
NA	716	20210913-Parrot-OB-C-560		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	51	<LOD	235	175	337																				
									57	<LOD	351	172	340																				
									53	<LOD	341	233	391																				
									54	<LOD	309	193	356																				
NA	717	20210913-Parrot-OB-C-560							51	<LOD	235	175	337																				
									57	<LOD	351	172	340																				
									53	<LOD	341	233	391																				
									54	<LOD	309	193	356																				
NA	718	20210913-Parrot-DUP-560							73	<LOD	336	187	408																				
									57	<LOD	281	171	339																				
									54	<LOD	292	289	384																				
									61	<LOD	303	216	377															114.2857	NA	98.05825	111.5517	105.8989
211022-11	719	20210913-Parrot-LAB-560	[Reserved for QA/QC]											53	15 U	269	235	381											98.75776	NA	87.05502	121.5517	107.0225
NA	720	20210913-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	721	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	722	20210913-Parrot-OB-C-561		Cell Four	12 Confrimation samples of OB from the first cut of cell 4. OB direct hauled to cell 3. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 4871-4990	10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	77	<LOD	648	226	443																				
									66	<LOD	485	213	421																				
									76	<LOD	373	227	506																				
									73	<LOD	502	222	457																				
NA	723	20210913-Parrot-OB-C-562		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	79	<LOD	484	141	467																			
									41	<LOD	483	82	407																				
									65	<LOD	492	111	416																				
									62	<LOD	486	111	430																				
NA	724	20210913-Parrot-OB-C-563		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	93	<LOD	204	181	266																			
									78	<LOD	296	185	427																				
									71	<LOD	275	181	378																				
									81	<LOD	258	182	357																				
NA	725	20210913-Parrot-OB-C-564		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	46	<LOD	344	164	393																			
									142	<LOD	420	239	356																				
									66	<LOD	422	106	378																				
									85	<LOD	395	170	376																				
NA	726	20210913-Parrot-OB-C-565		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	40	<LOD	302	85	273																			
									48	<LOD	274	102	258																				
									98	<LOD	303	115	251																				
									62	<LOD	293	101	261																				
NA	727	20210913-Parrot-OB-C-566		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	36	<LOD	226	75	566																			
									42	<LOD	241	138	374																				
									36	<LOD	179	60	209																				
									38	<LOD	215	91	383																				
NA	728	20210914-Parrot-OB-C-567		Cell Four	Samples 567-568 consisted of quartz monzonite that were hauled to cell 3. Samples 569-571 consisted of contaminated OB that was stripped to the quartz monzonite layer, approx. 4 ft. and hauled to MR. Sample 572 consisted of the underlying quartz monzonite, approx. 4 ft. – 8 ft. and was hauled to cell 3. Samples 573-574 consisted of contaminated OB that was stripped to the quartz monzonite layer, approx. 4 ft bgs and hauled to MR.	10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	51	<LOD	126	46	182																					
									57	<LOD	229	99	598																				
									108	<LOD	216	73	306																				
									72	<LOD	190	73	362																				
NA	729	20210914-Parrot-OB-C-568		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	50	<LOD	272	131	426																			
									131	<LOD	448	248	538																				
									91	<LOD	298	122	365																				
									91	<LOD	339	167	443																				
NA	730	20210914-Parrot-OB-C-569		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 4 ft. Bgs	Yes	93	<LOD	785	315	**2904**																			
									108	<LOD	832	270	**2147**																				
									266	<LOD	680	370	**2590**																				
									156	<LOD	766	318	**2547**																				
NA	731	20210914-Parrot-OB-C-570		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 4 ft. Bgs	Yes	78	<LOD	489	216	950																			
									83	<LOD	589	196	**1349**																				
									86	<LOD	669	273	**1542**																				
									82	<LOD	582	228	**1280**																				
NA	732	20210914-Parrot-OB-C-571		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 4 ft. Bgs	Yes	**269**	<LOD	917	233	**2833**																			
									81	<LOD	808	140	**1604**																				
									68	<LOD	637	142	**1855**																				
									139	<LOD	787	172	**2097**																				
NA	733	20210914-Parrot-OB-C-572		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 4 ft. - 8 ft. Bgs	Yes	64	<LOD	350	114	251																			
									72	<LOD	430	129	224																				
									63	<LOD	347	123	211																				
									66	<LOD	376	122	229																				
NA	734	20210914-Parrot-OB-C-573		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 4 ft. Bgs	Yes	188	<LOD	918	199	**1897**																			
									409	<LOD	949	188	**1192**																				
									207	<LOD	829	244	**1925**																				
									268	<LOD	899	210	**1671**																				
NA	735	20210914-Parrot-OB-C-574		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 4 ft. Bgs	Yes	117	<LOD	823	302	**2264**																			
									120	<LOD	991	367	**3345**																				
									150	<LOD	**1152**	348	**2849**																				
									129	<LOD	989	339	**2819**																				
NA	736	20210917-Parrot-OB-C-575		Cell Four	9 Confrimation samples of OB from the first cut of cell 4. OB direct hauled to cell 3. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 5161-5250	10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	131	<LOD	342	134	271																			
									87	<LOD	300	184	300																				
									88	<LOD	290	159	366																				
									102	<LOD	311	159	312																				
NA	737	20210917-Parrot-OB-C-576		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	82	<LOD	283	168	473																			
									85	<LOD	320	168	472																				
									65	<LOD	247	167	488																				
									77	<LOD	283	168	478																				
NA	738	20210917-Parrot-OB-C-577		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	54	<LOD	589	235	284																			
									87	<LOD	363	245	259																				
									35	<LOD	410	187	249																				
									59	<LOD	454	222	264																				
NA	739	20210917-Parrot-OB-C-578		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	35	<LOD	281	262	350																			
									48	<LOD	286	150	406																				
									50	<LOD	257	139	298																				
									44	<LOD	275	184	351																				
NA	740	20210917-Parrot-OB-C-579		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	33	<LOD	306	135	294																			
									25	<LOD	270	121	342																				
									44	<LOD	331	201	422																				
									34	<LOD	302	152	353																				
NA	741	20210917-Parrot-OB-C-580		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	38	<LOD	343	121	397																			
									68	<LOD	554	139	581																				
									34	<LOD	331	110	400																				
									47	<LOD	409	123	459																				
NA	742	20210917-Parrot-OB-C-580							38	<LOD	343	121	397																				
									68	<LOD	554	139	581																				
									34	<LOD	331	110	400																				
									47	<LOD	409	123	459																				
NA	743	20210917-Parrot-DUP-580							31	<LOD	408	151	586																				
									35	<LOD	389	170	408																				
									32	<LOD	518	186	838																				
									33	<LOD	438	169	611															105.3763	NA	107.4346	111.9205	104.2093
211022-12	744	20210917-Parrot-LAB-580	[Reserved for QA/QC]											51	15 U	380	197	468											109.2857	NA	92.83388	159.7297	101.8868
NA	745	20210917-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	746	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	747	20210917-Parrot-OB-C-581		Cell Four	9 Confrimation samples of OB from the first cut of cell 4. OB direct hauled to cell 3. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 5161-5250	10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	34	<LOD	297	124	256																				
									43	<LOD	289	122	326																				
									46	<LOD	326	97	216																				
									41	<LOD	304	114	266																				
NA	748	20210917-Parrot-OB-C-582		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	37	<LOD	318	108	337																				
									38	<LOD	419	90	328																				
									47	<LOD	409	81	480																				
									41	<LOD	382	93	382																				
NA	749	20210917-Parrot-OB-C-583		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell Three	Approx. 0 ft. - 8 ft. Bgs	Yes	30	<LOD	442	94	364																				
									36	<LOD	511	114	457																				
									28	<LOD	483	227	438																				
									31	<LOD	479	145	420																				
NA	750	20210920-Parrot-OB-C-584		Cell Four	8 Confrimation samples of OB from the first cut of cell 4. 6 samples of OB direct hauled to MR. 2 Samples of OB direct hauled to Cell 3. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 5161-5250	10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	116	<LOD	**1029**	305	**2818**																				
									144	<LOD	**1039**	348	**3549**																				
									133	<LOD	**1607**	417	**3798**																				
									131	<LOD	**1225**	357	**3388**																				
NA	751	20210920-Parrot-OB-C-585		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	105	9	**1105**	339	**3464**																				
									93	<LOD	**1009**	306	**3088**																				
									114	<LOD	768	286	**2427**																				
									104	9	961	310	**2993**																				
NA	752	20210920-Parrot-OB-C-586		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell 3	Approx. 0 ft. - 8 ft. Bgs	Yes	120	<LOD	279	98	398																				
									222	<LOD	353	114	430																				
									184	<LOD	293	99	361																				
									175	<LOD	308	104	396																				
NA	753	20210920-Parrot-OB-C-587		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to Cell 3	Approx. 0 ft. - 8 ft. Bgs	Yes	52	<LOD	288	90	308																				
									55	<LOD	278	102	265																				
									75	<LOD	440	112	297																				
									61	<LOD	335	101	290																				
NA	754	20210920-Parrot-OB-C-588		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	**256**	<LOD	252	109	244																				
									269	<LOD	248	107	231																				
									468	<LOD	328	143	253																				
									331	<LOD	276	120	243																				
NA	755	20210920-Parrot-OB-C-589		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	**365**	<LOD	325	155	273																				
									1002	<LOD	363	233	317																				
									397	<LOD	325	159	472																				
									588	<LOD	338	182	354																				
NA	756	20210920-Parrot-OB-C-590		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	144	<LOD	**1382**	494	**3739**																				
									188	<LOD	**1754**	780	**7384**																				
									178	<LOD	**1778**	730	**4541**																				
									170	<LOD	**1638**	668	**5221**																				
NA	757	20210920-Parrot-OB-C-591		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	**803**	<LOD	667	428	**1688**																				
									265	<LOD	651	290	**1445**																				
									154	<LOD	578	244	**1096**																				
									407	<LOD	632	321	**1410**																				
NA	758	20210921-Parrot-OB-C-592		Cell Four	9 Confrimation samples of OB from the first cut of cell 4. 1 Confrimation samples of OB from second cut Cell 4. 9 samples of OB direct hauled to MR. Hauls 5251-5340. 1 Sample of OB direct hauled to Cell 3. Hauls 5341-5350 Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY.	10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	123	<LOD	435	172	910																				
									206	<LOD	**1682**	264	**1450**																				
									120	<LOD	538	190	**1269**																				
									150	<LOD	885	209	**1210**																				
NA	759	20210921-Parrot-OB-C-593		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	101	<LOD	871	370	**2518**																				
									126	<LOD	951	368	**2221**																				
									114	<LOD	765	283	**2117**																				
									114	<LOD	862	340	**2285**																				
NA	760	20210921-Parrot-OB-C-594		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	**221**	<LOD	679	254	**1752**																				
									249	<LOD	903	309	**1768**																				
									74	<LOD	512	212	**2012**																				
									181	<LOD	698	258	**1844**																				
NA	761	20210921-Parrot-OB-C-595		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	**313**	<LOD	239	101	325																				
									167	<LOD	231	100	364																				
									96	<LOD	255	83	325																				
									192	<LOD	242	95	338																				
NA	762	20210921-Parrot-OB-C-596		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	**268**	<LOD	432	219	934																				
									207	<LOD	435	214	941																				
									198	<LOD	421	213	**1346**																				
									224	<LOD	429	215	**1074**																				
NA	763	20210921-Parrot-OB-C-597		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	188	<LOD	570	254	**1685**																				
									251	<LOD	450	174	646																				
									240	<LOD	390	150	762																				
									226	<LOD	470	193	**1031**																				
NA	764	20210921-Parrot-OB-C-598		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	82	<LOD	328	135	416																				
									70	<LOD	390	123	670																				
									83	<LOD	412	154	875																				
									78	<LOD	377	137	654																				
NA	765	20210921-Parrot-OB-C-599		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	106	<LOD	**1485**	463	**3831**																				
									98	<LOD	**1324**	442	**3305**																				
									94	<LOD	**1049**	472	**3321**																				
									99	<LOD	**1286**	459	**3486**																				
NA	766	20210921-Parrot-OB-C-600		Cell Four		10 pt. Composite Sample from first cut of OB, Direct Haul to MR	Approx. 0 ft. - 8 ft. Bgs	Yes	83	<LOD	**1011**	338	**2901**																				
									75	<LOD	727	356	**2530**																				
									98	<LOD	880	392	**2904**																				
									85	<LOD	873	362	**2778**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	767	20210921-Parrot-OB-C-600							83	<LOD	**1011**	338	**2901**																				
									75	<LOD	727	356	**2530**																				
									98	<LOD	880	392	**2904**																				
									85	<LOD	873	362	**2778**																				
211022-13	768	20210921-Parrot-DUP-600							69	<LOD	400	244	**1601**																				
									55	<LOD	496	218	**1433**	77	15 U	598	340	**2147**															
									77	<LOD	619	281	**1622**																				
									67	<LOD	505	248	**1552**																78.51563	NA	57.8686	68.41621	55.86083
211022-14	769	20210830-Parrot-LAB-600	[Reserved for QA/QC]											79	15 U	628	370	**2337**											92.57813	NA	71.96333	102.2099	84.11518
211022-15	770	20210921-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15 U	29 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	771	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	772	20210921-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
211022-22	773	SRM (Lab Analysis) (2711a)												58	**47**	154	**1480**	420	107	54.1	140	1400	414	54	87	110	106	101					
NA	774	20210921-Parrot-OB-C-601		Cell Four	9 Confirmation samples of OB from the first cut of cell 4. 2 Confirmation samples of OB from second cut Cell 4. 9 samples of OB	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	90	<LOD	416	220	**1368**																				
									99	<LOD	373	180	595																				
									86	<LOD	390	180	518																				
									92	<LOD	393	193	827																				
NA	775	20210922-Parrot-OB-C-602		Cell Four	9 Confirmation samples of OB from second cut Cell 4. Samples direct hauled to cell 3. Hauls 5350-5440. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY.	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	91	<LOD	229	226	208																				
									66	<LOD	261	173	324																				
									52	<LOD	301	321	299																				
									70	<LOD	264	240	277																				
NA	776	20210922-Parrot-OB-C-603		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	96	<LOD	445	206	210																				
									87	<LOD	315	214	177																				
									81	<LOD	280	190	264																				
									88	<LOD	347	203	217																				
NA	777	20210922-Parrot-OB-C-604		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	100	<LOD	348	170	237																				
									66	<LOD	323	150	191																				
									82	<LOD	274	196	172																				
									83	<LOD	315	172	200																				
NA	778	20210922-Parrot-OB-C-605		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	73	<LOD	337	218	219																				
									101	<LOD	328	279	290																				
									158	<LOD	319	410	190																				
									111	<LOD	328	302	233																				
NA	779	20210922-Parrot-OB-C-606		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	133	<LOD	262	498	105																				
									97	<LOD	293	387	146																				
									145	<LOD	371	352	220																				
									125	<LOD	309	412	157																				
NA	780	20210922-Parrot-OB-C-607		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	76	<LOD	354	245	483																				
									100	<LOD	326	220	228																				
									75	<LOD	243	261	548																				
									84	<LOD	308	242	420																				
NA	781	20210922-Parrot-OB-C-608		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	77	<LOD	329	169	299																				
									79	<LOD	322	218	267																				
									92	<LOD	378	181	339																				
									83	<LOD	343	189	302																				
NA	782	20210922-Parrot-OB-C-609		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	38	<LOD	366	80	338																				
									37	<LOD	389	95	266																				
									51	<LOD	330	79	236																				
									42	<LOD	362	85	280																				
NA	783	20210922-Parrot-OB-C-610		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	98	<LOD	312	120	226																				
									124	<LOD	415	163	196																				
									80	<LOD	317	147	222																				
									101	<LOD	348	143	215																				
NA	784	20210923-Parrot-OB-C-611		Cell Four	13 Confirmation samples of OB from second cut Cell 4. Samples direct hauled to cell 3. Hauls 5441-5570. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY.	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	73	<LOD	343	189	221																				
									45	<LOD	432	214	190																				
									72	<LOD	281	119	213																				
									63	<LOD	352	174	208																				
NA	785	20210923-Parrot-OB-C-612		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	51	<LOD	367	95	358																				
									51	<LOD	367	139	194																				
									40	<LOD	297	124	233																				
									47	<LOD	344	119	262																				
NA	786	20210923-Parrot-OB-C-613		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	64	<LOD	292	92	260																				
									54	<LOD	307	190	276																				
									48	<LOD	296	101	235																				
									55	<LOD	298	128	257																				
NA	787	20210923-Parrot-OB-C-614		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	124	<LOD	342	135	213																				
									53	<LOD	314	110	227																				
									45	<LOD	396	131	172																				
									74	<LOD	351	125	204																				
NA	788	20210923-Parrot-OB-C-615		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	56	<LOD	307	255	149																				
									48	<LOD	354	86	158																				
									47	<LOD	306	146	136																				
									50	<LOD	322	162	148																				
NA	789	20210923-Parrot-OB-C-616		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	51	<LOD	325	221	198																				
									42	<LOD	365	192	193																				
									41	<LOD	347	319	152																				
									45	<LOD	346	244	181																				
NA	790	20210923-Parrot-OB-C-617		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	67	<LOD	364	241	155																				
									113	<LOD	432	368	187																				
									54	<LOD	395	205	189																				
									78	<LOD	397	271	177																				
NA	791	20210923-Parrot-OB-C-618		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	62	<LOD	380	150	176																				
									60	<LOD	296	266	192																				
									43	<LOD	365	139	205																				
									55	<LOD	347	185	191																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	792	20210923-Parrot-OB-C-619		Cell Four	13 Confirmation samples of OB from second cut Cell 4. Samples direct hauled to cell 3. Hauls 5441-5570. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY.	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	50	<LOD	385	165	249																				
									40	<LOD	310	139	236																				
									<LOD	<LOD	293	408	221																				
									45	<LOD	329	237	235																				
NA	793	20210923-Parrot-OB-C-620		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft. - 14 ft. Bgs	Yes	39	<LOD	318	225	222																				
									47	<LOD	324	192	230																				
									60	<LOD	300	237	185																				
									49	<LOD	314	218	212																				
NA	794	20210923-Parrot-OB-C-620							39	<LOD	318	225	222																				
									47	<LOD	324	192	230																				
									60	<LOD	300	237	185																				
									49	<LOD	314	218	212																				
211116-1	795	20210923-Parrot-DUP-620							69	<LOD	334	304	169																				
									67	<LOD	298	203	141	96	15U	362	248	203															
									57	<LOD	485	254	274																				
									64	<LOD	372	254	195																			75.64767	NA	84.33303	85.93955	109.0753
211116-2	796	20210923-Parrot-LAB-620												64	15U	401	235	198											131.5068	NA	127.707	107.7982	93.24961
211116.3	797	20210923-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15U	15U	9U	9U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	798	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180										
NA	799	20210923-Parrot-OB-C-621		Cell Four	13 Confirmation samples of OB from second cut Cell 4. Samples direct hauled to cell 3. Hauls 5441-5570. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY.	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	40	<LOD	421	195	214																				
									48	<LOD	386	168	207																				
									54	<LOD	428	229	197																				
									47	<LOD	412	197	206																				
NA	800	20210923-Parrot-OB-C-622		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	155	<LOD	302	314	194																				
									128	<LOD	303	593	177																				
									150	<LOD	281	305	175																				
									144	<LOD	295	404	182																				
NA	801	20210923-Parrot-OB-C-623		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	124	<LOD	247	432	157																				
									113	<LOD	236	212	302																				
									98	<LOD	232	184	242																				
									112	<LOD	238	276	234																				
NA	802	20210924-Parrot-OB-C-624		Cell Four	8 Confirmation samples of OB from second cut Cell 4. 5 Samples direct hauled to cell 3 and 3 samples were direct hauled to MR. Hauls 5571-5650. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Material today was very borderline between above and below action levels. One sample marginally above action levels went to cell #3. Also, 1 clean OB sample was sent to MR.	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	148	<LOD	347	194	186																				
									99	<LOD	267	160	198																				
									129	<LOD	434	142	224																				
									125	<LOD	349	165	203																				
NA	803	20210924-Parrot-OB-C-625		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	**225**	<LOD	254	194	196																				
									208	<LOD	199	113	237																				
									239	<LOD	233	198	205																				
									224	<LOD	229	168	213																				
NA	804	20210924-Parrot-OB-C-626		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	192	<LOD	321	181	239																				
									156	<LOD	273	142	182																				
									159	<LOD	315	158	263																				
									169	<LOD	303	160	228																				
NA	805	20210924-Parrot-OB-C-627		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	155	<LOD	455	157	273																				
									376	<LOD	630	403	398																				
									250	<LOD	538	232	347																				
									260	<LOD	541	264	339																				
NA	806	20210924-Parrot-OB-C-628		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**300**	<LOD	497	277	402																				
									399	<LOD	427	301	408																				
									351	<LOD	624	260	647																				
									350	<LOD	516	279	486																				
NA	807	20210924-Parrot-OB-C-629		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	76	<LOD	382	134	619																				
									149	<LOD	413	144	580																				
									116	<LOD	410	157	538																				
									114	<LOD	402	145	579																				
NA	808	20210924-Parrot-OB-C-630		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	122	<LOD	282	78	354																				
									94	<LOD	283	62	315																				
									87	<LOD	232	64	240																				
									101	<LOD	266	68	303																				
NA	809	20210924-Parrot-OB-C-631		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	53	<LOD	253	86	268																				
									126	<LOD	267	119	216																				
									69	<LOD	267	71	340																				
									83	<LOD	262	92	275																				
NA	810	20210927-Parrot-OB-C-632		Cell Four	12 Confirmation samples of OB from second cut Cell 4. 7 Samples direct hauled to cell 3, 4 samples were direct hauled to MR, and 1 sample was a split haul, half to cell 3 and half to MR. Hauls 5651-5770. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Material today was very borderline between above and below action levels, soil was routed by truck load, 68 loads to cell 3 and 45 loads to MR.	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	120	<LOD	256	159	270																				
									130	<LOD	237	62	201																				
									183	<LOD	259	125	415																				
									144	<LOD	251	115	295																				
NA	811	20210927-Parrot-OB-C-633		Cell Four		10 pt. Composite Sample from 2nd cut of OB,5 loads routed to Cell Three/5 loads routed to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**317**	<LOD	354	292	**1809**																				
									196	<LOD	301	134	242																				
									241	<LOD	220	125	196																				
									251	<LOD	292	184	749																				
NA	812	20210927-Parrot-OB-C-634		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	46	<LOD	324	73	269																				
									45	<LOD	361	65	260																				
									63	<LOD	433	99	344																				
									51	<LOD	373	79	291																				
NA	813	20210927-Parrot-OB-C-635		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	52	<LOD	265	77	347																				
									43	<LOD	251	72	283																				
									58	<LOD	228	78	334																				
									51	<LOD	248	76	321																				
NA	814	20210927-Parrot-OB-C-636		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	71	<LOD	461	111	330																				
									71	<LOD	523	114	343																				
									55	<LOD	321	74	365																				
									66	<LOD	435	100	346																				
NA	815	20210927-Parrot-OB-C-637		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	156	<LOD	250	102	289																				
									121	<LOD	263	92	234																				
									142	<LOD	214	111	220																				
									140	<LOD	242	102	248																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	816	20210927-Parrot-OB-C-638		Cell Four	12 Confirmation samples of OB from second cut Cell 4. 7 Samples direct hauled to cell 3, 4 samples were direct hauled to MR, and 1 sample was a split haul, half to cell 3 and half to MR. Hauls 5651-5770. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Material today was very borderline between above and below action levels, soil was routed by truck load, 68 loads to cell 3 and 45 loads to MR	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**285**	<LOD	359	156	547																			
									365	<LOD	440	182	476																				
									329	<LOD	**3428**	186	525																				
									326	<LOD	**1409**	175	516																				
NA	817	20210927-Parrot-OB-C-639		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**424**	<LOD	873	256	345																				
									519	<LOD	332	275	492																				
									486	<LOD	364	202	317																				
									476	<LOD	523	244	385																				
NA	818	20210927-Parrot-OB-C-640		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three	Approx. 8 ft - 14 ft. Bgs	Yes	148	<LOD	345	137	351																				
									137	<LOD	352	115	292																				
									147	<LOD	339	97	267																				
									144	<LOD	345	116	303																				
NA	819	20210927-Parrot-OB-C-640							148	<LOD	345	137	351																				
									137	<LOD	352	115	292																				
									147	<LOD	339	97	267																				
									144	<LOD	345	116	303																				
NA	820	20210927-Parrot-DUP-640							136	<LOD	329	193	393																				
									132	<LOD	362	113	324																				
									167	<LOD	367	126	344																				
									145	<LOD	353	144	354															100.6944	NA	102.1236	123.7822	116.5934
211116-4	821	20210927-Parrot-LAB-640	[Reserved for QA/QC]											185	15U	349	205	440											128.4722	NA	101.0618	176.2178	145.0549
NA	822	20210927-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	12																				
									<LOD	<LOD	<LOD	<LOD	12																				
NA	823	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180					0					
NA	824	20210927-Parrot-OB-C-641		Cell Four	12 Confirmation samples of OB from second cut Cell 4. 7 Samples direct hauled to cell 3, 4 samples were direct hauled to MR, and 1 sample was a split haul, half to cell 3 and half to MR. Hauls 5651-5770. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Material today was very borderline between above and below action levels, soil was routed by truck load, 68 loads to cell 3 and	3 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell Three (3 Hauls)	Approx. 8 ft - 14 ft. Bgs	Yes	119	<LOD	344	564	508																			
									175	<LOD	467	446	548																				
									123	<LOD	324	372	562																				
									139	<LOD	378	461	539																				
NA	825	20210927-Parrot-OB-C-642		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**226**	<LOD	451	188	705																				
									317	<LOD	477	154	350																				
									331	<LOD	463	171	332																				
									291	<LOD	464	171	462																				
NA	826	20210927-Parrot-OB-C-643		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**282**	<LOD	637	436	**1102**																				
									248	<LOD	587	529	895																				
									236	<LOD	711	396	862																				
									255	<LOD	645	454	953																				
NA	827	20210928-Parrot-OB-C-644		Cell Four	7 Confirmation samples of OB from second cut Cell 4. 2 Samples direct hauled to cell 3, and 5 samples were direct hauled to MR. Hauls 5771-5840. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Material today was very borderline between above and below action levels, soil was routed by truck load, 20 loads to cell 3 and 50 loads to MR.	10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**405**	<LOD	275	150	234																			
									597	<LOD	388	175	298																				
									980	<LOD	682	177	364																				
									661	<LOD	448	167	299																				
NA	828	20210928-Parrot-OB-C-645		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell 3	Approx. 8 ft - 14 ft. Bgs	Yes	99	<LOD	389	256	669																				
									122	<LOD	329	304	497																				
									111	<LOD	445	262	690																				
									111	<LOD	388	274	619																				
NA	829	20210928-Parrot-OB-C-646		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**277**	<LOD	408	421	563																				
									516	<LOD	713	393	**1127**																				
									329	<LOD	455	444	580																				
									374	<LOD	525	419	757																				
NA	830	20210928-Parrot-OB-C-647		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to Cell 3	Approx. 8 ft - 14 ft. Bgs	Yes	124	<LOD	350	199	353																				
									74	<LOD	287	263	426																				
									86	<LOD	273	259	242																				
									95	<LOD	303	240	340																				
NA	831	20210928-Parrot-OB-C-648		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	145	<LOD	584	504	**1190**																				
									216	<LOD	**1776**	529	**4155**																				
									225	<LOD	662	425	**1855**																				
									195	<LOD	**1007**	486	**2400**																				
NA	832	20210928-Parrot-OB-C-649		Cell Four		10 pt. Composite Sample from 2nd cut of OB, Direct Haul to MR	Approx. 8 ft - 14 ft. Bgs	Yes	**237**	<LOD	450	281	933																				
									299	<LOD	536	265	863																				
									192	<LOD	547	322	**1140**																				
									243	<LOD	511	289	979																				
NA	833	20210928-Parrot-TA-C-650		Cell Four		10 pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**524**	<LOD	**2200**	815	**2069**																				
									384	<LOD	**1143**	644	903																				
									405	<LOD	**1251**	581	**1205**																				
									438	<LOD	**1531**	680	**1392**																				
NA	834	20210928-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
211116-5	835	SRM (Lab Analysis) (2710a)												**1419**	15U	**3503**	**5523**	**4095**	1540	12.3	3420	5520	4180	92	NA	102	100	98					
NA	836	20210929-Parrot-TA-C-651		Cell Four	8 Confirmation samples of the first cut of TA in cell 4. All samples confirmed above action level and direct hauled to MR. Hauls 5841-5920. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. 2 8 point confirmation samples of ET cover soil. Both samples were confirmed below action level and left in place. Sampling consists of 1 composite sample/5000 CY.	10 pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**366**	<LOD	434	607	379																			
									570	<LOD	594	536	399																				
									386	<LOD	800	509	380																				
									441	<LOD	609	551	386																				
NA	837	20210929-Parrot-TA-C-652		Cell Four		10 pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**469**	<LOD	379	781	**1092**																				
									593	<LOD	356	611	816																				
									543	<LOD	366	718	**1476**																				
									535	<LOD	367	703	**1128**																				
NA	838	20210929-Parrot-TA-C-653		Cell Four		10pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**702**	<LOD	**1403**	781	904																				
									780	<LOD	**1535**	760	**1195**																				
									1100	<LOD	**1048**	682	777																				
									861	<LOD	**1329**	741	959																				
NA	839	20210929-Parrot-TA-C-654		Cell Four		10pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**551**	<LOD	626	480	891																				
									541	<LOD	**1184**	489	783																				
									543	<LOD	625	589	993																				
									545	<LOD	812	519	889																				
NA	840	20210929-Parrot-TA-C-655		Cell Four		10pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**491**	<LOD	274	732	795																				
									472	<LOD	465	541	571																				
									481	<LOD	480	634	527																				
									481	<LOD	406	636	631																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	841	20210929-Parrot-TA-C-656		Cell Four	8 Confirmation samples of the first cut of TA in cell 4. All samples confirmed above action level and direct hauled to MR. Hauls 5841-5920. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. 2 8 point confirmation samples of ET cover soil. Both samples were confirmed below action level and left in place. Sampling consists of 1 composite sample/5000 CY.	10pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**378**	<LOD	382	717	756																			
									319	<LOD	385	520	646																			
									311	<LOD	392	571	618																			
									336	<LOD	386	603	673																			
NA	842	20210929-Parrot-TA-C-657		Cell Four		10pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**520**	<LOD	483	761	661																				
									566	<LOD	699	607	633																			
									478	8	560	565	**1005**																			
									521	8	581	644	766																			
NA	843	20210929-Parrot-TA-C-658		Cell Four		10pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**462**	<LOD	483	571	606																				
									419	<LOD	598	626	481																			
									417	<LOD	338	790	681																			
									433	<LOD	473	662	589																			
H21100040-002	E844	20210929-Parrot-ET-C-659		ET Cover Stockpile		8 pt. Composite Sample of stockpiled ET cover soil (east side) Estimated soil quanity of 5,000 CY/sample	Surface stockpile	Yes	12	<LOD	33	14	93																				
									13	<LOD	38	16	101	6	<LOD	27	11	55										222.2222	NA	138.2716	121.2121	168.4848
									15	<LOD	41	10	84																			
									13	<LOD	37	13	93																			
H21100040-001	E845	20210929-Parrot-ET-C-660		ET Cover Stockpile		8 pt. Composite Sample of stockpiled ET cover soil (west side) Estimated soil quanity of 5,000 CY/sample	Surface stockpile	Yes	11	<LOD	<LOD	<LOD	50																				
									10	<LOD	<LOD	7	58	5	<LOD	20	9	44										206.6667	NA	NA	83.33333	128.0303
									10	<LOD	<LOD	8	61																			
									10	<LOD	<LOD	8	56																			
NA	846	20210929-Parrot-TA-C-661							**389**	<LOD	275	606	467																			
									460	<LOD	291	633	451																			
									456	<LOD	355	622	618																			
									435	<LOD	307	620	512																			
NA	847	20210929-Parrot-DUP-C-661							**464**	<LOD	355	626	361																			
									604	<LOD	715	778	285																			
									480	<LOD	486	727	536																			
									516	<LOD	519	710	394															118.6207	NA	168.9468	114.5083	76.95313
211116-6	848	20210929-Parrot-LAB-660	[Reserved for QA/QC]											**430**	15U	390	685	578										98.85057	NA	127.0358	110.4245	112.8906
NA	849	20210929-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	850	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																	1540	12.3	3420	5520	4180										
NA	851	20210930-Parrot-TA-C-661		Cell Four	1 10 point composite sample of first cut of TA in cell 4. Sample was confirmed above action level and direct hauled to MR. Hauls 5921-	10pt. Composite Sample from 1st cut of TA, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**389**	<LOD	275	606	467																				
									460	<LOD	291	633	451																			
									456	<LOD	355	622	618																			
									435	<LOD	307	620	512																			
NA	852	20211001-Parrot-TA-G-662		Cell Four	1 grab sample each of black, yellow, and red tailings were taken in an attempt to characterize the material that would be hauled in the days sampling events. All samples were confirmed above action level and advised direct haul to MR.	Grab Sample from 1st cut of TA, Black, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**263**	<LOD	**2174**	300	**1064**																				
									351	<LOD	**2246**	268	**1043**																			
									226	<LOD	**2251**	233	**1183**																			
									280	<LOD	**2224**	267	**1097**																			
NA	853	20211001-Parrot-TA-G-663		Cell Four		Grab Sample from 1st cut of TA, Yellow, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**373**	<LOD	311	593	635																				
									414	<LOD	752	550	707																			
									370	<LOD	260	551	611																			
									386	<LOD	441	565	651																			
NA	854	20211001-Parrot-TA-G-664		Cell Four		Grab Sample from 1st cut of TA, Red, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**383**	<LOD	917	545	**1536**																				
									419	<LOD	**1016**	607	**1859**																			
									403	<LOD	879	578	**1146**																			
									402	<LOD	937	577	**1514**																			
H21110448-001	E855	20211005-Parrot-CY-G-665		Cell Four	5 total grab samples were taken from the first cut of tailings. These consisted of 2 samples of mixed material, 1 black clay, 1 red colored tailings, and 1 pale colored tailings. All samples were confirmed above action level. All material was advised to be hauled to MR. These samples were collected Tue AM before hauling began and is ment to represent Monday's work. The GIS for these samples also represent Monday's activity.	Grab Sample from 1st cut of Black Clay, still 5 ft above vertical extent, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	19	17	**4792**	89	**2560**																			
									21	20	**4232**	94	**2558**	25.1	19.2	**5160**	97.7	**2570**										84.99336	93.75	93.76615	90.07165	98.66407
									24	17	**5491**	81	**2489**																			
									21	18	**4838**	88	**2536**																			
H21110448-002	E856	20211005-Parrot-TA-G-666		Cell Four		Grab Sample from 1st cut of TA, Mixed, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**464**	<LOD	**2629**	355	**1007**																				
									529	<LOD	**2415**	378	**1004**	**494**	7.67	**2110**	**299**	**996**										96.76113	NA	117.6619	115.942	100.2343
									441	<LOD	**2404**	307	984																			
									478	<LOD	**2483**	347	998																			
H21110448-003	E857	20211005-Parrot-TA-G-667		Cell Four		Grab Sample from 1st cut of TA, Mixed, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**469**	9	**2440**	**1130**	**1876**																				
									455	<LOD	**2367**	**1135**	**1627**	**449**	7.36	**1880**	**867**	**2310**										102.6726	122.2826	122.4291	132.6413	72.42424
									459	<LOD	**2098**	**1185**	**1516**																			
									461	9	**2302**	**1150**	**1673**																			
H21110448-004	E858	20211005-Parrot-TA-G-668		Cell Four		Grab Sample from 1st cut of TA, Red, Direct Haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**426**	<LOD	**1950**	660	**1522**																				
									360	<LOD	**1305**	793	903	**555**	5.62	**1660**	**527**	**1880**										71.41141	NA	97.06827	133.2068	74.96454
									403	<LOD	**1579**	653	**1803**																			
									396	<LOD	**1611**	702	**1409**																			
NA	859	20211005-Parrot-TA-G-669		Cell Four		Grab Sample from first cut of TA, White, Direct haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**260**	8	622	439	**2439**																				
									276	<LOD	760	502	**1441**																			
									303	<LOD	631	444	**1265**																			
									280	8	671	462	**1715**																			
NA	860	20211005-Parrot-TA-G-670		Cell Four	5 total grab samples were taken from the first cut of tailings. These consisted of 2 samples of TA, 1 sample of CY, 1 sample of mix CY/RK, and 1 sample of the vertical extent floor. The 4 waste samples were confirmed above action level, the floor was below action levels. All material was advised to be hauled to MR. These samples were collected Tue PM after hauling was complete and is ment to represent Tuesday's work. The GIS for these samples also represent Tuesday's activity.	Grab Sample from side slopet of TA, Yellow, Direct haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**545**	<LOD	565	773	931																			
									395	<LOD	358	554	743																			
									407	<LOD	322	492	486																			
									449	<LOD	415	606	720																			
NA	861	20211005-Parrot-RK-G-671		Cell Four		Grab Sample from floor, Alluvium, RK.	Approx. 14 ft -20 ft. Bgs	Yes	112	<LOD	475	277	325																			
									140	<LOD	468	109	351																			
									128	<LOD	497	63	332																			
									127	<LOD	480	150	336																			
H21110448-005	E862	20211005-Parrot-CY-G-672		Cell Four		Grab Sample from clay sideslope, Black, Direct haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**2319**	<LOD	844	332	681																				
									2479	<LOD	855	326	717	**2190**	<LOD	**720**	**325**	**592**										111.0654	NA	122.037	107.4872	120.3266
									2499	<LOD	937	390	739																			
									2432	<LOD	879	349	712																			
NA	863	20211005-Parrot-TA-G-673		Cell Four		Grab Sample from first cut of TA, Orange, Direct haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**519**	<LOD	954	892	817																				
									538	<LOD	809	671	667																			
									575	<LOD	999	997	**1171**																			
									544	<LOD	921	853	885																			
H21110448-006	E864	20211005-Parrot-CY-G-674		Cell Four		Grab Sample from Alluvium/Clay, Mixed, Direct haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	69	<LOD	938	202	**1318**																				
									68	<LOD	927	131	**1285**	60.9	4.39	**737**	123	**998**										105.6377	NA	143.0122	121.6802	128.2231
									56	<LOD	**1297**	116	**1236**																			
									64	<LOD	**1054**	150	**1280**																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	865	20211007-Parrot-RK-G-675		Cell Four	3 total grab samples were taken from the tailings removal area during active excavation. All samples were above action levels and material contunues to be hauled to MR.	Grab Sample from Alluvium/Clay, Mixed, Direct haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	132	<LOD	**1759**	242	460																				
									114	<LOD	**1906**	202	607																			
									121	<LOD	**2496**	198	558																			
									122	<LOD	**2054**	214	542																			
NA	866	20211007-Parrot-TA-G-676		Cell Four		Grab Sample from first cut of TA, Orange, Direct haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**1037**	<LOD	750	842	406																				
									1057	<LOD	610	847	555																			
									930	<LOD	547	**1144**	831																			
									1008	<LOD	636	944	597																			
NA	867	20211007-Parrot-RK-G-677		Cell Four		Grab Sample from Alluvium/Tailings, Mixed, Direct haul to MR	Approx. 14 ft -20 ft. Bgs	Yes	**374**	<LOD	**1624**	511	805																				
									412	<LOD	**1242**	547	683																			
									355	<LOD	**1282**	492	973																			
									380	<LOD	**1383**	517	820																			
NA	868	20211007-Parrot-RK-C-678		Cell Four	15 samples of the excavation floor were collected within Cell 4 on 10/7 and 10/8. Samples consisted of eight point composites of 100x50 ft grids. 1 composite sample of OB from Cell 5 was also collected. The OB sampled was repositioned to create an access ramp to Cell 3 so OB from Cell 5 could be placed within Cells 3 and 4.	8 pt. Composite sample from Floor	Verical Extent	Yes	51	13	**1385**	105	**1252**																					
									53	<LOD	**1123**	101	**1243**																			
									44	11	948	102	**1260**																			
									49	12	**1152**	103	**1252**																			
NA	869	20211007-Parrot-RK-C-679		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	43	<LOD	**1023**	107	**1142**																			
									49	<LOD	**1169**	142	**1148**																			
									58	<LOD	**1482**	131	**1306**																			
									50	<LOD	**1225**	127	**1199**																			
NA	870	20211007-Parrot-RK-C-680		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	56	<LOD	**1037**	110	954																			
									58	<LOD	**1137**	120	**1080**																			
									61	<LOD	**1016**	95	**1019**																			
									58	<LOD	**1063**	108	**1018**																			
NA	871	20211007-Parrot-RK-C-680							56	<LOD	**1037**	110	954																			
									58	<LOD	**1137**	120	**1080**																			
									61	<LOD	**1016**	95	**1019**																			
									58	<LOD	**1063**	108	**1018**																			
NA	872	20211007-Parrot-DUP-C-680							53	14	782	80	785																			
									42	<LOD	892	83	731																			
									57	<LOD	**1072**	116	**1132**																			
									51	14	915	93	883															86.85714	NA	86.0815	85.84615	86.73436
211116-7	873	20211007-Parrot-LAB-680	[Reserved for QA/QC]											43	15U	722	112	766											73.71429	NA	67.89969	103.3846	75.27023
NA	874	20211008-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	875	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180										
NA	876	20211007-Parrot-RK-C-681		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	55	<LOD	727	13	**1654**																			
									67	8	**1122**	117	**1598**																			
									64	<LOD	**1013**	105	**1558**																			
									62	8	954	78	**1603**																			
NA	877	20211007-Parrot-RK-C-682		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	49	<LOD	**1255**	84	763																			
									59	14	**1187**	92	849																			
									67	13	**1571**	95	793																			
									58	14	**1338**	90	802																			
NA	878	20211007-Parrot-RK-C-683		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	136	<LOD	660	79	511																			
									116	<LOD	606	82	398																			
									108	<LOD	615	81	540																			
									120	<LOD	627	81	483																			
NA	879	20211007-Parrot-RK-C-684		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	124	9	**2209**	144	888																			
									133	<LOD	**3721**	148	952																			
									115	<LOD	**1714**	177	881																			
									124	9	**2548**	156	907																			
NA	880	20211007-Parrot-RK-C-685		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	150	<LOD	**1117**	97	932																			
									195	<LOD	**1020**	94	675																			
									159	<LOD	998	93	932																			
									168	<LOD	**1045**	95	846																			
NA	881	20211007-Parrot-RK-C-686		Cell Four	15 samples of the excavation floor were collected within Cell 4 on 10/7 and 10/8. Samples consisted of eight point composites of 100x50 ft grids. 1 composite sample of OB from Cell 5 was also collected. The OB sampled was repositioned to create an access ramp to Cell 3 so OB from Cell 5 could be placed within Cells 3 and 4.	8 pt. Composite sample from Floor	Verical Extent	Yes	180	<LOD	398	80	273																					
									148	<LOD	392	38	268																			
									201	<LOD	373	42	259																			
									176	<LOD	388	53	267																			
NA	882	20211008-Parrot-RK-C-687		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	145	8	**1303**	59	385																			
									130	<LOD	**1312**	82	414																			
									137	<LOD	**1249**	60	376																			
									137	8	**1288**	67	392																			
NA	883	20211008-Parrot-RK-C-688		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	122	<LOD	732	45	375																			
									95	<LOD	650	67	348																			
									117	<LOD	790	50	450																			
									111	<LOD	724	54	391																			
NA	884	20211007-Parrot-RK-C-689		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	**263**	<LOD	561	32	314																			
									238	<LOD	456	34	321																			
									212	<LOD	708	31	246																			
									238	<LOD	575	32	294																			
NA	885	20211008-Parrot-RK-C-690		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	102	<LOD	**1720**	97	397																			
									84	<LOD	**1393**	112	324																			
									88	<LOD	**1525**	91	372																			
									91	<LOD	**1546**	100	364																			
NA	886	20211007-Parrot-RK-C-691		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	60	<LOD	**2128**	90	747																			
									79	<LOD	**3513**	85	742																			
									59	<LOD	**2233**	79	312																			
									66	<LOD	**2625**	85	600																			
NA	887	20211008-Parrot-RK-C-692		Cell Four		8 pt. Composite sample from Floor	Verical Extent	Yes	38	<LOD	**1852**	91	892																			
									38	16	**1886**	97	915																			
									44	14	**1439**	79	918																			
									40	15	**1726**	89	908																			
NA	888	20211008-Parrot-OB-C-693		Cell Five		10 pt. composite from first cut of OB from cell 5, Hauls 5921-5930	0-8 ft. bgs	Yes	82	<LOD	329	192	344																			
									53	<LOD	293	181	307																			
									33	<LOD	305	168	446																			
									56	<LOD	309	180	366																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	889	20211011-Parrot-OB-C-694		Cell Five	10 Confirmation samples of OB from first cut Cell 5. Samples direct hauled to Cell 3. Hauls 5930-6030. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. One sample (697) was above action level, the other 9 samples were below action levels.	10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	39	<LOD	196	105	300																					
									47	<LOD	222	119	363																				
									57	<LOD	167	127	235																				
									48	<LOD	195	117	299																				
NA	890	20211011-Parrot-OB-C-695		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	38	<LOD	325	114	824																			
									45	<LOD	338	111	723																				
									60	<LOD	377	140	**1028**																				
									48	<LOD	347	122	858																				
NA	891	20211011-Parrot-OB-C-696		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	29	<LOD	290	153	498																			
									37	<LOD	271	100	422																				
									39	<LOD	209	105	386																				
									35	<LOD	257	119	435																				
NA	892	20211011-Parrot-OB-C-697		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	70	<LOD	655	264	**1257**																			
									61	<LOD	552	253	**1204**																				
									55	<LOD	487	175	963																				
									62	<LOD	565	231	**1141**																				
NA	893	20211011-Parrot-OB-C-698		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	72	<LOD	388	134	**1112**																			
									53	<LOD	364	136	744																				
									45	<LOD	333	113	618																				
									57	<LOD	362	128	825																				
NA	894	20211011-Parrot-OB-C-699		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	51	<LOD	400	117	462																			
									69	<LOD	431	175	519																				
									47	<LOD	381	108	391																				
									56	<LOD	404	133	457																				
NA	895	20211011-Parrot-OB-C-700		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	51	<LOD	429	152	600																			
									47	<LOD	477	156	755																				
									40	<LOD	389	174	605																				
									46	<LOD	432	161	653																				
NA	896	20211011-Parrot-OB-C-700							51	<LOD	429	152	600																				
									47	<LOD	477	156	755																				
									40	<LOD	389	174	605																				
									46	<LOD	432	161	653																				
211116-8	897	20211011-Parrot-DUP-700							54	<LOD	495	187	744																				
									42	<LOD	331	107	507	45	15U	337	180	639															
									52	<LOD	363	132	506																				
									49	<LOD	396	142	586																		107.2464	NA	91.81467	88.38174	89.64286
211116-9	898	20211011-Parrot-LAB-700	[Reserved for QA/QC]											48	15U	371	191	735											104.3478	NA	85.94595	118.8797	112.5
211116-10	899	20211011-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15U	15U	9U	9U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	900	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180										
NA	901	20211011-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
211116-15	902	SRM (Lab Analysis) (2710a)												**1499**	15U	**3554**	**5600**	**4230**	1540	12.3	3420	5520	4180	97	NA	104	101	101					
NA	903	20211011-Parrot-OB-C-701		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	40	<LOD	373	102	329																			
									38	<LOD	282	137	267																				
									50	<LOD	340	132	240																				
									43	<LOD	332	124	279																				
NA	904	20211011-Parrot-OB-C-702		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	47	<LOD	382	110	301																			
									42	<LOD	359	95	264																				
									61	<LOD	395	135	276																				
									50	<LOD	379	113	280																				
NA	905	20211011-Parrot-OB-C-703		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	50	<LOD	310	145	251																			
									47	<LOD	282	123	331																				
									49	<LOD	331	139	336																				
									49	<LOD	308	136	306																				
NA	906	20211012-Parrot-OB-C-704		Cell Five	9 Confirmation samples of OB from first cut Cell 5. 7 Samples direct hauled to Cell 3, 2 samples were direct hauled to MR. Hauls 6031-6120. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Material today was very borderline between above and below action levels, soil was routed by truck load, 70 loads to Cell 3 and 20 loads to MR.	10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	40	<LOD	369	169	520																					
									38	<LOD	363	88	360																				
									49	<LOD	380	140	354																				
									42	<LOD	371	132	411																				
NA	907	20211012-Parrot-OB-C-705		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	79	<LOD	227	102	215																			
									67	<LOD	325	108	268																				
									58	<LOD	275	142	238																				
									68	<LOD	276	117	240																				
NA	908	20211012-Parrot-OB-C-706		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	45	<LOD	332	116	602																			
									33	<LOD	326	117	472																				
									45	<LOD	283	128	462																				
									41	<LOD	314	120	512																				
NA	909	20211012-Parrot-OB-C-707		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	72	<LOD	360	99	462																			
									38	<LOD	284	80	472																				
									44	<LOD	292	89	602																				
									51	<LOD	312	89	512																				
NA	910	20211012-Parrot-OB-C-708		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	64	<LOD	293	100	430																			
									63	<LOD	230	65	287																				
									39	<LOD	178	67	368																				
									55	<LOD	234	77	362																				
NA	911	20211012-Parrot-OB-C-709		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	132	<LOD	342	167	917																			
									86	<LOD	203	96	354																				
									64	<LOD	210	100	495																				
									94	<LOD	252	121	589																				
NA	912	20211012-Parrot-OB-C-710		Cell Five		5 pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 for placement.	0-8 ft. bgs	Yes	42	<LOD	168	123	157																			
									30	<LOD	106	54	154																				
									50	<LOD	126	82	169																				
									41	<LOD	133	86	160																				
NA	913	20211012-Parrot-OB-C-711		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	120	<LOD	**1757**	649	**3965**																			
									12	10	**1753**	552	**4353**																				
									114	<LOD	**1563**	534	**4003**																				
									82	10	**1691**	578	**4107**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	914	20211012-Parrot-OB-C-712		Cell Five		10 pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	**228**	12	**2622**	867	**9838**																				
									226	<LOD	**2460**	913	**9886**																				
									182	16	**2273**	648	**7850**																				
									212	14	**2452**	809	**9191**																				
NA	915	20211013-Parrot-OB-C-713		Cell Five	9 Confirmation samples of OB from first cut Cell 5. Samples were direct hauled to MR. Hauls 6121-6200. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. All samples within the OB layer were above action level and routed appropriately.	10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	165	<LOD	**2185**	921	**6658**																				
									200	<LOD	**2346**	975	**7427**																				
									185	12	**2269**	930	**6353**																				
									183	12	**2267**	942	**6813**																				
NA	916	20211013-Parrot-OB-C-714		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	174	9	**1983**	826	**6032**																				
									130	<LOD	**1707**	453	**5698**																				
									166	<LOD	**1880**	613	**6456**																				
									157	9	**1857**	631	**6062**																				
NA	917	20211013-Parrot-OB-C-715		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	**276**	<LOD	**2809**	700	**8574**																				
									306	<LOD	**3517**	906	**12500**																				
									214	<LOD	**2843**	701	**9116**																				
									265	<LOD	**3056**	769	**10063**																				
NA	918	20211013-Parrot-OB-C-716		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	**245**	12	**2729**	**1068**	**12200**																				
									367	<LOD	**2133**	654	**9762**																				
									278	<LOD	**2504**	713	**7940**																				
									297	12	**2455**	812	**9967**																				
NA	919	20211013-Parrot-OB-C-717		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	87	9	**1474**	498	**5823**																				
									138	<LOD	**1851**	708	**8569**																				
									113	<LOD	**1658**	558	**5333**																				
									113	9	**1661**	588	**6575**																				
NA	920	20211013-Parrot-OB-C-718		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	104	9	**1430**	632	**5147**																				
									161	<LOD	**2064**	840	**7987**																				
									155	<LOD	**1315**	447	**7181**																				
									140	9	**1603**	640	**6772**																				
NA	921	20211013-Parrot-OB-C-719		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	37	<LOD	788	344	**2537**																				
									36	<LOD	586	211	**1995**																				
									79	<LOD	970	346	**4013**																				
									51	<LOD	781	300	**2848**																				
NA	922	20211013-Parrot-OB-C-720		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	44	<LOD	533	210	**2148**																				
									93	<LOD	677	450	**2411**																				
									71	<LOD	481	216	**1577**																				
									69	<LOD	564	292	**2045**																				
NA	923	20211013-Parrot-OB-C-720							44	<LOD	533	210	**2148**																				
									93	<LOD	677	450	**2411**																				
									71	<LOD	481	216	**1577**																				
									69	<LOD	564	292	**2045**																				
211116-11	924	20211013-Parrot-DUP-720							61	<LOD	822	200	**1784**																				
									70	9	834	365	**3313**	137	15U	683	359	3312															
									48	<LOD	491	211	**1688**																				
									60	9	716	259	**2262**																86.05769	NA	126.9663	88.58447	110.5769
211116-12	925	20211013-Parrot-LAB-720												111	15U	872	438	**4281**											160.0962	NA	154.7014	150	209.3057
211116-13	926	20211013-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15U	17J	9U	9U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	927	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																	1540	12.3	3420	5520	4180										
NA	928	20211013-Parrot-OB-C-721		Cell Five	9 Confirmation samples of OB from first cut Cell 5. Samples were direct hauled to MR. Hauls 6121-6200. Sampling consists of 1	10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	98	8	**1144**	502	**3263**																				
									96	<LOD	996	545	**3352**																				
									95	<LOD	**1047**	510	**5143**																				
									96	8	**1062**	519	**3919**																				
NA	929	20211014-Parrot-OB-C-722		Cell Five	10 Confirmation samples of OB from first cut Cell 5. 1 Sample direct hauled to Cell 4, 9 samples were direct hauled to MR. Daily Hauls 6201-6300. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Soil was routed by truck load, 5 loads to Cell 4 and 100 loads to MR.	10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	155	10	**1688**	581	**5776**																				
									172	<LOD	**1469**	599	**7116**																				
									153	11	**1565**	575	**5338**																				
									160	11	**1574**	585	**6077**																				
NA	930	20211014-Parrot-OB-C-723		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	171	14	**2458**	751	**8655**																				
									111	8	**1682**	511	**5602**																				
									116	10	**1428**	454	**5818**																				
									133	11	**1856**	572	**6692**																				
NA	931	20211014-Parrot-OB-C-724		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	164	<LOD	**2114**	659	**7866**																				
									138	13	**2866**	676	**7034**																				
									108	<LOD	**1522**	593	**5003**																				
									137	13	**2167**	643	**6634**																				
NA	932	20211014-Parrot-OB-C-725		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	127	<LOD	**1448**	557	**4412**																				
									96	9	**1456**	552	**4288**																				
									126	<LOD	**1241**	497	**5158**																				
									116	9	**1382**	535	**4619**																				
NA	933	20211014-Parrot-OB-C-726		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	110	<LOD	**1328**	454	**4588**																				
									95	11	**1277**	578	**6863**																				
									102	<LOD	**1209**	351	**3909**																				
									102	11	**1271**	461	**5120**																				
NA	934	20211014-Parrot-OB-C-727		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	67	<LOD	**1038**	446	**3148**																				
									96	10	**1237**	439	**4545**																				
									98	<LOD	**1340**	454	**5174**																				
									87	10	**1205**	446	**4289**																				
NA	935	20211014-Parrot-OB-C-728		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 4. (5 Hauls)	0-8 ft. bgs	Yes	59	<LOD	329	117	729																				
									51	<LOD	319	141	776																				
									55	<LOD	196	91	520																				
									55	<LOD	281	116	675																				
NA	936	20211014-Parrot-OB-C-729		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	116	<LOD	**1758**	612	**6917**																				
									103	<LOD	**2034**	341	**6323**																				
									87	<LOD	**1029**	390	**3429**																				
									102	<LOD	**1607**	448	**5556**																				
NA	937	20211014-Parrot-OB-C-730		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	94	<LOD	**1315**	445	**4278**																				
									112	<LOD	**1226**	406	**4467**																				
									98	12	**1438**	455	**4681**																				
									101	12	**1326**	435	**4475**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	938	20211014-Parrot-OB-C-731		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	112	<LOD	**1236**	347	**3960**																				
									69	<LOD	926	441	**3371**																				
									100	<LOD	**1249**	404	**3533**																				
									94	<LOD	**1137**	397	**3621**																				
NA	939	20211015-Parrot-OB-C-732		Cell Five	9 Confirmation samples of OB from first cut Cell 5. 1 Sample direct hauled to Cell 4, 8 samples were direct hauled to MR. Daily Hauls 6300-6390. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Soil was routed by truck load, 5 loads to Cell 4 and 85 loads to MR.	10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	**251**	10	**2836**	**1015**	**8816**																				
									174	13	**1961**	893	**6561**																				
									157	12	**2205**	790	**8043**																				
									194	12	**2334**	899	**7807**																				
NA	940	20211015-Parrot-OB-C-733		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	57	<LOD	723	281	**1589**																				
									81	<LOD	863	350	**2740**																				
									69	<LOD	729	312	**2103**																				
									69	<LOD	772	314	**2144**																				
NA	941	20211015-Parrot-OB-C-734		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 4. (3 Hauls)	0-8 ft. bgs	Yes	31	<LOD	335	247	994																				
									37	<LOD	333	253	**1161**																				
									45	<LOD	398	234	778																				
									38	<LOD	355	245	978																				
NA	942	20211015-Parrot-OB-C-735		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	39	<LOD	344	275	907																				
									70	<LOD	637	231	**2196**																				
									58	<LOD	575	251	**2198**																				
									56	<LOD	519	252	**1767**																				
NA	943	20211015-Parrot-OB-C-736		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	114	<LOD	**1913**	621	**8430**																				
									126	13	**2076**	672	**8928**																				
									196	<LOD	**2327**	803	**11700**																				
									145	13	**2105**	699	**9686**																				
NA	944	20211015-Parrot-OB-C-737		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	111	<LOD	**1418**	622	**7095**																				
									69	<LOD	**1305**	454	**5124**																				
									78	<LOD	**1095**	443	**5318**																				
									86	<LOD	**1273**	506	**5846**																				
NA	945	20211015-Parrot-OB-C-738		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	145	<LOD	**2201**	691	**8655**																				
									137	10	**2147**	717	**7493**																				
									175	<LOD	**2408**	998	**10100**																				
									152	10	**2252**	802	**8749**																				
NA	946	20211015-Parrot-OB-C-739		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR. (1 Haul to Cell 4)	0-8 ft. bgs	Yes	167	9	**2066**	733	**6958**																				
									109	10	**1939**	696	**5615**																				
									161	16	227	858	**7840**																				
									146	12	**1411**	762	**6804**																				
NA	947	20211015-Parrot-OB-C-740		Cell Five		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR. (1 Haul to Cell 4)	0-8 ft. bgs	Yes	54	<LOD	663	281	**2508**																				
									73	<LOD	**1038**	329	**2886**																				
									71	<LOD	844	321	**2391**																				
									66	<LOD	848	310	**2595**																				
NA	948	20211015-Parrot-OB-C-740							54	<LOD	663	281	**2508**																				
									73	<LOD	**1038**	329	**2886**																				
									71	<LOD	844	321	**2391**																				
									66	<LOD	848	310	**2595**																				
NA	949	20211015-Parrot-DUP-740							86	<LOD	**1063**	474	**3723**																				
									78	<LOD	835	352	**2696**																				
									91	<LOD	**1085**	353	**2857**																				
									85	<LOD	994	393	**3092**																				
211116-14	950	20211015-Parrot-LAB-740	[Reserved for QA/QC]											51	15U	815	449	**3954**											128.7879	NA	117.2102	126.638	119.1522
																													77.27273	NA	96.07073	144.6831	152.3699
NA	951	20211015-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	952	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																	1540	12.3	3420	5520	4180										
NA	953	20211018-Parrot-OB-C-741		Cell 5	10 confirmation samples were taken from overburden in cell 5. 1 sample was hauled to clean cells (6 trucks to cell 3, 2 tucks to cell 4). 9 samples hauled direct to MR. Daily Hauls 6391- 6490. 1 composite sample/10 hauls, approx. 400 CY per haul. Soil routed by truck load: approx. 8 loads to cells 3 and 4, and 85 to MR.	10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	130	<LOD	**1768**	753	**9293**																				
									83	10	**1442**	578	**6868**																				
									98	11	**1390**	571	**7517**																				
									104	11	**1533**	634	**7893**																				
NA	954	20211018-Parrot-OB-C-742		Cell 5		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	78	<LOD	**1357**	516	**4530**																				
									133	10	**1993**	825	**7257**																				
									122	<LOD	**2070**	879	**9093**																				
									111	10	**1807**	740	**6960**																				
NA	955	20211018-Parrot-OB-C-743		Cell 5		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	95	<LOD	895	284	**3314**																				
									74	<LOD	794	293	**3498**																				
									119	<LOD	**1027**	430	**4906**																				
									96	<LOD	905	336	**3906**																				
NA	956	20211018-Parrot-OB-C-744		Cell 5		8pt. composite from first cut of OB from cell 5, Direct Hauled to Cell 3 & 4 (8 Hauls)	0-8 ft. bgs	Yes	37	<LOD	139	61	478																				
									39	<LOD	184	53	526																				
									44	<LOD	203	67	469																				
									40	<LOD	175	60	491																				
NA	957	20211018-Parrot-OB-C-745		Cell 5		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	106	<LOD	**1044**	375	**3380**																				
									60	<LOD	600	200	**1905**																				
									109	<LOD	**1413**	430	**3511**																				
									92	<LOD	**1019**	335	**2932**																				
NA	958	20211018-Parrot-OB-C-746		Cell 5		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	115	9	**1464**	523	**6105**																				
									128	<LOD	**1421**	478	**4256**																				
									97	<LOD	**1455**	460	**4735**																				
									113	9	**1447**	487	**5032**																				
NA	959	20211018-Parrot-OB-C-747		Cell 5		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	47	<LOD	603	205	**1926**																				
									50	<LOD	576	236	**2138**																				
									52	<LOD	556	237	**2017**																				
									50	<LOD	578	226	**2027**																				
NA	960	20211018-Parrot-OB-C-748		Cell 5		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	69	<LOD	663	236	**2328**																				
									41	<LOD	476	198	**1813**																				
									25	<LOD	516	235	**2014**																				
									45	<LOD	552	223	**2052**																				
NA	961	20211018-Parrot-OB-C-749		Cell 5		10pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	58	<LOD	**1058**	378	**3857**																				
									50	<LOD	**1037**	288	**2836**																				
									70	<LOD	967	353	**2757**																				
									59	<LOD	**1021**	340	**3150**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	962	20211018-Parrot-OB-C-750		Cell 5		5pt. composite from first cut of OB from cell 5, Direct Hauled to MR.	0-8 ft. bgs	Yes	149	<LOD	**1636**	313	**5040**																				
									125	<LOD	**2005**	349	**4980**																			
									117	<LOD	**1582**	306	**3752**																			
									130	<LOD	**1741**	323	**4591**																			
NA	963	20211018-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
211116-16	964	SRM Lab Analysis (2710a)												**1468**	15U	**3545**	**5578**	**4228**	1540	12.3	3420	5520	4180	95	NA	104	101	101					
NA	965	20211019-Parrot-OB-C-751		Cell 5	10 confirmation samples were taken from OB in cell 5. 4 samples were hauled to MR. One of these samples (751) shot clean, but was deemed dirty in the field due to the difficulty in separating clean material from dirty. After this sample, the excavator operator was able to start stripping the clean layer (0-4 ft. bgs) off and the clean material was hauled to cell 3. Day finished with hauls from 4-8 ft. bgs going to MR. 6 samples were hauled to cell 3 in total. Daily Hauls 6491-6590. I composite sample/10 haul trucks, approx. 400 CY per haul. Soil routed by truck: 40 loads to MR, approx. 60 loads to cell 3.	10pt. Composite from first cut of OB from cell 5, Direct Hauled to MR	0-8 ft. bgs	Yes	32	<LOD	381	130	998																						
									27	<LOD	377	140	995																				
									36	<LOD	302	116	898																				
									32	<LOD	353	129	964																				
NA	966	20211019-Parrot-OB-C-752		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to Cell 3	0-4 ft. bgs	Yes	28	<LOD	173	101	470																				
									27	<LOD	188	91	353																				
									25	<LOD	174	95	436																				
									27	<LOD	178	96	420																				
NA	967	20211019-Parrot-OB-C-753		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to Cell 3	0-4 ft. bgs	Yes	25	<LOD	131	57	220																				
									24	<LOD	159	53	290																				
									25	<LOD	165	59	296																				
									25	<LOD	152	56	269																				
NA	968	20211019-Parrot-OB-C-754		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to MR	0-4 ft. bgs	Yes	72	<LOD	**1650**	370	**3962**																				
									77	8	**1281**	392	**4290**																				
									124	<LOD	**1373**	504	**5530**																				
									91	8	**1435**	422	**4594**																				
NA	969	20211019-Parrot-OB-C-755		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to Cell 3	0-4 ft. bgs	Yes	11	<LOD	81	38	168																				
									<LOD	<LOD	64	15	141																				
									11	<LOD	53	36	203																				
									11	<LOD	66	30	171																				
NA	970	20211019-Parrot-OB-C-756		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to Cell 3	0-4 ft. bgs	Yes	<LOD	<LOD	44	15	85																				
									14	<LOD	126	18	97																				
									12	<LOD	38	19	105																				
									13	<LOD	69	17	96																				
NA	971	20211019-Parrot-OB-C-757		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to Cell 3	0-4 ft. bgs	Yes	10	<LOD	39	24	112																				
									13	<LOD	26	18	104																				
									15	<LOD	37	15	112																				
									13	<LOD	34	19	109																				
NA	972	20211019-Parrot-OB-C-758		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to Cell 3	0-4 ft. bgs	Yes	13	<LOD	77	36	217																				
									27	<LOD	101	34	224																				
									<LOD	<LOD	56	84	168																				
									20	<LOD	78	51	203																				
NA	973	20211019-Parrot-OB-C-759		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to MR	4-8 ft. bgs	Yes	118	<LOD	**1625**	630	**6349**																				
									118	<LOD	**1678**	579	**6730**																				
									147	<LOD	**1493**	550	**7509**																				
									128	<LOD	**1599**	586	**6863**																				
NA	974	20211019-Parrot-OB-C-760		Cell 5		10pt. Composite from first cut of OB from cell 5, Direct Hauled to MR	4-8 ft. bgs	Yes	187	<LOD	**1486**	531	**5370**																				
									167	<LOD	**1571**	609	**8401**																				
									115	<LOD	**1404**	443	**5669**																				
									156	<LOD	**1487**	528	**6480**																				
NA	975	20211019-Parrot-OB-C-760							187	<LOD	**1486**	531	**5370**																				
									167	<LOD	**1571**	609	**8401**																				
									115	<LOD	**1404**	443	**5669**																				
									156	<LOD	**1487**	528	**6480**																				
NA	976	20211019-Parrot-DUP-760							168	12	**1515**	460	**4747**																				
									191	<LOD	**1419**	602	**3955**																				
									108	<LOD	**1242**	408	**4289**																				
									156	12	**1392**	490	**4330**																			99.57356	NA	93.6113	92.86166	66.82613
211116-17	978	20211019-Parrot-LAB-760	[Reserved for QA/QC]											157	15U	**1434**	723	**7962**														100.4264	NA	96.43578	137.0183	122.8704
NA	979	20211019-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	980	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180										
NA	981	20211020-Parrot-OB-C-761		Cell 5	10 confirmation samples were taken from OB in cell 5. The first two samples were taken from the first cut, and 8 were taken from the second cut. 2 samples were hauled to cell 3. 8 samples were direct hauled to MR. Daily hauls 6591-6690. Sampling consisted of 1 composite/10 haul trucks, approx. 400 CY per haul. Soil routed by truck load: 20 hauls to MR and 80 hauls to Cell 3.	10pt. Composite from first cut of OB from Cell 5, Direct Haul to MR	0-8 ft. bgs	Yes	104	<LOD	**1556**	450	**4636**																				
									88	9	**1951**	521	**5221**																				
									124	<LOD	**1825**	651	**6597**																				
									105	9	**1777**	541	**5485**																				
NA	982	20211020-Parrot-OB-C-762		Cell 5		10pt. Composite from first cut of OB from Cell 5, Direct Haul to MR	0-8 ft. bgs	Yes	111	<LOD	**2108**	594	**5695**																				
									115	<LOD	**1978**	638	**8188**																				
									106	10	**1971**	612	**6288**																				
									111	10	**2019**	615	**6724**																				
NA	983	20211020-Parrot-OB-C-763		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 3	Approx. 8-14 ft. bgs	Yes	79	<LOD	342	230	385																				
									54	<LOD	234	147	319																				
									77	<LOD	261	134	321																				
									70	<LOD	279	170	342																				
NA	984	20211020-Parrot-OB-C-764		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 3	Approx. 8-14 ft. bgs	Yes	64	<LOD	188	241	170																				
									133	<LOD	262	351	177																				
									116	<LOD	257	227	262																				
									104	<LOD	236	273	203																				
NA	985	20211020-Parrot-OB-C-765		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 3	Approx. 8-14 ft. bgs	Yes	83	<LOD	214	116	227																				
									62	<LOD	245	137	273																				
									54	<LOD	208	163	216																				
									66	<LOD	222	139	239																				
NA	986	20211020-Parrot-OB-C-766		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 3	Approx. 8-14 ft. bgs	Yes	40	<LOD	217	140	192																				
									75	<LOD	252	169	197																				
									57	<LOD	287	123	218																				
									57	<LOD	252	144	202																				
NA	987	20211020-Parrot-OB-C-767		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 3	Approx. 8-14 ft. bgs	Yes	58	<LOD	369	114	232																				
									59	<LOD	289	97	295																				
									71	<LOD	320	120	269																				
									63	<LOD	326	110	265																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	988	20211020-Parrot-OB-C-768		Cell 5	10 confirmation samples were taken from OB in cell 5. The first two samples were taken from the first cut, and 8 were taken from the second cut. 2 samples were hauled to cell 3. 8 samples were direct hauled to MR. Daily hauls 6591-6690. Sampling consisted of 1 composite/10 haul trucks, approx. 400 CY per haul. Soil routed by truck load: 20 hauls to MR and 80 hauls to Cell 3.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 3	Approx. 8-14 ft. bgs	Yes	65	<LOD	311	230	397																					
									92	<LOD	272	498	385																				
									87	<LOD	261	183	376																				
									81	<LOD	281	304	386																				
NA	989	20211020-Parrot-OB-C-769		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 3	Approx. 8-14 ft. bgs	Yes	116	<LOD	277	354	198																				
									67	<LOD	219	201	338																				
									105	<LOD	333	276	212																				
									96	<LOD	276	277	249																				
NA	990	20211020-Parrot-OB-C-770		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 3	Approx. 8-14 ft. bgs	Yes	53	<LOD	253	156	275																				
									50	<LOD	326	182	435																				
									51	<LOD	294	237	321																				
									51	<LOD	291	192	344																				
NA	991	20211021-Parrot-OB-C-771		Cell 5	11 confirmation samples were taken ftom the second cut of OB in Cell 5. 11 samples were hauled to Cell 4. Daily hauls 6691-6800. Sampling consisted of 1 composite/10 haul trucks, approx. 400 CY per haul. 110 hauls total to Cell 4.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	77	<LOD	349	115	419																					
									58	<LOD	271	167	371																				
									61	<LOD	305	111	380																				
									65	<LOD	308	131	390																				
NA	992	20211021-Parrot-OB-C-772		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	81	<LOD	313	158	423																				
									92	<LOD	303	193	340																				
									114	<LOD	228	153	373																				
									96	<LOD	281	168	379																				
NA	993	20211021-Parrot-OB-C-773		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	80	<LOD	315	228	494																				
									113	<LOD	331	201	718																				
									80	<LOD	355	215	561																				
									91	<LOD	334	215	591																				
NA	994	20211021-Parrot-OB-C-774		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	79	<LOD	326	150	527																				
									85	<LOD	348	162	455																				
									124	<LOD	331	153	509																				
									96	<LOD	335	155	497																				
NA	995	20211021-Parrot-OB-C-775		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	125	<LOD	330	139	418																				
									88	<LOD	296	160	360																				
									107	<LOD	296	164	392																				
									107	<LOD	307	154	390																				
NA	996	20211021-Parrot-OB-C-776		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	89	<LOD	417	199	541																				
									80	<LOD	374	197	566																				
									78	<LOD	371	174	438																				
									82	<LOD	387	190	515																				
NA	997	20211021-Parrot-OB-C-777		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	72	<LOD	395	193	477																				
									97	<LOD	400	208	491																				
									96	<LOD	372	198	887																				
									88	<LOD	389	200	618																				
NA	998	20211021-Parrot-OB-C-778		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	64	<LOD	364	128	275																				
									78	<LOD	360	236	302																				
									44	<LOD	365	155	221																				
									62	<LOD	363	173	266																				
NA	999	20211021-Parrot-OB-C-779		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	72	<LOD	328	134	420																				
									54	<LOD	369	192	508																				
									67	<LOD	351	156	485																				
									64	<LOD	349	161	471																				
NA	1000	20211021-Parrot-OB-C-780		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	71	<LOD	366	139	559																				
									74	<LOD	320	146	408																				
									91	<LOD	335	132	487																				
									79	<LOD	340	139	485																				
NA	1001	20211021-Parrot-OB-C-780							71	<LOD	366	139	559																				
									74	<LOD	320	146	408																				
									91	<LOD	335	132	487																				
									79	<LOD	340	139	485																				
NA	1002	20211021-Parrot-DUP-780							88	<LOD	380	226	530																				
									81	<LOD	352	417	596																				
									57	<LOD	336	143	494																				
									75	<LOD	356	262	540															95.76271	NA	104.6033	188.4892	111.4168
211116-18	1003	20211021-Parrot-LAB-780	[Reserved for QA/QC]											60	15U	379	201	698											76.27119	NA	111.3614	144.6043	211116-19
NA	1004	20211021-Parrot-Field Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1005	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																	1540	12.3	3420	5520	4180										
NA	1006	20211021-Parrot-OB-C-781		Cell 5	11 confirmation samples were taken ftom the second cut of OB in Cell 5. 11 samples were hauled to Cell 4. Daily hauls 6691-6800.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	56	<LOD	357	179	396																				
									103	<LOD	328	206	337																				
									72	<LOD	338	270	358																				
									77	<LOD	341	218	364																				
NA	1007	20211022-Parrot-OB-C-782		Cell 5	9 confirmation samples were taken from the second cut of OB in Cell 5. All samples were confirmed below action level and hauled to cell 4. Hauls 6801-6900. Sampling consisted of 1 composite/10 haul trucks, approx. 400 CY per haul. 90 hauls to cell 4.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	79	<LOD	283	215	389																				
									107	<LOD	260	251	309																				
									72	<LOD	291	177	329																				
									86	<LOD	278	214	342																				
NA	1008	20211022-Parrot-OB-C-783		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	**226**	<LOD	319	328	794																				
									154	<LOD	345	273	**1583**																				
									191	<LOD	413	279	609																				
									190	<LOD	359	293	995																				
NA	1009	20211022-Parrot-OB-C-784		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	109	<LOD	245	192	334																				
									154	<LOD	363	196	456																				
									111	<LOD	264	155	221																				
									125	<LOD	**291**	181	337																				
NA	1010	20211022-Parrot-OB-C-785		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	130	<LOD	320	153	307																				
									164	<LOD	319	173	340																				
									190	<LOD	355	210	274																				
									161	<LOD	331	179	307																				
NA	1011	20211022-Parrot-OB-C-786		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	181	<LOD	313	209	521																				
									101	<LOD	417	263	929																				
									101	<LOD	313	246	523																				
									128	<LOD	348	239	658																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1012	20211022-Parrot-OB-C-787		Cell 5	9 confirmation samples were taken from the second cut of OB in Cell 5. All samples were confirmed below action level and hauled to cell 4. Hauls 6801-6900. Sampling consisted of 1 composite/10 haul trucks, approx. 400 CY per haul. 90 hauls to cell 4.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	91	<LOD	369	188	642																				
									102	<LOD	345	234	631																			
									116	<LOD	416	218	660																			
									103	<LOD	377	213	644																			
NA	1013	20211022-Parrot-OB-C-788		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	114	<LOD	376	210	500																		
									87	<LOD	350	220	362																			
									146	<LOD	377	285	331																			
									116	<LOD	368	238	398																			
NA	1014	20211022-Parrot-OB-C-789		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	70	<LOD	280	124	313																		
									138	<LOD	293	285	326																			
									64	<LOD	314	162	272																			
									91	<LOD	296	190	304																			
NA	1015	20211022-Parrot-OB-C-790		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	101	<LOD	241	204	372																		
									172	<LOD	264	178	451																			
									133	<LOD	284	178	828																			
									135	<LOD	263	187	550																			
NA	1016	20211025-Parrot-OB-C-791		Cell 5	10 confirmation samples were taken from the second cut of OB in cell 5. 6 samples were confirmed above action levels and direct hauled to MR. 4 Samples were below action levels and hauled to Cells 3 & 4. Hauls 6901-7000. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 60 trucks to MR, approx. 15 hauls to cell 4 and 20 to cell 3.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	96	<LOD	332	256	575																				
									79	<LOD	269	152	665																			
									89	<LOD	321	167	669																			
									88	<LOD	307	192	636																			
NA	1017	20211025-Parrot-OB-C-792		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**414**	18	413	632	**2600**																		
									220	<LOD	499	311	**1713**																			
									224	<LOD	426	283	790																			
									286	18	446	409	**1701**																			
NA	1018	20211025-Parrot-OB-C-793		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**364**	<LOD	353	271	848																		
									262	<LOD	340	212	539																			
									354	<LOD	299	236	697																			
									327	<LOD	331	240	695																			
NA	1019	20211025-Parrot-OB-C-794		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**386**	<LOD	403	327	894																		
									277	<LOD	605	419	**2725**																			
									268		324	245	548																			
									310	<LOD	444	330	**1389**																			
NA	1020	20211025-Parrot-OB-C-795		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	102	<LOD	329	197	690																		
									147	<LOD	491	291	**1622**																			
									140	<LOD	409	191	776																			
									130	<LOD	410	226	**1029**																			
NA	1021	20211025-Parrot-OB-C-796		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	102	<LOD	323	166	257																		
									65	<LOD	315	190	284																			
									62	<LOD	306	264	253																			
									76	<LOD	315	207	265																			
NA	1022	20211025-Parrot-OB-C-797		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	112	<LOD	336	199	425																		
									152	<LOD	513	415	431																			
									181	<LOD	376	247	**1014**																			
									148	<LOD	408	287	623																			
NA	1023	20211025-Parrot-OB-C-798		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	66	<LOD	248	129	382																		
									100	<LOD	273	163	306																			
									95	<LOD	276	173	310																			
									87	<LOD	266	155	333																			
NA	1024	20211025-Parrot-OB-C-799		Cell 5		4pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	199	<LOD	289	337	252																		
									188	<LOD	264	432	189																			
									256	<LOD	269	611	209																			
									214	<LOD	274	460	217																			
NA	1025	20211025-Parrot-OB-C-800		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**249**	<LOD	259	212	353																		
									214	<LOD	304	210	547																			
									226	<LOD	223	140	350																			
									230	<LOD	262	187	417																			
NA	1026	20211025-Parrot-OB-C-800							**249**	<LOD	259	212	353																			
									214	<LOD	304	210	547																			
									226	<LOD	223	140	350																			
									230	<LOD	262	187	417																			
211116-19	1027	20211025-Parrot-DUP-800							**269**	<LOD	306	142	319																			
									215	<LOD	290	198	366	**235**	15U	312	222	346														
									349	<LOD	240	329	898																			
									278	<LOD	279	223	528																120.8999	NA	106.3613	119.0391	126.64
211116-20	1028	20211025-Parrot-LAB-800	[Reserved for QA/QC]											**220**	15U	295	221	380											95.791	NA	112.5954	117.9715	91.2
211116-21	1029	20211025-Parrot-FieldBlank							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD	6U	15U	16J	9U	9U														
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	1030	20211025-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
211116-22	1031	SRM Lab Analysis (2710a)												**1455**	15U	**3558**	**5579**	**4189**	1540	12.3	3420	5520	4180	94	NA	104	101	100					
NA	1032	20211026-Parrot-OB-C-801		Cell 5	12 confirmation samples were taken from the second cut of OB in cell 5. 4 samples were confirmed above action levels and direct hauled to MR. 8 Samples were below action levels and hauled to Cell 4. Hauls 7001-7120. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 33 trucks to MR, approx. 80 hauls to cell 4. Sample 811 was deemed contaminated in-situ and routed to MR however the confirmation sample was below action level.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**253**	<LOD	578	294	**1987**																				
									204	<LOD	412	213	**1193**																			
									170	<LOD	424	350	847																			
									209	<LOD	471	286	**1342**																			
NA	1033	20211026-Parrot-OB-C-802		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**847**	<LOD	537	237	**1122**																		
									385	<LOD	410	198	652																			
									377	<LOD	496	284	895																			
									536	<LOD	481	240	890																			
NA	1034	20211026-Parrot-OB-C-803		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	158	<LOD	264	245	353																		
									213	<LOD	286	224	612																			
									253	<LOD	364	269	607																			
									208	<LOD	305	246	524																			
NA	1035	20211026-Parrot-OB-C-804		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	81	<LOD	242	216	318																		
									83	<LOD	258	196	286																			
									69	<LOD	269	198	259																			
									78	<LOD	256	203	288																			
NA	1036	20211026-Parrot-OB-C-805		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	176	<LOD	337	545	420																		
									68	<LOD	304	249	408																			
									108	<LOD	322	236	360																			
									117	<LOD	321	343	396																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1037	20211026-Parrot-OB-C-806		Cell 5	12 confirmation samples were taken from the second cut of OB in cell 5. 4 samples were confirmed above action levels and direct hauled to MR. 8 Samples were below action levels and hauled to Cell 4. Hauls 7001-7120. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 33 trucks to MR, approx. 80 hauls to cell 4. Sample 811 was deemed contaminated in-situ and routed to MR however the confirmation sample was below action level.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	60	<LOD	246	392	229																				
									77	<LOD	253	353	198																				
									70	<LOD	253	219	376																				
									69	<LOD	251	321	268																				
NA	1038	20211026-Parrot-OB-C-807		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	89	<LOD	269	227	211																				
									69	<LOD	237	177	246																				
									66	<LOD	233	212	250																				
									75	<LOD	246	205	236																				
NA	1039	20211026-Parrot-OB-C-808		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	158	<LOD	294	115	336																				
									206	<LOD	364	139	319																				
									114	<LOD	323	124	440																				
									159	<LOD	327	126	365																				
NA	1040	20211026-Parrot-OB-C-809		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	63	<LOD	294	141	318																				
									44	<LOD	262	113	270																				
									77	<LOD	265	121	234																				
									61	<LOD	274	125	274																				
NA	1041	20211026-Parrot-OB-C-810		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	80	<LOD	333	176	308																				
									70	<LOD	261	140	292																				
									97	<LOD	349	320	464																				
									82	<LOD	314	212	355																				
NA	1042	20211026-Parrot-OB-C-811		Cell 5		3pt. Composite (3 hauls) from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	117	<LOD	276	218	182																				
									183	<LOD	304	262	203																				
									97	<LOD	277	165	175																				
									132	<LOD	286	215	187																				
NA	1043	20211026-Parrot-OB-C-812		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	59	<LOD	222	187	303																				
									66	<LOD	231	226	299																				
									57	<LOD	235	258	246																				
									61	<LOD	229	224	283																				
NA	1044	20211028-Parrot-OB-C-813		Cell 6	One eight point composite of stockpiled OB material from fine surface soils that were placed in dewatering system area. ~400 CY	8 pt. composite of cell 6 scrape for dewatering extension	0-1 ft. bgs	Yes	43	<LOD	120	131	298																				
									34	<LOD	112	102	260																				
									36	<LOD	16	122	300																				
									38	<LOD	83	118	286																				
NA	1045	20211101-Parrot-OB-C-814		Cell 5	11 confirmation samples were taken from the second cut of OB in Cell 5. 9 samples were direct hauled to MR. 2 Samples were hauled to Cell 4. Hauls 7131-7240. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 90 hauls to MR, 20 hauls to cell 4. Samples 816, 818, 824 were deemed contaminated in-situ and routed to MR however the confirmation sample was below action level. Material hauled to Cell 4 were confirmed below action levels.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**301**	<LOD	555	257	**1003**																				
									298	<LOD	618	567	**4887**																				
									290	<LOD	460	265	866																				
									296	<LOD	544	363	**2252**																				
NA	1046	20211101-Parrot-OB-C-815		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**419**	<LOD	238	417	197																				
									285	<LOD	294	279	225																				
									263	<LOD	241	287	174																				
									322	<LOD	258	328	199																				
NA	1047	20211101-Parrot-OB-C-816		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	124	<LOD	428	245	757																				
									102	<LOD	418	284	802																				
									196	<LOD	341	208	608																				
									141	<LOD	396	246	722																				
NA	1048	20211101-Parrot-OB-C-817		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	169	<LOD	589	499	**1422**																				
									131	<LOD	610	417	**2017**																				
									191	<LOD	591	529	**1404**																				
									164	<LOD	597	482	**1614**																				
NA	1049	20211101-Parrot-OB-C-818		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**212**	<LOD	338	499	726																				
									193	<LOD	313	522	518																				
									184	<LOD	342	384	658																				
									196	<LOD	331	468	634																				
NA	1050	20211101-Parrot-OB-C-819		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**208**	<LOD	257	359	338																				
									302	<LOD	201	370	203																				
									225	<LOD	241	352	203																				
									245	<LOD	233	360	248																				
NA	1051	20211101-Parrot-OB-C-820		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	166	<LOD	311	327	368																				
									87	<LOD	282	225	242																				
									125	<LOD	257	249	274																				
									126	<LOD	283	267	295																				
NA	1052	20211101-Parrot-OB-C-820							166	<LOD	311	327	368																				
									87	<LOD	282	225	242																				
									125	<LOD	257	249	274																				
									126	<LOD	283	267	295																				
220104-1	1053	20211101-Parrot-DUP-820							95	<LOD	220	184	237																				
									164	<LOD	261	242	196	164	15 U	383	296	489															
									226	<LOD	311	244	284																				
									162	<LOD	264	223	239																			128.3069	NA	93.17647	83.64544	81.1086
220104-2	1054	20211101-Parrot-LAB-820												155	15 U	356	336	481														123.0159	NA	125.6471	125.8427	163.2353
220104-3	1055	20211101-Parrot-FieldBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	26 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1056	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																	1540	12.3	3420	5520	4180										
NA	1057	20211101-Parrot-OB-C-821		Cell 5	11 confirmation samples were taken from the second cut of OB in Cell 5. 9 samples were direct hauled to MR. 2 Samples were hauled to Cell 4. Hauls 7131-7240. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 90 hauls to MR, 20 hauls to cell 4. Samples 816, 818, 824 were deemed contaminated in-situ and routed to MR however the confirmation sample was below action level. Material hauled to Cell 4 were confirmed below action levels.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**262**	<LOD	279	219	223																				
									232	<LOD	289	160	212																				
									358	<LOD	364	205	273																				
									284	<LOD	311	195	236																				
NA	1058	20211101-Parrot-OB-C-822		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	102	<LOD	250	276	309																				
									120	<LOD	294	176	381																				
									94	<LOD	314	324	296																				
									105	<LOD	286	259	329																				
NA	1059	20211101-Parrot-OB-C-823		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**242**	<LOD	273	121	342																				
									182	<LOD	273	135	281																				
									330	<LOD	281	156	436																				
									251	<LOD	276	137	353																				
NA	1060	20211101-Parrot-OB-C-824		Cell 5		8pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	193	<LOD	218	171	242																				
									138	<LOD	242	180	239																				
									232	<LOD	234	184	227																				
									188	<LOD	231	178	236																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1061	20211102-Parrot-OB-C-825		Cell 5	11 confirmation samples were taken from the second cut of OB in Cell 5. 7 samples were direct hauled to MR. 4 Samples were hauled to Cell 4. Hauls 7241-7350. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 70 hauls to MR, 40 hauls to cell 4. All material hauled today were routed correctly. Sample 836 was a grab sample of the underlying tailings.	10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**222**	<LOD	266	168	281																					
									176	<LOD	268	132	320																				
									216	<LOD	272	166	330																				
									205	<LOD	269	155	310																				
NA	1062	20211102-Parrot-OB-C-826		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**333**	<LOD	289	192	279																				
									389	<LOD	326	174	321																				
									286	<LOD	306	142	308																				
									336	<LOD	**307**	169	**303**																				
NA	1063	20211102-Parrot-OB-C-827		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**376**	<LOD	353	255	307																				
									250	<LOD	288	274	829																				
									293	<LOD	353	327	541																				
									323	<LOD	**317**	**219**	**413**																				
NA	1064	20211102-Parrot-OB-C-828		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	125	<LOD	322	222	188																				
									130	<LOD	232	236	187																				
									121	<LOD	205	210	264																				
									125	<LOD	253	223	213																				
NA	1065	20211102-Parrot-OB-C-829		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**306**	<LOD	517	162	403																				
									431	<LOD	411	159	376																				
									343	<LOD	397	232	**1274**																				
									360	<LOD	442	184	684																				
NA	1066	20211102-Parrot-OB-C-830		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	194	<LOD	290	286	272																				
									118	<LOD	330	158	297																				
									112	<LOD	322	179	491																				
									141	<LOD	314	208	353																				
NA	1067	20211102-Parrot-OB-C-831		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**267**	<LOD	380	250	539																				
									258	<LOD	458	226	531																				
									294	<LOD	375	146	474																				
									273	<LOD	404	207	515																				
NA	1068	20211102-Parrot-OB-C-832		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**257**	<LOD	374	193	684																				
									272	<LOD	433	197	528																				
									200	<LOD	337	205	577																				
									243	<LOD	381	198	596																				
NA	1069	20211102-Parrot-OB-C-833		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	128	<LOD	310	317	445																				
									115	<LOD	361	223	521																				
									139	<LOD	413	473	542																				
									127	<LOD	361	338	503																				
NA	1070	20211102-Parrot-OB-C-834		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to Cell 4	Approx. 8-14 ft. bgs	Yes	78	<LOD	541	69	433																				
									105	<LOD	479	90	425																				
									90	<LOD	456	88	531																				
									91	<LOD	492	82	463																				
NA	1071	20211102-Parrot-OB-C-835		Cell 5		10pt. Composite from second cut of OB from Cell 5, Direct Haul to MR	Approx. 8-14 ft. bgs	Yes	**225**	<LOD	573	170	**1264**																				
									245	<LOD	444	148	834																				
									264	<LOD	533	247	**1595**																				
									245	<LOD	517	188	**1231**																				
NA	1072	20211102-Parrot-TA-G-836		Cell 5		Grab Sample from first cut of TA, Orange, Direct haul to MR	Approx 15 ft bgs	Yes	**555**	<LOD	924	**1094**	562																				
									527	<LOD	713	996	426																				
									454	<LOD	**1108**	830	568																				
									512	<LOD	915	973	519																				
NA	1073	20211103-Parrot-OB-C-837		Cell 6	11 confirmation samples were taken from the first cut of OB in Cell 6. 4 samples were direct hauled to MR. 7 Samples were hauled to Cells 3 & 4. Hauls7351-7460. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 40 hauls to MR, 70 hauls to Cells 3 & 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 3 & 4	Approx 0 - 7 ft. bgs	Yes	31	<LOD	223	108	487																					
									36	<LOD	271	149	738																				
									45	<LOD	303	142	667																				
									37	<LOD	266	133	631																				
NA	1074	20211103-Parrot-OB-C-838		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	68	10	**1207**	446	**3796**																				
									91	<LOD	**1269**	487	**4280**																				
									91	<LOD	**1203**	448	**4188**																				
									83	10	**1226**	460	**4088**																				
NA	1075	20211103-Parrot-OB-C-839		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	178	11	**2058**	808	**6986**																				
									152	<LOD	**1823**	619	**5656**																				
									144	<LOD	**1678**	575	**5004**																				
									158	11	**1853**	667	**5882**																				
NA	1076	20211103-Parrot-OB-C-840		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	180	18	**2472**	809	**6893**																				
									190	15	**2404**	765	**6826**																				
									135	19	**2513**	982	**7653**																				
									168	17	**2463**	852	**7124**																				
NA	1077	20211103-Parrot-OB-C-840							180	18	**2472**	809	**6893**																				
									190	15	**2404**	765	**6826**																				
									135	19	**2513**	982	**7653**																				
									168	17	**2463**	852	**7124**																				
NA	1078	20211103-Parrot-DUP-840							180	12	**2336**	851	**7692**																				
									203	14	**2811**	896	**10400**																				
									181	15	**2466**	930	**8847**																				
									188	14	**2538**	892	**8980**															111.6832	78.84615	103.0315	104.734	126.0481
220104-4	1079	20211103-Parrot-LAB-840	[Reserved for QA/QC]											**206**	15 U	**2517**	**1139**	**12391**											122.3762	NA	102.1924	133.6854	173.9332
NA	1080	20211103-Parrot-FieldBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1081	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180										
NA	1082	20211103-Parrot-OB-C-841		Cell 6	11 confirmation samples were taken from the first cut of OB in Cell 6. 4 samples were direct hauled to MR. 7 Samples were hauled to Cells 3 & 4. Hauls7351-7460. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 40 hauls to MR, 70 hauls to Cells 3 & 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	62	<LOD	958	476	**2765**																					
									86	11	**1177**	532	**2817**																				
									92	10	**1261**	557	**3487**																				
									80	11	**1132**	522	**3023**																				
NA	1083	20211103-Parrot-OB-C-842		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 3	Approx 0 - 7 ft. bgs	Yes	25	8	204	147	375																				
									34	<LOD	277	110	427																				
									27	<LOD	209	126	438																				
									29	8	230	128	413																				
NA	1084	20211103-Parrot-OB-C-843		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 3	Approx 0 - 7 ft. bgs	Yes	34	<LOD	179	74	273																				
									44	<LOD	83	51	223																				
									34	<LOD	109	67	240																				
									37	<LOD	124	64	245																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1085	20211103-Parrot-OB-C-844		Cell 6	11 confirmation samples were taken from the first cut of OB in Cell 6. 4 samples were direct hauled to MR. 7 Samples were hauled to Cells 3 & 4. Hauls7351-7460. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 40 hauls to MR, 70 hauls to Cells 3 & 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 3	Approx 0 - 7 ft. bgs	Yes	45	<LOD	247	134	493																			
									28	<LOD	245	133	454																			
									37	<LOD	292	329	519																			
									37	<LOD	261	199	489																			
NA	1086	20211103-Parrot-OB-C-845		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 3 & 4	Approx 0 - 7 ft. bgs	Yes	51	<LOD	235	169	458																				
									44	<LOD	199	163	462																			
									28	<LOD	229	190	478																			
									41	<LOD	221	174	466																			
NA	1087	20211103-Parrot-OB-C-846		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 3 & 4	Approx 0 - 7 ft. bgs	Yes	67	<LOD	187	74	398																				
									35	<LOD	93	67	232																			
									46	<LOD	203	80	425																			
									49	<LOD	161	74	352																			
NA	1088	20211103-Parrot-OB-C-847		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 4	Approx 0 - 7 ft. bgs	Yes	30	<LOD	137	65	212																				
									21	<LOD	120	54	227																			
									29	<LOD	127	51	225																			
									27	<LOD	128	57	221																			
NA	1089	20211104-Parrot-OB-C-848		Cell 6	11 confirmation samples were taken from the first cut of OB in Cell 6. 7 samples were direct hauled to MR. 4 Samples were hauled to Cell 4. Hauls 7461-7570. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 70 hauls to MR, 40 hauls to Cell 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	**247**	17	**3641**	**1218**	**12100**																			
									222	19	**3013**	**1127**	**11000**																			
									278	14	**3699**	**1316**	**11900**																			
									249	17	**3451**	**1220**	**11667**																			
NA	1090	20211104-Parrot-OB-C-849		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	96	<LOD	701	607	**1729**																				
									67	<LOD	687	525	**1578**																			
									46	<LOD	447	594	978																			
									70	<LOD	612	575	**1428**																			
NA	1091	20211104-Parrot-OB-C-850		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 4	Approx 0 - 7 ft. bgs	Yes	94	<LOD	269	289	576																				
									83	<LOD	209	238	350																			
									78	<LOD	255	258	371																			
									85	<LOD	244	262	432																			
NA	1092	20211104-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
220104-19	1093	SRM Lab Analysis (2711a)												68	40 J	150	**1450**	413	107	54.1	140	1400	414	64	NA	107	104	100					
NA	1094	20211104-Parrot-OB-C-851		Cell 6	11 confirmation samples were taken from the first cut of OB in Cell 6. 7 samples were direct hauled to MR. 4 Samples were hauled to Cell 4. Hauls 7461-7570. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 70 hauls to MR, 40 hauls to Cell 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	183	14	**2003**	962	**7520**																			
									147	11	**1364**	651	**3018**																			
									140	<LOD	**1383**	833	**3774**																			
									157	13	**1583**	815	**4771**																			
NA	1095	20211104-Parrot-OB-C-852		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	94	<LOD	922	558	**2410**																				
									96	<LOD	737	575	**2058**																			
									110	<LOD	**1339**	442	**2501**																			
									100	<LOD	999	525	**2323**																			
NA	1096	20211104-Parrot-OB-C-853		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 4	Approx 0 - 7 ft. bgs	Yes	55	<LOD	426	171	653																				
									38	<LOD	218	237	486																			
									88	<LOD	331	424	493																			
									60	<LOD	325	277	544																			
NA	1097	20211104-Parrot-OB-C-854		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	142	17	**1931**	760	**4826**																				
									219	<LOD	**1906**	790	**4426**																			
									120	<LOD	**1528**	698	**4074**																			
									160	17	**1788**	749	**4442**																			
NA	1098	20211104-Parrot-OB-C-855		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	97	<LOD	**1009**	453	**2743**																				
									107	12	**1168**	523	**3734**																			
									144	11	**1275**	604	**5037**																			
									116	12	**1151**	527	**3838**																			
NA	1099	20211104-Parrot-OB-C-856		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 4	Approx 0 - 7 ft. bgs	Yes	46	<LOD	230	159	602																				
									65	<LOD	238	134	509																			
									72	<LOD	352	177	828																			
									61	<LOD	273	157	646																			
NA	1100	20211104-Parrot-OB-C-857		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	103	<LOD	937	600	**3173**																				
									108	<LOD	975	522	**2069**																			
									70	<LOD	820	431	**2064**																			
									94	<LOD	911	518	**2435**																			
NA	1101	20211104-Parrot-OB-C-858		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 4	Approx 0 - 7 ft. bgs	Yes	56	<LOD	160	128	236																				
									57	<LOD	187	179	245																			
									52	<LOD	198	120	290																			
									55	<LOD	182	142	257																			
NA	1102	20211105-Parrot-OB-C-859		Cell 6	4 confirmation samples were taken from the first cut of OB in Cell 6. 2 samples were direct hauled to MR. 2 Samples were hauled to Cell 4. 8 confirmation samples were taken from the second cut of OB in cell 6. 3 samples were direct hauled to MR. 5 samples were direct hauled	10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	179	12	**1778**	531	**4282**																			
									172	<LOD	**1565**	568	**3672**																			
									141	8	**1488**	515	**3425**																			
									164	10	**1610**	538	**3793**																			
NA	1103	20211105-Parrot-OB-C-860		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 4	Approx 0 - 7 ft. bgs	Yes	45	<LOD	206	141	341																				
									68	<LOD	176	104	460																			
									59	<LOD	144	84	287																			
									57	<LOD	175	110	363																			
NA	1104	20211105-Parrot-OB-C-860							45	<LOD	206	141	341																			
									68	<LOD	176	104	460																			
									59	<LOD	144	84	287																			
									57	<LOD	175	110	363																			
NA	1105	20211105-Parrot-DUP-860							67	<LOD	301	163	719																			
									64	<LOD	273	122	506																			
									55	<LOD	312	115	389																			
									62	<LOD	295	133	538															108.1395	NA	168.4411	121.5805	148.3456
220104-5	1106	20211105-Parrot-LAB-860	[Reserved for QA/QC]											61	15 U	162	153	304											106.3953	NA	92.39544	139.5137	83.82353
NA	1107	20211105-Parrot-FieldBlank							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	1108	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																	1540	12.3	3420	5520	4180									

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1109	20211105-Parrot-OB-C-861		Cell 6	4 confirmation samples were taken from the first cut of OB in Cell 6. 2 samples were direct hauled to MR. 2 Samples were hauled to Cell 4. 8 confirmation samples were taken from the second cut of OB in cell 6. 3 samples were direct hauled to MR. 5 samples were direct hauled to Cell 4. Hauls 7571-7690. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 70 hauls to MR, 50 hauls to Cell 4. One sample was incorrectly routed to MR.	10pt. Composite from first cut of OB from Cell 6, Direct Haul to MR	Approx 0 - 7 ft. bgs	Yes	108	<LOD	**1213**	452	**2867**																						
									205	<LOD	**3497**	**1023**	**9418**																				
									121	10	**1416**	767	**3427**																				
									145	10	**2042**	747	**5237**																				
NA	1110	20211105-Parrot-OB-C-862		Cell 6		10pt. Composite from first cut of OB from Cell 6, Direct Haul to Cell 4	Approx 0 - 7 ft. bgs	Yes	89	<LOD	456	168	407																				
									87	<LOD	302	191	476																				
									86	<LOD	245	167	772																				
									87	<LOD	334	175	552																				
NA	1111	20211105-Parrot-OB-C-863		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to MR	Approx 7 - 14 ft. bgs	Yes	149	<LOD	**1257**	640	**6912**																				
									78	<LOD	929	425	**3301**																				
									100	<LOD	850	414	**4137**																				
									109	<LOD	**1012**	493	**4783**																				
NA	1112	20211105-Parrot-OB-C-864		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to MR	Approx 7 - 14 ft. bgs	Yes	100	<LOD	**1584**	790	**4440**																				
									159	9	**1970**	686	**3039**																				
									150	<LOD	**1327**	763	**3304**																				
									136	9	**1627**	746	**3594**																				
NA	1113	20211105-Parrot-OB-C-865		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to MR	Approx 7 - 14 ft. bgs	Yes	150	<LOD	327	243	482																				
									182	<LOD	396	243	678																				
									179	<LOD	294	205	390																				
									170	<LOD	339	230	517																				
NA	1114	20211105-Parrot-OB-C-866		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	82	<LOD	313	168	415																				
									78	<LOD	361	135	357																				
									76	<LOD	312	168	378																				
									79	<LOD	329	157	383																				
NA	1115	20211105-Parrot-OB-C-867		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	77	<LOD	331	173	437																				
									74	<LOD	262	105	343																				
									107	<LOD	245	171	332																				
									86	<LOD	279	150	371																				
NA	1116	20211105-Parrot-OB-C-868		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	**220**	<LOD	232	119	378																				
									84	<LOD	254	121	446																				
									69	<LOD	286	126	565																				
									124	<LOD	257	122	463																				
NA	1117	20211105-Parrot-OB-C-869		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	77	<LOD	259	125	499																				
									66	<LOD	264	115	551																				
									109	<LOD	461	159	800																				
									84	<LOD	328	133	617																				
NA	1118	20211105-Parrot-OB-C-870		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	187	<LOD	304	154	387																				
									142	<LOD	280	170	642																				
									135	<LOD	250	128	500																				
									155	<LOD	278	151	510																				
NA	1119	20211108-Parrot-OB-C-871		Cell 6	10 Confirmation samples of OB from the second cut of cell 6. OB direct hauled to cell 4. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 7691-7790	10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	111	<LOD	270	160	508																				
									115	<LOD	231	171	640																				
									103	<LOD	252	139	477																				
									110	<LOD	251	157	542																				
NA	1120	20211108-Parrot-OB-C-872		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	70	<LOD	254	80	360																				
									143	<LOD	288	124	336																				
									116	<LOD	246	141	313																				
									110	<LOD	263	115	336																				
NA	1121	20211108-Parrot-OB-C-873		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	77	<LOD	374	199	287																				
									91	<LOD	354	198	267																				
									64	<LOD	340	205	340																				
									77	<LOD	356	201	298																				
NA	1122	20211108-Parrot-OB-C-874		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	49	<LOD	397	176	314																				
									47	<LOD	305	134	218																				
									47	<LOD	343	185	327																				
									48	<LOD	348	165	286																				
NA	1123	20211108-Parrot-OB-C-875		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	112	<LOD	343	120	342																				
									118	<LOD	318	107	337																				
									117	<LOD	312	119	333																				
									116	<LOD	324	115	337																				
NA	1124	20211108-Parrot-OB-C-876		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	48	<LOD	328	125	368																				
									58	<LOD	429	151	383																				
									72	<LOD	573	205	**1063**																				
									59	<LOD	443	160	605																				
NA	1125	20211108-Parrot-OB-C-877		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	62	<LOD	429	208	444																				
									37	<LOD	379	278	399																				
									38	<LOD	491	263	348																				
									46	<LOD	433	250	397																				
NA	1126	20211108-Parrot-OB-C-878		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	40	<LOD	208	75	247																				
									37	<LOD	197	81	316																				
									43	<LOD	275	100	342																				
									40	<LOD	227	85	302																				
NA	1127	20211108-Parrot-OB-C-879		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	81	<LOD	309	111	395																				
									50	<LOD	221	92	465																				
									87	<LOD	285	108	346																				
									73	<LOD	272	104	402																				
NA	1128	20211108-Parrot-OB-C-880		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	97	<LOD	276	72	315																				
									56	<LOD	236	89	255																				
									57	<LOD	342	98	238																				
									70	<LOD	285	86	269																				
NA	1129	20211108-Parrot-OB-C-880							97	<LOD	276	72	315																				
									56	<LOD	236	89	255																				
									57	<LOD	342	98	238																				
									70	<LOD	285	86	269																				
NA	1130	20211108-Parrot-DUP-880							61	<LOD	235	98	211																				
									81	<LOD	224	104	256																				
									76	<LOD	264	156	247																				
									73	<LOD	241	119	238															103.8095	NA	84.66042	138.2239	88.36634
220104-6	1131	20211108-Parrot-LAB-880	[Reserved for QA/QC]											92	15 U	289	135	291											131.4286	NA	101.5222	156.3707	108.0446
NA	1132	20211108-Parrot-FieldBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1133	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																	1540	12.3	3420	5520	4180										
NA	1134	20211109-Parrot-TA-G-881		Cell 5	5 total grab samples were taken from the tailings removal area and current floor elevation of Cell 5. Confirmation sampling was not conducted for safety reasons. 4 samples were above action levels, one was below action levels, all material was routed to MR. The current floor is elevated approx. 2 ft from the vertical extent and 2 out of 3 samples confirmed the floor is above action levels.	Grab Sample of first cut TA from Cell 5	Approx 14-24 ft. bgs	Yes	**408**	<LOD	506	580	**1031**																					
									485	<LOD	310	569	286																				
									425	<LOD	310	785	376																				
									439	<LOD	375	645	564																				
NA	1135	20211109-Parrot-RK-G-882		Cell 5		Grab Sample of RK from Cell 5	Approx 24 ft. bgs	Yes	**601**	<LOD	460	454	563																				
									416	<LOD	514	323	578																				
									527	<LOD	564	262	497																				
									515	<LOD	513	346	546																				
NA	1136	20211109-Parrot-TA-G-883		Cell 5		Grab Sample of TA from Cell 5	Approx 14-24 ft. bgs	Yes	**332**	<LOD	199	656	417																				
									360	<LOD	199	685	660																				
									313	<LOD	224	586	689																				
									335	<LOD	207	642	589																				
NA	1137	20211109-Parrot-RK-G-884		Cell 5		Grab Sample of RK from Cell 5	Approx 24 ft. bgs	Yes	155	<LOD	748	42	414																				
									104	<LOD	648	15	335																				
									107	<LOD	675	18	310																				
									122	<LOD	690	25	353																				
NA	1138	20211109-Parrot-RK-G-885		Cell 5		Grab Sample of RK from Cell 5	Approx 24 ft. bgs	Yes	154	<LOD	**1230**	71	**1017**																				
									155	<LOD	**1263**	89	**1010**																				
									117	<LOD	**1152**	70	**1098**																				
									142	<LOD	**1215**	77	**1042**																				
NA	1139	20211110-Parrot-OB-C-886		Cell 6	11 Confirmation samples of OB from the second cut of cell 6. OB direct hauled to cell 4. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 7791-7900	10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	92	<LOD	293	118	393																						
									78	<LOD	291	116	364																				
									95	<LOD	310	126	332																				
									88	<LOD	298	120	363																				
NA	1140	20211110-Parrot-OB-C-887		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	40	<LOD	380	192	278																				
									50	<LOD	413	224	244																				
									44	<LOD	352	159	225																				
									45	<LOD	382	192	249																				
NA	1141	20211110-Parrot-OB-C-888		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	58	<LOD	355	177	313																				
									63	<LOD	305	138	244																				
									59	<LOD	299	188	249																				
									60	<LOD	320	168	269																				
NA	1142	20211110-Parrot-OB-C-889		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	162	<LOD	438	213	484																				
									114	<LOD	415	180	389																				
									158	<LOD	477	280	554																				
									145	<LOD	443	224	476																				
NA	1143	20211110-Parrot-OB-C-890		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	133	<LOD	376	206	444																				
									123	<LOD	379	267	478																				
									142	<LOD	529	205	472																				
									133	<LOD	428	226	465																				
NA	1144	20211110-Parrot-OB-C-891		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	92	<LOD	362	223	380																				
									99	<LOD	331	200	316																				
									91	<LOD	311	136	241																				
									94	<LOD	335	186	312																				
NA	1145	20211110-Parrot-OB-C-892		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	49	<LOD	399	136	278																				
									49	<LOD	552	227	437																				
									46	<LOD	401	178	329																				
									48	<LOD	451	180	348																				
NA	1146	20211110-Parrot-OB-C-893		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	111	<LOD	326	206	244																				
									108	<LOD	305	176	341																				
									91	<LOD	264	154	228																				
									103	<LOD	298	179	271																				
NA	1147	20211110-Parrot-OB-C-894		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	76	<LOD	311	150	407																				
									86	<LOD	325	143	429																				
									60	<LOD	263	437	333																				
									74	<LOD	300	243	390																				
NA	1148	20211110-Parrot-OB-C-895		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	56	<LOD	308	93	396																				
									27	<LOD	266	95	459																				
									39	<LOD	219	83	387																				
									41	<LOD	264	90	414																				
NA	1149	20211110-Parrot-OB-C-896		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	56	<LOD	383	166	395																				
									60	<LOD	327	175	311																				
									85	<LOD	377	186	354																				
									67	<LOD	362	176	353																				
NA	1150	20211111-Parrot-OB-C-897		Cell 6	11 Confirmation samples of OB from the second cut of cell 6. OB direct hauled to cell 4. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 7901-8010	10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	73	<LOD	285	208	315																						
									64	<LOD	254	201	309																				
									61	<LOD	278	180	413																				
									66	<LOD	272	196	346																				
NA	1151	20211111-Parrot-OB-C-898		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	53	<LOD	236	128	376																				
									69	<LOD	301	131	271																				
									73	<LOD	301	194	338																				
									65	<LOD	279	151	328																				
NA	1152	20211111-Parrot-OB-C-899		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	57	<LOD	343	117	563																				
									50	<LOD	316	82	326																				
									53	<LOD	287	93	345																				
									53	<LOD	315	97	411																				
NA	1153	20211111-Parrot-OB-C-900		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	94	<LOD	306	247	190																				
									85	<LOD	264	269	252																				
									92	<LOD	302	182	188																				
									90	<LOD	291	233	210																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1154	20211111-Parrot-OB-C-900							94	<LOD	306	247	190																				
									85	<LOD	264	269	252																				
									92	<LOD	302	182	188																				
									90	<LOD	291	233	210																				
220104-7	1155	2021111-Parrot-DUP-900							122	<LOD	334	259	180																				
									89	<LOD	257	220	171	147	15 U	346	314	203														
									73	<LOD	268	140	192																				
									95	<LOD	286	206	181																104.797	NA	98.50917	88.68195	86.19048
220104-8	1156	20211111-Parrot-LAB-900	[Reserved for QA/QC]											141	15 U	336	283	197											156.0886	NA	115.5963	121.6332	93.80952
220104-9	1157	20211111-Parrot-FieldBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	21 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1158	20211111-Parrot-Xcon Blank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
220104-20	1159	SRM Lab Analysis (2711a)												54	15 U	144	**1491**	440	107	54.1	140	1400	414	50	NA	103	107	106					
NA	1160	20211111-Parrot-OB-C-901		Cell 6	11 Confirmation samples of OB from the second cut of cell 6. OB direct hauled to cell 4. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 7901-8010	10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	51	<LOD	274	130	240																				
									44	<LOD	245	155	192																				
									41	<LOD	261	106	218																				
									45	<LOD	260	130	217																				
NA	1161	20211111-Parrot-OB-C-902		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	41	<LOD	299	208	273																				
									46	<LOD	316	154	315																				
									42	<LOD	283	195	251																				
									43	<LOD	299	186	280																				
NA	1162	20211111-Parrot-OB-C-903		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	197	<LOD	266	106	312																				
									44	<LOD	303	664	282																				
									50	<LOD	285	98	242																				
									97	<LOD	285	289	279																				
NA	1163	20211111-Parrot-OB-C-904		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	48	<LOD	223	103	211																				
									48	<LOD	277	123	251																				
									55	<LOD	250	133	260																				
									50	<LOD	250	120	241																				
NA	1164	20211111-Parrot-OB-C-905		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	99	<LOD	261	97	231																				
									82	<LOD	260	107	408																				
									54	<LOD	217	112	312																				
									78	<LOD	246	105	317																				
NA	1165	20211111-Parrot-OB-C-906		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	66	<LOD	200	219	116																				
									47	<LOD	253	251	179																				
									55	<LOD	279	231	126																				
									56	<LOD	244	234	140																				
NA	1166	20211111-Parrot-OB-C-907		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	37	<LOD	294	143	204																				
									50	<LOD	260	112	185																				
									50	<LOD	240	160	170																				
									46	<LOD	265	138	186																				
NA	1167	20211115-Parrot-OB-C-908		Cell 6	3 Confirmation samples of OB from the second cut of Cell 6.OB direct hauled to Cell 4. Sampling consists of 1 composite sample/10 haul trucks, approx. 400 CY. Hauls 8011-8040. Two Grab Samples of waste material from Cell 5 were collected to confirm waste material was routed to MR.	10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	55	<LOD	307	170	391																					
									68	<LOD	332	161	352																				
									50	<LOD	295	186	381																				
									58	<LOD	311	172	375																				
NA	1168	20211115-Parrot-OB-C-909		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	67	<LOD	288	205	314																				
									60	<LOD	299	122	340																				
									56	<LOD	337	136	419																				
									61	<LOD	308	154	358																				
NA	1169	20211115-Parrot-OB-C-910		Cell 6		10pt. Composite from second cut of OB from Cell 6, Direct Haul to Cell 4	Approx 7 - 14 ft. bgs	Yes	42	<LOD	349	177	338																				
									34	<LOD	265	106	341																				
									75	<LOD	**1944**	376	722																				
									50	<LOD	853	220	467																				
NA	1170	20211115-Parrot-TA-G-911		Grab Cell 5		Grab Sample from first cut of TA, Yellow/White, Direct haul to MR	Approx 14-20 bgs	Yes	**270**	<LOD	192	**1122**	**1302**																				
									329	<LOD	226	**1093**	943																				
									468	<LOD	468	**1013**	**2780**																				
									356	<LOD	295	**1076**	**1675**																				
NA	1171	20211115-Parrot-CY-G-912		Grab Cell 5		Grab Sample from first cut of CY, Black Clay, Direct haul to MR	Approx 14-20 bgs	Yes	<LOD	<LOD	665	71	**3234**																				
									<LOD	<LOD	718	76	**3418**																				
									13	13	**1451**	105	**5878**																				
									13	13	945	84	**4177**																				
NA	1172	20211116-Parrot-TA-G-913		Grab Cell 5	5 Grab Samples of waste material from Cells 5 and 6 were collected to confirm waste material was appropriately routed to MR. All samples above action levels.	Grab Sample from first cut of TA, Yellow/Orange, Direct haul to MR	Approx 14-20 bgs	Yes	**369**	<LOD	331	552	567																				
									444	<LOD	387	519	799																				
									375	<LOD	284	596	486																				
									396	<LOD	334	556	617																				
NA	1173	20211116-Parrot-TA-G-914		Grab Cell 5		Grab Sample from first cut of TA, White/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	164	<LOD	128	398	815																				
									254	<LOD	231	584	**1209**																				
									141	<LOD	217	511	**1643**																				
									186	<LOD	192	498	**1222**																				
NA	1174	20211116-Parrot-RK-G-915		Grab Cell 5		Grab Sample of RK from Cell 5, from vertical extent	Approx 14-20 bgs	Yes	**229**	<LOD	248	69	162																				
									207	<LOD	236	82	209																				
									205	<LOD	193	51	133																				
									214	<LOD	226	67	168																				
NA	1175	20211116-Parrot-TA-G-916		Grab Cell 5		Grab Sample from first cut of TA, Orange, Direct haul to MR	Approx 14-20 bgs	Yes	**942**	<LOD	345	312	408																				
									854	<LOD	364	303	448																				
									832	<LOD	386	362	454																				
									876	<LOD	365	326	437																				
NA	1176	20211116-Parrot-CY-G-917		Grab Cell 6		Grab Sample from first cut of CY, Black Clay, Direct haul to MR	Approx 14-20 bgs	Yes	**394**	<LOD	617	419	**1233**																				
									363	<LOD	630	337	**1018**																				
									407	<LOD	654	388	781																				
									388	<LOD	634	381	**1011**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1177	20211117-Parrot-TA-G-918		Grab Cell 6	2 Confirmation samples of OB from a wind row stockpile from the sideslopes of Cell 6. OB direct hauled to MR. Sampling consists of 1 composite sample of stockpiled material for each approx. 400 CY. Five Grab Samples of waste material/aluvium floor from Cell 6 were collected to confirm waste material was routed to MR.	Grab Sample from first cut of TA, White/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**305**	<LOD	427	**1156**	**1218**																					
									256	<LOD	372	919	**1707**																				
									342	<LOD	467	**1064**	**1408**																				
									301	<LOD	422	**1046**	**1444**																				
NA	1178	20211117-Parrot-CY-G-919		Grab Cell 6		Grab Sample from first cut of CY, Black Clay, Direct haul to MR	Approx 14-20 bgs	Yes	67	<LOD	**1704**	241	**1334**																				
									94	<LOD	**1575**	228	**1247**																				
									75	<LOD	**1670**	316	**1250**																				
									79	<LOD	**1650**	262	**1277**																				
NA	1179	20211117-Parrot-TA-G-920		Grab Cell 6		Grab Sample from first cut of TA, White/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**305**	<LOD	391	**1410**	277																				
									426	<LOD	365	**1454**	423																				
									326	<LOD	372	**1411**	171																				
									352	<LOD	376	**1425**	290																				
NA	1180	20211117-Parrot-TA-G-920							**305**	<LOD	391	**1410**	277																				
									426	<LOD	365	**1454**	423																				
									326	<LOD	372	**1411**	171																				
									352	<LOD	376	**1425**	290																				
220104-10	1181	20211117-Parrot-DUP-920							**445**	<LOD	321	**1310**	440																				
									427	<LOD	303	**1268**	290	**507**	15 U	311	**1291**	397															
									572	<LOD	352	**1379**	270																				
									481	<LOD	325	**1319**	333																				
220104-11	1182	20211117-Parrot-LAB-920												**323**	15 U	364	**1491**	486											136.6131	NA	86.52482	92.5614	114.8106
																													91.67455	NA	96.80851	104.6316	167.3938
220104-12	1183	20211117-Parrot-FieldBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	21 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1184	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180										
NA	1185	20211117-Parrot-OB-C-921		Cell 6	2 Confirmation samples of OB from a wind row stockpile from the sideslopes of Cell 6. OB direct hauled to MR. Sampling consists of 1 composite sample of stockpiled material for each approx. 400 CY. Five Grab Samples of waste material/aluvium floor from Cell 6 were collected to confirm waste material was routed to MR.	10pt. Composite from second cut of OB from southern edge of Cell 6, Windrow stockpile sample, approximately 400 CY	Approx 7 - 14 ft. bgs	Yes	105	<LOD	883	318	**1448**																					
									137	<LOD	800	323	**1653**																				
									114	<LOD	758	309	**1370**																				
									119	<LOD	814	317	**1490**																				
NA	1186	20211117-Parrot-OB-C-922		Cell 6		10pt. Composite from second cut of OB from southeast edge of Cell 6, Windrow stockpile sample, approximately 400 CY	Approx 7 - 14 ft. bgs	Yes	169	<LOD	**1037**	419	**2183**																				
									154	<LOD	**1034**	471	**2091**																				
									178	<LOD	**1169**	576	**2856**																				
									167	<LOD	**1080**	489	**2377**																				
NA	1187	20211117-Parrot-RK-G-923		Cell 6		Grab Sample of RK from Cell 6, sample collected at vertical extent direct hauled to MR	Approx 32 bgs	Yes	75	<LOD	386	35	294																				
									54	<LOD	273	42	221																				
									45	<LOD	238	44	225																				
									58	<LOD	299	40	247																				
NA	1188	20211117-Parrot-TA-G-924		Cell 6		Grab Sample from first cut of TA, White/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**488**	<LOD	385	**1090**	261																				
									542	<LOD	239	779	351																				
									603	<LOD	203	909	242																				
									544	<LOD	276	926	285																				
NA	1189	20211118-Parrot-TA-G-925		Cell 6	Five Grab Samples of waste material/aluvium floor from Cell 6 were collected to confirm waste material was routed to MR.	Grab Sample from first cut of TA, Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**389**	<LOD	548	984	779																				
									396	<LOD	399	**1053**	**1233**																				
									367	<LOD	439	**1079**	**1010**																				
									384	<LOD	462	**1039**	**1007**																				
NA	1190	20211118-Parrot-TA-G-926		Cell 6		Grab Sample from first cut of TA, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	**523**	<LOD	474	562	413																				
									345	<LOD	412	481	337																				
									483	<LOD	485	525	457																				
									450	<LOD	457	523	402																				
NA	1191	20211118-Parrot-RK-G-927		Cell 6		Grab Sample of RK from Cell 6, sample collected at vertical extent direct hauled to MR	Approx 32 bgs	Yes	20	<LOD	180	35	175																				
									34	<LOD	230	88	259																				
									18	<LOD	131	38	157																				
									24	<LOD	180	54	197																				
NA	1192	20211118-Parrot-RK-G-928		Cell 6		Grab Sample of RK from Cell 6, sample collected 2' above vertical extent direct hauled to MR	Approx 30 bgs	Yes	62	<LOD	340	27	188																				
									81	<LOD	394	24	221																				
									79	<LOD	381	17	223																				
									74	<LOD	372	23	211																				
NA	1193	20211118-Parrot-CY-G-929		Cell 6		Grab Sample from first cut of CY, Black Clay, Direct haul to MR	Approx 14-20 bgs	Yes	21	**34**	**2495**	102	**2888**																				
									30	**35**	**2266**	99	**2830**																				
									26	**29**	**2292**	89	**2851**																				
									26	**33**	**2351**	97	**2856**																				
NA	1194	20211119-Parrot-OB-C-930		Cell 5 - West	11 confirmation samples were taken from the first cut of OB in Cell 5-West. 7 samples were direct hauled to MR. 4 Samples were hauled to Cell 4. Hauls 8041-8250. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 70 hauls to MR, 40 hauls to Cell 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**481**	<LOD	550	269	301																					
									671	<LOD	277	179	338																				
									219	<LOD	340	428	342																				
									457	<LOD	389	292	327																				
NA	1195	20211119-Parrot-OB-C-931		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	73	<LOD	212	94	315																				
									183	<LOD	225	89	456																				
									66	<LOD	216	85	359																				
									107	<LOD	218	89	377																				
NA	1196	20211119-Parrot-OB-C-932		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	99	<LOD	794	257	**2468**																				
									170	<LOD	639	262	**2396**																				
									142	<LOD	943	310	**2408**																				
									137	<LOD	792	276	**2424**																				
NA	1197	20211119-Parrot-OB-C-933		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**508**	<LOD	404	137	519																				
									99	<LOD	332	102	515																				
									536	<LOD	244	136	609																				
									381	<LOD	327	125	548																				
NA	1198	20211119-Parrot-OB-C-934		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	128	<LOD	871	342	**2869**																				
									190	<LOD	927	372	**2949**																				
									101	<LOD	814	277	**2578**																				
									140	<LOD	871	330	**2799**																				
NA	1199	20211119-Parrot-OB-C-935		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	85	<LOD	683	327	**2125**																				
									73	<LOD	948	375	**2195**																				
									69	<LOD	646	229	**1403**																				
									76	<LOD	759	310	**1908**																				
NA	1200	20211119-Parrot-OB-C-936		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	32	<LOD	205	78	431																				
									36	<LOD	222	93	351																				
									55	<LOD	336	87	450																				
									41	<LOD	254	86	411																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1201	20211119-Parrot-OB-C-937		Cell 5 - West	11 confirmation samples were taken from the first cut of OB in Cell 5-West. 7 samples were direct hauled to MR. 4 Samples were hauled to Cell 4. Hauls 8041-8250. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 70 hauls to MR, 40 hauls to Cell 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	43	<LOD	289	94	516																					
									29	<LOD	175	90	328																				
									63	<LOD	**1004**	94	416																				
									45	<LOD	489	93	420																				
NA	1202	20211119-Parrot-OB-C-938		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	76	<LOD	305	206	703																				
									32	<LOD	350	121	731																				
									38	<LOD	238	146	617																				
									49	<LOD	298	158	684																				
NA	1203	20211119-Parrot-OB-C-939		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	89	8	985	395	**2676**																				
									107	<LOD	**1049**	491	**3244**																				
									81	<LOD	927	331	**2707**																				
									92	8	987	406	**2876**																				
NA	1204	20211119-Parrot-OB-C-940		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	108	<LOD	**1070**	447	**3775**																				
									62	<LOD	**1004**	529	**4063**																				
									107	<LOD	**1166**	520	**5225**																				
									92	<LOD	**1080**	499	**4354**																				
NA	1205	20211119-Parrot-OB-C-940							108	<LOD	**1070**	447	**3775**																				
									62	<LOD	**1004**	529	**4063**																				
									107	<LOD	**1166**	520	**5225**																				
									92	<LOD	**1080**	499	**4354**																				
NA	1206	20211119-Parrot-DUP-940							86	<LOD	999	416	**4518**																				
									68	<LOD	944	392	**2986**																				
									74	<LOD	957	402	**2991**																				
									76	<LOD	967	403	**3498**																			82.31047	NA	89.50617	80.88235	80.34142
220104-13	1207	20211117-Parrot-LAB-940	[Reserved for QA/QC]											95	15 U	**1133**	690	**6438**											102.8881	NA	104.9074	138.369	147.8527
NA	1208	20211119-Parrot-FieldBlank-940							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1209	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																	1540	12.3	3420	5520	4180										
NA	1210	20211122-Parrot-OB-C-941		Cell 5 - West	6 confirmation samples were taken from the first cut of OB in Cell 5-West. 3 samples were direct hauled to MR. 3 Samples were hauled to Cell 4. Hauls 8251-8310. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 30 hauls to MR, 30 hauls to Cell 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**206**	<LOD	**1414**	539	**4272**																					
									96	<LOD	958	404	**2926**																				
									145	<LOD	967	537	**3362**																				
									149	<LOD	**1113**	493	**3520**																				
NA	1211	20211122-Parrot-OB-C-942		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	59	<LOD	623	271	**1547**																				
									74	<LOD	692	281	**1791**																				
									60	<LOD	753	282	**1995**																				
									64	<LOD	689	278	**1778**																				
NA	1212	20211122-Parrot-OB-C-943		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	129	<LOD	500	282	**1721**																				
									74	<LOD	473	232	990																				
									62	<LOD	466	311	**1356**																				
									88	<LOD	480	275	**1356**																				
NA	1213	20211122-Parrot-OB-C-944		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	33	<LOD	259	119	476																				
									39	<LOD	247	105	347																				
									43	<LOD	246	125	647																				
									38	<LOD	251	116	490																				
NA	1214	20211122-Parrot-OB-C-945		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	63	<LOD	321	154	552																				
									76	<LOD	363	180	781																				
									66	<LOD	314	133	458																				
									68	<LOD	333	156	597																				
NA	1215	20211122-Parrot-OB-C-946		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	59	<LOD	238	112	411																				
									51	<LOD	320	140	614																				
									68	<LOD	330	172	444																				
									59	<LOD	296	141	490																				
NA	1216	20211123-Parrot-OB-C-947		Cell 5 - West	10 confirmation samples were taken from the first cut of OB in Cell 5-West. 8 samples were direct hauled to MR. 2 Samples were hauled to Cell 4. Hauls 8311-8410. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 80 hauls to MR, 20 hauls to Cell 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	80	<LOD	179	101	472																					
									64	<LOD	223	83	405																				
									97	<LOD	313	138	731																				
									80	<LOD	238	107	536																				
NA	1217	20211123-Parrot-OB-C-948		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	78	<LOD	641	272	**1949**																				
									101	<LOD	671	367	**2095**																				
									92	<LOD	791	344	**2340**																				
									90	<LOD	701	328	**2128**																				
NA	1218	20211123-Parrot-OB-C-949		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	84	<LOD	562	248	**2613**																				
									69	<LOD	696	298	**4243**																				
									68	<LOD	649	277	**2692**																				
									74	<LOD	636	274	**3183**																				
NA	1219	20211123-Parrot-OB-C-950		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	65	<LOD	512	263	**1359**																				
									59	<LOD	491	203	**2125**																				
									68	<LOD	479	227	**2319**																				
									64	<LOD	494	231	**1934**																				
NA	1220	20211123-Parrot-XconBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
220104-21	1221	SRM Lab Analysis (2711a)												57	**45**	141	**1445**	420	107	54.1	140	1400	414	53	83	101	103	101					
NA	1222	20211123-Parrot-OB-C-951		Cell 5 - West	10 confirmation samples were taken from the first cut of OB in Cell 5-West. 8 samples were direct hauled to MR. 2 Samples were hauled to Cell 4. Hauls 8311-8410. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 80 hauls to MR, 20 hauls to Cell 4. All material hauled today were routed correctly.	10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	130	<LOD	484	299	**1802**																					
									143	<LOD	676	288	**1820**																				
									104	<LOD	452	236	**1326**																				
									126	<LOD	537	274	**1649**																				
NA	1223	20211123-Parrot-OB-C-952		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	115	<LOD	533	184	**1720**																				
									102	<LOD	350	182	**3526**																				
									145	<LOD	333	168	988																				
									121	<LOD	405	178	**2078**																				
NA	1224	20211123-Parrot-OB-C-953		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	105	<LOD	554	242	**1469**																				
									81	<LOD	770	316	**2307**																				
									94	<LOD	641	276	**2345**																				
									93	<LOD	655	278	**2040**																				
NA	1225	20211123-Parrot-OB-C-954		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**323**	<LOD	391	341	995																				
									254	<LOD	383	322	**1183**																				
									545	<LOD	268	305	710																				
									374	<LOD	347	323	963																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1226	20211123-Parrot-OB-C-955		Cell 5 - West	10 confirmation samples were taken from the first cut of OB in Cell 5-West. 8 samples were direct hauled to MR. 2 Samples were hauled to Cell 4. Hauls 8311-8410. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 80 hauls to MR, 20 hauls to Cell 4. All material hauled	10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4	Approx 0-8 ft bgs	Yes	94	<LOD	132	119	271																				
									59	<LOD	129	83	362																				
									75	<LOD	124	106	306																				
									76	<LOD	128	103	313																				
NA	1227	20211123-Parrot-OB-C-956		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**245**	<LOD	268	457	557																				
									244	<LOD	284	468	724																				
									296	<LOD	601	626	**1897**																				
									262	<LOD	384	517	**1059**																				
NA	1228	20211124-Parrot-OB-C-957		Cell 5 - West	4 confirmation samples were taken from the first cut of OB in Cell 5-West. 4 samples were direct hauled to MR. 0 Samples were hauled to Cell 4. Hauls 8411-8460. Sampling consisted of 1 composite sample/10 haul trucks. Approx. 400 CY per haul. 40 hauls to MR, 0 hauls to Cell 4. All material hauled today were routed correctly. Note Sample 957 was 1 haul collected on 11/23 and was assiciated with the sample area 955 was collected from. It was carried over to todays sampling effort, however, no other clean samples were collected from	10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to Cell 4 (1 haul)	Approx 0-8 ft bgs	Yes	152	<LOD	208	166	573																				
									150	<LOD	262	192	523																				
									135	<LOD	263	245	**1381**																				
									146	<LOD	244	201	826																				
NA	1229	20211124-Parrot-OB-C-958		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**279**	<LOD	205	374	260																				
									351	<LOD	210	385	225																				
									328	<LOD	229	402	208																				
									319	<LOD	215	387	231																				
NA	1230	20211124-Parrot-OB-C-959		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**476**	<LOD	240	435	218																				
									498	<LOD	197	399	220																				
									321	<LOD	217	324	207																				
									432	<LOD	218	386	215																				
NA	1231	20211124-Parrot-OB-C-960		Cell 5 - West		10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**272**	<LOD	294	253	319																				
									360	<LOD	298	286	310																				
									369	<LOD	303	251	327																				
									334	<LOD	298	263	319																				
NA	1232	20211124-Parrot-OB-C-960							**272**	<LOD	294	253	319																				
									360	<LOD	298	286	310																				
									369	<LOD	303	251	327																				
									334	<LOD	298	263	319																				
NA	1233	20211124-Parrot-DUP-960							**348**	<LOD	215	338	336																				
									243	<LOD	247	277	318																				
									340	<LOD	284	386	307																				
									310	<LOD	249	334	320																				
220104-14	1234	20211124-Parrot-LAB-960	[Reserved for QA/QC]											**393**	15 U	322	304	293											93.00699	NA	83.35196	126.7089	100.523
																													117.7822	NA	107.933	115.443	91.94561
NA	1235	20211124-Parrot-FieldBlank-960							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1236	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180										
NA	1237	20211124-Parrot-OB-C-961		Cell 5 - West	4 confirmation samples were taken from the first cut of OB in Cell 5-West. 4 samples were direct hauled to MR. 0 Samples were	10pt. Composite from first cut of OB from Cell 5-West, Direct Haul to MR	Approx 0-8 ft bgs	Yes	**225**	<LOD	364	362	534																				
									206	<LOD	311	460	516																				
									257	<LOD	416	446	512																				
									229	<LOD	364	423	521																				
NA	1238	20211129-Parrot-CY-G-962		Cell 6	4 Floor Grid Samples of RK from elevated floor (3' above vertical extent) of northern portion of Cell 5 were analyzed to determine whether additional excavation was required. The results determined additional excavation is required and is ongoing. Sampling consists of 1 composite sample of material for each 100'x50' grid. 3 Grab Samples of waste material/aluvium floor from Cell 6 were collected to confirm waste material was routed to MR.	Grab Sample from first cut of CY, Black Clay, Direct haul to MR	Approx 14-20 bgs	Yes	**204**	**24**	**3914**	236	**1584**																				
									198	**24**	**4047**	251	**1598**																				
									224	19	**3787**	267	**1539**																				
									209	**22**	**3916**	251	**1574**																				
NA	1239	20211129-Parrot-TA-G-963		Cell 6		Grab Sample from first cut of TA, White/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**330**	<LOD	199	**1348**	**1256**																				
									381	<LOD	196	**1433**	**1386**																				
									316	<LOD	194	**1477**	**1355**																				
									342	<LOD	196	**1419**	**1332**																				
NA	1240	20211129-Parrot-RK-G-964		Cell 6		Grab Sample of RK from Cell 6, sample collected at vertical extent direct hauled to MR	Approx 32 bgs	Yes	110	<LOD	411	107	321																				
									132	<LOD	473	98	391																				
									113	<LOD	450	91	391																				
									118	<LOD	445	99	368																				
NA	1241	20211129-Parrot-RK-C-965		Cell 5		8 pt. composite of alluvium at approximately 3 ft. above the vertical extent	Approx 29 ft bgs	Yes	80	<LOD	606	26	367																				
									75	<LOD	541	36	325																				
									140	<LOD	609	103	358																				
									98	<LOD	585	55	350																				
NA	1242	20211129-Parrot-RK-C-966		Cell 5		8 pt. composite of alluvium at approximately 3 ft. above the vertical extent	Approx 29 ft bgs	Yes	126	<LOD	643	60	416																				
									135	<LOD	657	73	418																				
									163	<LOD	566	55	396																				
									141	<LOD	622	63	410																				
NA	1243	20211129-Parrot-RK-C-967		Cell 5		8 pt. composite of alluvium at approximately 3 ft. above the vertical extent	Approx 29 ft bgs	Yes	**280**	<LOD	550	73	408																				
									337	<LOD	584	60	417																				
									240	<LOD	512	62	359																				
									286	<LOD	549	65	395																				
NA	1244	20211129-Parrot-RK-C-968		Cell 5		8 pt. composite of alluvium at approximately 3 ft. above the vertical extent	Approx 29 ft bgs	Yes	**362**	<LOD	597	154	355																				
									346	<LOD	533	256	342																				
									210	<LOD	445	112	280																				
									306	<LOD	525	174	326																				
NA	1245	20211130-Parrot-TA-G-969		Cell 5	3 grab samples of alluvium and tailings/waste were taken from cell 5 and 2 grab samples of tailings were taken from cell 6 to confirm waste material was routed to MR.	Grab Sample from first cut of TA, White/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**558**	<LOD	496	535	481																				
									479	<LOD	464	600	546																				
									425	<LOD	419	570	311																				
									487	<LOD	460	568	446																				
NA	1246	20211130-Parrot-RK-G-970		Cell 5		Grab Sample of RK from Cell 5, sample collected on sideslope (Dozer Excavation) direct hauled to MR	Approx 14-20 bgs	Yes	**250**	<LOD	562	158	350																				
									257	<LOD	500	175	357																				
									301	<LOD	485	169	346																				
									269	<LOD	516	167	351																				
NA	1247	20211130-Parrot-TA-G-971		Cell 5		Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**572**	<LOD	**1903**	825	502																				
									566	<LOD	**1252**	737	325																				
									553	<LOD	**1928**	773	419																				
									564	<LOD	**1694**	778	415																				
NA	1248	20211130-Parrot-TA-G-972		Cell 6		Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**499**	<LOD	508	**1252**	**1571**																				
									437	<LOD	449	**1306**	851																				
									445	<LOD	436	**1182**	767																				
									460	<LOD	464	**1247**	**1063**																				
NA	1249	20211130-Parrot-TA-G-973		Cell 6		Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**247**	10	367	**1344**	**1290**																				
									373	<LOD	527	**1327**	**2051**																				
									267	8	371	**1463**	**1660**																				
									296	9	422	**1378**	**1667**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1250	20211201-Parrot-TA-G-974		Cell 6	1 grab sample of alluvium/mixed waste was taken from the berm protecting the excavation. 4 grab samples of tailings were taken from the tailings layer to confirm waste material was hauled to MR.	Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**394**	<LOD	354	172	281																				
									367	<LOD	353	146	352																				
									376	<LOD	399	250	337																				
									379	<LOD	369	189	323																				
NA	1251	20211201-Parrot-TA-G-975		Cell 6		Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**463**	<LOD	348	750	719																				
									398	<LOD	244	649	256																				
									395	<LOD	232	613	289																				
									419	<LOD	275	671	421																				
NA	1252	20211201-Parrot-TA-G-976		Cell 6		Grab Sample from first cut of TA, Orange/Yellow/Blue, Direct haul to MR	Approx 14-20 bgs	Yes	**477**	<LOD	**3847**	768	**1032**																				
									420	<LOD	**1573**	677	647																				
									418	<LOD	**2504**	694	675																				
									438	<LOD	**2641**	713	785																				
NA	1253	20211201-Parrot-RK-G-977		Cell 6		Grab Sample from RK berm	Approx 14-20 bgs	Yes	129	<LOD	318	87	582																				
									94	<LOD	297	115	237																				
									94	<LOD	331	85	257																				
									106	<LOD	315	96	359																				
NA	1254	20211201-Parrot-TA-G-978		Cell 6		Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**747**	<LOD	230	850	151																				
									720	<LOD	230	**1056**	193																				
									712	<LOD	231	695	154																				
									726	<LOD	230	867	166																				
NA	1255	20211202-Parrot-TA-G-979		Cell 5	5 grab samples of TA were taken from cells 5 and 6 to confirm waste was hauled to MR	Grab Sample from first cut of TA, White/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**216**	12	160	765	**4274**																				
									221	<LOD	184	860	844																				
									273	<LOD	224	**1057**	998																				
									237	12	189	894	**2039**																				
NA	1256	20211202-Parrot-TA-G-980		Cell 5		Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**442**	<LOD	369	595	960																				
									359	<LOD	235	585	665																				
									415	<LOD	310	647	723																				
									405	<LOD	305	609	783																				
NA	1257	20211202-Parrot-TA-G-980							**442**	<LOD	369	595	960																				
									359	<LOD	235	585	665																				
									415	<LOD	310	647	723																				
									405	<LOD	305	609	783																				
NA	1258	20211202-Parrot-DUP-980							**382**	<LOD	209	598	271																				
									407	<LOD	423	744	364																				
									396	<LOD	224	558	366																				
									395	<LOD	285	633	334																			97.45066	NA	93.65427	103.9956	42.63203
220104-15	1259	20211202-Parrot-LAB-980	[Reserved for QA/QC]											**338**	15 U	375	719	707															83.38816	NA	123.0853	118.0624	90.3322
NA	1260	20211202-Parrot-FieldBlank-980							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1261	SRM (Field XRF) (2710a) - Sample group did not exceed 20 samples.																															
																			1540	12.3	3420	5520	4180										
NA	1262	20211202-Parrot-TA-G-981		Cell 5	5 grab samples of TA were taken from cells 5 and 6 to confirm waste was hauled to MR	Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**401**	<LOD	298	614	**1068**																				
									456	<LOD	517	611	507																				
									509	<LOD	352	592	651																				
									455	<LOD	389	606	742																				
NA	1263	20211202-Parrot-TA-G-982		Cell 5		Grab Sample from first cut of TA, Orange/Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**350**	<LOD	270	646	669																				
									303	<LOD	222	713	636																				
									379	<LOD	268	703	484																				
									344	<LOD	253	687	596																				
NA	1264	20211202-Parrot-CY-G-983		Cell 5		Grab Sample from underlying CY, Direct haul to MR	Approx 32 bgs	Yes	**573**	<LOD	**1119**	304	478																				
									547	<LOD	**1021**	308	462																				
									535	<LOD	**1027**	282	490																				
									552	<LOD	**1056**	298	477																				
NA	1265	20211203-Parrot-TA-G-984		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR	Grab Sample from first cut of TA, Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**315**	<LOD	212	721	536																				
									295	<LOD	234	686	839																				
									303	<LOD	252	588	999																				
									304	<LOD	233	665	791																				
NA	1266	20211203-Parrot-TA-G-985		Cell 5		Grab Sample from first cut of TA, Orange, Direct haul to MR	Approx 14-20 bgs	Yes	**1400**	<LOD	182	581	88																				
									1314	<LOD	224	593	141																				
									1535	<LOD	214	592	139																				
									1416	<LOD	207	589	123																				
NA	1267	20211203-Parrot-TA-G-986		Cell 5		Grab Sample from first cut of TA, White, Direct haul to MR	Approx 14-20 bgs	Yes	94	13	196	402	**2955**																				
									119	14	223	523	**2663**																				
									120	8	201	519	**1789**																				
									111	12	207	481	**2469**																				
NA	1268	20211203-Parrot-TA-G-987		Cell 5		Grab Sample from first cut of TA, Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	171	<LOD	150	532	367																				
									146	<LOD	108	553	612																				
									148	<LOD	98	521	**1035**																				
									155	<LOD	119	535	671																				
NA	1269	20211203-Parrot-TA-G-988		Cell 5		Grab Sample from first cut of TA, Orange, Direct haul to MR	Approx 14-20 bgs	183	**814**	<LOD	404	673	319																				
									786	<LOD	293	472	308																				
									783	<LOD	369	473	374																				
									794	<LOD	355	539	334																				
NA	1270	20211207-Parrot-TA-G-989		Cell 5 West	5 grab samples of TA were taken from cell 5 West to confirm waste was hauled to MR	Grab Sample from first cut of TA, Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	183	11	393	**1074**	**1701**																				
									167	<LOD	363	**1205**	866																				
									318	<LOD	974	**1308**	843																				
									223	11	577	**1196**	**1137**																				
NA	1271	20211207-Parrot-TA-G-990		Cell 5 West		Grab Sample from first cut of TA, Orange, Direct haul to MR	Approx 14-20 bgs	Yes	**433**	<LOD	621	943	805																				
									415	<LOD	603	922	745																				
									473	<LOD	644	997	834																				
									440	<LOD	623	954	795																				
NA	1272	20211207-Parrot-TA-G-991		Cell 5 West		Grab Sample from first cut of TA, Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**439**	<LOD	209	862	580																				
									409	<LOD	212	728	968																				
									481	<LOD	192	937	**1072**																				
									443	<LOD	204	842	873																				
NA	1273	20211207-Parrot-TA-G-992		Cell 5 West		Grab Sample from first cut of TA, Yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**249**	9	577	**1123**	**2139**																				
									187	<LOD	359	926	**3466**																				
									188	8	324	**1493**	**2451**																				
									208	9	420	**1181**	**2685**																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1274	20211207-Parrot-TA-G-993		Cell 5 West	5 grab samples of TA were taken from cell 5 West to confirm waste was hauled to MR	Grab Sample from first cut of TA, Gray/Black, Direct haul to MR	Approx 14-20 bgs	Yes	**676**	<LOD	880	677	978																				
									742	<LOD	995	712	**1343**																				
									718	<LOD	**1084**	605	956																				
									712	<LOD	986	665	**1092**																				
NA	1275	20211208-Parrot-TA-G-994		Cell 5 West	5 grab samples of TA were taken from cell 5 West to confirm waste was hauled to MR.	Grab Sample from first cut of TA, Brown/Orange, Direct haul to MR	Approx 14-20 bgs	Yes	**356**	<LOD	356	817	841																				
									317	<LOD	370	757	**1083**																				
									360	<LOD	329	871	931																				
									344	<LOD	352	815	952																				
NA	1276	20211208-Parrot-TA-G-995		Cell 5 West		Grab Sample from first cut of TA, Brown/Black, Direct haul to MR	Approx 14-20 bgs	Yes	**421**	<LOD	349	336	474																				
									388	<LOD	344	363	496																				
									332	<LOD	288	347	553																				
									380	<LOD	327	349	508																				
NA	1277	20211208-Parrot-TA-G-996		Cell 5 West		Grab Sample from first cut of TA, Gray/White, Direct haul to MR	Approx 14-20 bgs	Yes	**276**	13	329	**1366**	**3852**																				
									209	<LOD	203	**1024**	**1697**																				
									228	10	326	**1091**	**1156**																				
									238	12	286	**1160**	**2235**																				
NA	1278	20211208-Parrot-TA-G-997		Cell 5 West		Grab Sample from first cut of TA, Brown/Black, Direct haul to MR	Approx 14-20 bgs	Yes	132	<LOD	614	498	662																				
									281	<LOD	607	872	867																				
									256	11	371	920	**6616**																				
									223	11	531	763	**2715**																				
NA	1279	20211208-Parrot-TA-G-998		Cell 5 West		Grab Sample from first cut of TA, Orange/Brown, Direct haul to MR	Approx 14-20 bgs	Yes	**303**	<LOD	312	932	**1113**																				
									288	<LOD	31	853	**1489**																				
									306	<LOD	478	752	**1348**																				
									299	<LOD	274	846	**1317**																				
NA	1280	20211209-Parrot-TA-G-999		Cell 5 West	5 grab samples of TA were taken from cell 5 West to confirm waste was hauled to MR.	Grab Sample from first cut of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**303**	<LOD	199	658	518																				
									223	<LOD	156	730	312																				
									245	<LOD	159	755	818																				
									257	<LOD	171	714	549																				
NA	1281	20211209-Parrot-TA-G-1000		Cell 5 West		Grab Sample from first cut of TA, white, Direct haul to MR	Approx 14-20 bgs	Yes	**480**	<LOD	**2377**	**1262**	**1725**																				
									484	9	**2951**	**1034**	**1742**																				
									362	<LOD	**1529**	**1004**	**1161**																				
									442	9	**2286**	**1100**	**1543**																				
NA	1282	20211209-Parrot-TA-G-1000							**480**	<LOD	**2377**	**1262**	**1725**																				
									484	9	**2951**	**1034**	**1742**																				
									362	<LOD	**1529**	**1004**	**1161**																				
									442	9	**2286**	**1100**	**1543**																				
220104-16	1283	20211209-Parrot-DUP-1000							**567**	<LOD	**2155**	**1448**	**1895**																				
									510	<LOD	**2149**	**1618**	**2445**	**375**	15 U	**1821**	**1265**	**1984**															
									442	<LOD	**1467**	**1288**	**1749**																				
									506	<LOD	**1924**	**1451**	**2030**																			114.5551	NA	84.16217	131.9394	131.5687
220104-17	1284	20211209-Parrot-LAB-1000	[Reserved for QA/QC]											**325**	15 U	**1831**	**1125**	**1679**														73.52941	NA	80.10792	102.2727	108.8375
220104-18	1285	20211209-Parrot-FieldBlank-1000							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	22 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1286	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	1287	20211209-Parrot-XconBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
220104-22	1288	SRM Lab Analysis (2711a)												73	**46**	149	**1490**	443	107	54.1	140	1400	414	68	85	106	106	107					
NA	1289	20211209-Parrot-TA-G-1001		Cell 5 West	5 grab samples of TA were taken from cell 5 West to confirm waste was hauled to MR.	Grab Sample from first cut of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**376**	<LOD	432	850	956																				
									300	<LOD	398	**1154**	**1048**																				
									332	<LOD	701	**1091**	**1502**																				
									336	<LOD	510	**1032**	**1169**																				
NA	1290	20211209-Parrot-TA-G-1002		Cell 5 West		Grab Sample from first cut of TA, brown, Direct haul to MR	Approx 14-20 bgs	Yes	**455**	<LOD	340	255	**1746**																				
									410	<LOD	212	290	**3130**																				
									494	<LOD	473	287	**1997**																				
									453	<LOD	342	277	**2291**																				
NA	1291	20211209-Parrot-TA-G-1003		Cell 5 West		Grab Sample from first cut of TA, orange/yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**580**	<LOD	159	792	98																				
									534	<LOD	165	694	**1050**																				
									646	<LOD	201	985	165																				
									587	<LOD	175	824	438																				
NA	1292	20211210-Parrot-TA-G-1004		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR.	Grab Sample from first cut of TA, orange/yellow, Direct haul to MR	Approx 14-20 bgs	Yes	178	<LOD	169	202	**1093**																				
									208	<LOD	154	223	**1092**																				
									222	<LOD	192	156	832																				
									203	<LOD	172	194	**1006**																				
NA	1293	20211210-Parrot-TA-G-1005		Cell 5		Grab Sample from first cut of TA, brown, Direct haul to MR	Approx 14-20 bgs	Yes	**397**	<LOD	448	852	**2304**																				
									419	<LOD	558	875	934																				
									393	7	481	951	1000																				
									403	7	496	893	**1413**																				
NA	1294	20211210-Parrot-TA-G-1006		Cell 5		Grab Sample from first cut of TA, orange, Direct haul to MR	Approx 14-20 bgs	Yes	**227**	<LOD	175	135	**1921**																				
									255	<LOD	168	133	831																				
									244	<LOD	187	202	**1010**																				
									242	<LOD	177	157	**1254**																				
NA	1295	20211210-Parrot-TA-G-1007		Cell 5		Grab Sample from first cut of TA, gray, Direct haul to MR	Approx 14-20 bgs	Yes	**537**	<LOD	521	272	**1173**																				
									477	<LOD	334	252	**1300**																				
									522	<LOD	476	337	939																				
									512	<LOD	444	287	**1137**																				
NA	1296	20211210-Parrot-TA-G-1008		Cell 5		Grab Sample from first cut of TA, brown, Direct haul to MR	Approx 14-20 bgs	Yes	**234**	<LOD	388	263	513																				
									259	<LOD	369	266	577																				
									236	<LOD	332	228	473																				
									243	<LOD	363	252	521																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1297	20211213-Parrot-TA-G-1009		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR. 6 8 pt. composites were taken from the excavation floor of cell 5 west.	Grab Sample from first cut of TA, orange/yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**259**	<LOD	364	519	439																				
									284	<LOD	727	457	**1383**																			
									210	10	167	581	**1201**																			
									251	10	419	519	**1008**																			
NA	1298	20211213-Parrot-TA-G-1010		Cell 5		Grab Sample from first cut of TA, orange/yellow, Direct haul to MR	Approx 14-20 bgs	Yes	179	<LOD	176	566	538																			
									295	<LOD	215	489	663																			
									229	<LOD	232	499	**1125**																			
									234	<LOD	208	518	775																			
NA	1299	20211213-Parrot-TA-G-1011		Cell 5		Grab Sample from first cut of TA, gray/yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**252**	<LOD	122	212	156																			
									220	<LOD	188	178	156																			
									285	<LOD	220	355	218																			
									252	<LOD	177	248	177																			
NA	1300	20211213-Parrot-TA-G-1012		Cell 5		Grab Sample from first cut of TA, gray/yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**383**	8	245	723	854																			
									387	<LOD	331	658	**1291**																			
									378	<LOD	481	942	**2165**																			
									383	8	352	774	**1437**																			
NA	1301	20211213-Parrot-TA-G-1013		Cell 5		Grab Sample from first cut of TA, gray/yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**289**	<LOD	185	871	**1382**																			
									246	<LOD	118	675	264																			
									282	<LOD	254	622	**3813**																			
									272	<LOD	186	723	**1820**																			
NA	1302	20211213-Parrot-RK-C-1014		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	88	<LOD	**1558**	99	**1045**																			
									63	<LOD	**1731**	89	**1111**																			
									54	<LOD	**1253**	88	973																			
									68	<LOD	**1514**	92	**1043**																			
NA	1303	20211213-Parrot-RK-C-1015		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	107	<LOD	**1697**	84	663																			
									99	<LOD	**1817**	129	748																			
									100	<LOD	**2340**	115	882																			
									102	<LOD	**1951**	109	764																			
NA	1304	20211213-Parrot-RK-C-1016		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	70	<LOD	**2491**	97	**1117**																			
									61	<LOD	**1956**	83	937																			
									75	<LOD	**1950**	77	965																			
									69	<LOD	**2132**	86	**1006**																			
NA	1305	20211213-Parrot-RK-C-1017		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	54	<LOD	**1442**	83	784																			
									44	<LOD	**1296**	72	762																			
									53	<LOD	**1647**	78	803																			
									50	<LOD	**1462**	78	783																			
NA	1306	20211213-Parrot-RK-C-1018		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	86	<LOD	**2148**	153	920																			
									99	<LOD	**1665**	104	723																			
									98	<LOD	**1581**	102	803																			
									94	<LOD	**1798**	120	815																			
NA	1307	20211213-Parrot-RK-C-1019		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	78	<LOD	**1622**	104	727																			
									82	<LOD	**1932**	117	796																			
									67	<LOD	**1302**	90	547																			
									76	<LOD	**1619**	104	690																			
NA	1308	20211214-Parrot-RK-C-1020		Cell 5 West	9 - 8 pt. composite samples were taken from the floor of cell and cell 5 west.	8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	103	<LOD	499	70	421																			
									136	<LOD	622	71	487																			
									104	<LOD	607	73	596																			
									114	<LOD	576	71	501																			
NA	1309	20211214-Parrot-RK-C-1020							103	<LOD	499	70	421																			
									136	<LOD	622	71	487																			
									104	<LOD	607	73	596																			
									114	<LOD	576	71	501																			
220309-1	1310	20211214-Parrot-DUP-1020							118	<LOD	567	63	423																			
									155	<LOD	707	77	552	104	15 U	467	80	368														
									101	<LOD	448	71	298																			
									125	<LOD	574	70	424															109.0379	NA	99.65278	98.59813	84.64096
220309-2	1311	20211214-Parrot-LAB-1020												109	15 U	441	75	416											95.33528	NA	76.5625	105.1402	82.97872
220309-3	1312	20211214-Parrot-FieldBlank-1020							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	34 J	9 U	9 U														
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	1313	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																														
																			107	54.1	140	1400	414									
NA	1314	20211214-Parrot-RK-C-1021		Cell 5 West	9 - 8 pt. composite samples were taken from the floor. 5 from cell 5 west and 4 from cell 5.	8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	163	<LOD	741	73	456																			
									169	<LOD	871	71	531																			
									147	<LOD	764	81	445																			
									160	<LOD	792	75	477																			
NA	1315	20211214-Parrot-RK-C-1022		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	172	<LOD	499	43	279																			
									192	<LOD	553	58	370																			
									177	<LOD	473	54	294																			
									180	<LOD	508	52	314																			
NA	1316	20211214-Parrot-RK-C-1023		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	79	<LOD	299	53	248																			
									82	<LOD	422	45	357																			
									86	<LOD	388	57	332																			
									82	<LOD	370	52	312																			
NA	1317	20211214-Parrot-RK-C-1024		Cell 5 West		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	125	<LOD	**1191**	139	680																			
									178	<LOD	**1214**	80	731																			
									114	<LOD	**1085**	130	647																			
									139	<LOD	**1163**	116	686																			
NA	1318	20211214-Parrot-RK-C-1025		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	65	<LOD	259	48	216																			
									132	<LOD	256	38	217																			
									87	<LOD	352	34	289																			
									95	<LOD	289	40	241																			
NA	1319	20211214-Parrot-RK-C-1026		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	89	<LOD	434	37	343																			
									72	<LOD	407	37	323																			
									73	<LOD	458	36	353																			
									78	<LOD	433	37	340																			
NA	1320	20211214-Parrot-RK-C-1027		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	**210**	<LOD	253	62	202																			
									305	<LOD	384	78	335																			
									228	<LOD	297	76	283																			
									248	<LOD	311	72	273																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1321	20211214-Parrot-RK-C-1028		Cell 5	9 - 8 pt. composite samples were taken from the floor. 5 from cell 5 west and 4 from cell 5.	8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	**248**	<LOD	530	50	505																				
									270	<LOD	516	47	474																		
									263	<LOD	601	64	534																		
									260	<LOD	549	54	504																		
NA	1322	20211215-Parrot-TA-G-1029		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR.	Cell 6	Approx 14-20 bgs	Yes	**330**	<LOD	201	890	230																		
									276	<LOD	196	519	484																		
									339	<LOD	180	590	404																		
									315	<LOD	192	666	373																		
NA	1323	20211215-Parrot-TA-G-1030		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**213**	<LOD	172	416	702																		
									206	<LOD	239	493	353																		
									236	<LOD	199	531	884																		
									218	<LOD	203	480	646																		
NA	1324	20211215-Parrot-TA-G-1031		Cell 5		Grab Sample from sideslope of TA, orange, Direct haul to MR	Approx 14-20 bgs	Yes	**730**	<LOD	157	776	202																		
									605	<LOD	138	728	512																		
									682	<LOD	136	718	220																		
									672	<LOD	144	741	311																		
NA	1325	20211215-Parrot-TA-G-1032		Cell 5		Grab Sample from sideslope of TA, orange, Direct haul to MR	Approx 14-20 bgs	Yes	**296**	<LOD	266	171	**1268**																		
									342	<LOD	254	196	**1020**																		
									354	<LOD	297	220	**1605**																		
									331	<LOD	272	196	**1298**																		
NA	1326	20211215-Parrot-TA-G-1033		Cell 5		Grab Sample from sideslope of TA, orange, Direct haul to MR	Approx 14-20 bgs	Yes	**480**	<LOD	202	114	806																		
									592	<LOD	207	137	723																		
									410	<LOD	217	165	590																		
									494	<LOD	209	139	706																		
NA	1327	20211216-Parrot-RK-C-1034		Cell 6	7 - 8 pt. composite samples were taken from the floor of cell 6.	8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	135	<LOD	525	161	464																		
									115	<LOD	518	190	410																		
									104	<LOD	388	175	319																		
									118	<LOD	477	175	398																		
NA	1328	20211216-Parrot-RK-C-1035		Cell 6		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	34	<LOD	209	36	247																		
									37	<LOD	227	35	261																		
									67	<LOD	325	75	301																		
									46	<LOD	254	49	270																		
NA	1329	20211216-Parrot-RK-C-1036		Cell 6		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	76	<LOD	209	67	174																		
									134	<LOD	296	68	203																		
									128	<LOD	255	85	193																		
									113	<LOD	253	73	190																		
NA	1330	20211216-Parrot-RK-C-1037		Cell 6		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	89	<LOD	247	53	218																		
									111	<LOD	237	56	224																		
									105	<LOD	258	60	194																		
									102	<LOD	247	56	212																		
NA	1331	20211216-Parrot-RK-C-1038		Cell 6		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	81	<LOD	472	114	359																		
									60	<LOD	434	97	411																		
									71	<LOD	360	103	327																		
									71	<LOD	422	105	366																		
NA	1332	20211216-Parrot-RK-C-1039		Cell 6		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	66	<LOD	359	169	310																		
									67	<LOD	282	55	297																		
									75	<LOD	334	61	336																		
									69	<LOD	325	95	314																		
NA	1333	20211216-Parrot-RK-C-1040		Cell 6		8 pt. Composite sample from Floor	Approx. 26 ft. bgs	Yes	110	<LOD	404	110	408																		
									134	<LOD	278	97	312																		
									74	<LOD	362	102	365																		
									106	<LOD	348	103	362																		
NA	1334	20211216-Parrot-RK-C-1040							110	<LOD	404	110	408																		
									134	<LOD	278	97	312																		
									74	<LOD	362	102	365																		
									106	<LOD	348	103	362																		
NA	1335	20211216-Parrot-DUP-1040							116	<LOD	389	107	402																		
									122	<LOD	357	101	361																		
									88	<LOD	380	127	390																		
									109	<LOD	375	112	384															102.5157	NA	107.8544	108.4142	106.2673
220309-4	1336	20211216-Parrot-LAB-1040	[Reserved for QA/QC]											77	15 U	285	119	347											72.64151	NA	81.89655	115.534	95.9447
NA	1337	20211216-Parrot-FieldBlank-1040							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1338	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
H21120610-001	E1339	20211216-Parrot-OB-G-1041		MR proposed backfill area	A trench approximately 900 ft long by 3 ft. wide by 5 ft. deep was dug to determine if the material within the proposed MR backfill area was viable fill for the excavation. 1 grab sample was taken per apprixiamately 150 ft. for a total of 6 grab samples.	Grab sample of OB from the trench sideslope	Approx. 0-5 ft.	Yes	<LOD	<LOD	**1269**	91	353	9	<LOD	**1280**	121	**322**											NA	NA	100.625	73.00275	105.9006
									<LOD	<LOD	**1299**	87	317																		
									<LOD	<LOD	**1296**	87	353																		
									<LOD	<LOD	**1288**	88	341																		
NA	1340	20211216-Parrot-OB-G-1042		MR proposed backfill area		Grab sample of OB from the trench sideslope	Approx. 0-5 ft.	Yes	<LOD	<LOD	**1212**	81	187																		
									<LOD	<LOD	**1362**	109	164																		
									<LOD	<LOD	**1266**	106	206																		
									<LOD	<LOD	**1280**	99	186																		
H21120610-002	E1341	20211216-Parrot-OB-G-1043		MR proposed backfill area		Grab sample of OB from the trench sideslope	Approx. 0-5 ft.	Yes	11	<LOD	**1575**	88	331	9	<LOD	**1520**	110	**303**											122.2222	NA	114.9781	86.36364	119.802
									<LOD	<LOD	**1849**	102	361																		
									<LOD	<LOD	**1819**	95	397																		
									11	<LOD	**1748**	95	363																		
NA	1342	20211216-Parrot-OB-G-1044		MR proposed backfill area		Grab sample of OB from the trench sideslope	Approx. 0-5 ft.	Yes	<LOD	<LOD	**1548**	113	511																		
									<LOD	<LOD	**1674**	222	525																		
									<LOD	<LOD	**1509**	89	501																		
									<LOD	<LOD	**1577**	141	512																		
NA	1343	20211216-Parrot-OB-G-1045		MR proposed backfill area		Grab sample of OB from the trench sideslope	Approx. 0-5 ft.	Yes	<LOD	<LOD	**1556**	103	630																		
									<LOD	<LOD	**1259**	113	512																		
									13	<LOD	**1372**	99	573																		
									13	<LOD	**1396**	105	572																		
H21120610-003	E1344	20211216-Parrot-OB-G-1046		MR proposed backfill area		Grab sample of OB from the trench sideslope	Approx. 0-5 ft.	Yes	17	<LOD	**1532**	73	454	17	<LOD	**1490**	125	**419**											100	NA	105.5034	63.46667	109.9443
									14	<LOD	**1600**	76	420																		
									20	<LOD	**1584**	89	508																		
									17	<LOD	**1572**	79	461																		

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1345	20211217-Parrot-TA-G-1047		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR.	Grab Sample from sideslope of TA, brown, Direct haul to MR	Approx 14-20 bgs	Yes	**698**	<LOD	341	751	878																				
									684	<LOD	470	751	**1581**																				
									607	<LOD	343	733	668																				
									663	<LOD	385	745	**1042**																				
NA	1346	20211217-Parrot-TA-G-1048		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**875**	<LOD	229	799	513																				
									624	<LOD	552	859	950																				
									614	<LOD	196	936	791																				
									704	<LOD	326	865	751																				
NA	1347	20211217-Parrot-TA-G-1049		Cell 5		Grab Sample from sideslope of TA, orange/gray, Direct haul to MR	Approx 14-20 bgs	Yes	**817**	<LOD	374	893	**1474**																				
									680	<LOD	252	717	**1050**																				
									740	<LOD	402	801	**3335**																				
									746	<LOD	343	804	**1953**																				
NA	1348	20211217-Parrot-TA-G-1050		Cell 5		Grab Sample from sideslope of TA, orange/gray, Direct haul to MR	Approx 14-20 bgs	Yes	**835**	<LOD	233	455	921																				
									842	<LOD	252	590	**2553**																				
									925	<LOD	227	430	**1120**																				
									867	<LOD	237	492	**1531**																				
NA	1349	20211217-Parrot-XconBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
220309-5	1350	SRM Lab Analysis (2710a)												**1484**	15 U	**3547**	**5547**	**4204**	1540	12.3	3420	5520	4180	96	NA	104	100	101					
NA	1351	20211217-Parrot-TA-G-1051		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR.	Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**503**	<LOD	416	**1199**	557																				
									553	<LOD	927	**1214**	474																				
									537	<LOD	531	974	474																				
									531	<LOD	625	**1129**	502																				
H21120542-001	E1352	20211220-Parrot-OB-G-1052		MR proposed backfill area	Fourteen samples (14) collected from several trenches approximately by 3 ft. wide by 5 ft. deep with varying lengths. These trenches were dug to determine if the material within the proposed MR backfill area was viable fill for the excavation.	Grab sample of OB from the east trench sideslope	Approx. 0-4 ft.	Yes	49	<LOD	211	209	109	54	<LOD	**242**	**208**	79										83.33333	NA	82.92011	91.1859	137.9747
									46	<LOD	177	173	79																				
									40	<LOD	214	187	139																				
									45	<LOD	201	190	109																				
H21120542-002	E1353	20211220-Parrot-OB-G-1053		MR proposed backfill area		Grab sample of OB from the east trench sideslope	Approx. 0-4 ft.	Yes	30	<LOD	305	125	146	44	<LOD	**408**	197	122											59.09091	NA	71.97712	64.46701	120.765
									27	<LOD	303	127	167																				
									21	<LOD	273	129	129																				
									26	<LOD	294	127	147																				
H21120542-003	E1354	20211220-Parrot-OB-G-1054		MR proposed backfill area		Grab sample of OB from the east trench sideslope	Approx. 0-4 ft.	Yes	14	<LOD	324	170	142	43	<LOD	**371**	**202**	118											47.28682	NA	107.4573	70.79208	126.2712
									20	<LOD	362	163	152																				
									27	<LOD	510	96	153																				
									20	<LOD	399	143	149																				
H21120542-004	E1355	20211220-Parrot-OB-G-1055		MR proposed backfill area		Grab sample of OB from the east trench sideslope	Approx. 0-4 ft.	Yes	36	<LOD	353	342	229	61	<LOD	**385**	**500**	179											56.28415	NA	91.86147	64	113.7803
									32	<LOD	387	306	200																				
									35	<LOD	321	312	182																				
									34	<LOD	354	320	204																				
H21120542-005	E1356	20211220-Parrot-OB-G-1056		MR proposed backfill area		Grab sample of OB from the east trench sideslope	Approx. 0-4 ft.	Yes	37	<LOD	263	226	178	49	<LOD	**316**	**263**	159											91.83673	NA	96.72996	86.69202	153.0398
									42	<LOD	282	237	181																				
									56	<LOD	372	221	371																				
									45	<LOD	306	228	243																				
H21120542-006	E1357	20211220-Parrot-OB-G-1057		MR proposed backfill area		Grab sample of OB from the north upper trench sideslope	Approx. 0-3 ft.	Yes	39	<LOD	487	128	162	50	<LOD	**561**	**348**	125											68.66667	NA	97.3262	38.40996	133.0667
									33	<LOD	543	134	165																				
									31	<LOD	608	139	172																				
									34	<LOD	546	134	166																				
H21120542-007	E1358	20211220-Parrot-OB-G-1058		MR proposed backfill area		Grab sample of OB from the north upper trench sideslope	Approx. 0-3 ft.	Yes	38	<LOD	605	254	169	47	<LOD	**555**	189	127											64.53901	NA	100.7207	114.6384	137.7953
									29	<LOD	537	135	176																				
									24	<LOD	535	261	180																				
									30	<LOD	559	217	175																				
H21120542-008	E1359	20211220-Parrot-OB-G-1059		MR proposed backfill area		Grab sample of OB from the north upper trench sideslope	Approx. 0-3 ft.	Yes	29	<LOD	538	164	168	44	<LOD	**547**	**200**	137											84.09091	NA	104.6923	93	126.2774
									32	<LOD	599	120	167																				
									50	<LOD	581	274	184																				
									37	<LOD	573	186	173																				
H21120542-009	E1360	20211220-Parrot-OB-G-1060		MR proposed backfill area		Grab sample of OB from the north upper trench sideslope	Approx. 0-3 ft.	Yes	31	<LOD	518	121	169	53	<LOD	**643**	**226**	179											72.32704	NA	84.55158	66.66667	104.4693
									47	<LOD	550	165	193																				
									37	<LOD	563	166	199																				
									38	<LOD	544	151	187																				
NA	1361	20211220-Parrot-OB-G-1065							<LOD	<LOD	**1931**	131	624																				
									19	<LOD	**1652**	100	529																				
									12	<LOD	**1801**	87	548																				
									16	<LOD	**1795**	106	567																				
NA	1362	20211220-Parrot-DUP-1065							17	<LOD	**1766**	91	545																				
									<LOD	<LOD	**1820**	114	531																				
									<LOD	<LOD	**1666**	93	453																				
									17	<LOD	**1751**	99	510															109.6774	NA	97.54829	93.71069	89.8883
220309-6	1363	20211220-Parrot-LAB-1065	[Reserved for QA/QC]											6 U	15 U	**1298**	132	423											NA	NA	72.32541	124.5283	74.60317
NA	1364	20211220-Parrot-FieldBlank-1060							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1365	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
H21120542-010	E1366	20211220-Parrot-OB-G-1061		MR proposed backfill area		Grab sample of OB from the north upper trench sideslope	Approx. 0-3 ft.	Yes	36	<LOD	467	116	154	50	<LOD	**454**	**354**	110											60.66667	NA	106.2408	45.10358	133.0303
									32	<LOD	498	222	144																				
									23	<LOD	482	141	141																				
									30	<LOD	482	160	146																				
NA	1367	20211220-Parrot-OB-G-1062		MR proposed backfill area		Grab sample of OB from the northwest lower trench sideslope	Approx. 0-3 ft.	Yes	15	<LOD	**1519**	81	406																				
									13	<LOD	**1722**	82	494																				
									13	<LOD	**1532**	101	415																				
									14	<LOD	**1591**	88	438																				
NA	1368	20211220-Parrot-OB-G-1063		MR proposed backfill area		Grab sample of OB from the northwest lower trench sideslope	Approx. 0-3 ft.	Yes	<LOD	<LOD	**1560**	84	368																				
									<LOD	<LOD	**1735**	92	354																				
									13	<LOD	**1527**	66	338																				
									13	<LOD	**1607**	81	353																				
NA	1369	20211220-Parrot-OB-G-1064		MR proposed backfill area		Grab sample of OB from the northwest lower trench sideslope	Approx. 0-3 ft.	Yes	<LOD	<LOD	**1200**	76	232																				
									<LOD	<LOD	**1331**	110	248																				
									<LOD	<LOD	**1391**	84	243																				
									<LOD	<LOD	**1307**	90	241																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1370	20211220-Parrot-OB-G-1065		MR proposed backfill area		Grab sample of OB from the northwest lower trench sideslope	Approx. 0-3 ft.	Yes	<LOD	<LOD	**1931**	131	624																				
									19	<LOD	**1652**	100	529																				
									12	<LOD	**1801**	87	548																				
									16	<LOD	**1795**	106	567																				
NA	1371	20211220-Parrot-TA-G-1066		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR.	Grab Sample from sideslope of TA, brown, Direct haul to MR	Approx 14-20 bgs	Yes	**571**	<LOD	224	805	333																				
									850	<LOD	248	871	457																				
									818	<LOD	361	724	341																				
									746	<LOD	278	800	377																				
NA	1372	20211220-Parrot-TA-G-1067		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**772**	<LOD	211	**1574**	**5318**																				
									761	<LOD	167	**1321**	592																				
									1029	<LOD	834	**1753**	934																				
									854	<LOD	404	**1549**	**2281**																				
NA	1373	20211220-Parrot-TA-G-1068		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**499**	<LOD	242	503	**2151**																				
									537	<LOD	433	428	677																				
									356	<LOD	193	496	**1125**																				
									464	<LOD	289	476	**1318**																				
NA	1374	20211220-Parrot-TA-G-1069		Cell 5		Grab Sample from sideslope of TA, brown, Direct haul to MR	Approx 14-20 bgs	Yes	**640**	<LOD	350	717	463																				
									726	<LOD	350	774	399																				
									643	<LOD	304	678	298																				
									670	<LOD	335	723	387																				
NA	1375	20211220-Parrot-TA-G-1070		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**268**	<LOD	187	405	256																				
									348	<LOD	384	309	659																				
									294	<LOD	195	265	699																				
									303	<LOD	255	326	538																				
H21120542-011	E1376	20211221-Parrot-ET-C-1071		ET Cover Placement-Shields Avenue	Two 8 pt. composite samples of the ET cover soil placement were taken.	8 pt. composite sample of ET cover soil	Surface Stockpile	Yes	11	<LOD	<LOD	<LOD	75	5	<LOD	22	11	56											193.3333	NA	NA	72.72727	128.5714
									10	<LOD	<LOD	<LOD	72																				
									8	<LOD	<LOD	8	69																				
									10	<LOD	<LOD	8	72																				
H21120542-012	E1377	20211221-Parrot-ET-C-1072		ET Cover Placement-Shields Avenue		8 pt. composite sample of ET cover soil	Surface Stockpile	Yes	9	<LOD	<LOD	10	80	10	<LOD	34	135	68										80	NA	NA	6.666667	114.7059
									7	<LOD	<LOD	8	81																				
									<LOD	<LOD	<LOD	9	73																				
									8	<LOD	<LOD	9	78																				
NA	1378	20211222-Parrot-TA-G-1073		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR and 5 composite samples were taken of the floor of cell 5.	Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**324**	<LOD	248	567	971																				
									354	<LOD	269	478	600																				
									315	<LOD	235	492	607																				
									331	<LOD	251	512	726																				
NA	1379	20211222-Parrot-TA-G-1074		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**293**	<LOD	226	480	662																				
									332	<LOD	237	519	547																				
									327	<LOD	258	696	562																				
									317	<LOD	240	565	590																				
NA	1380	20211222-Parrot-TA-G-1075		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**298**	<LOD	200	627	905																				
									337	<LOD	171	644	358																				
									349	<LOD	173	830	809																				
									328	<LOD	181	700	691																				
NA	1381	20211222-Parrot-TA-G-1076		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**418**	<LOD	209	620	272																				
									483	<LOD	238	564	284																				
									462	<LOD	253	624	377																				
									454	<LOD	233	603	311																				
NA	1382	20211222-Parrot-TA-G-1077		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**397**	<LOD	265	405	440																				
									402	<LOD	231	462	674																				
									464	<LOD	414	491	415																				
									421	<LOD	303	453	510																				
NA	1383	20211222-Parrot-RK-C-1078		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	**216**	<LOD	323	71	285																				
									149	<LOD	225	53	207																				
									187	<LOD	296	63	247																				
									184	<LOD	281	62	246																				
NA	1384	20211222-Parrot-RK-C-1079		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	**225**	<LOD	350	72	332																				
									240	<LOD	319	95	309																				
									258	<LOD	339	114	378																				
									241	<LOD	336	94	340																				
NA	1385	20211222-Parrot-RK-C-1080		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	194	<LOD	435	86	462																				
									170	<LOD	442	89	440																				
									174	<LOD	431	84	459																				
									179	<LOD	436	86	454																				
NA	1386	20211222-Parrot-RK-C-1080							194	<LOD	435	86	462																				
									170	<LOD	442	89	440																				
									174	<LOD	431	84	459																				
									179	<LOD	436	86	454																				
NA	1387	20211222-Parrot-DUP-1080							**229**	<LOD	470	107	586																				
									233	<LOD	470	104	486																				
									260	<LOD	467	92	483																				
									241	<LOD	469	101	518															134.2007	NA	107.5688	116.9884	114.2542
220309-7	1388	20211222-Parrot-LAB-1080	[Reserved for QA/QC]											136	15 U	417	91	405										75.83643	NA	95.6422	105.4054	89.27259
NA	1384	20211222-Parrot-FieldBlank-1080							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1385	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	1386	20211222-Parrot-RK-C-1081		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	**203**	<LOD	295	66	331																				
									259	<LOD	275	61	315																				
									266	<LOD	373	83	446																				
									243	<LOD	314	70	364																				
NA	1387	20211222-Parrot-RK-C-1082		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	**334**	<LOD	227	53	234																				
									372	<LOD	276	74	255																				
									368	<LOD	277	66	252																				
									358	<LOD	260	64	247																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1388	20211228-Parrot-TA-G-1083		Cell 5	5 grab samples of TA were taken from cell 5 to confirm waste was hauled to MR.	Grab Sample from sideslope of TA, brown, mix with the alluvium floor material. Direct haul to MR	Approx 14-20 bgs	Yes	50	<LOD	134	47	130																				
									64	<LOD	224	47	221																			
									45	<LOD	238	52	197																			
									53	<LOD	199	49	183																			
NA	1389	20211228-Parrot-TA-G-1084		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**285**	<LOD	248	514	526																			
									381	<LOD	412	586	376																			
									318	<LOD	273	546	414																			
									328	<LOD	311	549	439																			
NA	1390	20211228-Parrot-TA-G-1085		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**463**	<LOD	254	465	280																			
									421	<LOD	242	632	436																			
									301	<LOD	228	479	417																			
									395	<LOD	241	525	378																			
NA	1391	20211228-Parrot-TA-G-1086		Cell 5		Grab Sample from sideslope of TA, brown, mix with the alluvium floor material. Direct haul to MR	Approx 14-20 bgs	Yes	**380**	<LOD	291	494	614																			
									310	<LOD	286	554	346																			
									355	<LOD	267	494	769																			
									348	<LOD	281	514	576																			
NA	1392	20211228-Parrot-TA-G-1087		Cell 5		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**404**	<LOD	207	542	317																			
									295	<LOD	159	506	216																			
									429	<LOD	213	659	386																			
									376	<LOD	193	569	306																			
NA	1393	20211229-Parrot-RK-G-1088		Cell 5	5 Grab Samples from sideslope of TA removal area. Grabs consisted of alluvial floor material graded to meeting vertical extent/final grades. Active excavation consists of tailings/alluvial floor removal.	Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	62	<LOD	419	95	646																				
									67	<LOD	413	75	346																			
									76	<LOD	418	96	402																			
									68	<LOD	417	89	465																			
NA	1394	20211229-Parrot-RK-G-1089		Cell 5		Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	52	<LOD	368	74	349																			
									59	<LOD	429	103	347																			
									46	<LOD	392	85	378																			
									52	<LOD	396	87	358																			
NA	1395	20211229-Parrot-RK-G-1090		Cell 5		Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	90	<LOD	409	84	417																			
									100	<LOD	347	116	306																			
									98	<LOD	374	90	291																			
									96	<LOD	377	97	338																			
NA	1396	20211229-Parrot-RK-G-1091		Cell 5		Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	104	<LOD	489	264	664																			
									102	<LOD	518	219	708																			
									257	<LOD	532	315	601																			
									154	<LOD	513	266	658																			
NA	1397	20211229-Parrot-RK-G-1092		Cell 5		Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	**385**	<LOD	858	451	769																			
									549	<LOD	935	333	741																			
									433	<LOD	723	374	880																			
									456	<LOD	839	386	797																			
NA	1398	20220103-Parrot-TA-G-1093		Cell 5	5 Grab Samples from sideslope of TA removal area. Grabs consisted of alluvial floor material graded to meeting vertical extent/final grades. Active excavation consists of tailings/alluvial floor removal. 1 Additional grab sample was taken from the small excavation in the cell 5 west expansion.	Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	**803**	<LOD	609	921	731																			
									683	<LOD	573	793	617																			
									766	<LOD	539	885	682																			
									751	<LOD	574	866	677																			
NA	1399	20220103-Parrot-TA-G-1094		Cell 5		Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	**597**	<LOD	714	715	536																			
									716	<LOD	850	931	908																			
									422	<LOD	473	672	409																			
									578	<LOD	629	773	618																			
NA	1400	20220103-Parrot-TA-G-1095		Cell 5		Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	**389**	<LOD	558	476	720																			
									418	<LOD	621	512	628																			
									546	<LOD	756	747	867																			
									451	<LOD	645	578	738																			
NA	1401	20220103-Parrot-CY-G-1096		Cell 5		Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	**228**	<LOD	**1458**	365	**1193**																			
									252	<LOD	**1496**	364	**1393**																			
									228	<LOD	**1414**	319	**1033**																			
									236	<LOD	**1456**	349	**1206**																			
NA	1402	20220103-Parrot-RK-G-1097		Cell 5		Grab Sample from sideslope of TA removal area, dozer grading alluvium to TA area for removal to meet final grades, grab of graded alluvial material	Approx 14-20 bgs	Yes	**442**	<LOD	613	481	772																			
									269	<LOD	381	256	419																			
									298	<LOD	405	240	422																			
									336	<LOD	466	326	538																			
NA	1403	20220103-Parrot-TA-G-1098		Cell 5 West Expansion		Grab Sample from sideslope of TA removal area, small area to vertical extent	Approx 14-20 bgs	Yes	193	<LOD	42	479	**1049**																			
									147	<LOD	46	406	**1441**																			
									155	<LOD	104	354	705																			
									165	<LOD	64	413	**1065**																			
NA	1404	20220107-Parrot-TA-G-1099		Cell 5	5 Grab Samples from sideslope of TA removal area. Grabs consisted of alluvial floor material graded to meeting vertical extent/final grades. Active excavation consists of tailings/alluvial floor removal. 1 Additional grab sample was taken from the small excavation in the	Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	116	<LOD	342	124	484																			
									98	<LOD	335	132	284																			
									87	<LOD	328	99	320																			
									100	<LOD	335	118	363																			
NA	1405	20220107-Parrot-TA-G-1100		Cell 5		Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	158	<LOD	711	189	676																			
									156	<LOD	761	204	743																			
									122	<LOD	533	193	479																			
									145	<LOD	668	195	633																			
NA	1406	20220107-Parrot-TA-G-1100							158	<LOD	711	189	676																			
									156	<LOD	761	204	743																			
									122	<LOD	533	193	479																			
									145	<LOD	668	195	633																			
220309-8	1407	20220107-Parrot-DUP-1100							135	<LOD	487	168	418																			
									142	<LOD	510	234	553	92	15 U	371	204	404														
									135	<LOD	502	273	845																			
									137	<LOD	500	225	605																			
220309-9	1408	20220107-Parrot-LAB-1100	[Reserved for QA/QC]											98	15 U	407	145	431											94.49541	NA	74.76309	115.1877	95.67966
																													67.43119	NA	60.89776	74.23208	68.12434
220309-10	1409	20220107-Parrot-FieldBlank-1100							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	29 J	9 U	9 U														
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	1410	20220107-Parrot-Xcon-1100							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
220309-11	1411	SRM Lab Analysis (2710a)												**1446**	15U	**3506**	**5572**	**4279**	1540	12.3	3420	5520	4180	94	NA	103	101	102					

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1412	20220107-Parrot-TA-G-1101		Cell 5	5 Grab Samples from sideslope of TA removal area. Grabs consisted of alluvial floor material graded to meeting vertical extent/final grades. Active excavation consists of tailings/alluvial floor removal. 1 Additional grab sample was taken from the small excavation in the cell 5 west expansion.	Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	124	<LOD	404	235	439																					
									205	<LOD	318	245	677																			
									113	<LOD	314	261	593																			
									147	<LOD	345	247	570																			
NA	1413	20220107-Parrot-TA-G-1102		Cell 5		Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	165	<LOD	319	218	427																			
									83	<LOD	378	207	449																			
									97	<LOD	361	204	441																			
									115	<LOD	353	210	439																			
NA	1414	20220107-Parrot-TA-G-1103		Cell 5		Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	36	<LOD	488	83	413																			
									46	<LOD	516	89	468																			
									125	<LOD	622	130	473																			
									69	<LOD	542	101	451																			
NA	1415	20220107-Parrot-TA-G-1104		Cell 5 West Expansion		Grab Sample from sideslope of OB, Direct haul to MR	Approx 14-20 bgs	Yes	**595**	<LOD	299	653	410																			
									482	<LOD	274	526	262																			
									484	<LOD	386	549	805																			
									520	<LOD	320	576	492																			
NA	1416	20220110-Parrot-RK-C-1105		Cell 5	5 grab samples of TA were taken from cell 5 west expansion to confirm waste was hauled to MR and 9 composite samples were taken of the floor of cell 5.	8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	140	<LOD	199	78	225																			
									117	<LOD	161	63	160																			
									96	<LOD	167	56	157																			
									118	<LOD	176	66	181																			
NA	1417	20220110-Parrot-RK-C-1106		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	150	<LOD	181	122	241																			
									120	<LOD	178	117	187																			
									118	<LOD	191	108	198																			
									129	<LOD	183	116	209																			
NA	1418	20220110-Parrot-RK-C-1107		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	140	<LOD	184	39	141																			
									95	<LOD	197	54	201																			
									101	<LOD	188	39	182																			
									112	<LOD	190	44	175																			
NA	1419	20220110-Parrot-RK-C-1108		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	49	<LOD	196	30	169																			
									45	<LOD	173	31	167																			
									42	<LOD	205	42	213																			
									45	<LOD	191	34	183																			
NA	1420	20220110-Parrot-RK-C-1109		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	45	<LOD	136	48	143																			
									67	<LOD	147	65	165																			
									49	<LOD	164	37	109																			
									54	<LOD	149	50	139																			
NA	1421	20220110-Parrot-RK-C-1110		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	53	<LOD	202	55	383																			
									47	<LOD	193	57	166																			
									72	<LOD	254	67	208																			
									57	<LOD	216	60	252																			
NA	1422	20220110-Parrot-RK-C-1111		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	47	<LOD	242	89	183																			
									43	<LOD	200	99	197																			
									45	<LOD	178	59	168																			
									45	<LOD	207	82	183																			
NA	1423	20220110-Parrot-RK-C-1112		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	27	<LOD	102	23	101																			
									28	<LOD	129	23	100																			
									60	<LOD	157	30	141																			
									38	<LOD	129	25	114																			
NA	1424	20220110-Parrot-RK-C-1113		Cell 5		8 pt. Composite sample from Floor	Approx. 26 ft bgs	Yes	21	<LOD	111	46	95																			
									35	<LOD	107	47	125																			
									22	<LOD	100	33	105																			
									26	<LOD	106	42	108																			
NA	1425	20220110-Parrot-CY-G-1114		Cell 5 West Expansion		Grab Sample from sideslope of CY, Black, Direct haul to MR	Approx 14-20 bgs	Yes	151	<LOD	**1329**	181	544																			
									139	<LOD	**1890**	118	767																			
									247	<LOD	**2426**	273	879																			
									179	<LOD	**1882**	191	730																			
NA	1426	20220110-Parrot-TA-G-1115		Cell 5 West Expansion		Grab Sample from sideslope of TA, Orange, Direct haul to MR	Approx 14-20 bgs	Yes	**782**	<LOD	178	457	147																			
									796	<LOD	196	483	136																			
									783	<LOD	214	470	141																			
									787	<LOD	196	470	141																			
NA	1427	20220110-Parrot-TA-G-1116		Cell 5 West Expansion		Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	**413**	<LOD	238	361	261																			
									576	<LOD	224	435	166																			
									539	<LOD	238	425	156																			
									509	<LOD	233	407	194																			
NA	1428	20220110-Parrot-TA-G-1117		Cell 5 West Expansion		Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	**746**	<LOD	240	510	233																			
									741	<LOD	254	494	285																			
									765	<LOD	263	448	271																			
									751	<LOD	252	484	263																			
NA	1429	20220110-Parrot-TA-G-1118		Cell 5 West Expansion		Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	**423**	<LOD	**1592**	903	605																			
									472	<LOD	550	847	539																			
									461	<LOD	608	858	575																			
									452	<LOD	917	869	573																			
NA	1430	20220112-Parrot-TA-G-1119		Cell 5 West Expansion	5 grab samples of TA/CY/RK were taken from Cell 5 West Expansion to confirm waste was hauled to MR.	Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	186	<LOD	182	463	150																			
									195	<LOD	125	473	151																			
									213	<LOD	186	452	164																			
									198	<LOD	164	463	155																			
NA	1431	20220112-Parrot-TA-G-1120		Cell 5 West Expansion		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	172	<LOD	193	519	318																			
									198	<LOD	221	455	327																			
									203	<LOD	209	448	318																			
									191	<LOD	208	474	321																			
NA	1432	20220112-Parrot-TA-G-1120							172	<LOD	193	519	318																			
									198	<LOD	221	455	327																			
									203	<LOD	209	448	318																			
									191	<LOD	208	474	321																			
220309-12	1433	20220112-Parrot-DUP-1120							198	<LOD	212	438	229																			
									191	<LOD	198	464	213	**309**	15 U	299	657	597														
									191	<LOD	185	454	251																			
									193	<LOD	198	452	231																			
220309-13	1434	20220112-Parrot-LAB-1120												**297**	15 U	275	604	507											159.8276	NA	150.7563	145.354	258.4416
																													155.4974	NA	132.4238	127.4262	157.9439
220309-14	1435	20220112-Parrot-FieldBlank-1120							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	26 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1436	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	1437	20220112-Parrot-CY-G-1121		Cell 5 West Expansion	5 grab samples of TA/CY/RK were taken from Cell 5 West Expansion to confirm waste was hauled to MR.	Grab Sample from sideslope of CY, black, Direct haul to MR	Approx 14-20 bgs	Yes	172	<LOD	402	50	573																				
									252	<LOD	567	86	906																				
									208	<LOD	464	69	758																				
									211	<LOD	478	68	746																				
NA	1438	20220112-Parrot-TA-G-1122		Cell 5 West Expansion		Grab Sample from sideslope of TA, orange, Direct haul to MR	Approx 14-20 bgs	Yes	85	<LOD	277	64	199																				
									87	<LOD	231	99	178																				
									101	<LOD	265	85	285																				
									91	<LOD	258	83	221																				
NA	1439	20220112-Parrot-RK-G-1123		Cell 5 West Expansion		Grab Sample from sideslope of mixed TA/RK, Brown, Direct haul to MR	Approx 14-20 bgs	Yes	135	<LOD	755	261	494																				
									67	<LOD	558	143	291																				
									96	<LOD	457	156	274																				
									99	<LOD	590	187	353																				
NA	1440	20220114-Parrot-TA-G-1124		Cell 5 West Expansion	5 grab samples of TA//OB/Surface (top of tailings) were taken from Cell 5 West Expansion to confirm waste was hauled to MR.	Grab Sample from sideslope of TA, orange, Direct haul to MR	Approx 14-20 bgs	Yes	155	<LOD	173	296	235																				
									143	<LOD	203	328	211																				
									169	<LOD	158	332	167																				
									156	<LOD	178	319	204																				
NA	1441	20220114-Parrot-TA-G-1125		Cell 5 West Expansion		Grab Sample from surface of TA/OB (top of tailings), brown, Direct haul to MR	Surface	Yes	38	<LOD	281	163	239																				
									37	<LOD	247	147	231																				
									35	<LOD	224	158	211																				
									37	<LOD	251	156	227																				
NA	1442	20220114-Parrot-TA-G-1126		Cell 5 West Expansion		Grab Sample from surface of TA/OB (top of tailings), brown, Direct haul to MR	Surface	Yes	66	<LOD	222	271	310																				
									66	<LOD	196	254	366																				
									117	<LOD	263	283	472																				
									83	<LOD	227	269	383																				
NA	1443	20220114-Parrot-TA-G-1127		Cell 5 West Expansion		Grab Sample from sideslope of TA, orange, Direct haul to MR	Approx 14-20 bgs	Yes	**1054**	<LOD	183	561	150																				
									1064	<LOD	196	572	160																				
									1131	<LOD	160	459	89																				
									1083	<LOD	180	531	133																				
NA	1444	20220114-Parrot-TA-G-1128		Cell 5 West Expansion		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 14-20 bgs	Yes	**379**	<LOD	166	766	453																				
									393	<LOD	143	769	478																				
									452	<LOD	159	696	451																				
									408	<LOD	156	744	461																				
NA	1445	20220117-Parrot-TA-G-1129		Cell 5 West Expansion	5 grab samples of TA//OB/Surface (top of tailings) were taken from Cell 5 West Expansion to confirm waste was hauled to MR.	Grab Sample from sideslope of TA, orange, Direct haul to MR	Approx 0-8 bgs	Yes	187	<LOD	139	470	904																				
									186	<LOD	109	441	614																				
									176	<LOD	138	498	667																				
									183	<LOD	129	470	728																				
NA	1446	20220117-Parrot-TA-G-1130		Cell 5 West Expansion		Grab Sample from sideslope of TA, white, Direct haul to MR	Approx 0-8 bgs	Yes	193	<LOD	101	509	604																				
									345	<LOD	165	520	**1150**																				
									266	<LOD	308	617	**1082**																				
									268	<LOD	191	549	945																				
NA	1447	20220117-Parrot-TA-G-1131		Cell 5 West Expansion		Grab Sample from sideslope of TA, yellow, Direct haul to MR	Approx 0-8 bgs	Yes	173	<LOD	242	668	682																				
									110	<LOD	143	649	985																				
									115	<LOD	143	576	941																				
									133	<LOD	176	631	869																				
NA	1448	20220117-Parrot-CY-G-1132		Cell 5 West Expansion		Grab Sample from sideslope of CY, black, Direct haul to MR	Approx 0-8 bgs	Yes	90	12	336	115	**1203**																				
									101	<LOD	312	156	**1220**																				
									144	11	273	124	**2654**																				
									112	12	307	132	**1692**																				
NA	1449	20220117-Parrot-RK-G-1133		Cell 5 West Expansion		Grab Sample from sideslope of RK, Gray, Direct haul to MR	Approx 0-8 bgs	Yes	16	8	582	94	720																				
									<LOD	<LOD	654	98	753																				
									19	<LOD	702	104	776																				
									18	8	646	99	750																				
NA	1450	20220119-Parrot-TA-G-1134		Cell 5 West Expansion	5 grab samples of TA were taken from the sideslope of Cell 5 West expansion to confirm waste was routed to MR	Grab Sample from side slope of TA, yellow, Direct haul to MR	Approx. 0-12 bgs	Yes	**215**	<LOD	220	538	849																				
									253	<LOD	201	632	698																				
									218	<LOD	198	565	**2160**																				
									229	<LOD	206	578	**1236**																				
NA	1451	20220119-Parrot-TA-G-1135		Cell 5 West Expansion		Grab Sample from side slope of TA, brown, Direct haul to MR	Approx. 0-12 bgs	Yes	**501**	<LOD	203	666	760																				
									423	<LOD	196	748	786																				
									535	<LOD	255	803	799																				
									486	<LOD	218	739	782																				
NA	1452	20220119-Parrot-TA-G-1136		Cell 5 West Expansion		Grab Sample from side slope of TA, brown, Direct haul to MR	Approx. 0-12 bgs	Yes	**569**	<LOD	273	610	560																				
									505	<LOD	358	501	575																				
									620	<LOD	354	684	966																				
									565	<LOD	328	598	700																				
NA	1453	20220119-Parrot-TA-G-1137		Cell 5 West Expansion		Grab Sample from side slope of TA, yellow, Direct haul to MR	Approx. 0-12 bgs	Yes	**226**	<LOD	248	635	512																				
									252	<LOD	205	676	555																				
									248	<LOD	202	532	**1196**																				
									242	<LOD	218	614	754																				
NA	1454	20220119-Parrot-TA-G-1138		Cell 5 West Expansion		Grab Sample from side slope of TA, orange, Direct haul to MR	Approx. 0-12 bgs	Yes	**411**	<LOD	157	769	851																				
									273	<LOD	153	700	496																				
									298	<LOD	162	825	523																				
									327	<LOD	157	765	623																				
NA	1455	20220120-Parrot-RK-C-1139		Cell 5 West Expansion	6 - 8 pt. composite samples were taken from the floor of cell 5 west expansion	8 pt. Composite sample from Floor	Approx. 20 ft bgs	Yes	32	<LOD	980	89	712																				
									28	<LOD	**1270**	99	**1158**																				
									17	<LOD	**1125**	199	935																				
									26	<LOD	**1125**	129	935																				
NA	1456	20220120-Parrot-RK-C-1140		Cell 5 West Expansion		8 pt. Composite sample from Floor	Approx. 20 ft bgs	Yes	53	<LOD	**1468**	40	577																				
									52	<LOD	**1296**	50	548																				
									42	<LOD	**1434**	42	519																				
									49	<LOD	**1399**	44	548																				
NA	1457	20220120-Parrot-RK-C-1140							53	<LOD	**1468**	40	577																				
									52	<LOD	**1296**	50	548																				
									42	<LOD	**1434**	42	519																				
									49	<LOD	**1399**	44	548																				
NA	1458	20220120-Parrot-DUP-1140							54	<LOD	**1502**	53	540																				
									65	<LOD	**2019**	42	629																				
									52	<LOD	**1624**	43	24																				
									57	<LOD	**1715**	46	398																			116.3265	NA	122.5584	104.5455	72.56691
220309-15	1459	20220120-Parrot-LAB-1140	[Reserved for QA/QC]											40	15 U	**1145**	72	480											81.63265	NA	81.82468	163.6364	87.59124

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1460	20220120-Parrot-FieldBlank-1140							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	1461	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																														
																			107	54.1	140	1400	414									
NA	1462	20220120-Parrot-RK-C-1141		Cell 5 West Expansion	6 - 8 pt. composite samples were taken from the floor of cell 5 west expansion	8 pt. Composite sample from Floor	Approx. 20 ft bgs	Yes	77	<LOD	**1248**	55	539																			
									101	<LOD	**1258**	83	562																			
									76	<LOD	**1422**	47	531																			
									85	<LOD	**1309**	62	544																			
NA	1463	20220120-Parrot-RK-C-1142		Cell 5 West Expansion		8 pt. Composite sample from Floor	Approx. 20 ft bgs	Yes	75	<LOD	**1256**	59	513																			
									80	<LOD	**1232**	59	473																			
									51	<LOD	895	37	406																			
									69	<LOD	**1128**	52	464																			
NA	1464	20220120-Parrot-RK-C-1143		Cell 5 West Expansion		8 pt. Composite sample from Floor	Approx. 20 ft bgs	Yes	117	<LOD	**1001**	104	550																			
									146	<LOD	**1017**	81	582																			
									100	<LOD	895	76	488																			
									121	<LOD	971	87	540																			
NA	1465	20220120-Parrot-RK-C-1144		Cell 5 West Expansion		8 pt. Composite sample from Floor	Approx. 20 ft bgs	Yes	46	<LOD	**1916**	87	439																			
									58	<LOD	**2552**	149	592																			
									44	<LOD	**2205**	113	536																			
									49	<LOD	**2224**	116	522																			
NA	1466	20220125-MR-OB-C-1145		MR Borrow Area - Lunchroom Dump	Seven (7) 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	35	<LOD	392	212	193																			
									26	<LOD	422	250	180																			
									29	<LOD	387	220	177																			
									30	<LOD	400	227	183																			
NA	1467	20220125-MR-OB-C-1146		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	68	<LOD	236	509	195																			
									<LOD	<LOD	188	633	155																			
									34	<LOD	222	390	173																			
									51	<LOD	215	511	174																			
NA	1468	20220125-MR-OB-C-1147		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	45	<LOD	639	403	189																			
									33	<LOD	298	390	164																			
									33	<LOD	260	397	177																			
									37	<LOD	399	397	177																			
NA	1469	20220125-MR-OB-C-1148		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	33	<LOD	374	234	191																			
									33	<LOD	393	251	209																			
									25	<LOD	405	302	197																			
									30	<LOD	391	262	199																			
NA	1470	20220125-MR-OB-C-1149		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	23	<LOD	211	320	146																			
									26	<LOD	249	479	167																			
									<LOD	<LOD	228	351	149																			
									25	<LOD	229	383	154																			
NA	1471	20220125-MR-OB-C-1150		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	36	<LOD	344	214	157																			
									44	<LOD	363	233	216																			
									44	<LOD	348	229	191																			
									41	<LOD	352	225	188																			
NA	1472	20220125-Parrot-Xcon-1150							<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
220309-16	1473	SRM Lab Analysis (2710a)												**1471**	15 U	**3566**	**5597**	**4248**	1540	12.3	3420	5520	4180	96	NA	104	101	102					
NA	1474	20220125-MR-OB-C-1151		MR Borrow Area - Lunchroom Dump	Seven (7) 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	45	<LOD	245	298	210																			
									46	<LOD	207	337	190																			
									39	<LOD	215	276	218																			
									43	<LOD	222	304	206																			
NA	1475	20220126-MR-OB-C-1152		MR Borrow Area - Lunchroom Dump	Thirteen (13) 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	54	<LOD	545	218	203																			
									38	<LOD	393	176	201																			
									37	<LOD	450	73	206																			
									43	<LOD	463	156	203																			
NA	1476	20220127-MR-OB-C-1153		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	39	<LOD	282	158	140																			
									48	<LOD	252	186	169																			
									48	<LOD	437	184	184																			
									45	<LOD	324	176	164																			
NA	1477	20220127-MR-OB-C-1154		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	37	<LOD	209	249	205																			
									34	<LOD	268	269	224																			
									38	<LOD	215	213	195																			
									36	<LOD	231	244	208																			
NA	1478	20220127-MR-OB-C-1155		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	21	<LOD	**1231**	81	217																			
									26	<LOD	768	140	210																			
									28	<LOD	821	170	208																			
									25	<LOD	940	130	212																			
NA	1479	20220127-MR-OB-C-1156		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	30	<LOD	278	269	244																			
									30	<LOD	209	304	213																			
									18	<LOD	204	237	173																			
									26	<LOD	230	270	210																			
NA	1480	20220127-MR-OB-C-1157		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	19	<LOD	398	238	157																			
									36	<LOD	410	118	170																			
									32	<LOD	654	183	209																			
									29	<LOD	487	180	179																			
NA	1481	20220127-MR-OB-C-1158		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	24	<LOD	355	154	163																			
									33	<LOD	522	110	189																			
									80	<LOD	694	382	169																			
									46	<LOD	524	215	174																			
NA	1482	20220127-MR-OB-C-1159		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	38	<LOD	285	237	242																			
									34	<LOD	293	345	254																			
									29	<LOD	280	254	267																			
									34	<LOD	286	279	254																			
NA	1483	20220127-MR-OB-C-1160		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	45	<LOD	195	157	123																			
									53	<LOD	220	183	138																			
									39	<LOD	192	195	115																			
									46	<LOD	202	178	125																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1484	20220127-MR-OB-C-1160							45	<LOD	195	157	123																				
									53	<LOD	220	183	138																				
									39	<LOD	192	195	115																				
									46	<LOD	202	178	125																				
NA	1485	20220127-MR-DUP-1160							35	<LOD	214	490	97																				
									34	<LOD	253	189	130																				
									30	<LOD	219	216	119																				
									33	<LOD	229	298	115																				
220309-17	1486	20220127-Parrot-LAB-1160	[Reserved for QA/QC]											29	15 U	212	261	102											72.26277	NA	113.0148	167.2897	92.02128
																													63.50365	NA	104.7776	146.3551	81.38298
NA	1487	20220127-Parrot-FieldBlank-1160							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1488	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	1489	20220127-MR-OB-C-1161		MR Borrow Area - Lunchroom Dump	Thirteen (13) 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	39	<LOD	268	140	141																					
									36	<LOD	300	154	144																				
									36	<LOD	333	134	150																				
									37	<LOD	300	143	145																				
NA	1490	20220127-MR-OB-C-1162		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	49	<LOD	221	157	125																			
									39	<LOD	241	162	143																				
									37	<LOD	218	176	117																				
									42	<LOD	227	165	128																				
NA	1491	20220127-MR-OB-C-1163		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	37	<LOD	273	185	136																			
									45	<LOD	253	264	150																				
									50	<LOD	286	192	182																				
									44	<LOD	271	214	156																				
NA	1492	20220127-MR-OB-C-1164		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft.	0-8 ft bgs	Yes	33	<LOD	497	195	174																			
									37	<LOD	482	152	195																				
									36	<LOD	459	197	172																				
									35	<LOD	479	181	180																				
NA	1493	20220211-MR-OB-C-1165		MR Borrow Area - Lunchroom Dump	Six (6) 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	34	<LOD	550	165	202																					
									28	<LOD	493	184	184																				
									47	<LOD	477	243	215																				
									36	<LOD	507	197	200																				
NA	1494	20220211-MR-OB-C-1166		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	37	<LOD	465	242	167																			
									42	<LOD	409	149	164																				
									34	<LOD	368	145	163																				
									38	<LOD	414	179	165																				
NA	1495	20220211-MR-OB-C-1167		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	48	<LOD	317	189	133																			
									46	<LOD	345	129	176																				
									41	<LOD	313	166	148																				
									45	<LOD	325	161	152																				
NA	1496	20220211-MR-OB-C-1168		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	30	<LOD	307	146	163																			
									32	<LOD	372	124	160																				
									26	<LOD	355	121	164																				
									29	<LOD	345	130	162																				
NA	1497	20220211-MR-OB-C-1169		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	37	<LOD	365	136	211																			
									42	<LOD	382	145	194																				
									27	<LOD	363	186	181																				
									35	<LOD	370	156	195																				
NA	1498	20220211-MR-OB-C-1170		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	52	<LOD	214	165	145																			
									62	<LOD	196	187	126																				
									33	<LOD	193	209	121																				
									49	<LOD	201	187	131																				
NA	1499	20220301-MR-OB-C-1171		MR Borrow Area - Lunchroom Dump	Seventeen (17) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	40	<LOD	310	183	263																					
									36	<LOD	246	260	196																				
									43	<LOD	305	192	259																				
									40	<LOD	287	212	239																				
NA	1500	20220301-MR-OB-C-1172		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	25	<LOD	246	115	138																			
									42	<LOD	268	168	182																				
									23	<LOD	293	187	197																				
									30	<LOD	269	157	172																				
NA	1501	20220301-MR-OB-C-1173		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	<LOD	<LOD	232	236	126																			
									25	<LOD	185	120	117																				
									36	<LOD	171	128	106																				
									31	<LOD	196	161	116																				
NA	1502	20220301-MR-OB-C-1174		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	24	<LOD	248	158	237																			
									32	<LOD	299	125	283																				
									29	<LOD	248	125	268																				
									28	<LOD	265	136	263																				
NA	1503	20220301-MR-OB-C-1175		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	31	<LOD	224	133	158																			
									29	<LOD	244	117	158																				
									44	<LOD	213	473	134																				
									35	<LOD	227	241	150																				
NA	1504	20220301-MR-OB-C-1176		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	46	<LOD	375	149	244																			
									36	<LOD	436	183	203																				
									37	<LOD	512	223	228																				
									40	<LOD	441	185	225																				
NA	1505	20220301-MR-OB-C-1177		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	27	<LOD	404	393	167																			
									51	<LOD	385	238	202																				
									35	<LOD	343	137	156																				
									38	<LOD	377	256	175																				
NA	1506	20220301-MR-OB-C-1178		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	49	<LOD	627	166	259																			
									107	<LOD	668	320	262																				
									31	<LOD	591	144	235																				
									62	<LOD	629	210	252																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1507	20220301-MR-OB-C-1179		MR Borrow Area - Lunchroom Dump	Seventeen (17) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	36	<LOD	737	113	201																					
									44	<LOD	735	204	244																				
									41	<LOD	668	135	191																				
									40	<LOD	713	151	212																				
NA	1508	20220301-MR-OB-C-1180		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	35	<LOD	332	181	280																			
									44	<LOD	401	150	327																				
									37	<LOD	324	218	256																				
									39	<LOD	352	183	288																				
NA	1509	20220301-MR-OB-C-1180							35	<LOD	332	181	280																				
									44	<LOD	401	150	327																				
									37	<LOD	324	218	256																				
									39	<LOD	352	183	288																				
NA	1510	20220301-MR-DUP-1180							18	<LOD	331	176	266																				
									37	<LOD	380	151	252																				
									40	<LOD	350	147	273																				
									32	<LOD	354	158	264																			81.89655	NA	100.3784	86.3388	91.65701
220309-18	1511	20220301-Parrot-LAB-1180	[Reserved for QA/QC]											35	15 U	287	230	203														90.51724	NA	81.45695	125.6831	70.56779
NA	1512	20220301-Parrot-FieldBlank-1180							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1513	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	1514	20220301-MR-OB-C-1181		MR Borrow Area - Lunchroom Dump	Seventeen (17) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	59	<LOD	285	148	226																					
									41	<LOD	231	189	235																				
									38	<LOD	242	164	170																				
									46	<LOD	253	167	210																				
NA	1515	20220301-MR-OB-C-1182		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	43	<LOD	292	225	170																			
									43	<LOD	284	231	169																				
									37	<LOD	323	163	180																				
									41	<LOD	300	206	173																				
NA	1516	20220301-MR-OB-C-1183		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	37	<LOD	276	131	168																			
									128	<LOD	288	176	149																				
									35	<LOD	288	210	142																				
									67	<LOD	284	172	153																				
NA	1517	20220301-MR-OB-C-1184		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	37	<LOD	506	155	212																			
									39	<LOD	469	152	194																				
									50	<LOD	560	436	211																				
									42	<LOD	512	248	206																				
NA	1518	20220301-MR-OB-C-1185		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	43	<LOD	739	128	210																			
									40	<LOD	586	130	224																				
									39	<LOD	685	133	238																				
									41	<LOD	670	130	224																				
NA	1519	20220301-MR-OB-C-1186		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	42	<LOD	260	226	174																			
									50	<LOD	206	226	137																				
									53	<LOD	229	184	149																				
									48	<LOD	232	212	153																				
NA	1520	20220301-MR-OB-C-1187		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	42	<LOD	455	164	171																			
									27	<LOD	389	163	142																				
									29	<LOD	391	137	152																				
									33	<LOD	412	155	155																				
NA	1521	20220303-MR-OB-C-1188		MR Borrow Area - Lunchroom Dump	Seventeen (17) 8-pt. composite samples and one (1) grab were taken from fourteen sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	28	<LOD	634	159	251																					
									51	<LOD	605	283	230																				
									39	<LOD	661	183	245																				
									39	<LOD	633	208	242																				
NA	1522	20220303-MR-OB-C-1189		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	23	<LOD	393	186	164																			
									37	<LOD	460	153	184																				
									45	<LOD	428	158	190																				
									35	<LOD	427	166	179																				
NA	1523	20220303-MR-OB-C-1190		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	61	<LOD	157	284	192																			
									61	<LOD	166	373	167																				
									40	<LOD	147	286	139																				
									54	<LOD	157	314	166																				
NA	1524	20220303-MR-OB-C-1191		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	55	<LOD	367	334	273																			
									41	<LOD	338	314	254																				
									59	<LOD	394	288	300																				
									52	<LOD	366	312	276																				
NA	1525	20220303-MR-OB-C-1192		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	29	<LOD	477	214	230																			
									45	<LOD	438	197	238																				
									46	<LOD	469	203	260																				
									40	<LOD	461	205	243																				
NA	1526	20220303-MR-OB-C-1193		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	43	<LOD	459	166	246																			
									35	<LOD	390	182	218																				
									45	<LOD	412	225	222																				
									41	<LOD	420	191	229																				
NA	1527	20220303-MR-OB-C-1194		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	39	<LOD	331	130	174																			
									49	<LOD	403	384	181																				
									41	<LOD	327	120	180																				
									43	<LOD	354	211	178																				
NA	1528	20220303-MR-OB-C-1195		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	35	<LOD	308	682	194																			
									28	<LOD	296	302	189																				
									40	<LOD	279	278	176																				
									34	<LOD	294	421	186																				
NA	1529	20220303-MR-OB-C-1196		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	36	<LOD	269	416	416																			
									26	<LOD	241	351	171																				
									22	<LOD	252	359	153																				
									28	<LOD	254	375	247																				
NA	1530	20220303-MR-OB-C-1197		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	37	<LOD	271	501	251																			
									57	<LOD	285	406	183																				
									40	<LOD	189	407	171																				
									45	<LOD	248	438	202																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1531	20220303-MR-OB-C-1198		MR Borrow Area - Lunchroom Dump	Seventeen (17) 8-pt. composite samples and one (1) grab were taken from fourteen sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	30	<LOD	170	300	139																				
									44	<LOD	172	304	151																				
									44	<LOD	166	257	152																				
									39	<LOD	169	287	147																				
NA	1532	20220303-MR-OB-C-1199		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	62	<LOD	**1034**	248	**1322**																				
									55	<LOD	**1092**	239	**1110**																				
									91	<LOD	865	624	940																				
									69	<LOD	997	370	**1124**																				
NA	1533	20220303-MR-OB-C-1200		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	29	<LOD	344	124	303																				
									29	<LOD	356	151	366																				
									30	<LOD	421	127	388																				
									29	<LOD	374	134	352																				
NA	1534	20220303-MR-OB-C-1200							29	<LOD	344	124	303																				
									29	<LOD	356	151	366																				
									30	<LOD	421	127	388																				
									29	<LOD	374	134	352																				
220309-19	1535	20220303-MR-DUP-1200							33	<LOD	362	136	497																				
									29	<LOD	594	132	533	31	15 U	338	195	341															
									33	<LOD	421	210	450																				
									32	<LOD	459	159	493																			97.89474	NA	73.63834	122.3849	69.12162
220309-20	1536	20220303-Parrot-LAB-1200	[Reserved for QA/QC]											32	15 U	355	178	347														109.0909	NA	95.00446	132.8358	98.48628
220309-21	1537	20220303-Parrot-FieldBlank-1200							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	20 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1538	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	1539	20220303-Parrot-XconBlank							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
220309-22	1540	SRM Lab Analysis (2710a)												**1466**	15 U	**3517**	**5571**	**4147**	1540	12.3	3420	5520	4180	95	NA	103	101	99					
NA	1541	20220303-MR-OB-C-1201		MR Borrow Area - Lunchroom Dump	Seventeen (17) 8-pt. composite samples and one (1) grab were taken from fourteen sampling trenches at the MR "Lunchroom Dump" borrow source. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	26	<LOD	694	152	438																				
									22	<LOD	817	157	515																				
									17	<LOD	898	121	477																				
									22	<LOD	803	143	477																				
NA	1542	20220303-MR-OB-C-1202		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	<LOD	<LOD	632	289	231																				
									36	<LOD	728	157	297																				
									28	<LOD	523	152	265																				
									32	<LOD	628	199	264																				
NA	1543	20220303-MR-OB-C-1203		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	30	<LOD	397	142	154																				
									35	<LOD	340	570	151																				
									21	<LOD	368	194	153																				
									29	<LOD	368	302	153																				
NA	1544	20220303-MR-OB-C-1204		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	<LOD	<LOD	**1518**	86	478																				
									12	<LOD	**1141**	73	398																				
									11	<LOD	**1260**	67	418																				
									12	<LOD	**1306**	75	431																				
NA	1545	20220303-MR-OB-C-1205		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 2nd Cut	0-8 ft bgs	Yes	11	<LOD	**1051**	45	252																				
									12	<LOD	**1065**	46	210																				
									<LOD	<LOD	**1120**	100	235																				
									12	<LOD	**1079**	64	232																				
NA	1546	20220303-MR-OB-C-1206		MR Borrow Area - Lunchroom Dump		Grab of Grey Clay Deposit with north side of trench associated with 1192	0-4 ft bgs	Yes	28	<LOD	**1052**	323	**3789**																				
									32	11	**1071**	218	**3418**																				
									<LOD	<LOD	813	250	**2874**																				
									30	11	979	264	**3360**																				
NA	1547	20220311-MR-OB-C-1207		MR Borrow Area - Lunchroom Dump	One 8- point composite of the face of Grid 1199 was taken to confirm that routing of soils was required. Five (5) 10-point composite samples, one (1) 3-point composite sample, and one (1) 2-point composite samples were taken from Grid "1199" to route soils appropriately. One (1) grab sample of clay was taken.	8 Pt. composite sample from the face of grid 1199	0-8 ft bgs	Yes	35	<LOD	550	190	188																				
									34	<LOD	461	130	171																				
									50	<LOD	574	229	173																				
									40	<LOD	528	183	177																				
NA	1548	20220311-MR-OB-C-1208		MR Borrow Area - Lunchroom Dump		10 Pt. Composite sample from Grid 1199 to Cell 5	0-8 ft bgs	Yes	42	<LOD	477	172	164																				
									45	<LOD	504	151	165																				
									37	<LOD	490	186	163																				
									41	<LOD	490	170	164																				
NA	1549	20220311-MR-OB-C-1209		MR Borrow Area - Lunchroom Dump		10 Pt. Composite sample from Grid 1199 to MR	0-8 ft bgs	Yes	47	<LOD	**1093**	251	869																				
									67	<LOD	**1408**	349	1000																				
									46	<LOD	**1146**	201	678																				
									53	<LOD	**1216**	267	849																				
NA	1550	20220311-MR-OB-C-1210		MR Borrow Area - Lunchroom Dump		10 Pt. Composite sample from Grid 1199 to Cell 5	0-8 ft bgs	Yes	36	<LOD	520	182	185																				
									40	<LOD	490	150	163																				
									32	<LOD	489	147	168																				
									36	<LOD	500	160	172																				
NA	1551	20220311-MR-OB-C-1211		MR Borrow Area - Lunchroom Dump		10 Pt. Composite sample from Grid 1199 to Cell 5	0-8 ft bgs	Yes	52	<LOD	544	404	196																				
									46	<LOD	500	142	162																				
									26	<LOD	646	215	203																				
									41	<LOD	563	254	187																				
NA	1552	20220311-MR-OB-C-1212		MR Borrow Area - Lunchroom Dump		10 Pt. Composite sample from Grid 1199 to Cell 5	0-8 ft bgs	Yes	41	<LOD	630	220	374																				
									36	<LOD	654	247	365																				
									35	<LOD	861	163	292																				
									37	<LOD	715	210	344																				
NA	1553	20220311-MR-OB-C-1213		MR Borrow Area - Lunchroom Dump		3 Pt. Composite sample from Grid 1199 to Cell 5	0-8 ft bgs	Yes	31	<LOD	460	181	270																				
									42	<LOD	435	171	399																				
									111	<LOD	527	**1078**	322																				
									61	<LOD	474	477	330																				
NA	1554	20220311-MR-OB-C-1214		MR Borrow Area - Lunchroom Dump		2 Pt. Composite sample from Grid 1199 to MR	0-8 ft bgs	Yes	77	<LOD	**1518**	297	**1106**																				
									65	<LOD	989	239	**1119**																				
									75	<LOD	885	228	**1414**																				
									72	<LOD	**1131**	255	**1213**																				
NA	1555	20220311-MR-CY-G-1215		MR Borrow Area - Lunchroom Dump		Grab of Grey Clay Deposit from Grid 1199	8 ft bgs	Yes	27	<LOD	826	229	351																				
									36	<LOD	**1034**	236	936																				
									20	<LOD	**1012**	153	271																				
									28	<LOD	957	206	519																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
H22030510-001	E1556	20220318-Parrot-ET-C-1216		ET Stockpile West Face	Two 8- point composite samples were taken from the South and West face of the ET Cover Stockpile	8 pt Composite of ET Cover Soil	Surface	Yes	10	<LOD	<LOD	11	84	7	<LOD	26	11	63											157.1429	NA	115.3846	100	134.9206
									9	<LOD	30	13	90																			
									14	<LOD	<LOD	9	81																				
									11	<LOD	30	11	85																			
H22030510-002	E1557	20220318-Parrot-ET-C-1217		ET Stockpile South Face		8 pt Composite of ET Cover Soil	Surface	Yes	12	<LOD	<LOD	<LOD	75	10	<LOD	70	31	112											106.6667	NA	NA	35.48387	69.94048
									10	<LOD	<LOD	11	83																				
									10	<LOD	<LOD	<LOD	77																				
									11	<LOD	<LOD	11	78																				
NA	1558	20220411-Parrot-OB-C-1218		East Water Line Excavation	One 10-point composite sample was taken from the East Water Line Excavation	10 pt Composite of OB	0-8 ft bgs	Yes	138	<LOD	594	418	410																			
									139	<LOD	584	438	349																			
									150	<LOD	700	495	405																			
									142	<LOD	626	450	388																			
NA	1559	20220421-MR-OB-C-1219		MR Borrow Area - Lunchroom Dump	Thirteen (13) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source 3rd lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	39	<LOD	369	235	182																			
									42	<LOD	395	149	192																			
									40	<LOD	341	144	190																			
									40	<LOD	368	176	188																			
NA	1560	20220421-MR-OB-C-1220		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	39	<LOD	198	213	130																			
									34	<LOD	195	145	111																			
									43	<LOD	191	207	137																			
									39	<LOD	195	188	126																			
NA	1561	20220421-MR-OB-C-1220							39	<LOD	198	213	130																			
									34	<LOD	195	145	111																			
									43	<LOD	191	207	137																			
									39	<LOD	195	188	126																			
221205-1	1562	20220421-DUP-1220							40	<LOD	197	236	137	41	15 U	219	236	113															
									47	<LOD	223	440	152																			
									40	<LOD	229	187	155																			
									42	<LOD	216	288	148															96.85039	NA	101.2327	82.0394	76.35135
221205-2	1563	20220421-LAB-1220	[Reserved for QA/QC]											38	15 U	202	253	106											98.27586	NA	103.7671	134.3363	84.12698
221205-3	1564	20220421-FieldBlank-1220							<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	28 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
									<LOD	<LOD	<LOD	<LOD	<LOD																			
NA	1565	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																														
																			107	54.1	140	1400	414									
NA	1566	20220421-MR-OB-C-1221		MR Borrow Area - Lunchroom Dump	Thirteen (13) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source 3rd lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	39	<LOD	636	119	354																			
									40	<LOD	844	180	394																			
									33	<LOD	862	219	378																			
									37	<LOD	781	173	375																			
NA	1567	20220421-MR-OB-C-1222		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	44	<LOD	310	164	177																			
									33	<LOD	361	158	171																			
									39	<LOD	420	245	194																			
									39	<LOD	364	189	181																			
NA	1568	20220421-MR-OB-C-1223		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	31	<LOD	381	181	299																			
									33	<LOD	520	218	307																			
									31	<LOD	403	185	287																			
									32	<LOD	435	195	298																			
NA	1569	20220421-MR-OB-C-1224		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	42	<LOD	166	211	314																			
									35	<LOD	175	210	332																			
									44	<LOD	154	237	328																			
									40	<LOD	165	219	325																			
NA	1570	20220421-MR-OB-C-1225		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	33	<LOD	686	245	278																			
									48	<LOD	588	154	271																			
									32	<LOD	684	156	292																			
									38	<LOD	653	185	280																			
NA	1571	20220421-MR-OB-C-1226		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	32	<LOD	510	165	204																			
									43	<LOD	512	136	181																			
									38	<LOD	598	120	211																			
									38	<LOD	540	140	199																			
NA	1572	20220421-MR-OB-C-1227		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	38	<LOD	626	172	205																			
									28	<LOD	637	144	206																			
									36	<LOD	665	165	190																			
									34	<LOD	643	160	200																			
NA	1573	20220421-MR-OB-C-1228		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	25	<LOD	810	111	441																			
									20	<LOD	784	176	486																			
									23	<LOD	703	184	382																			
									23	<LOD	766	157	436																			
NA	1574	20220421-MR-OB-C-1229		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	40	<LOD	692	163	256																			
									39	<LOD	608	144	209																			
									41	<LOD	604	171	241																			
									40	<LOD	635	159	235																			
NA	1575	20220421-MR-OB-C-1230		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	32	<LOD	505	112	194																			
									40	<LOD	576	137	188																			
									30	<LOD	498	137	170																			
									34	<LOD	526	129	184																			
NA	1576	20220421-MR-OB-C-1231		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	37	<LOD	410	175	196																			
									41	<LOD	404	157	170																			
									27	<LOD	443	198	190																			
									35	<LOD	419	177	185																			
NA	1577	20220426-MR-OB-C-1232		MR Borrow Area - Lunchroom Dump	Twenty-four (24) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source 3rd lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	23	<LOD	**1196**	115	503																			
									<LOD	<LOD	**1388**	140	526																			
									44	<LOD	**1040**	128	457																			
									34	<LOD	**1208**	128	495																			
NA	1578	20220426-MR-OB-C-1233		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	33	<LOD	867	175	386																			
									33	<LOD	879	225	397																			
									41	<LOD	**1003**	232	416																			
									36	<LOD	916	211	400																			
NA	1579	20220426-MR-OB-C-1234		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	52	<LOD	984	237	**1025**																			
									44	<LOD	**1024**	201	941																			
									56	<LOD	935	246	908																			
									51	<LOD	981	228	958																			

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1580	20220426-MR-OB-C-1235		MR Borrow Area - Lunchroom Dump	Twenty-four (24) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source 3rd lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	31	<LOD	**1157**	121	715																					
									26	<LOD	**1022**	140	607																			
									31	<LOD	**1079**	152	695																			
									29	<LOD	**1086**	138	672																			
NA	1581	20220426-MR-OB-C-1236		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	24	<LOD	489	226	221																			
									24	<LOD	639	234	243																			
									18	<LOD	463	223	194																			
									22	<LOD	530	228	219																			
NA	1582	20220426-MR-OB-C-1237		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	33	<LOD	395	314	229																			
									18	<LOD	443	306	251																			
									25	<LOD	606	323	260																			
									25	<LOD	481	314	247																			
NA	1583	20220426-MR-OB-C-1238		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	48	<LOD	450	456	142																			
									28	<LOD	439	161	174																			
									32	<LOD	406	158	153																			
									36	<LOD	432	258	156																			
NA	1584	20220426-MR-OB-C-1239		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	32	<LOD	450	133	160																			
									42	<LOD	591	138	199																			
									38	<LOD	496	166	195																			
									37	<LOD	512	146	185																			
NA	1585	20220426-MR-OB-C-1240		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	38	<LOD	438	173	165																			
									34	<LOD	491	248	188																			
									39	<LOD	468	144	187																			
									37	<LOD	466	188	180																			
NA	1586	20220426-MR-OB-C-1240							38	<LOD	438	173	165																			
									34	<LOD	491	248	188																			
									39	<LOD	468	144	187																			
									37	<LOD	466	188	180																			
NA	1587	20220426-DUP-1240							46	<LOD	485	160	193																			
									42	<LOD	441	184	192																			
									41	<LOD	487	208	196																			
									43	<LOD	471	184	194															116.2162	NA	101.1453	97.69912	107.5926
221205-4	1588	20220426-LAB-1240												36	15 U	415	211	149											97.2973	NA	89.11954	112.0354	82.77778
NA	1589	20220426-FieldBlank-1240							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1590	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	1591	20220426-MR-OB-C-1241		MR Borrow Area - Lunchroom Dump	Twenty-four (24) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source 3rd lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	29	<LOD	398	424	177																					
									31	<LOD	389	156	171																			
									35	<LOD	368	150	170																			
									32	<LOD	385	243	173																			
NA	1592	20220426-MR-OB-C-1242		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	42	<LOD	488	203	227																			
									43	<LOD	412	131	187																			
									38	<LOD	427	162	193																			
									41	<LOD	442	165	202																			
NA	1593	20220426-MR-OB-C-1243		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	39	<LOD	297	160	178																			
									67	<LOD	405	413	194																			
									30	<LOD	363	143	178																			
									45	<LOD	355	239	183																			
NA	1594	20220426-MR-OB-C-1244		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	58	<LOD	472	199	220																			
									38	<LOD	424	141	193																			
									38	<LOD	413	115	183																			
									45	<LOD	436	152	199																			
NA	1595	20220426-MR-OB-C-1245		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	28	<LOD	394	402	171																			
									50	<LOD	373	176	167																			
									37	<LOD	325	181	159																			
									38	<LOD	364	253	166																			
NA	1596	20220426-MR-OB-C-1246		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	26	<LOD	214	149	132																			
									29	<LOD	273	141	142																			
									31	<LOD	220	121	136																			
									29	<LOD	236	137	137																			
NA	1597	20220426-MR-OB-C-1247		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	31	<LOD	189	129	146																			
									51	<LOD	237	133	137																			
									34	<LOD	238	137	175																			
									39	<LOD	221	133	153																			
NA	1598	20220426-MR-OB-C-1248		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	<LOD	<LOD	278	251	150																			
									36	<LOD	259	119	154																			
									21	<LOD	240	143	129																			
									29	<LOD	259	171	144																			
NA	1599	20220426-MR-OB-C-1249		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	<LOD	<LOD	247	295	259																			
									44	<LOD	272	351	271																			
									30	<LOD	279	202	355																			
									37	<LOD	266	283	295																			
NA	1600	20220426-MR-OB-C-1250		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	25	<LOD	298	125	166																			
									33	<LOD	302	189	188																			
									38	<LOD	367	115	178																			
									32	<LOD	322	143	177																			
NA	1601	20220426-parrot-xcon-1250							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
221205-5	1602	SRM Lab Analysis (2711a)												80	34 J	152	**1453**	422	107	54.1	140	1400	414	75		109	104	102					

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1603	20220426-MR-OB-C-1251		MR Borrow Area - Lunchroom Dump	Twenty-four (24) 8-pt. composite samples were taken from nine sampling trenches at the MR "Lunchroom Dump" borrow source 3rd lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	26	<LOD	301	137	151																					
									28	<LOD	268	209	133																				
									31	<LOD	229	99	132																				
									28	<LOD	266	148	139																				
NA	1604	20220426-MR-OB-C-1252		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	43	<LOD	202	178	113																			
									54	<LOD	202	224	117																				
									44	<LOD	199	236	128																				
									47	<LOD	201	213	119																				
NA	1605	20220426-MR-OB-C-1253		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	<LOD	<LOD	166	586	92																			
									35	<LOD	181	241	107																				
									38	<LOD	165	171	87																				
									37	<LOD	171	333	95																				
NA	1606	20220426-MR-OB-C-1254		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	<LOD	<LOD	456	323	178																			
									70	<LOD	370	269	170																				
									57	<LOD	494	222	189																				
									64	<LOD	440	271	179																				
NA	1607	20220426-MR-OB-C-1255		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 3rd Cut	0-8 ft bgs	Yes	33	<LOD	451	128	170																			
									32	<LOD	456	158	166																				
									68	<LOD	443	250	176																				
									44	<LOD	450	179	171																				
NA	1608	20220519-MR-OB-C-1256		MR Borrow Area - Lunchroom Dump	Twenty-four (24) 8-pt. composite samples and two (2) Grab samples were taken from fourteen (14) sampling trenches at the MR "Lunchroom Dump" borrow source 4th lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	36	<LOD	408	138	192																					
									25	<LOD	421	175	181																				
									41	<LOD	475	151	202																				
									34	<LOD	435	155	192																				
NA	1609	20220519-MR-OB-C-1257		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	46	<LOD	165	163	95																			
									37	<LOD	143	166	107																				
									53	<LOD	178	208	99																				
									45	<LOD	162	179	100																				
NA	1610	20220519-MR-OB-C-1258		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	41	<LOD	198	236	144																			
									29	<LOD	188	249	135																				
									46	<LOD	225	193	134																				
									39	<LOD	204	226	138																				
NA	1611	20220519-MR-OB-C-1259		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	20	<LOD	**1142**	149	457																			
									17	<LOD	**1202**	137	480																				
									24	<LOD	**1040**	111	405																				
									20	<LOD	**1128**	132	447																				
NA	1612	20220519-MR-OB-C-1260		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	30	<LOD	367	149	145																			
									39	<LOD	390	203	173																				
									34	<LOD	361	144	171																				
									34	<LOD	373	165	163																				
									35	<LOD	359	152	165																				
NA	1613	20220519-MR-OB-C-1260							30	<LOD	367	149	145																				
									39	<LOD	390	203	173																				
									34	<LOD	361	144	171																				
									34	<LOD	373	165	163																				
NA	1614	20220519-MR-DUP-1260							36	<LOD	365	186	164																				
									33	<LOD	381	119	166																				
									36	<LOD	330	150	165																				
									35	<LOD	359	152	165															101.9417	NA	96.24329	91.73387	101.227
221205-6	1615	20220519-LAB-1260												36	15 U	352	199	148											104.8544	NA	94.45438	120.3629	90.79755
NA	1616	20220519-MR-FieldBlank-1260							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1617	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	1618	20220519-MR-OB-C-1261		MR Borrow Area - Lunchroom Dump	Twenty-four (24) 8-pt. composite samples and two (2) Grab samples were taken from fourteen (14) sampling trenches at the MR "Lunchroom Dump" borrow source 4th lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	37	<LOD	250	237	136																					
									59	<LOD	244	220	118																				
									24	<LOD	183	139	119																				
									40	<LOD	226	199	124																				
NA	1619	20220519-MR-OB-C-1262		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	29	<LOD	451	167	206																			
									20	<LOD	295	158	200																				
									19	<LOD	516	223	186																				
									23	<LOD	421	183	197																				
NA	1620	20220519-MR-OB-C-1263		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	29	<LOD	318	198	214																			
									17	<LOD	393	174	259																				
									34	<LOD	313	167	201																				
									27	<LOD	341	180	225																				
NA	1621	20220519-MR-OB-C-1264		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	28	<LOD	234	202	261																			
									25	<LOD	286	189	297																				
									46	<LOD	269	290	257																				
									33	<LOD	263	227	272																				
NA	1622	20220519-MR-OB-C-1265		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	34	<LOD	260	234	228																			
									32	<LOD	278	134	187																				
									39	<LOD	361	136	202																				
									35	<LOD	300	168	206																				
NA	1623	20220519-MR-OB-C-1266		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	59	<LOD	219	282	114																			
									41	<LOD	197	178	133																				
									50	<LOD	247	208	139																				
									50	<LOD	221	223	129																				
NA	1624	20220519-MR-OB-C-1267		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	35	<LOD	295	155	178																			
									31	<LOD	284	200	170																				
									26	<LOD	282	157	174																				
									31	<LOD	287	171	174																				
NA	1625	20220519-MR-OB-C-1268		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	39	<LOD	283	154	294																			
									33	<LOD	360	212	270																				
									<LOD	<LOD	427	641	309																				
									36	<LOD	357	336	291																				
NA	1626	20220519-MR-OB-C-1269		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	31	<LOD	278	223	351																			
									32	<LOD	290	165	280																				
									41	<LOD	312	226	308																				
									35	<LOD	293	205	313																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1627	20220519-MR-OB-C-1270		MR Borrow Area - Lunchroom Dump	Twenty-four (24) 8-pt. composite samples and two (2) Grab samples were taken from fourteen (14) sampling trenches at the MR "Lunchroom Dump" borrow source 4th lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	33	<LOD	597	352	227																				
									40	<LOD	744	178	279																				
									38	<LOD	719	198	342																				
									37	<LOD	687	243	283																				
NA	1628	20220519-MR-OB-C-1271		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	40	<LOD	641	128	215																				
									43	<LOD	640	161	257																				
									31	<LOD	588	114	232																				
									38	<LOD	623	134	235																				
NA	1629	20220519-MR-OB-C-1272		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	30	<LOD	494	132	193																				
									49	<LOD	545	186	188																				
									20	<LOD	231	57	186																				
									33	<LOD	423	125	189																				
NA	1630	20220519-MR-OB-G-1273		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	11	<LOD	**2152**	89	352																				
									23	<LOD	**2303**	115	373																				
									16	<LOD	**2110**	88	371																				
									17	<LOD	**2188**	97	365																				
NA	1631	20220519-MR-OB-G-1274		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	11	<LOD	**1324**	55	**1095**																				
									15	<LOD	**1458**	72	907																				
									<LOD	<LOD	**1436**	113	907																				
									13	<LOD	**1406**	80	970																				
NA	1632	20220519-MR-OB-C-1275		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	45	<LOD	678	222	235																				
									30	<LOD	539	106	168																				
									32	<LOD	555	130	198																				
									36	<LOD	591	153	200																				
NA	1633	20220519-MR-OB-C-1276		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	37	<LOD	647	134	221																				
									33	<LOD	801	186	225																				
									41	<LOD	590	145	217																				
									37	<LOD	679	155	221																				
NA	1634	20220519-MR-OB-C-1277		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	30	<LOD	440	185	188																				
									42	<LOD	445	112	225																				
									34	<LOD	478	162	175																				
									35	<LOD	454	153	196																				
NA	1635	20220519-MR-OB-C-1278		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	21	<LOD	**4548**	111	605																				
									<LOD	<LOD	**3586**	157	531																				
									29	<LOD	**3092**	117	446																				
									25	<LOD	**3742**	128	527																				
NA	1636	20220519-MR-OB-C-1279		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	38	<LOD	**1801**	160	371																				
									45	<LOD	**1118**	232	252																				
									42	<LOD	**1035**	229	264																				
									42	<LOD	**1318**	207	296																				
NA	1637	20220519-MR-OB-C-1280		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	29	<LOD	**1570**	143	452																				
									<LOD	<LOD	**1880**	145	666																				
									23	<LOD	**1096**	131	377																				
									26	<LOD	**1515**	140	498																				
NA	1638	20220519-MR-OB-C-1280							29	<LOD	**1570**	143	452																				
									<LOD	<LOD	**1880**	145	666																				
									23	<LOD	**1096**	131	377																				
									26	<LOD	**1515**	140	498																				
NA	1639	20220519-MR-DUP-1280							20	<LOD	**1712**	136	427																				
									19	<LOD	**1871**	112	474																				
									27	<LOD	**1586**	123	461																				
									22	<LOD	**1723**	124	454																				
221205-7	1640	20220519-LAB-1280												21	15 U	**1,138**	138	389											95.65217	NA	157.208	94.40204	120.4244
																													95.45455	NA	66.04759	111.5903	85.68282
NA	1641	20220519-MR-FieldBlank-1280							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1642	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	1643	20220519-MR-OB-C-1281		MR Borrow Area - Lunchroom Dump	Twenty-four (24) 8-pt. composite samples and two (2) Grab samples were taken from fourteen (14) sampling trenches at the MR	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	<LOD	<LOD	**1743**	157	375																				
									13	<LOD	**2169**	91	329																				
									13	<LOD	**1845**	94	329																				
									13	<LOD	**1919**	114	344																				
NA	1644	20220601-Parrot-TA-G-1282		West Expansion Continuation	Five (5) grab samples were taken from the "pie" area north of civic center road.	Grab sample from first cut of TA	0-11 ft. bgs	Yes	72	<LOD	285	349	**1535**																				
									135	<LOD	325	462	**1180**																				
									216	<LOD	274	44	968																				
									141	<LOD	295	285	**1228**																				
NA	1645	20220601-Parrot-TA-G-1283		West Expansion Continuation		Grab sample from first cut of TA	0-11 ft. bgs	Yes	61	<LOD	985	431	986																				
									51	<LOD	393	345	959																				
									109	<LOD	428	654	846																				
									74	<LOD	602	477	930																				
NA	1646	20220601-Parrot-TA-G-1284		West Expansion Continuation		Grab sample from first cut of TA	0-11 ft. bgs	Yes	**218**	<LOD	228	628	691																				
									206	<LOD	211	676	677																				
									166	<LOD	224	677	528																				
									197	<LOD	221	660	632																				
NA	1647	20220601-Parrot-CY-G-1285		West Expansion Continuation		Grab sample from Clay layer in first cut of TA	0-11 ft. bgs	Yes	<LOD	12	494	256	**2012**																				
									<LOD	13	44	246	**1973**																				
									15	15	423	235	**2168**																				
									15	13	320	246	**2051**																				
NA	1648	20220601-Parrot-TA-G-1286		West Expansion Continuation		Grab sample from first cut of TA	0-11 ft. bgs	Yes	**528**	<LOD	281	496	742																				
									485	<LOD	414	684	601																				
									420	<LOD	373	461	560																				
									478	<LOD	356	547	634																				
NA	1649	20220603-Parrot-TA-G-1287		West Expansion	Five (5) grab samples were taken from the area south of civic center road adjacent to old job trailer location.	Grab sample from first cut of TA	0-14 ft. bgs	Yes	**260**	<LOD	415	286	**1127**																				
									316	<LOD	286	316	768																				
									244	<LOD	272	292	770																				
									273	<LOD	324	298	888																				
NA	1650	20220603-Parrot-TA-G-1288		West Expansion		Grab sample from first cut of TA	0-14 ft. bgs	Yes	**266**	<LOD	240	485	691																				
									293	<LOD	207	537	695																				
									333	<LOD	242	522	566																				
									297	<LOD	230	515	651																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1651	20220603-Parrot-TA-G-1289		West Expansion	Five (5) grab samples were taken from the area south of civic center road adjacent to old job trailer location.	Grab sample from first cut of TA	0-14 ft. bgs	Yes	**228**	<LOD	218	579	963																				
									211	<LOD	139	440	250																				
									253	<LOD	187	504	262																				
									231	<LOD	181	508	492																				
NA	1652	20220603-Parrot-TA-G-1290		West Expansion		Grab sample from first cut of TA	0-14 ft. bgs	Yes	**281**	<LOD	185	632	217																				
									282	<LOD	208	674	218																				
									302	<LOD	206	528	248																				
									288	<LOD	200	611	228																				
NA	1653	20220603-Parrot-TA-G-1291		West Expansion		Grab sample from first cut of TA	0-14 ft. bgs	Yes	187	<LOD	451	364	464																				
									208	<LOD	513	508	681																				
									202	<LOD	525	420	539																				
									199	<LOD	496	431	561																				
NA	1654	20220606-Parrot-TA-G-1292		West Expansion	Three (3) grab samples were taken from the area south of civic center road adjacent to old job trailer location.	Grab sample from first cut of TA	0-14 ft. bgs	Yes	**215**	<LOD	691	275	**1048**																				
									229	<LOD	614	349	987																				
									237	<LOD	766	382	697																				
									227	<LOD	690	335	911																				
NA	1655	20220606-Parrot-TA-G-1293		West Expansion		Grab sample from first cut of TA	0-14 ft. bgs	Yes	**528**	<LOD	427	469	718																				
									629	<LOD	439	331	675																				
									575	<LOD	409	302	697																				
									577	<LOD	425	367	697																				
NA	1656	20220606-Parrot-TA-G-1294		West Expansion		Grab sample from first cut of TA	0-14 ft. bgs	Yes	**314**	<LOD	227	703	383																				
									245	<LOD	192	582	442																				
									255	<LOD	206	551	337																				
									271	<LOD	208	612	387																				
H22060592-001	E1657	20220615-Parrot-ET-C-1295		2nd Street ET Area	Four (4) composite samples were taken two ET placement areas and one ET stockpile. Those samples were split, with gallon bags being sent to Energy labs for analysis and the splits analyzed in the job trailer.	8 pt. composite sample from ET Area	Surface	Yes	10	<LOD	<LOD	<LOD	83	3	<LOD	19	10	53											311.1111	NA	NA	NA	176.7296
									10	<LOD	<LOD	<LOD	99																				
									8	<LOD	<LOD	<LOD	99																				
									9	<LOD	<LOD	<LOD	94																				
H22060592-002	E1658	20220615-Parrot-ET-C-1296		Phase 2A Interim		8 pt. composite sample from ET Area	Surface	Yes	9	<LOD	<LOD	<LOD	82	3	<LOD	17	11	50											355.5556	NA	NA	81.81818	179.3333
									11	8	<LOD	9	83																				
									12	<LOD	<LOD	<LOD	104																				
									11	8	<LOD	9	90																				
H22060592-003	E1659	20220615-Parrot-ET-C-1297		Phase 2C Interim Stockpile		8 pt. composite sample from ET Stockpile - South	Surface	Yes	8	<LOD	<LOD	10	93	3	<LOD	17	12	50											300	NA	NA	129.1667	190
									8	<LOD	<LOD	21	94																				
									11	<LOD	<LOD	<LOD	98																				
									9	<LOD	<LOD	16	95																				
H22060592-004	E1660	20220615-Parrot-ET-C-1298		Phase 2C Interim Stockpile		8 pt. composite sample from ET Stockpile - North	Surface	Yes	7	<LOD	<LOD	9	88	3	<LOD	16	16	53											255.5556	NA	NA	50	170.4403
									9	<LOD	<LOD	7	92																				
									7	<LOD	<LOD	<LOD	91																				
									8	<LOD	<LOD	8	90																				
NA	1661	20220624-Parrot-TA-G-1299		West Expansion	Five (5) grab samples of TA were taken from the old job trailer location	Grab sample from first cut of TA, Orange	0-14 ft. bgs	Yes	**394**	<LOD	176	536	476																				
									391	<LOD	208	647	374																				
									343	<LOD	166	557	439																				
									376	<LOD	183	580	430																				
NA	1662	20220624-Parrot-TA-G-1300		West Expansion		Grab sample from first cut of TA, Yellow	0-14 ft. bgs	Yes	193	<LOD	255	705	**1101**																				
									187	<LOD	232	774	635																				
									167	<LOD	210	723	849																				
									182	<LOD	232	734	862																				
NA	1663	20220624-Parrot-TA-G-1300							193	<LOD	255	705	**1101**																				
									187	<LOD	232	774	635																				
									167	<LOD	210	723	849																				
									182	<LOD	232	734	862																				
221205-8	1664	20220624-Parrot-DUP-1300							164	7	219	718	865	118	15 U	**236**	**785**	**1729**															
									144	<LOD	235	677	**1028**																				
									103	<LOD	207	741	**1017**																				
									137	7	220	712	970															86.13139	NA	107.1104	110.2528	178.2474
221205-9	1665	20220624-Parrot-LAB-1300	[Reserved for QA/QC]											162	15 U	247	829	935											88.84826	NA	106.3128	112.9428	108.5106
221205-10	1666	20220624-Parrot-FieldBlank-1300							<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	28 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1667	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414	0	0	0	0	0					
NA	1668	20220624-Parrot-XconBlank-1300							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
221205-11	1669	SRM Lab Analysis (2711a)												68	44 J	151	**1482**	424	107	54.1	140	1400	414	64	NA	108	106	102					
NA	1670	20220624-Parrot-TA-G-1301		West Expansion	Five (5) grab samples of TA were taken from the old job trailer location	Grab sample from first cut of TA, White	0-14 ft. bgs	Yes	125	<LOD	129	321	**1162**																				
									161	<LOD	119	400	**1008**																				
									156	<LOD	118	347	**1163**																				
									147	<LOD	122	356	**1111**																				
NA	1671	20220624-Parrot-TA-G-1302		West Expansion		Grab sample from first cut of TA	0-14 ft. bgs	Yes	**404**	<LOD	306	708	786																				
									249	<LOD	254	602	655																				
									357	<LOD	318	790	**1164**																				
									337	<LOD	293	700	868																				
NA	1672	20220624-Parrot-TA-G-1303		West Expansion		Grab sample from first cut of TA	0-14 ft. bgs	Yes	34	**67**	663	68	**5297**																				
									32	**107**	597	77	**4134**																				
									29	**93**	883	82	**4457**																				
									32	**89**	714	76	**4629**																				
NA	1673	20220627-Parrot-RK-C-1304		West Expansion	Floor grid samples of of the west expansion tailings removal area. To be filled by MR barrow material.	8 pt. Composite sample from Floor	14 ft. bgs	Yes	118	9	465	128	412																				
									108	<LOD	539	141	424																				
									108	<LOD	502	106	332																				
									111	9	502	125	389																				
NA	1674	20220627-Parrot-RK-C-1305		West Expansion		8 pt. Composite sample from Floor	14 ft. bgs	Yes	116	<LOD	895	176	494																				
									120	<LOD	**1143**	164	567																				
									187	<LOD	990	278	514																				
									141	<LOD	**1009**	206	525																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1675	20220629-MR-OB-C-1306		MR Borrow Area - Lunchroom Dump	Six (6) 8-pt. composite samples were taken from three sampling trenches at the MR "Lunchroom Dump" borrow source 4th lift. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	51	<LOD	256	325	143																					
									56	<LOD	253	359	146																				
									45	<LOD	212	485	142																				
									51	<LOD	240	390	144																				
NA	1676	20220629-MR-OB-C-1307		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	46	<LOD	443	205	193																			
									38	<LOD	393	187	206																				
									43	<LOD	519	191	224																				
									42	<LOD	452	194	208																				
NA	1677	20220629-MR-OB-C-1308		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	59	<LOD	315	209	361																			
									41	<LOD	456	187	445																				
									46	<LOD	264	288	257																				
									49	<LOD	345	228	354																				
NA	1678	20220629-MR-OB-C-1309		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	35	<LOD	487	161	324																			
									42	<LOD	263	176	297																				
									<LOD	<LOD	304	602	278																				
									39	<LOD	351	313	300																				
NA	1679	20220629-MR-OB-C-1310		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	44	<LOD	385	216	286																			
									29	<LOD	309	471	255																				
									41	<LOD	391	152	268																				
									38	<LOD	362	280	270																				
NA	1680	20220629-MR-OB-C-1311		MR Borrow Area - Lunchroom Dump		8 Pt. composite sample from sample trenches - 4 each 0-4 ft. and 0-8ft. - 4th Cut	0-8 ft bgs	Yes	32	<LOD	292	166	245																			
									36	<LOD	207	166	225																				
									18	<LOD	234	167	192																				
									29	<LOD	244	166	221																				
NA	1681	20220817-Parrot-TA-G-1312		West Expansion	Five (5) grab samples of TA were taken from the Cell 5 west expansion to the north of civic center road. Additionally, two ET cover samples were taken and will be analyzed by the lab.	Grab sample from second cut of TA	8-16 ft. bgs	Yes	73	<LOD	700	476	**1411**																			
									61	<LOD	666	550	**1382**																				
									102	<LOD	622	404	**1739**																				
									79	<LOD	663	477	**1511**																				
NA	1682	20220817-Parrot-CY-G-1313		West Expansion		Grab sample of clay from second cut of TA	8-16 ft. bgs	Yes	<LOD	17	**1199**	338	**2798**																			
									<LOD	16	**1217**	336	**2803**																				
									<LOD	10	**1179**	317	**2639**																				
									<LOD	14	**1198**	330	**2747**																				
NA	1683	20220817-Parrot-TA-G-1314		West Expansion		Grab sample from second cut of TA	8-16 ft. bgs	Yes	<LOD	<LOD	368	441	**1591**																				
									37	<LOD	430	520	**1929**																				
									<LOD	<LOD	391	396	**2464**																				
									37	<LOD	396	452	**1995**																				
NA	1684	20220817-Parrot-TA-G-1315		West Expansion		Grab sample from second cut of TA	8-16 ft. bgs	Yes	104	10	**1730**	678	**2310**																				
									113	<LOD	**1297**	851	**2048**																				
									126	8	**1602**	712	**2139**																				
									114	9	**1543**	747	**2166**																				
NA	1685	20220817-Parrot-TA-G-1316		West Expansion		Grab sample from second cut of TA	8-16 ft. bgs	Yes	<LOD	<LOD	936	430	**1335**																				
									37	<LOD	**1545**	398	**1528**																				
									38	<LOD	**1194**	467	**1305**																				
									38	<LOD	**1225**	432	**1389**																				
H22080680-001	E1686	20220817-Parrot-ET-C-1317		ET Stockpile		8 - Pt. Composite of ET	Surface	Yes	11	<LOD	<LOD	<LOD	84																				
									8	<LOD	<LOD	7	88	4	<LOD	22	10	51											225	NA	NA	70	164.0523
									8	<LOD	<LOD	<LOD	79																				
									9	<LOD	<LOD	7	84																				
H22080680-002	E1687	20220817-Parrot-ET-C-1318		ET Stockpile		8 - Pt. Composite of ET	Surface	Yes	9	<LOD	<LOD	<LOD	110																				
									10	<LOD	<LOD	<LOD	110	3	<LOD	20	12	51											316.6667	NA	NA	125	209.1503
									<LOD	<LOD	<LOD	15	100																				
									10	<LOD	<LOD	15	107																				
NA	1688	20220818-Parrot-TA-G-1319		West Expansion	Five (5) grab samples of TA were taken from the Cell 5 west expansion. 2 from the north of civic center road and 3 from the west of the warren ave storm drain.	Grab sample from second cut of TA	8-16 ft bgs	Yes	**240**	<LOD	421	566	730																			
									269	<LOD	412	473	**1036**																				
									199	<LOD	362	675	951																				
									236	<LOD	398	571	906																				
NA	1689	20220818-Parrot-TA-G-1320		West Expansion		Grab sample from second cut of TA	8-16 ft bgs	Yes	140	<LOD	441	469	928																				
									148	<LOD	498	387	**1063**																				
									168	<LOD	579	499	**1154**																				
									152	<LOD	506	452	**1048**																				
NA	1690	20220818-Parrot-TA-G-1320							140	<LOD	441	469	928																				
									148	<LOD	498	387	**1063**																				
									168	<LOD	579	499	**1154**																				
									152	<LOD	506	452	**1048**																				
221205-12	1691	20220818-Parrot-DUP-1320							155	<LOD	526	410	**1079**																				
									164	<LOD	646	409	958	158	15 U	**484**	**550**	**1028**															
									185	<LOD	559	733	**1615**																				
									168	<LOD	**577**	**517**	**1217**																94.04762	NA	83.88215	106.3144	84.44688
221205-13	1692	20220818-Parrot-LAB-1320	[Reserved for QA/QC]											145	15 U	482	572	**1032**											95.39474	NA	95.25692	126.6421	98.44197
221205-14	1693	20220818-Parrot-fieldblank-1320							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	29 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1694	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	1695	20220818-Parrot-TA-G-1321		West Expansion (storm drain)	Five (5) grab samples of TA were taken from the Cell 5 west expansion. 2 from the north of civic center road and 3 from the west of the warren ave storm drain.	Grab sample from second cut of TA	8-16 ft bgs	Yes	**469**	<LOD	**1658**	437	555																			
									277	<LOD	234	543	826																				
									211	<LOD	191	372	461																				
									319	<LOD	694	451	614																				
NA	1696	20220818-Parrot-TA-G-1322		West Expansion (storm drain)		Grab sample from second cut of TA	8-16 ft bgs	Yes	**286**	7	346	446	689																				
									309	<LOD	510	430	755																				
									280	<LOD	673	476	**1301**																				
									292	7	510	451	915																				
NA	1697	20220818-Parrot-RK-G-1323		West Expansion (storm drain)		Grab sample of alluvium floor.	16 ft bgs	Yes	**988**	<LOD	440	381	299																				
									980	<LOD	401	314	281																				
									956	<LOD	372	296	290																				
									975	<LOD	404	330	290																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1698	20220819-Parrot-TA-G-1324		West Expansion (storm drain)	Five (5) grab samples of TA were taken from the Cell 5 west expansion. Samples taken from top of saftey berm along excavation edge. Highwall prevented sampling the excavation sides. Material routed to MR.	Grab sample of TA - Orange Coloration	8-16 ft bgs	Yes	**273**	<LOD	186	500	405																				
									256	<LOD	181	421	430																				
									286	<LOD	194	494	419																				
									272	<LOD	187	472	418																				
NA	1699	20220819-Parrot-TA-G-1325		West Expansion (storm drain)		Grab sample of TA - Brown Coloration	8-16 ft bgs	Yes	**587**	<LOD	195	287	370																				
									607	<LOD	185	285	367																				
									585	<LOD	194	295	396																				
									593	<LOD	191	289	378																				
NA	1700	20220819-Parrot-TA-G-1326		West Expansion (storm drain)		Grab sample of TA - White Coloration	8-16 ft bgs	Yes	**371**	<LOD	364	341	476																				
									361	<LOD	350	348	442																				
									368	<LOD	370	324	486																				
									367	<LOD	361	338	468																				
NA	1701	20220819-Parrot-TA-G-1327		West Expansion (storm drain)		Grab sample of TA - Brown Coloration	8-16 ft bgs	Yes	147	<LOD	841	356	**1138**																				
									141	<LOD	829	343	**1149**																				
									144	<LOD	817	340	**1112**																				
									144	<LOD	829	346	**1133**																				
NA	1702	20220819-Parrot-TA-G-1328		West Expansion (storm drain)		Grab sample of TA - Yellow Coloration	8-16 ft bgs	Yes	162	<LOD	408	406	471																				
									178	<LOD	309	407	450																				
									164	<LOD	361	411	480																				
									168	<LOD	359	408	467																				
NA	1703	20220822-Parrot-TA-G-1329		West Expansion (storm drain)	Five (5) grab samples of TA were taken from the Cell 5 west expansion. Samples taken from the excavation. Material routed to MR.	Grab sample of TA - Brown Coloration	8-16 ft bgs	Yes	95	<LOD	539	53	359																				
									60	<LOD	382	40	267																				
									72	<LOD	**1018**	39	301																				
									76	<LOD	646	44	309																				
NA	1704	20220822-Parrot-TA-G-1330		West Expansion (storm drain)		Grab sample of TA - Gray Coloration	8-16 ft bgs	Yes	**273**	<LOD	525	351	915																				
									460	<LOD	640	379	**1786**																				
									317	<LOD	630	500	860																				
									350	<LOD	598	410	**1187**																				
NA	1705	20220822-Parrot-TA-G-1331		West Expansion (storm drain)		Grab sample of TA - Orange Coloration	8-16 ft bgs	Yes	**332**	<LOD	409	446	709																				
									363	<LOD	519	567	607																				
									355	<LOD	363	595	710																				
									350	<LOD	430	536	675																				
NA	1706	20220822-Parrot-TA-G-1332		West Expansion (storm drain)		Grab sample of TA - Orange Coloration	8-16 ft bgs	Yes	**607**	<LOD	262	604	438																				
									655	<LOD	286	690	718																				
									655	<LOD	245	588	450																				
									639	<LOD	264	627	535																				
NA	1707	20220822-Parrot-CY-G-1333		West Expansion (storm drain)		Grab sample of black clay	8-16 ft bgs	Yes	13	<LOD	144	58	**3842**																				
									17	<LOD	97	71	**3783**																				
									16	<LOD	125	58	**3512**																				
									15	<LOD	122	62	**3712**																				
NA	1708	20220823-Parrot-TA-G-1334		West Expansion (storm drain)	Five (5) grab samples of TA were taken from the Cell 5 west expansion adjacent to the Warren Avenue storm drain. Samples were taken from the excavation. Material routed to MR.	Grab sample of mixed TA - Brown Coloration	8-16 ft bgs	Yes	197	<LOD	235	541	576																				
									210	<LOD	211	510	792																				
									231	<LOD	223	674	677																				
									213	<LOD	223	575	682																				
NA	1709	20220823-Parrot-TA-G-1335		West Expansion (storm drain)		Grab sample of mixed TA - Brown Coloration	8-16 ft bgs	Yes	173	<LOD	355	251	691																				
									150	<LOD	410	335	816																				
									165	<LOD	348	347	506																				
									163	<LOD	371	311	671																				
NA	1710	20220823-Parrot-TA-G-1336		West Expansion (storm drain)		Grab sample of mixed TA - Brown Coloration	8-16 ft bgs	Yes	**416**	<LOD	367	624	977																				
									470	<LOD	449	587	**1388**																				
									487	<LOD	371	682	784																				
									458	<LOD	396	631	**1050**																				
NA	1711	20220823-Parrot-TA-G-1337		West Expansion (storm drain)		Grab sample of mixed TA - Brown Coloration	8-16 ft bgs	Yes	**320**	<LOD	388	510	996																				
									362	<LOD	310	494	824																				
									323	<LOD	284	347	616																				
									335	<LOD	327	450	812																				
NA	1712	20220823-Parrot-TA-G-1338		West Expansion (storm drain)		Grab sample of mixed TA - Brown Coloration	8-16 ft bgs	Yes	**388**	<LOD	394	419	**1136**																				
									386	<LOD	445	405	998																				
									428	<LOD	492	446	**1106**																				
									401	<LOD	444	423	**1080**																				
NA	1713	20220825-Parrot-RK-C-1339		West Expansion Floor	9 composite samples of alluvial floor were taken after excavation was completed.	Composite sample of alluvial floor RK	16 ft bgs	Yes	13	<LOD	711	63	510																				
									15	<LOD	765	51	350																				
									15	<LOD	**1177**	55	363																				
									14	<LOD	884	56	408																				
NA	1714	20220825-Parrot-RK-C-1340		West Expansion Floor		Composite sample of alluvial floor RK	16 ft bgs	Yes	163	<LOD	719	208	781																				
									113	<LOD	932	169	877																				
									118	<LOD	844	221	556																				
									131	<LOD	832	199	738																				
NA	1715	20220825-Parrot-RK-1340							163	<LOD	719	208	781																				
									113	<LOD	932	169	877																				
									118	<LOD	844	221	556																				
									131	<LOD	832	199	738																				
NA	1716	20220825-Parrot-DUP-1340							125	<LOD	**1567**	198	**1065**																				
									98	<LOD	676	191	717																				
									99	<LOD	663	177	643																				
									107	<LOD	969	189	808																			81.72589	NA	116.4729	94.64883	109.5303
221205-15	1717	20220825-Parrot-LAB-1340												100	15 U	585	195	605														76.14213	NA	70.34068	97.82609	81.97832
NA	1718	20220825-Parrot-FieldBlank-1340							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1719	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	1720	20220825-Parrot-RK-C-1341		West Expansion Floor	9 composite samples of alluvial floor were taken after excavation was completed.	Composite sample of alluvial floor RK	16 ft bgs	Yes	**236**	<LOD	693	344	**1032**																				
									178	<LOD	719	239	855																				
									176	<LOD	708	237	832																				
									197	<LOD	707	273	906																				
NA	1721	20220825-Parrot-RK-C-1342		West Expansion Floor		Composite sample of alluvial floor RK	16 ft bgs	Yes	158	<LOD	467	174	675																				
									134	<LOD	417	155	575																				
									114	<LOD	379	145	523																				
									135	<LOD	421	158	591																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1722	20220825-Parrot-RK-C-1343		West Expansion Floor	9 composite samples of alluvial floor were taken after excavation was completed.	Composite sample of alluvial floor RK	16 ft bgs	Yes	**229**	<LOD	308	279	552																				
									108	<LOD	408	169	562																				
									124	<LOD	387	143	536																				
									154	<LOD	368	197	550																				
NA	1723	20220825-Parrot-RK-C-1344		West Expansion Floor		Composite sample of alluvial floor RK	16 ft bgs	Yes	114	<LOD	392	172	587																				
									129	<LOD	719	197	551																				
									126	<LOD	326	201	503																				
									123	<LOD	479	190	547																				
NA	1724	20220825-Parrot-RK-C-1345		West Expansion Floor		Composite sample of alluvial floor RK	16 ft bgs	Yes	112	<LOD	**1337**	17	732																				
									74	<LOD	**1139**	168	730																				
									86	<LOD	**1159**	175	844																				
									91	<LOD	**1212**	120	769																				
NA	1725	20220825-Parrot-RK-C-1346		West Expansion Floor		Composite sample of alluvial floor RK	16 ft bgs	Yes	41	<LOD	815	140	**1105**																				
									27	<LOD	619	162	989																				
									49	<LOD	659	147	**1021**																				
									39	<LOD	698	150	**1038**																				
NA	1726	20220825-Parrot-RK-C-1347		West Expansion Floor		Composite sample of alluvial floor RK	16 ft bgs	Yes	69	14	**2021**	483	**2584**																				
									62	11	**1038**	420	**2650**																				
									37	17	**1209**	383	**2909**																				
									56	14	**1423**	429	**2714**																				
NA	1727	20220829-MR-OB-C-1348		LR Dump west of Compost Pile	8 pt. Composite samples were collected from four exploratory trenches west of the compost pile at Lunchroom Dump	Composite Sample of Exploratory Trench 1	0-8 ft bgs	Yes	46	<LOD	139	359	113																				
									40	<LOD	141	448	112																				
									46	<LOD	144	341	109																				
									44	<LOD	141	383	111																				
NA	1728	20220829-MR-OB-C-1349		LR Dump west of Compost Pile		Composite Sample of Exploratory Trench 2	0-8 ft bgs	Yes	46	<LOD	192	229	199																				
									47	<LOD	233	159	197																				
									41	<LOD	195	320	204																				
									45	<LOD	207	236	200																				
NA	1729	20220829-MR-OB-C-1350		LR Dump west of Compost Pile		Composite Sample of Exploratory Trench 3	0-8 ft bgs	Yes	45	<LOD	562	148	395																				
									32	<LOD	376	191	351																				
									37	<LOD	381	166	381																				
									38	<LOD	440	168	376																				
NA	1730	20220829-MR-XCON-1350							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
221205-16	1731	SRM Lab Analysis (2711a)												77	**46**	151	**1490**	447	107	54.1	140	1400	414	72	85	108	106	108					
NA	1732	20220829-MR-OB-C-1351		LR Dump west of Compost Pile	8 pt. Composite samples were collected from four exploratory trenches west of the compost pile at Lunchroom Dump	Composite Sample of Exploratory Trench 4	0-8 ft bgs	Yes	24	<LOD	742	157	213																				
									41	<LOD	577	182	197																				
									37	<LOD	450	152	177																				
									34	<LOD	590	164	196																				
NA	1733	20220901-MR-OB-C-1352		LR Dump Cut 1 West	Seven (7) 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow Cut 1 West. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	66	<LOD	191	339	162																						
									57	<LOD	185	355	145																				
									<LOD	<LOD	214	690	169																				
									62	<LOD	197	461	159																				
NA	1734	20220901-MR-OB-C-1353		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	35	<LOD	251	219	169																				
									58	<LOD	298	307	180																				
									42	<LOD	302	266	203																				
									45	<LOD	284	264	184																				
NA	1735	20220901-MR-OB-C-1354		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	44	<LOD	188	356	180																				
									50	<LOD	207	323	172																				
									52	<LOD	223	289	196																				
									49	<LOD	206	323	183																				
NA	1736	20220901-MR-OB-C-1355		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	47	<LOD	232	316	185																				
									58	<LOD	219	455	182																				
									67	<LOD	216	377	183																				
									57	<LOD	222	383	183																				
NA	1737	20220901-MR-OB-C-1356		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	40	<LOD	223	270	156																				
									33	<LOD	300	150	126																				
									52	<LOD	166	236	125																				
									42	<LOD	230	219	136																				
NA	1738	20220901-MR-OB-C-1357		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	52	<LOD	286	152	223																				
									42	<LOD	292	147	268																				
									45	<LOD	298	133	316																				
									46	<LOD	292	144	269																				
NA	1739	20220901-MR-OB-C-1358		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	60	<LOD	396	200	399																				
									37	<LOD	384	152	374																				
									62	<LOD	352	164	326																				
									53	<LOD	377	172	366																				
NA	1740	20220906-MR-OB-C-1359		LR Dump Cut 1 West	Six (6) 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow Cut 1 West. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	30	<LOD	319	132	128																						
									31	<LOD	330	133	135																				
									30	<LOD	339	119	135																				
									30	<LOD	329	128	133																				
NA	1741	20220906-MR-OB-C-1360		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	23	<LOD	184	323	124																				
									28	<LOD	212	107	133																				
									37	<LOD	198	111	149																				
									29	<LOD	198	180	135																				
NA	1742	20220906-MR-OB-C-1360							23	<LOD	184	323	124																				
									28	<LOD	212	107	133																				
									37	<LOD	198	111	149																				
									29	<LOD	198	180	135																				
NA	1743	20220906-MR-DUP-1360							25	<LOD	268	177	109																				
									28	<LOD	292	146	131																				
									24	<LOD	276	135	142																				
									26	<LOD	279	153	127																			87.5	NA	140.7407	84.65804	94.08867
221205-17	1744	20220906-LAB-1360												35	15 U	238	181	105														119.3182	NA	120.202	100.3697	77.58621
NA	1745	20220906-FieldBlank-1360							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1746	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1747	20220906-MR-OB-C-1361		LR Dump Cut 1 West	8-pt. composite sampleswere taken from four sampling trenches at the MR "Lunchroom Dump" borrow Cut 1 West. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	33	<LOD	187	143	125																				
									40	<LOD	196	194	177																				
									24	<LOD	191	162	164																				
									32	<LOD	191	166	155																				
NA	1748	20220906-MR-OB-C-1362		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	33	<LOD	161	178	111																				
									28	<LOD	145	194	121																				
									30	<LOD	173	198	133																				
									30	<LOD	160	190	122																				
NA	1749	20220906-MR-OB-C-1363		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	29	<LOD	346	116	179																				
									31	<LOD	300	130	200																				
									28	<LOD	521	217	222																				
									29	<LOD	389	154	200																				
NA	1750	20220906-MR-OB-C-1364		LR Dump Cut 1 West		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 1 West	0-8 ft bgs	Yes	32	<LOD	440	127	271																				
									29	<LOD	343	113	192																				
									44	<LOD	472	275	224																				
									35	<LOD	418	172	229																				
NA	1751	20221031-Parrot-TA-G-1365		Civic Center Parking Lot	8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow Cut 1 West. Sampling is conducted at a frequency of 1600 cy/sample	Grab Sample of 0-1 Ft - Black/Brown	0-1 ft bgs	Yes	183	<LOD	353	272	750																				
									320	<LOD	586	382	852																				
									280	<LOD	486	366	811																				
									261	<LOD	475	340	804																				
NA	1752	20221031-Parrot-TA-G-1366		Civic Center Parking Lot		Grab sample of 1-3 ft - Yellow	1-3 ft bgs	Yes	147	<LOD	222	329	965																				
									180	<LOD	251	399	805																				
									182	<LOD	365	592	864																				
									170	<LOD	279	440	878																				
NA	1753	20221031-Parrot-TA-G-1367		Civic Center Parking Lot		Grab sample of 3-6 ft brown/orange	3-6 ft bgs	Yes	89	<LOD	865	873	**1726**																				
									139	<LOD	543	616	**1053**																				
									175	<LOD	651	800	**1585**																				
									134	<LOD	686	763	**1455**																				
NA	1754	20221031-Parrot-TA-G-1368		Civic Center Parking Lot		Grab sample of 6-8 ft - orange	6-8 ft bgs	Yes	**402**	<LOD	**7481**	328	**1253**																				
									451	<LOD	**7371**	397	858																				
									272	<LOD	**5009**	434	629																				
									375	<LOD	**6620**	386	913																				
NA	1755	20221031-Parrot-TA-G-1369		Civic Center Parking Lot		Grab sample of 6-8 ft - Rust	6-8 ft bgs	Yes	**214**	<LOD	**3366**	**1432**	**1051**																				
									166	<LOD	**1382**	**1026**	**1053**																				
									141	<LOD	**1195**	**1024**	868																				
									174	<LOD	**1981**	**1161**	991																				
NA	1756	20221031-Parrot-TA-G-1370		Civic Center Parking Lot		Grab sample of 8 ft - gray	8 ft bgs	Yes	27	<LOD	820	242	991																				
									40	<LOD	808	347	**1080**																				
									40	<LOD	833	338	**1083**																				
									36	<LOD	820	309	**1051**																				
NA	1757	20221102-Parrot-TA-G-1371		Civic Center Parking Lot	Five (5) grab samples of TA were taken from the Civic Center Parking Lot excavation. Material routed to MR. Two (2) 8-pt. composite samples were taken from the milled asphalt stockpile and were confirmed clean	Grab Sample of TA	0-10 ft. Bgs	Yes	124	<LOD	764	111	434																				
									127	<LOD	700	150	432																				
									128	<LOD	783	133	472																				
									126	<LOD	749	131	446																				
NA	1758	20221102-Parrot-TA-G-1372		Civic Center Parking Lot		Grab Sample of CY	0-10 ft. Bgs	Yes	**277**	<LOD	**2508**	252	839																				
									623	<LOD	**5095**	337	**1760**																				
									447	<LOD	**4456**	280	**2470**																				
									449	<LOD	**4020**	290	**1690**																				
NA	1759	20221102-Parrot-TA-G-1373		Civic Center Parking Lot		8 pt. Ccomposite sample of milled asphalt	0-10 ft. Bgs	Yes	24	<LOD	127	108	273																				
									<LOD	<LOD	195	175	353																				
									63	<LOD	290	244	574																				
									44	<LOD	204	176	400																				
NA	1760	20221102-Parrot-TA-G-1374		Civic Center Parking Lot		8 pt. Ccomposite sample of milled asphalt	0-10 ft. Bgs	Yes	49	<LOD	168	141	989																				
									41	<LOD	170	124	255																				
									63	<LOD	175	126	299																				
									51	<LOD	171	130	514																				
NA	1761	20221102-Parrot-TA-G-1375		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**219**	<LOD	299	719	780																				
									240	<LOD	366	711	728																				
									170	<LOD	312	583	871																				
									210	<LOD	326	671	793																				
NA	1762	20221102-Parrot-TA-G-1376		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**474**	<LOD	554	659	737																				
									348	<LOD	643	**1458**	896																				
									592	<LOD	622	782	687																				
									471	<LOD	606	966	773																				
NA	1763	20221102-Parrot-TA-G-1377		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**299**	<LOD	879	**1705**	**1601**																				
									361	<LOD	755	999	**1745**																				
									309	<LOD	790	**1223**	**1203**																				
									323	<LOD	808	**1309**	**1516**																				
NA	1764	20221104-Parrot-TA-G-1378		Civic Center Parking Lot	Five (5) grab samples of TA were taken from the Civic Center Parking Lot excavation. Material routed to MR.	Grab Sample of TA	0-10 ft. Bgs	Yes	**436**	<LOD	496	589	478																				
									456	<LOD	314	537	585																				
									395	<LOD	335	535	626																				
									429	<LOD	382	554	563																				
NA	1765	20221104-Parrot-TA-G-1379		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**462**	<LOD	349	107	344																				
									564	<LOD	383	51	361																				
									384	<LOD	260	130	298																				
									470	<LOD	331	96	334																				
NA	1766	20221104-Parrot-TA-G-1380		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**462**	<LOD	413	758	810																				
									434	<LOD	663	561	990																				
									388	<LOD	497	738	**1059**																				
									428	<LOD	524	686	953																				
NA	1767	20221104-Parrot-TA-G-1380							**462**	<LOD	413	758	810																				
									434	<LOD	663	561	990																				
									388	<LOD	497	738	**1059**																				
									428	<LOD	524	686	953																				
NA	1768	20221104-Parrot-DUP-1380							**433**	<LOD	443	529	556																				
									423	<LOD	475	661	547																				
									446	<LOD	475	607	773																				
									434	<LOD	464	599	625																			101.4019	NA	88.5569	87.36023	65.61735
221205-18	1769	LAB												**422**	15 U	492	637	821											98.59813	NA	93.83344	92.90228	86.149
NA	1770	20221104-Parrot-FieldBlank-1380							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1771	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	1772	20221104-Parrot-TA-G-1381		Civic Center Parking Lot	Five (5) grab samples of TA were taken from the Civic Center Parking Lot excavation. Material routed to MR.	Grab Sample of TA	0-10 ft. Bgs	Yes	**540**	<LOD	730	636	631																				
									584	<LOD	696	267	655																				
									705	<LOD	636	383	825																				
									610	<LOD	687	429	704																				
NA	1773	20221104-Parrot-TA-G-1382		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**778**	<LOD	526	823	347																				
									1123	<LOD	671	812	**1162**																				
									968	<LOD	609	702	982																				
									956	<LOD	602	779	830																				
NA	1774	20221107-Parrot-TA-G-1383		Civic Center Parking Lot	Five (5) grab samples of TA were taken from the Civic Center Parking Lot excavation. Material routed to MR.	Grab Sample of TA	0-10 ft. Bgs	Yes	**614**	<LOD	573	607	573																				
									720	<LOD	663	579	774																				
									677	<LOD	580	874	668																				
									670	<LOD	605	687	672																				
NA	1775	20221107-Parrot-TA-G-1384		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**959**	<LOD	773	777	659																				
									897	<LOD	616	782	774																				
									759	9	579	**1152**	721																				
									872	9	656	904	718																				
NA	1776	20221107-Parrot-TA-G-1385		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**753**	<LOD	817	451	744																				
									692	<LOD	550	364	381																				
									531	<LOD	545	400	516																				
									659	<LOD	637	405	547																				
NA	1777	20221107-Parrot-TA-G-1386		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	**265**	<LOD	474	715	602																				
									258	<LOD	385	697	455																				
									251	<LOD	547	514	491																				
									258	<LOD	469	642	516																				
NA	1778	20221107-Parrot-TA-G-1387		Civic Center Parking Lot		Grab Sample of TA	0-10 ft. Bgs	Yes	44	<LOD	231	68	276																				
									43	<LOD	255	79	292																				
									50	<LOD	278	85	312																				
									46	<LOD	255	77	293																				
NA	1779	20221109-Parrot-TA-G-1388		Civic Center Parking Lot	Five (5) grab samples, 3 TA and 2 CY, were taken from the Civic Center Parking Lot excavation. Material routed to MR. Additionally, 3 composite samples of Alluvial Floor were taken.	Grab Sample of Yellow TA	0-10 ft. Bgs	Yes	**401**	<LOD	**1187**	787	798																				
									241	<LOD	385	744	944																				
									356	9	719	808	831																				
									333	9	764	780	858																				
NA	1780	20221109-Parrot-TA-CY-1389		Civic Center Parking Lot		Grab Sample of black CY	0-10 ft. Bgs	Yes	93	10	**15200**	142	993																				
									59	<LOD	**16600**	153	937																				
									78	7	**16000**	141	909																				
									77	9	**15933**	145	946																				
NA	1781	20221109-Parrot-TA-CY-1390		Civic Center Parking Lot		Grab Sample of gray CY	0-10 ft. Bgs	Yes	**1156**	<LOD	**2350**	961	**1621**																				
									1207	7	**2708**	979	**1648**																				
									1237	<LOD	**2404**	**1020**	**1670**																				
									1200	7	**2487**	987	**1646**																				
NA	1782	20221109-Parrot-TA-G-1391		Civic Center Parking Lot		Grab Sample of Orange TA	0-10 ft. Bgs	Yes	**3209**	<LOD	807	632	**1535**																				
									3300	<LOD	924	659	**1331**																				
									3064	<LOD	746	711	**1180**																				
									3191	<LOD	826	667	**1349**																				
NA	1783	20221109-Parrot-TA-G-1392		Civic Center Parking Lot		Grab Sample of Brown/Mixed TA	0-10 ft. Bgs	Yes	54	<LOD	360	105	206																				
									120	<LOD	470	125	417																				
									62	<LOD	393	108	306																				
									79	<LOD	408	113	310																				
NA	1784	20221109-Parrot-RK-C-1393		Civic Center Parking Lot	3 composite samples of Alluvial Floor were taken.	8 pt. composite sample of alluvial floor	Vertical Extent	Yes	70	<LOD	383	90	272																				
									65	<LOD	430	85	389																				
									58	<LOD	410	84	314																				
									64	<LOD	408	86	325																				
NA	1785	20221109-Parrot-RK-C-1394		Civic Center Parking Lot		8 pt. composite sample of alluvial floor	Vertical Extent	Yes	31	<LOD	**1272**	74	293																				
									47	<LOD	**1898**	95	425																				
									39	<LOD	**1567**	71	385																				
									39	<LOD	**1579**	80	368																				
NA	1786	20221109-Parrot-RK-C-1395		Civic Center Parking Lot		8 pt. composite sample of alluvial floor	Vertical Extent	Yes	47	<LOD	**1506**	88	431																				
									54	<LOD	**1142**	91	408																				
									87	10	**1020**	98	519																				
									63	10	**1223**	92	453																				
NA	1787	20221114-Parrot-TA-G-1396		Civic Center Parking Lot	Five (5) grab samples were taken from the Civic Center Parking Lot excavation. Material routed to MR.	Grab Sample of mixed TA	0-10 ft. Bgs	Yes	186	<LOD	434	217	580																				
									208	<LOD	501	328	398																				
									241	<LOD	472	233	448																				
									212	<LOD	469	259	475																				
NA	1788	20221114-Parrot-TA-G-1397		Civic Center Parking Lot		Grab Sample of dark yellow TA	0-10 ft. Bgs	Yes	**347**	<LOD	270	736	628																				
									313	<LOD	190	599	402																				
									309	<LOD	252	652	850																				
									323	<LOD	237	662	627																				
NA	1789	20221114-Parrot-TA-G-1398		Civic Center Parking Lot		Grab Sample of light yellow TA	0-10 ft. Bgs	Yes	169	<LOD	179	420	388																				
									162	<LOD	206	516	587																				
									172	<LOD	225	542	599																				
									168	<LOD	203	493	525																				
NA	1790	20221114-Parrot-TA-G-1399		Civic Center Parking Lot		Grab Sample of orangish TA	0-10 ft. Bgs	Yes	**204**	<LOD	268	542	686																				
									308	<LOD	314	804	532																				
									236	<LOD	239	455	450																				
									249	<LOD	274	600	556																				
NA	1791	20221114-Parrot-TA-G-1400		Civic Center Parking Lot		Grab Sample of black TA	0-10 ft. Bgs	Yes	42	<LOD	**2434**	114	894																				
									40	<LOD	**2364**	106	844																				
									44	<LOD	**2507**	105	**1176**																				
									42	<LOD	**2435**	108	971																				
NA	1792	20221114-Parrot-TA-G-1400							42	<LOD	**2434**	114	894																				
									40	<LOD	**2364**	106	844																				
									44	<LOD	**2507**	105	**1176**																				
									42	<LOD	**2435**	108	971																				
221205-19	1793	20221114-Parrot-Dup-1400							<LOD	<LOD	**2447**	308	885																				
									64	<LOD	**2611**	135	952	26	15 U	**1572**	148	**673**															
									63	<LOD	**2345**	177	864																				
									64	<LOD	**2468**	207	900																				
221205-20	1794	20221114-Parrot-LAB-1400	[Reserved for QA/QC]											45	15 U	**2293**	136	888											40.94488	NA	63.7039	71.6129	74.75009
																													107.1429	NA	94.16838	125.5385	91.42073

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
221205-21	1795	20221114-FieldBlank-1400							<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	38 J	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1796	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414	0	0	0	0	0					
NA	1797	20221114-XCon-1400							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1798	SRM Lab Analysis (2711a)																	107	54.1	140	1400	414										
NA	1799	20221115-Parrot-RK-C-1401		Civic Center Parking Lot	5 8-pt. composite samples of alluvial floor from the vertical extent.	8 pt. composite sample of alluvial floor	10 ft Bgs	Yes	133	<LOD	**1266**	241	715																				
									126	<LOD	**1189**	168	686																				
									169	<LOD	**1296**	204	752																				
									143	<LOD	**1250**	204	718																				
NA	1800	20221115-Parrot-RK-C-1402		Civic Center Parking Lot		8 pt. composite sample of alluvial floor	10 ft Bgs	Yes	107	<LOD	**1115**	81	476																				
									125	<LOD	**1534**	107	523																				
									101	<LOD	**1130**	103	437																				
									111	<LOD	**1260**	97	479																				
NA	1801	20221115-Parrot-RK-C-1403		Civic Center Parking Lot		8 pt. composite sample of alluvial floor	10 ft Bgs	Yes	**238**	<LOD	**1135**	90	438																				
									82	<LOD	**1195**	85	500																				
									57	<LOD	**1169**	79	447																				
									126	<LOD	**1166**	85	462																				
NA	1802	20221115-Parrot-RK-C-1404		Civic Center Parking Lot		8 pt. composite sample of alluvial floor	10 ft Bgs	Yes	72	<LOD	740	94	327																				
									59	<LOD	857	78	442																				
									79	<LOD	661	63	343																				
									70	<LOD	753	78	371																				
NA	1803	20221115-Parrot-RK-C-1405		Civic Center Parking Lot		8 pt. composite sample of alluvial floor	10 ft Bgs	Yes	54	<LOD	568	92	458																				
									59	<LOD	430	46	300																				
									76	<LOD	623	80	453																				
									63	<LOD	540	73	404																				
NA	1804	20221116-MR-OB-C-1406		Lunchroom Dump	19 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow Cut 2 West. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	29	<LOD	505	142	170																						
									36	<LOD	528	161	180																				
									23	<LOD	515	145	175																				
									29	<LOD	516	149	175																				
NA	1805	20221116-MR-OB-C-1407		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	42	<LOD	183	189	118																				
									39	<LOD	239	219	157																				
									45	<LOD	205	156	137																				
									42	<LOD	209	188	137																				
NA	1806	20221116-MR-OB-C-1408		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	49	<LOD	219	195	108																				
									50	<LOD	254	194	115																				
									46	<LOD	205	179	110																				
									48	<LOD	226	189	111																				
NA	1807	20221116-MR-OB-C-1409		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	45	<LOD	185	156	136																				
									18	<LOD	172	181	123																				
									30	<LOD	195	141	118																				
									31	<LOD	184	159	126																				
NA	1808	20221116-MR-OB-C-1410		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	41	<LOD	186	145	103																				
									25	<LOD	154	163	106																				
									29	<LOD	166	111	103																				
									32	<LOD	169	140	104																				
NA	1809	20221116-MR-OB-C-1411		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	39	<LOD	346	161	399																				
									41	<LOD	297	165	350																				
									29	<LOD	341	146	327																				
									36	<LOD	328	157	359																				
NA	1810	20221116-MR-OB-C-1412		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	41	<LOD	306	200	343																				
									32	<LOD	275	238	291																				
									54	<LOD	295	448	276																				
									42	<LOD	292	295	303																				
NA	1811	20221116-MR-OB-C-1413		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	39	<LOD	205	215	196																				
									<LOD	<LOD	243	346	201																				
									40	<LOD	220	197	206																				
									40	<LOD	223	253	201																				
NA	1812	20221116-MR-OB-C-1414		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	43	<LOD	245	120	318																				
									17	<LOD	248	109	470																				
									32	<LOD	243	109	363																				
									31	<LOD	245	113	384																				
NA	1813	20221116-MR-OB-C-1415		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	52	<LOD	248	227	180																				
									34	<LOD	189	153	171																				
									34	<LOD	202	162	150																				
									40	<LOD	213	181	167																				
NA	1814	20221116-MR-OB-C-1416		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	31	<LOD	234	324	100																				
									102	<LOD	292	321	131																				
									44	<LOD	218	220	97																				
									59	<LOD	248	288	109																				
NA	1815	20221116-MR-OB-C-1417		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	45	<LOD	162	371	114																				
									44	<LOD	200	501	121																				
									51	<LOD	190	428	129																				
									47	<LOD	184	433	121																				
NA	1816	20221116-MR-OB-C-1418		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	37	<LOD	161	235	98																				
									35	<LOD	197	502	95																				
									58	<LOD	215	260	109																				
									43	<LOD	191	332	101																				
NA	1817	20221116-MR-OB-C-1419		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	34	<LOD	298	212	147																				
									36	<LOD	253	254	159																				
									39	<LOD	219	246	158																				
									36	<LOD	257	237	155																				
NA	1818	20221116-MR-OB-C-1420		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	42	<LOD	244	254	150																				
									37	<LOD	287	273	187																				
									37	<LOD	271	266	160																				
									39	<LOD	267	264	166																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1819	20221116-MR-OB-C-1420							42	<LOD	244	254	150																				
									37	<LOD	287	273	187																				
									37	<LOD	271	266	160																				
									39	<LOD	267	264	166																				
240209-1	1820	20221116-MR-DUP-1420							33	<LOD	240	247	160	37	15U	**248**	**326**	149															
									40	<LOD	286	318	159																				
									35	<LOD	267	260	151																				
									36	<LOD	264	275	157											93.10345	NA	98.87781	104.0353	94.5674	93.10345	NA	98.87781	104.0353	94.5674
240209-2	1821	LAB	[Reserved for QA/QC]											54	15 U	233	370	149						139.6552	NA	87.15711	139.9748	89.93964	139.6552	NA	87.15711	139.9748	89.93964
240209-3	1822	20221116-MR-FieldBlank-1420							<LOD	<LOD	<LOD	<LOD	<LOD	6 U	15 U	15 U	9 U	9 U															
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1823	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																															
																			107	54.1	140	1400	414										
NA	1824	20221116-MR-OB-C-1421		Lunchroom Dump	19 8-pt. composite samples were taken from four sampling trenches at the MR "Lunchroom Dump" borrow Cut 2 West. Sampling is conducted at a frequency of 1600 cy/sample	8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	<LOD	<LOD	578	284	250																				
									22	<LOD	539	347	231																				
									35	<LOD	645	350	230																				
									29	<LOD	587	327	237																				
NA	1825	20221116-MR-OB-C-1422		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	26	<LOD	678	226	375																		
									26	<LOD	840	178	289																				
									43	<LOD	789	231	323																				
									32	<LOD	769	212	329																				
NA	1826	20221116-MR-OB-C-1423		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	30	<LOD	872	227	543																		
									36	<LOD	962	161	558																				
									28	<LOD	918	144	538																				
									31	<LOD	917	177	546																				
NA	1827	20221116-MR-OB-C-1424		Lunchroom Dump		8 Pt. Composite Sample from sample trenches - 4 each 0-4 ft. and 0-8 ft - Cut 2 West	0-8 ft bgs	Yes	34	<LOD	745	187	505																		
									47	<LOD	778	163	636																				
									30	<LOD	762	228	587																				
									37	<LOD	762	193	576																				
NA	1828	20221116-Parror-TA-G-1425		Civic Center Parking Lot	Five (5) grab samples were taken from the Civic Center Parking Lot excavation. Material routed to MR.	Grab Sample of mixed TA	10 ft Bgs	Yes	22	<LOD	**1053**	47	298																		
									16	<LOD	987	69	315																				
									29	<LOD	961	55	297																				
									22	<LOD	**1000**	57	303																				
NA	1829	20221116-Parror-TA-G-1426		Civic Center Parking Lot		Grab Sample of mixed TA	10 ft Bgs	Yes	20	<LOD	879	65	322																				
									33	<LOD	**1307**	52	377																				
									23	<LOD	921	53	309																				
									25	<LOD	**1036**	57	336																				
NA	1830	20221116-Parror-TA-G-1427		Civic Center Parking Lot		Grab Sample of mixed TA	10 ft Bgs	Yes	30	<LOD	867	58	299																				
									27	<LOD	**1042**	70	371																				
									25	<LOD	959	51	308																				
									27	<LOD	956	60	326																				
NA	1831	20221116-Parror-TA-G-1428		Civic Center Parking Lot		Grab Sample of mixed TA	10 ft Bgs	Yes	26	<LOD	**1096**	50	372																				
									27	<LOD	**1099**	62	369																				
									22	<LOD	905	91	378																				
									25	<LOD	**1033**	68	373																				
NA	1832	20221116-Parror-TA-G-1429		Civic Center Parking Lot		Grab Sample of mixed TA	10 ft Bgs	Yes	34	<LOD	959	65	333																				
									36	<LOD	**1625**	74	436																				
									30	<LOD	986	60	304																				
									33	<LOD	**1190**	66	358																				
NA	1833	20221117-Parrot-RK-C-1430		Civic Center Parking Lot	2 8-pt. composite samples of alluvial floor from the vertical extent.	8 pt. composite sample of alluvial floor	10 ft Bgs	Yes	73	<LOD	865	74	501																				
									68	<LOD	806	61	469																				
									67	<LOD	746	91	455																				
									69	<LOD	806	75	475																				
NA	1834	20221117-Parrot-RK-C-1431		Civic Center Parking Lot		8 pt. composite sample of alluvial floor	10 ft Bgs	Yes	46	<LOD	**1838**	82	321																				
									42	<LOD	**1140**	119	331																				
									37	<LOD	**1202**	60	377																				
									42	<LOD	**1393**	87	343																				
NA	1835	20221122-Parrot-RK-C-1432		Civic Center Parking Lot	1 8-pt. composite sample of alluvial floor from the vertical extent.	8 pt. composite sample of alluvial floor	10 ft Bgs	Yes	94	<LOD	**2321**	204	774																				
									70	<LOD	**2390**	228	880																				
									77	<LOD	**1686**	275	946																				
									80	<LOD	**2132**	236	867																				
H23050062-001	E1836	20230424-Parrot-ET-C-1433		North Slope ET Placement	6 8-pt. composite samples of ET, 4 from the placement area and 2 from the stockpile.	8 pt. composite sample of ET	Surface	Yes	10	8	28	<LOD	81																				
									8	<LOD	<LOD	<LOD	72																				
									9	<LOD	<LOD	8	86																				
									9	8	28	8	80																				
H23050062-002	E1837	20230424-Parrot-ET-C-1434		North Slope ET Placement		8 pt. composite sample of ET	Surface	Yes	9	<LOD	<LOD	<LOD	72																				
									11	<LOD	<LOD	<LOD	81																				
									9	<LOD	<LOD	<LOD	59																				
									10	<LOD	<LOD	<LOD	71																				
H23050062-003	E1838	20230424-Parrot-ET-C-1435		North Slope ET Placement		8 pt. composite sample of ET	Surface	Yes	8	<LOD	<LOD	<LOD	70																				
									10	9	<LOD	8	77																				
									10	<LOD	<LOD	<LOD	73																				
									9	9	<LOD	8	73																				
H23050062-004	E1839	20230424-Parrot-ET-C-1436		North Slope ET Placement		8 pt. composite sample of ET	Surface	Yes	10	<LOD	<LOD	10	76																				
									8	11	<LOD	11	75																				
									9	<LOD	24	<LOD	89																				
									9	11	24	11	80																				
H23050062-005	E1840	20230424-Parrot-ET-C-1437		ET Stockpile		8 pt. composite sample of ET	Surface	Yes	10	<LOD	<LOD	<LOD	65																				
									10	<LOD	<LOD	<LOD	77																				
									8	<LOD	<LOD	8	70																				
									9	<LOD	<LOD	8	71																				
H23050062-006	E1841	20230424-Parrot-ET-C-1438		ET Stockpile		8 pt. composite sample of ET	Surface	Yes	11	<LOD	<LOD	<LOD	66																				
									<LOD	<LOD	<LOD	10	69																				
									6	9	<LOD	<LOD	71																				
									9	9	<LOD	10	69																				

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1842	20230502-Parrot-OB-C-1439		Haul Road	9 3-pt composite samples of the haul road were taken to determine if the upper layer of the haul road was suitable as backfill.	3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	53	<LOD	815	114	405																					
									59	<LOD	991	115	619																				
									50	<LOD	740	121	331																				
									54	<LOD	849	117	452																				
NA	1843	20230502-Parrot-OB-C-1440		Haul Road		3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	44	<LOD	858	119	392																				
									62	<LOD	894	148	452																				
									51	<LOD	803	135	397																				
									52	<LOD	852	134	414																				
NA	1844	20230502-Parrot-OB-C-1440							44	<LOD	858	119	392																				
									62	<LOD	894	148	452																				
									51	<LOD	803	135	397																				
									52	<LOD	852	134	414																				
NA	1845	20230502-Parrot-DUP-1440							59	<LOD	866	107	506																				
									44	<LOD	878	160	382																				
									55	<LOD	750	107	332																				
									53	<LOD	831	125	407											100.6369	NA	97.61252	93.03483	98.30782	100.6369	NA	97.61252	93.03483	98.30782
240209-4	1846	LAB												34	15 U	615	111	350						64.96815	NA	72.21135	82.83582	84.60919	64.96815	NA	72.21135	82.83582	84.60919
NA	1847	20230502-Parrot-FieldBlank-1440							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
NA	1848	SRM (Field XRF) (2711a) - Sample group did not exceed 20 samples.																	107	54.1	140	1400	414										
NA	1849	20230502-Parrot-OB-C-1441		Haul Road	9 3-pt composite samples of the haul road were taken to determine if the upper layer of the haul road was suitable as backfill.	3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	39	<LOD	438	60	205																					
									42	<LOD	474	71	253																				
									64	<LOD	562	82	295																				
									48	<LOD	491	71	251																				
NA	1850	20230502-Parrot-OB-C-1442		Haul Road		3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	58	<LOD	591	133	335																				
									57	<LOD	589	115	313																				
									63	<LOD	687	134	349																				
									59	<LOD	622	127	332																				
NA	1851	20230502-Parrot-OB-C-1443		Haul Road		3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	63	<LOD	651	152	378																				
									39	<LOD	419	78	290																				
									41	<LOD	569	116	314																				
									48	<LOD	546	115	327																				
NA	1852	20230502-Parrot-OB-C-1444		Haul Road		3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	76	<LOD	750	135	420																				
									77	<LOD	730	142	470																				
									61	<LOD	703	138	419																				
									71	<LOD	728	138	436																				
NA	1853	20230502-Parrot-OB-C-1445		Haul Road		3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	54	<LOD	791	133	346																				
									56	<LOD	629	168	382																				
									53	<LOD	633	112	344																				
									54	<LOD	684	138	357																				
NA	1854	20230502-Parrot-OB-C-1446		Haul Road		3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	47	<LOD	633	105	345																				
									58	<LOD	758	117	452																				
									61	<LOD	680	133	394																				
									55	<LOD	690	118	397																				
NA	1855	20230502-Parrot-OB-C-1447		Haul Road		3 pt. composite sample of Haul Road material, backfill determination sample	Surface	Yes	52	<LOD	639	127	380																				
									91	<LOD	797	191	440																				
									62	<LOD	788	142	430																				
									68	<LOD	741	153	417																				
NA	1856	20230615-Parrot-OB-C-1448		South Civic Center	4 grab samples of potentially contaminated material were taken from beneath the sidewalk on the south side of the civic center.	Grab sample of suspicious looking material East	Surface	Yes	**209**	<LOD	373	455	658																				
									175	<LOD	313	475	684																				
									190	<LOD	428	472	761																				
									191	<LOD	371	467	701																				
NA	1857	20230615-Parrot-OB-C-1449		South Civic Center		Grab sample of suspicious looking material. Mid -East	Surface	Yes	158	<LOD	253	**1183**	**1202**																				
									225	<LOD	236	**1114**	**1207**																				
									243	<LOD	291	963	**1374**																				
									209	<LOD	260	**1087**	**1261**																				
NA	1858	20230615-Parrot-OB-C-1450		South Civic Center		Grab sample of suspicious looking material Mid-West	Surface	Yes	**216**	<LOD	264	463	753																				
									222	<LOD	315	533	595																				
									224	<LOD	259	459	904																				
									221	<LOD	279	485	751																				
NA	1859	20220829-MR-XCON-1450							<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
									<LOD	<LOD	<LOD	<LOD	<LOD																				
240209-5	1860	SRM Lab Analysis (2710a)												**1434**	15U	**3584**	**5588**	**4104**	1540	12.3	3420	5520	4180	93		105	101	98					
NA	1861	20230615-Parrot-OB-C-1451		South Civic Center	4 grab samples of potentially contaminated material were taken from beneath the sidewalk on the south side of the civic center.	Grab sample of suspicious looking material West	Surface	Yes	**275**	<LOD	751	620	**1255**																				
									308	<LOD	718	697	**1062**																				
									256	<LOD	721	643	**1224**																				
									280	<LOD	730	653	**1180**																				
NA	1862	20230622-Parrot-OB-C-1452		South Civic Center	1 composite sample was taken from the stockpile that was considered waste.	Composite sample of suspicious looking material Beneath Civic Center Road in accordance with Change order #8	Surface	Yes	**378**	<LOD	647	536	**1287**																				
									230	<LOD	584	**1094**	892																				
									343	<LOD	536	614	755																				
									317	<LOD	589	748	978																				
NA	1863	20230707-Parrot-TA-C-1453		East side of Civic Center Annex	2 composite samples were taken of excavated material on the east and south sides of the Civic Center Annex.	Composite sample of excavated material east of Civic Center Annex	2 ft Bgs	Yes	**381**	<LOD	308	**1459**	472																				
									332	<LOD	316	633	439																				
									303	<LOD	274	631	626																				
									339	<LOD	299	908	512																				
NA	1864	20230707-Parrot-TA-C-1454		South side of Civic Center Annex		Composite sample of excavated material south of Civic Center Annex	2 ft Bgs	Yes	**298**	9	**1235**	**1637**	**2118**																				
									294	<LOD	802	**1996**	**2314**																				
									208	<LOD	782	**1729**	**2002**																				
									267	9	940	**1787**	**2145**																				
NA	1865	20230711-Parrot-OB-C-1455		Pit Run Stockpile (S side of Civic Center Annex)	1 composite sample was taken from the onsite stockpile of Pit Run material imported from Butanna Pit	Composite sample of Pit Run Stockpile located south of the Civic Center. This is imported material from Butanna Pit	Stockpile/Surface	Yes	<LOD	<LOD	<LOD	20	67																				
									<LOD	<LOD	<LOD	15	83																				
									<LOD	<LOD	<LOD	20	44																				
									<LOD	<LOD	<LOD	18	65																				

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .
Green cells denote ET cover samples
NA = Not Applicable

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Laboratory ID	WET Laboratory ID	Composite Field ID	Laboratory Sample ID	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)		Field XRF Results, ppm					Laboratory XRF Results, ppm					SRM Certified Values, ppm					SRM Recovery (%)					RPD				
									As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn	As	Cd	Cu	Pb	Zn
NA	1866	20230712-Parrot-TA-C-1456		North of walking trail	3 composite samples were collected during additional waste excavation in accordance with CO#8	Composite sample of excavated material north of walking trail	2 ft Bgs	Yes	**356**	<LOD	432	378	773																					
									266	<LOD	505	406	**1045**																			
									287	<LOD	621	475	906																			
									303	<LOD	519	420	908																			
NA	1867	20230712-Parrot-TA-C-1457		West extent of excavation (CO#8)		Composite sample of excavated material at the western extent of additional waste removal per CO#8	2 ft Bgs	Yes	**261**	<LOD	889	**1413**	**2012**																			
									319	9	972	**1310**	**1810**																			
									218	<LOD	570	**1367**	**1372**																			
									266	9	810	**1363**	**1731**																			
NA	1868	20230712-Parrot-TA-C-1458		North extent of excavation (CO#8)		Composite sample of excavated material at the northern extent of additional waste removal per CO#8	2 ft Bgs	Yes	191	<LOD	536	780	**1074**																			
									254	<LOD	508	769	**1054**																			
									156	<LOD	561	566	796																			
									200	<LOD	535	705	975																			

Table C4. Parrot Removal Sampled ID - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm

Sampling Labeling Schema

Sample ID = (Year, Month, Day = 180404), (Project Name = Parrot), (Strata Types = OB = Overburden, SL = Slag, TA = Tailings, CY = Clay, RK = Alluvium), (Sample Type = G = Grab, C = Composite), (Sample Number = 001)

Note: Values in bold exceed action levels .

Green cells denote ET cover samples

NA = Not Applicable

Project No: **210720 WET - Parrot**

24 samples were received on July 20, 2021 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
210720 Parrot	210720-1	23	7/30/2021	15:01:49	45	15 U	420	167	507
210720 Parrot	210720-2	48	7/30/2021	15:04:53	74	15 U	404	186	1,703
210720 Parrot	210720-3	62	7/30/2021	15:06:45	67	39 J	148	1,483	423
210720 Parrot	210720-4	75	7/30/2021	15:08:43	45	15 U	311	255	856
210720 Parrot	210720-5	100	7/30/2021	15:10:26	135	15 U	1,553	711	5,314
210720 Parrot	210720-6	125	7/30/2021	15:12:15	357	15 U	877	342	2,858
210720 Parrot	210720-7	129	7/30/2021	15:14:19	67	46	155	1,455	427
210720 Parrot	210720-8	152	7/30/2021	15:16:27	405	15 U	529	1,219	776
210720 Parrot	210720-9	177	7/30/2021	15:18:21	59	15 U	291	190	350
210720 Parrot	210720-10	191	7/30/2021	15:20:30	79	36 J	143	1,440	426
210720 Parrot	210720-11	204	7/30/2021	15:22:21	152	15 U	279	1,048	938
210720 Parrot	210720-12	229	7/30/2021	15:24:04	303	15 U	265	589	144
210720 Parrot	210720-13	254	7/30/2021	15:26:01	367	15 U	422	1,368	1,613
210720 Parrot	210720-14	258	7/30/2021	15:28:03	79	15 U	154	1,506	429
210720 Parrot	210720-15	22	7/30/2021	15:30:02	50	15 U	374	174	528
210720 Parrot	210720-16	24	7/30/2021	16:00:48	7 J	15 U	41 J	9 U	9 U
210720 Parrot	210720-17	124	7/30/2021	16:02:43	328	15 U	832	343	2,877
210720 Parrot	210720-18	126	7/30/2021	16:04:47	6 U	15 U	39 J	9 U	9 U
210720 Parrot	210720-19	151	7/30/2021	16:06:42	343	15 U	482	919	615
210720 Parrot	210720-20	153	7/30/2021	16:08:32	6 U	15 U	19 J	9 U	9 U
210720 Parrot	210720-21	253	7/30/2021	16:10:13	364	15 U	475	1,348	1,549
210720 Parrot	210720-22	255	7/30/2021	16:12:25	6 U	15 U	32 J	9 U	9 U
210720 Parrot	210720-23	216	7/30/2021	16:14:16	606	15 U	28,655	123	1,379
210720 Parrot	210720-24	218	7/30/2021	16:15:55	1,157	15 U	385	57	288

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **210720 WET - Parrot**

24 samples were received on July 20, 2021 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

					Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
210720 Parrot	210720-CalBlk	Silica Blank	7/30/2021	14:52:02	6 U	15 U	15 U	9 U	9 U																		
210720 Parrot	210720-InstCalC	SRM - OREAS153b	7/30/2021	14:58:05	78	15 U	7,331	15 J	158		79	-	6,780	13	122		98.7%	-	108.1%	114.5%	129.5%						
210720 Parrot	210720-4	75	7/30/2021	15:08:43	45	15 U	311	255	856																		
210720 Parrot	REP-210720-4	75	7/30/2021	15:35:03	47	15 U	295	257	840														4.3%	-	5.3%	0.8%	1.9%
210720 Parrot	210720-13	254	7/30/2021	15:26:01	367	15 U	422	1,368	1,613																		
210720 Parrot	DUP-210720-13	254	7/30/2021	15:53:02	326	15 U	447	1,340	1,288														11.8%	-	5.8%	2.1%	22.4%
210720 Parrot	QC CHK-2710a	SRM - NIST2710a	7/30/2021	15:56:02	1,420	15 U	3,460	5,483	4,139		1,540	12	3,420	5,520	4,180		92.2%	-	101.2%	99.3%	99.0%						
210720 Parrot	QC CHK-Blank	Silica Blank	7/30/2021	15:58:32	6 U	15 U	15 U	9 U	9 U																		
210720 Parrot	210720-24	218	7/30/2021	16:15:55	1,157	15 U	385	57	288																		
210720 Parrot	REP-210720-24	218	7/30/2021	16:18:00	1,169	15 U	382	60	291														1.0%	-	0.8%	5.1%	1.0%
210720 Parrot	210720-21	253	7/30/2021	16:10:13	364	15 U	475	1,348	1,549																		
210720 Parrot	DUP-210720-21	253	7/30/2021	16:45:59	364	15 U	434	1,427	1,779														0.0%	-	9.0%	5.7%	13.8%
210720 Parrot	QC CHK-2710a	SRM - NIST2710a	7/30/2021	16:48:18	1,423	15 U	3,538	5,632	4,181		1,540	12	3,420	5,520	4,180		92.4%	-	103.5%	102.0%	100.0%						
210720 Parrot	QC CHK-Blank	Silica Blank	7/30/2021	16:50:08	6 U	15 U	15 U	9 U	9 U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **210902 WET - Parrot**

22 samples were received on September 2, 2021 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
210902 Parrot	210902-1	280	9/15/2021	16:21:23	294	15 U	523	833	1,277
210902 Parrot	210902-2	281	9/15/2021	16:23:03	288	15 U	518	860	1,206
210902 Parrot	210902-3	282	9/15/2021	16:24:49	6 U	15 U	27 J	9 U	9 U
210902 Parrot	210902-4	306	9/15/2021	16:27:06	76	15 U	2,489	123	1,058
210902 Parrot	210902-5	333	9/15/2021	16:28:48	66	15 U	459	235	367
210902 Parrot	210902-6	358	9/15/2021	16:31:00	96	15 U	480	232	405
210902 Parrot	210902-7	382	9/15/2021	16:32:36	72	15 U	341	157	246
210902 Parrot	210902-8	383	9/15/2021	16:34:13	79	15 U	329	160	266
210902 Parrot	210902-9	384	9/15/2021	16:36:07	6 U	15 U	17 J	9 U	9 U
210902 Parrot	210902-10	408	9/15/2021	16:37:59	37	15 U	290	120	248
210902 Parrot	210902-11	409	9/15/2021	16:39:51	44	15 U	296	96	248
210902 Parrot	210902-12	410	9/15/2021	17:07:46	6 U	15 U	27 J	9 U	9 U
210902 Parrot	210902-13	434	9/15/2021	17:09:30	268	15 U	585	345	381
210902 Parrot	210902-14	461	9/15/2021	17:11:15	312	15 U	660	716	1,700
210902 Parrot	210902-15	486	9/15/2021	17:13:31	377	15 U	541	650	752
210902 Parrot	210902-16	510	9/15/2021	17:15:16	25	15 U	134	82	239
210902 Parrot	210902-17	511	9/15/2021	17:17:00	22	15 U	135	89	231
210902 Parrot	210902-18	512	9/15/2021	17:18:51	6 U	15 U	26 J	9 U	9 U
210902 Parrot	210902-19	515	9/15/2021	17:21:00	1,450	15 U	3,560	5,606	4,250
210902 Parrot	210902-20	448	9/15/2021	17:23:23	1,461	15 U	3,500	5,489	4,142
210902 Parrot	210902-21	386	9/15/2021	17:25:39	1,446	15 U	3,553	5,570	4,224
210902 Parrot	210902-22	320	9/15/2021	17:27:34	1,458	15 U	3,527	5,519	4,148

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **210902 WET - Parrot**

22 samples were received on September 2, 2021 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

					Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
210902 Parrot	210902-CalBlk	Silica Blank	9/15/2021	16:14:47	6 U	15 U	15 U	9 U	9 U																		
210902 Parrot	210902-InstCalC	SRM - OREAS153b	9/15/2021	16:17:23	85	15 U	7,383	17 J	163		79	-	6,780	13	122		107.6%	-	108.9%	129.8%	133.6%						
210902 Parrot	210902-11	409	9/15/2021	16:39:51	44	15 U	296	96	248																		
210902 Parrot	REP-210902-11	409	9/15/2021	16:42:52	36	15 U	295	107	269														20.0%	-	0.3%	10.8%	8.1%
210902 Parrot	210902-1	280	9/15/2021	16:21:23	294	15 U	523	833	1,277																		
210902 Parrot	DUP-210902-1	280	9/15/2021	16:59:20	295	15 U	603	827	1,003														0.3%	-	14.2%	0.7%	24.0%
210902 Parrot	QC CHK-2710a	SRM - NIST2710a	9/15/2021	17:03:20	1,437	15 U	3,460	5,490	4,112		1,540	12	3,420	5,520	4,180		93.3%	-	101.2%	99.5%	98.4%						
210902 Parrot	QC CHK-Blank	Silica Blank	9/15/2021	17:05:37	6 U	15 U	15 U	9 U	9 U																		
210902 Parrot	210902-17	511	9/15/2021	17:17:00	22	15 U	135	89	231																		
210902 Parrot	REP-210902-17	511	9/15/2021	17:32:07	26	15 U	143	81	234														16.7%	-	5.8%	9.4%	1.3%
210902 Parrot	210902-14	461	9/15/2021	17:11:15	312	15 U	660	716	1,700																		
210902 Parrot	DUP-210902-14	461	9/15/2021	17:43:36	301	15 U	654	762	1,959														3.6%	-	0.9%	6.2%	14.2%
210902 Parrot	QC CHK-2710a	SRM - NIST2710a	9/15/2021	17:45:53	1,403	15 U	3,541	5,523	4,152		1,540	12	3,420	5,520	4,180		91.1%	-	103.5%	100.1%	99.3%						
210902 Parrot	QC CHK-Blank	Silica Blank	9/15/2021	17:48:41	6 U	15 U	15 U	9 U	9 U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **211022 WET - Parrot**

22 samples were received on October 22, 2021 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Cells highlighted in red indicates Pb concentration ≥10X As concentration.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
211022 Parrot	211022-1	563	11/6/2021	9:47:06	62	15 U	314	158	480
211022 Parrot	211022-2	590	11/6/2021	9:48:57	48	15 U	248	152	203
211022 Parrot	211022-3	615	11/6/2021	9:51:16	74	15 U	278	257	461
211022 Parrot	211022-4	639	11/6/2021	9:53:06	331	15 U	435	1,246	1,670
211022 Parrot	211022-5	640	11/6/2021	9:54:58	376	15 U	503	1,322	1,400
211022 Parrot	211022-6	641	11/6/2021	9:56:52	6U	15 U	16 J	9 U	9 U
211022 Parrot	211022-7	666	11/6/2021	9:58:56	215	15 U	542	880	1,626
211022 Parrot	211022-8	667	11/6/2021	10:00:45	228	15 U	484	969	1,578
211022 Parrot	211022-9	668	11/6/2021	10:02:26	6U	15 U	28 J	9 U	9 U
211022 Parrot	211022-10	692	11/6/2021	10:04:22	47	15 U	581	97	498
211022 Parrot	211022-11	719	11/6/2021	10:06:05	53	15 U	269	235	381
211022 Parrot	211022-12	744	11/6/2021	10:50:36	51	15 U	380	197	468
211022 Parrot	211022-13	768	11/6/2021	10:52:31	77	15 U	598	340	2,147
211022 Parrot	211022-14	769	11/6/2021	10:54:21	79	15 U	628	370	2,337
211022 Parrot	211022-15	770	11/6/2021	10:56:12	6U	15 U	29 J	9 U	9 U
211022 Parrot	211022-16	537	11/6/2021	10:58:31	32	15 U	188	167	498
211022 Parrot	211022-17	538	11/6/2021	11:00:25	34	15 U	194	174	547
211022 Parrot	211022-18	539	11/6/2021	11:02:10	6U	15 U	26 J	9 U	9 U
211022 Parrot	211022-19	577	11/6/2021	11:04:22	86	56	161	1,463	429
211022 Parrot	211022-20	644	11/6/2021	11:06:13	78	43 J	150	1,476	429
211022 Parrot	211022-21	706	11/6/2021	11:07:59	66	35 J	138	1,459	415
211022 Parrot	211022-22	773	11/6/2021	11:10:00	58	47	154	1,480	420

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **211022 WET - Parrot**

22 samples were received on October 22, 2021 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Cells highlighted in red indicates Pb concentration ≥10X As concentration.

					Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
211022 Parrot	211022-CalBlk	Silica Blank	11/6/2021	9:41:20	6 U	15 U	15 U	9 U	9 U																		
211022 Parrot	211022-InstCalC	SRM - OREAS153b	11/6/2021	9:43:48	83	15 U	7,315	15 J	166		79	-	6,780	13	122		105.1%	-	107.9%	114.5%	136.1%						
211022 Parrot	211022-11	719	11/6/2021	10:06:05	53	15 U	269	235	381																		
211022 Parrot	REP-211022-11	719	11/6/2021	10:08:49	54	15 U	258	238	384														1.9%	-	4.2%	1.3%	0.8%
211022 Parrot	211022-4	639	11/6/2021	9:53:06	331	15 U	435	1,246	1,670																		
211022 Parrot	DUP-211022-4	639	11/6/2021	10:25:22	331	15 U	436	1,353	1,547														0.0%	-	0.2%	8.2%	7.6%
211022 Parrot	QC CHK-2710a	SRM - NIST2710a	11/6/2021	10:38:36	1,423	15 U	3,465	5,576	4,223		1,540	12	3,420	5,520	4,180		92.4%	-	101.3%	101.0%	101.0%						
211022 Parrot	QC CHK-Blank	Silica Blank	11/6/2021	10:41:11	6 U	15 U	15 U	9 U	9 U																		
211022 Parrot	211022-22	773	11/6/2021	11:10:00	58	47	154	1,480	420																		
211022 Parrot	REP-211022-22	773	11/6/2021	11:12:29	85	41	138	1,481	425														37.8%	13.6%	11.0%	0.1%	1.2%
211022 Parrot	211022-13	768	11/6/2021	10:52:31	77	15 U	598	340	2,147																		
211022 Parrot	DUP-211022-13	768	11/6/2021	11:30:05	75	15 U	498	324	2,164														2.6%	-	18.2%	4.8%	0.8%
211022 Parrot	QC CHK-2710a	SRM - NIST2710a	11/6/2021	11:37:29	1,391	15 U	3,499	5,554	4,183		1,540	12	3,420	5,520	4,180		90.3%	-	102.3%	100.6%	100.1%						
211022 Parrot	QC CHK-Blank	Silica Blank	11/6/2021	11:39:47	6 U	15 U	15 U	9 U	9 U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **211116 WET - Parrot**

22 samples were received on November 16, 2021 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
211116 Parrot	211116-1	795	11/30/2021	15:36:33	96	15 U	362	248	203
211116 Parrot	211116-2	796	11/30/2021	15:38:36	64	15 U	401	235	198
211116 Parrot	211116-3	797	11/30/2021	15:40:25	6 U	15 U	15 U	9 U	9 U
211116 Parrot	211116-4	821	11/30/2021	15:42:19	185	15 U	349	205	440
211116 Parrot	211116-5	835	11/30/2021	15:45:07	1,419	15 U	3,503	5,523	4,095
211116 Parrot	211116-6	848	11/30/2021	15:46:50	430	15 U	390	685	578
211116 Parrot	211116-7	873	11/30/2021	15:48:46	43	15 U	722	112	766
211116 Parrot	211116-8	897	11/30/2021	15:50:38	45	15 U	337	180	639
211116 Parrot	211116-9	898	11/30/2021	15:52:23	48	15 U	371	191	735
211116 Parrot	211116-10	899	11/30/2021	15:54:32	6 U	15 U	15 U	9 U	9 U
211116 Parrot	211116-11	924	11/30/2021	15:56:44	137	15 U	683	359	3,312
211116 Parrot	211116-12	925	11/30/2021	16:22:16	111	15 U	872	438	4,281
211116 Parrot	211116-13	926	11/30/2021	16:25:05	6 U	15 U	17 J	9 U	9 U
211116 Parrot	211116-14	950	11/30/2021	16:27:35	51	15 U	815	449	3,954
211116 Parrot	211116-15	902	11/30/2021	16:30:33	1,499	15 U	3,554	5,600	4,230
211116 Parrot	211116-16	964	11/30/2021	16:33:45	1,468	15 U	3,545	5,578	4,228
211116 Parrot	211116-17	978	11/30/2021	16:35:33	157	15 U	1,434	723	7,962
211116 Parrot	211116-18	1003	11/30/2021	16:37:19	60	15 U	379	201	698
211116 Parrot	211116-19	1027	11/30/2021	16:38:59	235	15 U	312	222	346
211116 Parrot	211116-20	1028	11/30/2021	16:40:42	220	15 U	295	221	380
211116 Parrot	211116-21	1029	11/30/2021	16:42:21	6 U	15 U	16 J	9 U	9 U
211116 Parrot	211116-22	1031	11/30/2021	16:44:24	1,455	15 U	3,558	5,579	4,189

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **211116 WET - Parrot**

22 samples were received on November 16, 2021 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

					Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
211116 Parrot	Cal Blank	Silica Blank	11/30/2021	15:31:21	6 U	15 U	15 U	9 U	9 U																		
211116 Parrot	211116-InstCalC	SRM - OREAS153b	11/30/2021	15:34:30	86	15 U	7,349	17 J	155		79	-	6,780	13	122		108.9%	-	108.4%	129.8%	127.0%						
211116 Parrot	211116-6	848	11/30/2021	15:46:50	430	15 U	390	685	578																		
211116 Parrot	REP-211116-6	848	11/30/2021	16:01:07	441	15 U	398	689	601														2.5%	-	2.0%	0.6%	3.9%
211116 Parrot	211116-11	924	11/30/2021	15:56:44	137	15 U	683	359	3,312																		
211116 Parrot	DUP-211116-11	924	11/30/2021	16:14:40	135	15 U	702	378	3,411														1.5%	-	2.7%	5.2%	2.9%
211116 Parrot	QC CHK-2710a	SRM - NIST2710a	11/30/2021	16:17:03	1,409	15 U	3,485	5,494	4,161		1,540	12	3,420	5,520	4,180		91.5%	-	101.9%	99.5%	99.5%						
211116 Parrot	QC CHK-Blank	Silica Blank	11/30/2021	16:20:14	6 U	15 U	15 U	9 U	9 U																		
211116 Parrot	211116-12	925	11/30/2021	16:22:16	111	15 U	872	438	4,281																		
211116 Parrot	REP-211116-12	925	11/30/2021	16:47:00	103	15 U	855	419	4,287														7.5%	-	2.0%	4.4%	0.1%
211116 Parrot	211116-17	978	11/30/2021	16:35:33	157	15 U	1,434	723	7,962																		
211116 Parrot	DUP-211116-17	978	11/30/2021	17:05:55	153	15 U	1,404	771	7,998														2.6%	-	2.1%	6.4%	0.5%
211116 Parrot	QC CHK-2710a	SRM - NIST2710a	11/30/2021	17:07:57	1,416	15 U	3,473	5,502	4,097		1,540	12	3,420	5,520	4,180		91.9%	-	101.5%	99.7%	98.0%						
211116 Parrot	QC CHK-Blank	Silica Blank	11/30/2021	17:10:37	6 U	15 U	15 U	9 U	9 U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **220104 WET - Parrot**

22 samples were received on January 4, 2022 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Cells highlighted in red indicates Pb concentration ≥10X As concentration.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
220104 Parrot	220104-1	1053	1/14/2022	14:58:37	164	15 U	383	296	489
220104 Parrot	220104-2	1054	1/14/2022	15:00:26	155	15 U	356	336	481
220104 Parrot	220104-3	1055	1/14/2022	15:02:10	6 U	15 U	26 J	9 U	9 U
220104 Parrot	220104-4	1079	1/14/2022	15:04:08	206	15 U	2,517	1,139	12,391
220104 Parrot	220104-5	1106	1/14/2022	15:06:20	61	15 U	162	153	304
220104 Parrot	220104-6	1131	1/14/2022	15:08:02	92	15 U	289	135	291
220104 Parrot	220104-7	1155	1/14/2022	15:09:44	147	15 U	346	314	203
220104 Parrot	220104-8	1156	1/14/2022	15:11:24	141	15 U	336	283	197
220104 Parrot	220104-9	1157	1/14/2022	15:13:01	6 U	15 U	21 J	9 U	9 U
220104 Parrot	220104-10	1181	1/14/2022	15:14:45	507	15 U	311	1,291	397
220104 Parrot	220104-11	1182	1/14/2022	15:16:41	323	15 U	364	1,491	486
220104 Parrot	220104-12	1183	1/14/2022	15:41:04	6 U	15 U	21 J	9 U	9 U
220104 Parrot	220104-13	1207	1/14/2022	15:42:44	95	15 U	1,133	690	6,438
220104 Parrot	220104-14	1234	1/14/2022	15:44:31	393	15 U	322	304	293
220104 Parrot	220104-15	1259	1/14/2022	15:46:21	338	15 U	375	719	707
220104 Parrot	220104-16	1283	1/14/2022	15:48:58	375	15 U	1,821	1,265	1,984
220104 Parrot	220104-17	1284	1/14/2022	15:50:39	325	15 U	1,831	1,125	1,679
220104 Parrot	220104-18	1285	1/14/2022	15:52:35	6 U	15 U	22 J	9 U	9 U
220104 Parrot	220104-19	1093	1/14/2022	15:54:44	68	40 J	150	1,450	413
220104 Parrot	220104-20	1159	1/14/2022	15:56:47	54	15 U	144	1,491	440
220104 Parrot	220104-21	1221	1/14/2022	15:58:34	57	45	141	1,445	420
220104 Parrot	220104-22	1288	1/14/2022	16:01:01	73	46	149	1,490	443

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **220104 WET - Parrot**

22 samples were received on January 4, 2022 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

					Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
220104 Parrot	Cal Blank	Silica Blank	1/14/2022	14:53:36	6 U	15 U	15 U	9 U	9 U																		
220104 Parrot	220104-InstCalC	SRM - OREAS153b	1/14/2022	14:56:25	86	15 U	7,304	15	157		79	-	6,780	13	122		108.9%	-	107.7%	114.5%	128.7%						
220104 Parrot	220104-11	1182	1/14/2022	15:16:41	323	15 U	364	1,491	486																		
220104 Parrot	REP-220104-11	1182	1/14/2022	15:19:03	316	15 U	368	1,511	520														2.2%	-	1.1%	1.3%	6.8%
220104 Parrot	220104-4	1079	1/14/2022	15:04:08	206	15 U	2,517	1,139	12,391																		
220104 Parrot	DUP-220104-4	1079	1/14/2022	15:34:40	211	15 U	2,477	1,121	12,625														2.4%	-	1.6%	1.6%	1.9%
220104 Parrot	QC CHK-2710a	SRM - NIST2710a	1/14/2022	15:37:11	1,376	15 U	3,438	5,519	4,137		1,540	12	3,420	5,520	4,180		89.4%	-	100.5%	100.0%	99.0%						
220104 Parrot	QC CHK-Blank	Silica Blank	1/14/2022	15:39:03	6 U	15 U	15 U	9 U	9 U																		
220104 Parrot	220104-14	1234	1/14/2022	15:44:31	393	15 U	322	304	293																		
220104 Parrot	REP-220104-14	1234	1/14/2022	16:04:33	399	15 U	321	313	305														1.5%	-	0.3%	2.9%	4.0%
220104 Parrot	220104-15	1259	1/14/2022	15:46:21	338	15 U	375	719	707																		
220104 Parrot	DUP-220104-15	1259	1/14/2022	16:27:43	348	15 U	423	694	727														2.9%	-	12.0%	3.5%	2.8%
220104 Parrot	QC CHK-2710a	SRM - NIST2710a	1/14/2022	16:31:17	1,433	15 U	3,439	5,480	4,104		1,540	12	3,420	5,520	4,180		93.1%	-	100.6%	99.3%	98.2%						
220104 Parrot	QC CHK-Blank	Silica Blank	1/14/2022	16:34:44	6 U	15 U	15 U	9 U	9 U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **220309 WET - Parrot**

22 samples were received on March 9, 2022 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
220309 Parrot	220309-1	1310	3/20/2022	14:00:35	104	15 U	467	80	368
220309 Parrot	220309-2	1311	3/20/2022	14:02:49	109	15 U	441	75	416
220309 Parrot	220309-3	1312	3/20/2022	14:04:35	6 U	15 U	34 J	9 U	9 U
220309 Parrot	220309-4	1336	3/20/2022	14:06:49	77	15 U	285	119	347
220309 Parrot	220309-5	1350	3/20/2022	14:09:05	1,484	15 U	3,547	5,547	4,204
220309 Parrot	220309-6	1363	3/20/2022	14:11:05	6 U	15 U	1,298	132	423
220309 Parrot	220309-7	1388	3/20/2022	14:13:29	136	15 U	417	91	405
220309 Parrot	220309-8	1407	3/20/2022	14:15:12	92	15 U	371	204	404
220309 Parrot	220309-9	1408	3/20/2022	14:18:52	98	15 U	407	145	431
220309 Parrot	220309-10	1409	3/20/2022	14:20:53	6 U	15 U	29 J	9 U	9 U
220309 Parrot	220309-11	1411	3/20/2022	14:22:42	1,446	15 U	3,506	5,572	4,279
220309 Parrot	220309-12	1433	3/20/2022	14:53:40	309	15 U	299	657	597
220309 Parrot	220309-13	1434	3/20/2022	14:56:28	297	15 U	275	604	507
220309 Parrot	220309-14	1435	3/20/2022	14:58:24	6 U	15 U	26 J	9 U	9 U
220309 Parrot	220309-15	1459	3/20/2022	15:00:22	40	15 U	1,145	72	480
220309 Parrot	220309-16	1473	3/20/2022	15:02:14	1,471	15 U	3,566	5,597	4,248
220309 Parrot	220309-17	1486	3/20/2022	15:04:01	29	15 U	212	261	102
220309 Parrot	220309-18	1511	3/20/2022	15:05:43	35	15 U	287	230	203
220309 Parrot	220309-19	1535	3/20/2022	15:07:29	31	15 U	338	195	341
220309 Parrot	220309-20	1536	3/20/2022	15:09:25	32	15 U	355	178	347
220309 Parrot	220309-21	1537	3/20/2022	15:11:03	6 U	15 U	20 J	9 U	9 U
220309 Parrot	220309-22	1540	3/20/2022	15:12:44	1,466	15 U	3,517	5,571	4,147

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **220309 WET - Parrot**

22 samples were received on March 9, 2022 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

					Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
220309 Parrot	Cal Blank	Silica Blank	3/20/2022	13:54:40	6 U	15 U	15 U	9 U	9 U																		
220309 Parrot	220309-InstCalC	SRM - OREAS153b	3/20/2022	13:57:22	82	15 U	7,342	16 J	163		79	-	6,780	13	122		103.8%	-	108.3%	122.1%	133.6%						
220309 Parrot	220309-9	1408	3/20/2022	14:18:52	98	15 U	407	145	431																		
220309 Parrot	REP-220309-9	1408	3/20/2022	14:27:04	94	15 U	400	146	431														4.2%	-	1.7%	0.7%	0.0%
220309 Parrot	220309-6	1363	3/20/2022	14:11:05	6 U	15 U	1,298	132	423																		
220309 Parrot	DUP-220309-6	1363	3/20/2022	14:47:05	6 U	15 U	1,338	129	450														-	-	3.0%	2.3%	6.2%
220309 Parrot	QC CHK-2710a	SRM - NIST2710a	3/20/2022	14:49:24	1,433	15 U	3,492	5,529	4,174		1,540	12	3,420	5,520	4,180		93.1%	-	102.1%	100.2%	99.9%						
220309 Parrot	QC CHK-Blank	Silica Blank	3/20/2022	14:51:19	6 U	15 U	15 U	9 U	9 U																		
220309 Parrot	220309-20	1536	3/20/2022	15:09:25	32	15 U	355	178	347																		
220309 Parrot	REP-220309-20	1536	3/20/2022	15:16:11	28	15 U	364	187	366														13.3%	-	2.5%	4.9%	5.3%
220309 Parrot	220309-12	1433	3/20/2022	14:53:40	309	15 U	299	657	597																		
220309 Parrot	DUP-220309-12	1433	3/20/2022	15:47:35	293	15 U	287	626	539														5.3%	-	4.1%	4.8%	10.2%
220309 Parrot	QC CHK-2710a	SRM - NIST2710a	3/20/2022	15:56:17	1,416	15 U	3,545	5,569	4,200		1,540	12	3,420	5,520	4,180		91.9%	-	103.7%	100.9%	100.5%						
220309 Parrot	QC CHK-Blank	Silica Blank	3/20/2022	15:58:30	6 U	15 U	15 U	9 U	9 U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **221205 WET - Parrot**

21 samples were received on December 5, 2022 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

Cells highlighted in red indicates Pb concentration ≥10X As concentration.

Project No.	LAB ID #	Sample ID	Date	Time	As, mg/kg	Cd, mg/kg	Cu, mg/kg	Pb, mg/kg	Zn, mg/kg
221205 Parrot	221205-1	1562	1/7/2023	15:32:23	41	15 U	219	236	113
221205 Parrot	221205-2	1563	1/7/2023	15:34:19	38	15 U	202	253	106
221205 Parrot	221205-3	1564	1/7/2023	15:36:06	6 U	15 U	28 J	9 U	9 U
221205 Parrot	221205-4	1588	1/7/2023	15:37:49	36	15 U	415	211	149
221205 Parrot	221205-5	1602	1/7/2023	15:39:34	80	34 J	152	1,453	422
221205 Parrot	221205-6	1615	1/7/2023	15:42:00	36	15 U	352	199	148
221205 Parrot	221205-7	1640	1/7/2023	15:43:46	21	15 U	1,138	138	389
221205 Parrot	221205-8	1664	1/7/2023	15:45:40	118	15 U	236	785	1,729
221205 Parrot	221205-9	1665	1/7/2023	15:47:51	162	15 U	247	829	935
221205 Parrot	221205-10	1666	1/7/2023	15:49:39	6 U	15 U	28 J	9 U	9 U
221205 Parrot	221205-11	1669	1/7/2023	15:51:29	68	44 J	151	1,482	424
221205 Parrot	221205-12	1691	1/7/2023	15:53:44	158	15 U	484	550	1,028
221205 Parrot	221205-13	1692	1/7/2023	15:55:44	145	15 U	482	572	1,032
221205 Parrot	221205-14	1693	1/7/2023	15:58:07	6 U	15 U	29 J	9 U	9 U
221205 Parrot	221205-15	1717	1/7/2023	15:59:55	100	15 U	585	195	605
221205 Parrot	221205-16	1731	1/7/2023	16:02:55	77	46	151	1,490	447
221205 Parrot	221205-17	1744	1/7/2023	16:04:58	35	15 U	238	181	105
221205 Parrot	221205-18	1769	1/7/2023	16:07:05	422	15 U	492	637	821
221205 Parrot	221205-19	1793	1/7/2023	16:09:27	26	15 U	1,572	148	673
221205 Parrot	221205-20	1794	1/7/2023	16:12:01	45	15 U	2,293	136	888
221205 Parrot	221205-21	1795	1/7/2023	16:13:48	6 U	15 U	38 J	9 U	9 U

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

Project No: **221205 WET - Parrot**

21 samples were received on December 5, 2022 for the analysis of As, Cd, Cu, Pb, and Zn by XRF.

					Analyzed, mg/kg						SRM Certified Values, mg/kg						SRM % Recovery						RPD				
Project No.	**LAB ID #**	**Sample ID**	**Date**	**Time**	**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**		**As**	**Cd**	**Cu**	**Pb**	**Zn**
221205 Parrot	Cal Blank	Silica Blank	1/7/2023	15:18:29	6 U	15 U	15 U	9 U	9 U																		
221205 Parrot	221205-InstCalC	SRM - OREAS153b	1/7/2023	15:27:33	86	15 U	7,369	14	156		79	-	6,780	13	122		108.9%	-	108.7%	106.9%	127.9%						
221205 Parrot	221205-18	1769	1/7/2023	16:07:05	422	15 U	492	637	821																		
221205 Parrot	REP-221205-18	1769	1/7/2023	16:17:56	418	15 U	540	641	813														1.0%	-	9.3%	0.6%	1.0%
221205 Parrot	221205-12	1691	1/7/2023	15:53:44	158	15 U	484	550	1,028																		
221205 Parrot	DUP-221205-12	1691	1/7/2023	16:31:37	141	15 U	514	548	1,165														11.4%	-	6.0%	0.4%	12.5%
221205 Parrot	QC CHK-2710a	SRM - NIST2710a	1/7/2023	16:35:33	1,432	15 U	3,509	5,484	4,133		1,540	12	3,420	5,520	4,180		93.0%	-	102.6%	99.3%	98.9%						
221205 Parrot	QC CHK-Blank	Silica Blank	1/7/2023	16:37:34	6 U	15 U	15 U	9 U	9 U																		

Qualifiers: J = Analyte below the reporting limit U = Not detected at the method detection limit

ANALYTICAL SUMMARY REPORT

October 04, 2021

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H21050584

Project Name: Parrot ET Cover

Energy Laboratories Inc Helena MT received the following 2 samples for MT Dept of Justice on 5/26/2021 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H21050584-001	20210525-Parrot-ET-C-001	05/25/21 13:00	05/26/21	Soil	Metals by ICP/ICPMS, Total Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Saturation Percentage Soil Preparation USDA1
H21050584-002	20210525-Parrot-ET0C-002	05/25/21 13:30	05/26/21	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

CLIENT: MT Dept of Justice
Project: Parrot ET Cover
Work Order: H21050584

Revised Date: 10/04/21
Report Date: 06/08/21

CASE NARRATIVE

Per J. Vincent with Water and Environmental Technologies all work for Parrot Tailings goes through NRD. 10/4/2021

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Project: Parrot ET Cover
Lab ID: H21050584-001
Client Sample ID: 20210525-Parrot-ET-C-001

Revised Date: 10/04/21
Report Date: 06/08/21
Collection Date: 05/25/21 13:00
DateReceived: 05/26/21
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	26.8	wt%		0.2		D2974	05/26/21 13:43 / iej
Sand	42	%		1		ASA15-5	06/04/21 09:31 / stp
Silt	46	%		1		ASA15-5	06/04/21 09:31 / stp
Clay	12	%		1		ASA15-5	06/04/21 09:31 / stp
Texture	L			1		ASA15-5	06/04/21 09:31 / stp
SATURATED PASTE							
Saturation	81.8	%		0.1		USDA27a	06/02/21 07:43 / sah
SATURATED PASTE							
pH, sat. paste	7.8	s.u.		0.1		ASA10-3	06/02/21 07:59 / sah
SATURATED PASTE EXTRACT							
Conductivity, sat. paste	4.0	mmhos/cm		0.1		ASA10-3	06/02/21 09:26 / stp
3050 EXTRACTABLE METALS							
Arsenic	6	mg/kg		1		SW6020	06/04/21 18:12 / dck
Cadmium	ND	mg/kg		1		SW6020	06/04/21 18:12 / dck
Copper	20	mg/kg	D	3		SW6020	06/04/21 18:12 / dck
Lead	13	mg/kg		1		SW6020	06/04/21 18:12 / dck
Zinc	54	mg/kg	D	8		SW6020	06/04/21 18:12 / dck

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Project: Parrot ET Cover
Lab ID: H21050584-002
Client Sample ID: 20210525-Parrot-ET0C-002

Revised Date: 10/04/21
Report Date: 06/08/21
Collection Date: 05/25/21 13:30
DateReceived: 05/26/21
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	15.6	wt%		0.2		D2974	05/26/21 13:43 / iej
Sand	64	%		1		ASA15-5	06/04/21 09:31 / stp
Silt	26	%		1		ASA15-5	06/04/21 09:31 / stp
Clay	10	%		1		ASA15-5	06/04/21 09:31 / stp
Texture	SL			1		ASA15-5	06/04/21 09:31 / stp
SATURATED PASTE							
Saturation	43.6	%		0.1		USDA27a	06/02/21 07:43 / sah
SATURATED PASTE							
pH, sat. paste	8.0	s.u.		0.1		ASA10-3	06/02/21 08:00 / sah
SATURATED PASTE EXTRACT							
Conductivity, sat. paste	1.2	mmhos/cm		0.1		ASA10-3	06/02/21 09:27 / stp
3050 EXTRACTABLE METALS							
Arsenic	9	mg/kg		1		SW6020	06/04/21 18:16 / dck
Cadmium	ND	mg/kg		1		SW6020	06/04/21 18:16 / dck
Copper	148	mg/kg	D	3		SW6020	06/04/21 18:16 / dck
Lead	41	mg/kg		1		SW6020	06/04/21 18:16 / dck
Zinc	119	mg/kg	D	8		SW6020	06/04/21 18:16 / dck

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21050584 **Report Date:** 06/08/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: ASA10-3									Analytical Run: SOIL EC_210607A	
Lab ID: ICV_1_210601_1		Initial Calibration Verification Standard							06/02/21 09:23	
Conductivity, sat. paste		1.46	mmhos/cm	0.10	103	90	110			
Lab ID: CCV_1_210601_1		Continuing Calibration Verification Standard							06/02/21 09:24	
Conductivity, sat. paste		5.14	mmhos/cm	0.10	103	90	110			
Lab ID: CCV1_1_210601_1		Continuing Calibration Verification Standard							06/02/21 09:24	
Conductivity, sat. paste		0.956	mmhos/cm	0.10	96	90	110			
Method: ASA10-3										Batch: 56438
Lab ID: MB-56438		Method Blank				Run: SOIL EC_210607A			06/02/21 09:25	
Conductivity, sat. paste		ND	mmhos/cm	0.05						
Lab ID: LCS-56438		Laboratory Control Sample				Run: SOIL EC_210607A			06/02/21 09:26	
Conductivity, sat. paste		4.28	mmhos/cm	0.10	102	80	120			
Lab ID: H21050593-003BDUP		Sample Duplicate				Run: SOIL EC_210607A			06/02/21 09:30	
Conductivity, sat. paste		1.78	mmhos/cm	0.10				2.2	20	
Method: ASA10-3									al Run: SOIL PH METER - ORION A211_210607A	
Lab ID: ICV_1_210601_1		Initial Calibration Verification Standard							06/02/21 07:55	
pH, sat. paste		7.05	s.u.	0.10	101	98.6	101.4			
Lab ID: CCV_1_210601_1		Continuing Calibration Verification Standard							06/02/21 07:56	
pH, sat. paste		7.05	s.u.	0.10	101	98.6	101.4			
Lab ID: CCV1_1_210601_1		Continuing Calibration Verification Standard							06/02/21 07:57	
pH, sat. paste		4.01	s.u.	0.10	100	97.5	102.5			
Method: ASA10-3										Batch: 56438
Lab ID: LCS-56438		Laboratory Control Sample				Run: SOIL PH METER - ORION A2			06/02/21 07:58	
pH, sat. paste		8.09	s.u.	0.10	101	95	105			
Lab ID: H21050593-003BDUP		Sample Duplicate				Run: SOIL PH METER - ORION A2			06/02/21 08:03	
pH, sat. paste		8.12	s.u.	0.10				0.1	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21050584 **Report Date:** 06/08/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**ASA15-5**										Batch: 56437
Lab ID:	**H21050700-001ADUP**	4	Sample Duplicate				Run: SOIL HYDROMETER_210607			06/04/21 09:31	
Sand			66.0	%	1.0				0.0	20	
Silt			20.0	%	1.0				0.0	20	
Clay			14.0	%	1.0				0.0	20	
Texture			SL		1.0						
Lab ID:	**LCS-56437**	3	Laboratory Control Sample				Run: SOIL HYDROMETER_210607			06/04/21 09:31	
Sand			48.0	%	1.0	114	70	130			
Silt			30.0	%	1.0	94	70	130			
Clay			22.0	%	1.0	85	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice

Work Order: H21050584

Report Date: 06/08/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **D2974**									Batch: PMOIST_210526_B	
Lab ID: **H21050584-002A DUP**	Sample Duplicate					Run: SOIL DRYING OVEN 2_21060			05/26/21 13:44	
Moisture		16.7	wt%	0.20				6.6	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21050584 **Report Date:** 06/08/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**								Analytical Run: ICPMS205-H_210604B		
Lab ID:	**ICV**	5	Initial Calibration Verification Standard							06/04/21 17:42	
Arsenic			0.0593	mg/L	0.0010	99	90	110			
Cadmium			0.0305	mg/L	0.0010	102	90	110			
Copper			0.0609	mg/L	0.0010	102	90	110			
Lead			0.0593	mg/L	0.0010	99	90	110			
Zinc			0.0614	mg/L	0.0013	102	90	110			
Lab ID:	**ICSA**	5	Interference Check Sample A							06/04/21 17:46	
Arsenic			0.0000482	mg/L	0.0010						
Cadmium			0.000167	mg/L	0.0010						
Copper			-0.0000437	mg/L	0.0010						
Lead			-0.0000244	mg/L	0.0010						
Zinc			0.000501	mg/L	0.0013						
Lab ID:	**ICSAB**	5	Interference Check Sample AB							06/04/21 17:51	
Arsenic			0.00956	mg/L	0.0010	96	70	130			
Cadmium			0.0100	mg/L	0.0010	101	70	130			
Copper			0.0188	mg/L	0.0010	94	70	130			
Lead			-0.0000441	mg/L	0.0010		0	0			
Zinc			0.00987	mg/L	0.0013	99	70	130			
Lab ID:	**CCV**	5	Continuing Calibration Verification Standard							06/04/21 17:58	
Arsenic			0.0512	mg/L	0.0010	102	90	110			
Cadmium			0.0515	mg/L	0.0010	103	90	110			
Copper			0.0521	mg/L	0.0010	104	90	110			
Lead			0.0503	mg/L	0.0010	101	90	110			
Zinc			0.0526	mg/L	0.0013	105	90	110			
Lab ID:	**CCB**	5	Continuing Calibration Blank							06/04/21 18:02	
Arsenic			9.38E-07	mg/L	0.0010						
Cadmium			2.95E-06	mg/L	0.0010						
Copper			-0.0000139	mg/L	0.0010						
Lead			-0.0000985	mg/L	0.0010						
Zinc			0.000159	mg/L	0.0013						
Method:	**SW6020**									Batch: 56459	
Lab ID:	**MB-56459**	5	Method Blank				Run: ICPMS205-H_210604B			06/04/21 18:05	
Arsenic			ND	mg/kg	0.4						
Cadmium			ND	mg/kg	0.09						
Copper			ND	mg/kg	3						
Lead			ND	mg/kg	1						
Zinc			ND	mg/kg	8						
Lab ID:	**LCS-56459**	5	Laboratory Control Sample				Run: ICPMS205-H_210604B			06/04/21 18:07	
Arsenic			160	mg/kg	1.0	81	71.4	105.1			
Cadmium			99.0	mg/kg	1.0	100	73.9	106.1			
Copper			127	mg/kg	3.1	93	76.6	108.8			
Lead			105	mg/kg	1.3	100	74.4	108.6			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21050584 **Report Date:** 06/08/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**										Batch: 56459
Lab ID:	**LCS-56459**	5	Laboratory Control Sample				Run: ICPMS205-H_210604B			06/04/21 18:07	
Zinc			236	mg/kg	7.6	102	75.3	111.7			
Lab ID:	**H21050584-001ADIL**	5	Serial Dilution				Run: ICPMS205-H_210604B			06/04/21 18:14	
Arsenic			6.79	mg/kg	2.0		0	0		10	N
Cadmium			ND	mg/kg	1.0		0	0		10	
Copper			21.1	mg/kg	16		0	0		10	N
Lead			12.4	mg/kg	6.6		0	0		10	N
Zinc			59.7	mg/kg	40		0	0		10	N
Lab ID:	**LFB-56459**	5	Laboratory Fortified Blank				Run: ICPMS205-H_210604B			06/04/21 18:42	
Arsenic			50.0	mg/kg	1.0	97	80	120			
Cadmium			26.9	mg/kg	1.0	104	80	120			
Copper			52.8	mg/kg	3.3	103	80	120			
Lead			53.5	mg/kg	1.3	104	80	120			
Zinc			51.2	mg/kg	8.0	99	80	120			
Lab ID:	**H21050584-001APDS1**	5	Post Digestion/Distillation Spike				Run: ICPMS205-H_210604B			06/04/21 18:44	
Arsenic			18.8	mg/kg	1.0	96	75	125			
Cadmium			13.5	mg/kg	1.0	103	75	125			
Copper			32.9	mg/kg	3.3	98	75	125			
Lead			26.4	mg/kg	1.3	105	75	125			
Zinc			65.4	mg/kg	8.0		75	125			A
Lab ID:	**H21050584-001AMS**	5	Sample Matrix Spike				Run: ICPMS205-H_210604B			06/04/21 18:46	
Arsenic			52.8	mg/kg	1.0	92	75	125			
Cadmium			25.7	mg/kg	1.0	101	75	125			
Copper			72.1	mg/kg	3.2	103	75	125			
Lead			64.2	mg/kg	1.3	102	75	125			
Zinc			111	mg/kg	7.8	111	75	125			
Lab ID:	**H21050584-001AMSD**	5	Sample Matrix Spike Duplicate				Run: ICPMS205-H_210604B			06/04/21 18:48	
Arsenic			53.0	mg/kg	1.0	93	75	125	0.3	20	
Cadmium			26.0	mg/kg	1.0	103	75	125	1.2	20	
Copper			74.7	mg/kg	3.2	109	75	125	3.6	20	
Lead			64.1	mg/kg	1.3	102	75	125	0.1	20	
Zinc			112	mg/kg	7.7	114	75	125	0.9	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

A - Analyte level was greater than four times the spike level - in accordance with the method, percent recovery is not calculated

N - Analyte concentration was not sufficiently high to calculate a Relative Percent Difference (RPD) for the serial dilution test

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice

Work Order: H21050584

Report Date: 06/08/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **USDA27a**										Batch: 56438
Lab ID: **LCS-56438**		Laboratory Control Sample				Run: SOIL DRYING OVEN 2_21060			06/02/21 07:42	
Saturation		41.3	%	0.10	99	80	120			
Lab ID: **H21050593-003BDUP**		Sample Duplicate				Run: SOIL DRYING OVEN 2_21060			06/02/21 07:43	
Saturation		56.8	%	0.10				7.1	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

Work Order Receipt Checklist

MT Dept of Justice

H21050584

Login completed by: Christopher F. Genin

Date Received: 5/26/2021

Reviewed by: BL2000\sdull

Received by: RAT

Reviewed Date: 6/2/2021

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	13.5°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

Client notified of temperature. Metals are to be reported on a dry weight basis. wj 5/26/2021 Cleint stated to proceed with analysis. wj 5/27/2021

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing information)

Company/Name	Water & Environmental Technologies
Contact	Jay Slocum
Phone	(406) 723-1579
Mailing Address	480 E. Park St.
City, State, Zip	Butte, MT 59701
Email	jslocum@waterenvtech.com
Receive Invoice	☐ Hard Copy ☒ Email
Receive Report	☐ Hard Copy ☒ Email
Purchase Order	
Quote	
Bottle Order	

Report Information (if different than Account Information)

Company/Name	Same as Account Info.
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	
Receive Report	☐ Hard Copy ☒ Email
Special Report/Formats:	☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other_____

Comments

Project Information

Project Name, PWSID, Permit, etc.	Parrot ET Cover
Sampler Name	Rick Gunderson
Sampler Phone	471-5336
Sample Origin State	MT
EPA/State Compliance	☒ Yes ☐ No

URANIUM MINING CLIENTS MUST indicate sample type.
☐ NOT Source or Byproduct Material
☐ Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING
☐ 11e.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle size	pH	Saturation percent	Electrical Conductivity	Metals-total As	Cd	Cu	Pb & Zn	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	20210525-Parrot-ET-C-001	5/25/21	13:00	1	S	X	X	X	X	X	X	X	X	X/X			H 21050584
2	20210525-Parrot-ET-C-002	5/25/21	13:30	1	S	X	X	X	X	X	X	X	X	X/X			
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Ryan Bossard	5/26/21				
	Relinquished by (print)	Date/Time 908	Signature	Received by Laboratory (print) Rebecca Todd	Date/Time 5-26-21 908	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
hand	yes	Y (N) C B	Y N	13.5 °C	Y (N)	(Y) N	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

October 04, 2021

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H21060877

Project Name: Parrot ET Cover

Energy Laboratories Inc Helena MT received the following 1 sample for MT Dept of Justice on 6/30/2021 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H21060877-001	20210630-Parrot-ET-C-104	06/30/21 10:00	06/30/21	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage Soil Preparation USDA1

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

CLIENT: MT Dept of Justice
Project: Parrot ET Cover
Work Order: H21060877

Revised Date: 10/04/21
Report Date: 07/22/21

CASE NARRATIVE

Per J. Vincent with Water and Environmental Technologies all work for Parrot Tailings goes through NRD. 10/4/2021

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Project: Parrot ET Cover
Lab ID: H21060877-001
Client Sample ID: 20210630-Parrot-ET-C-104

Revised Date: 10/04/21
Report Date: 07/22/21
Collection Date: 06/30/21 10:00
DateReceived: 06/30/21
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10.9	wt%		0.2		D2974	07/01/21 13:02 / sah
Sand	38	%		1		ASA15-5	07/07/21 09:53 / sah
Silt	50	%		1		ASA15-5	07/07/21 09:53 / sah
Clay	12	%		1		ASA15-5	07/07/21 09:53 / sah
Texture	SiL			1		ASA15-5	07/07/21 09:53 / sah
SATURATED PASTE							
Saturation	78.3	%		0.1		USDA27a	07/02/21 07:55 / sah
SATURATED PASTE							
pH, sat. paste	7.8	s.u.		0.1		ASA10-3	07/02/21 08:34 / sah
SATURATED PASTE EXTRACT							
Conductivity, sat. paste	2.0	mmhos/cm		0.1		ASA10-3	07/02/21 09:29 / sah
Calcium, sat. paste	10.1	meq/L		0.05		SW6010B	07/02/21 14:34 / sld
Magnesium, sat. paste	2.55	meq/L		0.08		SW6010B	07/02/21 14:34 / sld
Sodium, sat. paste	9.39	meq/L		0.04		SW6010B	07/02/21 14:34 / sld
Sodium Adsorption Ratio (SAR)	3.7	unitless		0.1		USDA20b	07/02/21 15:26 / SRW
3050 EXTRACTABLE METALS							
Arsenic	7	mg/kg-dry		1		SW6020	07/13/21 13:44 / sld
Cadmium	ND	mg/kg-dry		1		SW6020	07/15/21 14:49 / sld
Copper	77	mg/kg-dry	D	3		SW6020	07/13/21 13:44 / sld
Lead	11	mg/kg-dry		1		SW6020	07/15/21 14:49 / sld
Zinc	59	mg/kg-dry	D	8		SW6020	07/13/21 13:44 / sld

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21060877 **Report Date:** 07/22/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: ASA10-3									Analytical Run: SOIL EC_210702A	
Lab ID: ICV_1_210701_1		Initial Calibration Verification Standard							07/02/21 09:19	
Conductivity, sat. paste		1.42	mmhos/cm	0.10	101	90	110			
Lab ID: CCV_1_210701_1		Continuing Calibration Verification Standard							07/02/21 09:20	
Conductivity, sat. paste		4.93	mmhos/cm	0.10	99	90	110			
Lab ID: CCV1_1_210701_1		Continuing Calibration Verification Standard							07/02/21 09:21	
Conductivity, sat. paste		0.923	mmhos/cm	0.10	92	90	110			
Lab ID: CCV_3_210701_1		Continuing Calibration Verification Standard							07/02/21 09:30	
Conductivity, sat. paste		4.90	mmhos/cm	0.10	98	90	110			
Method: ASA10-3									Batch: 56860	
Lab ID: MB-56860		Method Blank				Run: SOIL EC_210702A			07/02/21 09:22	
Conductivity, sat. paste		ND	mmhos/cm	0.05						
Lab ID: LCS-56860		Laboratory Control Sample				Run: SOIL EC_210702A			07/02/21 09:22	
Conductivity, sat. paste		3.95	mmhos/cm	0.10	94	80	120			
Lab ID: H21060829-003ADUP		Sample Duplicate				Run: SOIL EC_210702A			07/02/21 09:26	
Conductivity, sat. paste		6.58	mmhos/cm	0.10				1.3	20	
Method: ASA10-3									al Run: SOIL PH METER - ORION A211_210702A	
Lab ID: ICV_1_210701_1		Initial Calibration Verification Standard							07/02/21 08:21	
pH, sat. paste		7.03	s.u.	0.10	100	98.6	101.4			
Lab ID: CCV_1_210701_1		Continuing Calibration Verification Standard							07/02/21 08:22	
pH, sat. paste		7.04	s.u.	0.10	101	98.6	101.4			
Lab ID: CCV1_1_210701_1		Continuing Calibration Verification Standard							07/02/21 08:23	
pH, sat. paste		4.02	s.u.	0.10	100	97.5	102.5			
Method: ASA10-3									Batch: 56860	
Lab ID: LCS-56860		Laboratory Control Sample				Run: SOIL PH METER - ORION A2			07/02/21 08:24	
pH, sat. paste		8.06	s.u.	0.10	100	95	105			
Lab ID: H21060829-003ADUP		Sample Duplicate				Run: SOIL PH METER - ORION A2			07/02/21 08:30	
pH, sat. paste		7.51	s.u.	0.10				0.1	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21060877 **Report Date:** 07/22/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **ASA15-5**										Batch: 56907
Lab ID: **LCS-56907**	3	Laboratory Control Sample				Run: SOIL HYDROMETER_210709				07/07/21 09:53
Sand		46.0	%	1.0	110	70	130			
Silt		28.0	%	1.0	88	70	130			
Clay		26.0	%	1.0	100	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice

Work Order: H21060877

Report Date: 07/22/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **D2974**									Batch: PMOIST_210701_A	
Lab ID: **H21060877-001A DUP**	Sample Duplicate					Run: SOIL DRYING OVEN 2_21071			07/01/21 13:02	
Moisture		10.7	wt%	0.20				1.7	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21060877 **Report Date:** 07/22/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									Analytical Run: ICP2-HE_210702B	
Lab ID: ICV	3	Initial Calibration Verification Standard								07/02/21 11:20
Calcium		40.1	mg/L	1.0	100	90	110			
Magnesium		39.2	mg/L	1.0	98	90	110			
Sodium		40.8	mg/L	1.0	102	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard								07/02/21 11:24
Calcium		24.6	mg/L	1.0	98	90	110			
Magnesium		23.9	mg/L	1.0	95	90	110			
Sodium		25.5	mg/L	1.0	102	90	110			
Lab ID: ICB	3	Continuing Calibration Blank								07/02/21 11:27
Calcium		0.0530	mg/L	1.0						
Magnesium		0.0146	mg/L	1.0						
Sodium		0.000770	mg/L	1.0						
Lab ID: ICSA	3	Interference Check Sample A								07/02/21 11:35
Calcium		467	mg/L	1.0	93	80	120			
Magnesium		503	mg/L	1.0	101	80	120			
Sodium		0.0140	mg/L	1.0		0	0			
Lab ID: ICSAB	3	Interference Check Sample AB								07/02/21 11:39
Calcium		484	mg/L	1.0	97	80	120			
Magnesium		516	mg/L	1.0	103	80	120			
Sodium		20.3	mg/L	1.0	102	80	120			
Method: SW6010B										Batch: 56860
Lab ID: MB-56860	6	Method Blank				Run: ICP2-HE_210702B				07/02/21 13:31
Calcium		0.3	mg/L	0.1						
Magnesium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.02						
Calcium, sat. paste		0.02	meq/L	0.007						
Magnesium, sat. paste		ND	meq/L	0.002						
Sodium, sat. paste		ND	meq/L	0.0009						
Lab ID: LFB-56860	6	Laboratory Fortified Blank				Run: ICP2-HE_210702B				07/02/21 13:34
Calcium		49.7	mg/L	1.0	99	80	120			
Magnesium		47.0	mg/L	1.0	94	80	120			
Sodium		48.5	mg/L	1.0	97	80	120			
Calcium, sat. paste		2.48	meq/L	0.050	99	80	120			
Magnesium, sat. paste		3.87	meq/L	0.082	94	80	120			
Sodium, sat. paste		2.11	meq/L	0.043	97	80	120			
Lab ID: LCS-56860	6	Laboratory Control Sample				Run: ICP2-HE_210702B				07/02/21 13:45
Calcium		211	mg/L	1.0	97	70	130			
Magnesium		73.7	mg/L	1.0	87	70	130			
Sodium		620	mg/L	1.0	101	70	130			
Calcium, sat. paste		10.5	meq/L	0.050	97	70	130			
Magnesium, sat. paste		6.06	meq/L	0.082	87	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21060877 **Report Date:** 07/22/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B										Batch: 56860
Lab ID: LCS-56860	6	Laboratory Control Sample				Run: ICP2-HE_210702B			07/02/21 13:45	
Sodium, sat. paste		26.9	meq/L	0.043	101	70	130			
Lab ID: H21060829-001AMS2	6	Sample Matrix Spike				Run: ICP2-HE_210702B			07/02/21 13:57	
Calcium		537	mg/L	1.0	92	70	130			
Magnesium		263	mg/L	1.0	91	70	130			
Sodium		817	mg/L	1.0	90	70	130			
Calcium, sat. paste		26.8	meq/L	0.050	92	70	130			
Magnesium, sat. paste		21.7	meq/L	0.082	91	70	130			
Sodium, sat. paste		35.5	meq/L	0.043	90	70	130			
Lab ID: H21060829-001AMSD	6	Sample Matrix Spike Duplicate				Run: ICP2-HE_210702B			07/02/21 14:00	
Calcium		540	mg/L	1.0	94	70	130	0.5	20	
Magnesium		263	mg/L	1.0	91	70	130	0.0	20	
Sodium		810	mg/L	1.0	87	70	130	0.9	20	
Calcium, sat. paste		26.9	meq/L	0.050	94	70	130	0.5	20	
Magnesium, sat. paste		21.7	meq/L	0.082	91	70	130	0.0	20	
Sodium, sat. paste		35.2	meq/L	0.043	87	70	130	0.9	20	
Lab ID: H21060829-003Adup	6	Sample Duplicate				Run: ICP2-HE_210702B			07/02/21 14:11	
Calcium		468	mg/L	1.4				0.2	30	
Magnesium		75.7	mg/L	1.0				0.6	30	
Sodium		653	mg/L	1.0				1.7	30	
Calcium, sat. paste		23.3	meq/L	0.071				0.2	30	
Magnesium, sat. paste		6.23	meq/L	0.082				0.6	30	
Sodium, sat. paste		28.4	meq/L	0.043				1.7	30	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21060877 **Report Date:** 07/22/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**								Analytical Run: ICPMS205-H_210713A		
Lab ID:	**ICV**	3	Initial Calibration Verification Standard							07/13/21 11:42	
Arsenic			0.0605	mg/L	0.0010	101	90	110			
Copper			0.0621	mg/L	0.0010	104	90	110			
Zinc			0.0623	mg/L	0.0013	104	90	110			
Lab ID:	**ICSA**	3	Interference Check Sample A							07/13/21 11:48	
Arsenic			0.0000391	mg/L	0.0010						
Copper			-0.000138	mg/L	0.0010						
Zinc			0.000493	mg/L	0.0013						
Lab ID:	**ICSAB**	3	Interference Check Sample AB							07/13/21 11:53	
Arsenic			0.0102	mg/L	0.0010	102	70	130			
Copper			0.0195	mg/L	0.0010	97	70	130			
Zinc			0.0105	mg/L	0.0013	105	70	130			
Lab ID:	**CCV**	3	Continuing Calibration Verification Standard							07/13/21 12:00	
Arsenic			0.0517	mg/L	0.0010	103	90	110			
Copper			0.0518	mg/L	0.0010	104	90	110			
Zinc			0.0522	mg/L	0.0013	104	90	110			
Lab ID:	**CCB**	3	Continuing Calibration Blank							07/13/21 12:05	
Arsenic			7.27E-06	mg/L	0.0010						
Copper			-0.000143	mg/L	0.0010						
Zinc			-0.0000776	mg/L	0.0013						
Method:	**SW6020**									Batch: 56975	
Lab ID:	**MB-56975**	3	Method Blank				Run: ICPMS205-H_210713A			07/13/21 12:35	
Arsenic			ND	mg/kg	0.2						
Copper			ND	mg/kg	1						
Zinc			ND	mg/kg	3						
Lab ID:	**LCS-56975**	3	Laboratory Control Sample				Run: ICPMS205-H_210713A			07/13/21 12:37	
Arsenic			178	mg/kg	1.0	91	71.4	105.1			
Copper			142	mg/kg	3.1	104	76.6	108.8			
Zinc			250	mg/kg	7.4	108	75.3	111.7			
Lab ID:	**LFB-56975**	3	Laboratory Fortified Blank				Run: ICPMS205-H_210713A			07/13/21 12:40	
Arsenic			51.1	mg/kg	1.0	104	80	120			
Copper			53.9	mg/kg	3.2	110	80	120			
Zinc			51.8	mg/kg	7.6	105	80	120			
Lab ID:	**H21060852-001ADIL**	3	Serial Dilution				Run: ICPMS205-H_210713A			07/13/21 13:37	
Arsenic			ND	mg/kg-dry	2.0		0	0		10	
Copper			ND	mg/kg-dry	16		0	0		10	
Zinc			ND	mg/kg-dry	40		0	0		10	
Lab ID:	**H21060852-001APDS1**	3	Post Digestion/Distillation Spike				Run: ICPMS205-H_210713A			07/13/21 13:49	
Arsenic			13.7	mg/kg-dry	1.0	107	75	125			
Copper			21.7	mg/kg-dry	3.3	111	75	125			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21060877 **Report Date:** 07/22/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**										Batch: 56975
Lab ID:	**H21060852-001APDS1**	3	Post Digestion/Distillation Spike				Run: ICPMS205-H_210713A				07/13/21 13:49
Zinc			36.8	mg/kg-dry	7.9	102	75	125			
Lab ID:	**H21060852-001AMS**	3	Sample Matrix Spike				Run: ICPMS205-H_210713A				07/13/21 13:51
Arsenic			53.5	mg/kg-dry	1.0	106	75	125			
Copper			63.8	mg/kg-dry	3.2	112	75	125			
Zinc			77.2	mg/kg-dry	7.8	106	75	125			
Lab ID:	**H21060852-001AMSD**	3	Sample Matrix Spike Duplicate				Run: ICPMS205-H_210713A				07/13/21 13:53
Arsenic			52.2	mg/kg-dry	1.0	105	75	125	2.4	20	
Copper			62.0	mg/kg-dry	3.2	109	75	125	3.0	20	
Zinc			75.0	mg/kg-dry	7.7	103	75	125	2.8	20	

Qualifiers:

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ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21060877 **Report Date:** 07/22/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**								Analytical Run: ICPMS205-H_210715B		
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							07/15/21 11:31	
Cadmium			0.0307	mg/L	0.0010	102	90	110			
Lead			0.0612	mg/L	0.0010	102	90	110			
Lab ID:	**ICSA**	2	Interference Check Sample A							07/15/21 11:37	
Cadmium			0.000117	mg/L	0.0010						
Lead			-0.000331	mg/L	0.0010						
Lab ID:	**ICSAB**	2	Interference Check Sample AB							07/15/21 11:41	
Cadmium			0.0101	mg/L	0.0010	101	70	130			
Lead			-0.000351	mg/L	0.0010		0	0			
Lab ID:	**CCV**	2	Continuing Calibration Verification Standard							07/15/21 11:48	
Cadmium			0.0514	mg/L	0.0010	103	90	110			
Lead			0.0513	mg/L	0.0010	103	90	110			
Lab ID:	**CCB**	2	Continuing Calibration Blank							07/15/21 11:53	
Cadmium			1.04E-06	mg/L	0.0010						
Lead			-0.000377	mg/L	0.0010						
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							07/15/21 15:51	
Cadmium			0.0306	mg/L	0.0010	102	90	110			
Lead			0.0595	mg/L	0.0010	99	90	110			
Lab ID:	**ICSA**	2	Interference Check Sample A							07/15/21 15:57	
Cadmium			0.000104	mg/L	0.0010						
Lead			-0.0000455	mg/L	0.0010						
Lab ID:	**ICSAB**	2	Interference Check Sample AB							07/15/21 16:01	
Cadmium			0.0101	mg/L	0.0010	101	70	130			
Lead			-0.0000506	mg/L	0.0010		0	0			
Method:	**SW6020**										Batch: 57015
Lab ID:	**MB-57015**	2	Method Blank				Run: ICPMS205-H_210715B			07/15/21 14:12	
Cadmium			ND	mg/kg	0.04						
Lead			ND	mg/kg	0.5						
Lab ID:	**LFB-57015**	2	Laboratory Fortified Blank				Run: ICPMS205-H_210715B			07/15/21 14:15	
Cadmium			27.2	mg/kg	1.0	106	80	120			
Lead			57.8	mg/kg	1.0	112	80	120			
Lab ID:	**LCS-57015**	2	Laboratory Control Sample				Run: ICPMS205-H_210715B			07/15/21 14:19	
Cadmium			102	mg/kg	1.0	103	73.9	106.1			
Lead			113	mg/kg	1.0	108	74.4	108.6			
Lab ID:	**H21060828-006APDS1**	2	Post Digestion/Distillation Spike				Run: ICPMS205-H_210715B			07/15/21 14:33	
Cadmium			7.71	mg/kg-dry	1.0	103	75	125			
Lead			25.0	mg/kg-dry	1.0	101	75	125			

Qualifiers:

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ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21060877 **Report Date:** 07/22/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **SW6020**										Batch: 57015
Lab ID: **H21060828-006AMS**	2	Sample Matrix Spike				Run: ICPMS205-H_210715B			07/15/21 14:36	
Cadmium		34.5	mg/kg-dry	1.0	102	75	125			
Lead		91.6	mg/kg-dry	1.0	110	75	125			
Lab ID: **H21060828-006AMSD**	2	Sample Matrix Spike Duplicate				Run: ICPMS205-H_210715B			07/15/21 14:38	
Cadmium		36.7	mg/kg-dry	1.0	105	75	125	6.2	20	
Lead		97.0	mg/kg-dry	1.0	115	75	125	5.7	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice

Work Order: H21060877

Report Date: 07/22/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: USDA20b										Batch: R166260
Lab ID: H21060830-001BDUP		Sample Duplicate				Run: SOIL CALC_210702A			07/02/21 15:26	
Sodium Adsorption Ratio (SAR)		3.27	unitless	0.10				2.4	30	
Lab ID: LCS-56860		Laboratory Control Sample				Run: SOIL CALC_210702A			07/02/21 15:26	
Sodium Adsorption Ratio (SAR)		9.36	unitless	0.10	106	80	120			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice

Work Order: H21060877

Report Date: 07/22/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: USDA27a										Batch: 56860
Lab ID: LCS-56860		Laboratory Control Sample				Run: SOIL DRYING OVEN 2_21070				07/02/21 07:55
Saturation		41.6	%	0.10	100	80	120			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

Work Order Receipt Checklist

MT Dept of Justice

H21060877

Login completed by: Jessica C. Smith

Date Received: 6/30/2021

Reviewed by: BL2000\spester

Received by: JCS

Reviewed Date: 7/20/2021

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☐	No ☑	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	2.8°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

Limited sample volume was submitted. Emailed client for a priority list. JCS 06/30/2021

ENERGY LABORATORIES
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Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 1

Account Information (Billing information)

Company/Name	Water + Environmental Technologies
Contact	Rial Gunlikson
Phone	406-471-5336
Mailing Address	480 E Park St.
City, State, Zip	Butte, MT, 59701
Email	rgunlikson@waterenvtech.com
Receive Invoice	☐Hard Copy ☑Email
Receive Report	☐Hard Copy ☐Email
Purchase Order	
Quote	
Bottle Order	

Report Information (if different than Account Information)

Company/Name	Same as Account Info
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	
Receive Report	☐Hard Copy ☑Email

Special Report/Formats:
☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other_____

Comments

Project Information

Project Name, PWSID, Permit, etc.	Parrot ET Cover
Sampler Name	Rial Gunlikson
Sampler Phone	406-471-5336
Sample Origin State	MT
EPA/State Compliance	☑Yes ☐ No

URANIUM MINING CLIENTS MUST indicate sample type.
☐ NOT Source or Byproduct Material
☐ Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING
☐ 11e.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

Analysis Requested

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	PH	Saturation %	Electrical Conductivity	Metals Total: As, Cd, Cu, Pb, Zn	Sodium Absorption Ratio			See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1	20210630-Parrot-ET-C-~~001~~ 104	6/30/21	10:00 AM	1	S	x	x	x	x	x	x	x					HZ1060877
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Rial Gunlikson	6/30/21 @ 2:55pm	[signature]	Shari Kelley	6/30/21 2:55pm	Shari Kelley
	Shari Kelley	6/30/21 @ 16:12	Shari Kelley	Received by Laboratory (print) Jessica Smith	Date/Time 06/30/2021 16:12	Signature [signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
Hand	Yes	Y N C B	Y N	2.8 °C	Y N	Y N	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-10/18 v.3

ANALYTICAL SUMMARY REPORT

October 04, 2021

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H21070691
Project Name: Parrot ET Cover

Energy Laboratories Inc Helena MT received the following 1 sample for MT Dept of Justice on 7/27/2021 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H21070691-001	20210721-Parrot-ET-C-Z49	07/21/21 11:00	07/27/21	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage Soil Preparation USDA1

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

CLIENT: MT Dept of Justice
Project: Parrot ET Cover
Work Order: H21070691

Revised Date: 10/04/21
Report Date: 08/10/21

CASE NARRATIVE

Per J. Vincent with Water and Environmental Technologies all work for Parrot Tailings goes through NRD. 10/4/2021

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Project: Parrot ET Cover
Lab ID: H21070691-001
Client Sample ID: 20210721-Parrot-ET-C-Z49

Revised Date: 10/04/21
Report Date: 08/10/21
Collection Date: 07/21/21 11:00
DateReceived: 07/27/21
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	18.9	wt%		0.2		D2974	07/28/21 18:15 / cfg
Sand	44	%		1		ASA15-5	07/29/21 08:55 / stp
Silt	46	%		1		ASA15-5	07/29/21 08:55 / stp
Clay	10	%		1		ASA15-5	07/29/21 08:55 / stp
Texture	L			1		ASA15-5	07/29/21 08:55 / stp
SATURATED PASTE							
Saturation	57.5	%		0.1		USDA27a	07/30/21 08:17 / swj
SATURATED PASTE							
pH, sat. paste	7.8	s.u.		0.1		ASA10-3	07/30/21 09:39 / kr
SATURATED PASTE EXTRACT							
Conductivity, sat. paste	2.5	mmhos/cm		0.1		ASA10-3	07/30/21 14:57 / swj
Calcium, sat. paste	11.8	meq/L		0.05		SW6010B	08/03/21 15:20 / sld
Magnesium, sat. paste	3.14	meq/L		0.08		SW6010B	08/03/21 15:20 / sld
Sodium, sat. paste	10.6	meq/L		0.04		SW6010B	08/03/21 15:20 / sld
Sodium Adsorption Ratio (SAR)	3.9	unitless		0.1		USDA20b	08/05/21 09:33 / stp
3050 EXTRACTABLE METALS							
Arsenic	6	mg/kg-dry		1		SW6020	08/03/21 13:42 / dck
Cadmium	ND	mg/kg-dry		1		SW6020	08/04/21 17:15 / dck
Copper	20	mg/kg-dry	D	6		SW6020	08/03/21 13:42 / dck
Lead	9	mg/kg-dry		1		SW6020	08/04/21 17:15 / dck
Zinc	37	mg/kg-dry	D	5		SW6010B	08/03/21 17:13 / sld

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: ASA10-3									Analytical Run: SOIL EC_210802A	
Lab ID: ICV_1_210729_1		Initial Calibration Verification Standard							07/30/21 14:43	
Conductivity, sat. paste		1.56	mmhos/cm	0.10	110	90	110			
Lab ID: CCV_1_210729_1		Continuing Calibration Verification Standard							07/30/21 14:43	
Conductivity, sat. paste		4.74	mmhos/cm	0.10	95	90	110			
Lab ID: CCV1_1_210729_1		Continuing Calibration Verification Standard							07/30/21 14:45	
Conductivity, sat. paste		1.06	mmhos/cm	0.10	106	90	110			
Method: ASA10-3										Batch: 57254
Lab ID: LCS-57254		Laboratory Control Sample				Run: SOIL EC_210802A			07/30/21 14:45	
Conductivity, sat. paste		4.58	mmhos/cm	0.10	109	80	120			
Lab ID: H21070691-001ADUP		Sample Duplicate				Run: SOIL EC_210802A			07/30/21 14:57	
Conductivity, sat. paste		2.57	mmhos/cm	0.10				4.3	20	
Method: ASA10-3									al Run: SOIL PH METER - ORION A211_210802A	
Lab ID: ICV_1_210729_1		Initial Calibration Verification Standard							07/30/21 09:18	
pH, sat. paste		7.01	s.u.	0.10	100	98.6	101.4			
Lab ID: CCV_1_210729_1		Continuing Calibration Verification Standard							07/30/21 09:19	
pH, sat. paste		7.01	s.u.	0.10	100	98.6	101.4			
Lab ID: CCV1_1_210729_1		Continuing Calibration Verification Standard							07/30/21 09:21	
pH, sat. paste		4.01	s.u.	0.10	100	97.5	102.5			
Method: ASA10-3										Batch: 57254
Lab ID: LCS-57254		Laboratory Control Sample				Run: SOIL PH METER - ORION A2			07/30/21 09:22	
pH, sat. paste		8.01	s.u.	0.10	100	95	105			
Lab ID: H21070691-001ADUP		Sample Duplicate				Run: SOIL PH METER - ORION A2			07/30/21 09:40	
pH, sat. paste		7.86	s.u.	0.10				0.1	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**ASA15-5**										Batch: 57257
Lab ID:	**H21070639-005ADUP**	4	Sample Duplicate				Run: SOIL HYDROMETER_210802			07/29/21 08:55	
Sand			88.0	%	1.0				1.1	20	
Silt			7.00	%	1.0				13	20	
Clay			5.00	%	1.0				0.0	20	
Texture			S		1.0						
Lab ID:	**LCS-57257**	3	Laboratory Control Sample				Run: SOIL HYDROMETER_210802			07/29/21 08:55	
Sand			47.0	%	1.0	112	70	130			
Silt			28.0	%	1.0	88	70	130			
Clay			25.0	%	1.0	96	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice

Work Order: H21070691

Report Date: 08/10/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **D2974**									Batch: PMOIST_210728_A	
Lab ID: **H21070691-001A DUP**	Sample Duplicate					Run: SOIL DRYING OVEN 2_21072			07/28/21 18:16	
Moisture		20.2	wt%	0.20				6.5	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									Analytical Run: ICP2-HE_210802B	
Lab ID: ICV	4	Initial Calibration Verification Standard								08/02/21 10:06
Calcium		39.5	mg/L	1.0	99	90	110			
Magnesium		38.3	mg/L	1.0	96	90	110			
Sodium		39.9	mg/L	1.0	100	90	110			
Zinc		0.792	mg/L	0.010	99	90	110			
Lab ID: CCV	4	Continuing Calibration Verification Standard								08/02/21 10:10
Calcium		25.3	mg/L	1.0	101	90	110			
Magnesium		24.2	mg/L	1.0	97	90	110			
Sodium		25.0	mg/L	1.0	100	90	110			
Zinc		2.52	mg/L	0.010	101	90	110			
Lab ID: CCB	4	Continuing Calibration Blank								08/02/21 10:15
Calcium		0.0432	mg/L	1.0						
Magnesium		0.0126	mg/L	1.0						
Sodium		0.00388	mg/L	1.0						
Zinc		0.000200	mg/L	0.010						
Lab ID: ICSA	4	Interference Check Sample A								08/02/21 10:23
Calcium		462	mg/L	1.0	92	80	120			
Magnesium		495	mg/L	1.0	99	80	120			
Sodium		0.0187	mg/L	1.0		0	0			
Zinc		0.00564	mg/L	0.010		0	0			
Lab ID: ICSAB	4	Interference Check Sample AB								08/02/21 10:27
Calcium		468	mg/L	1.0	94	80	120			
Magnesium		495	mg/L	1.0	99	80	120			
Sodium		20.1	mg/L	1.0	101	80	120			
Zinc		0.990	mg/L	0.010	99	80	120			
Method: SW6010B										Batch: 57254
Lab ID: MB-57254	6	Method Blank				Run: ICP2-HE_210802B				08/03/21 13:36
Calcium		ND	mg/L	0.1						
Magnesium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.02						
Calcium, sat. paste		ND	meq/L	0.007						
Magnesium, sat. paste		ND	meq/L	0.002						
Sodium, sat. paste		ND	meq/L	0.0009						
Lab ID: LFB-57254	6	Laboratory Fortified Blank				Run: ICP2-HE_210802B				08/03/21 13:40
Calcium		52.7	mg/L	1.0	105	80	120			
Magnesium		52.3	mg/L	1.0	105	80	120			
Sodium		49.5	mg/L	1.0	99	80	120			
Calcium, sat. paste		2.63	meq/L	0.050	105	80	120			
Magnesium, sat. paste		4.31	meq/L	0.082	105	80	120			
Sodium, sat. paste		2.15	meq/L	0.043	99	80	120			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									Batch: 57254	
Lab ID: LCS-57254	6	Laboratory Control Sample				Run: ICP2-HE_210802B			08/03/21 13:44	
Calcium		255	mg/L	1.0	117	70	130			
Magnesium		91.0	mg/L	1.0	107	70	130			
Sodium		700	mg/L	1.0	114	70	130			
Calcium, sat. paste		12.7	meq/L	0.050	117	70	130			
Magnesium, sat. paste		7.49	meq/L	0.082	107	70	130			
Sodium, sat. paste		30.4	meq/L	0.043	114	70	130			
Lab ID: H21070632-021AMS2	6	Sample Matrix Spike				Run: ICP2-HE_210802B			08/03/21 13:57	
Calcium		831	mg/L	1.5	101	70	130			
Magnesium		570	mg/L	1.6	101	70	130			
Sodium		2630	mg/L	1.0		70	130			A
Calcium, sat. paste		41.5	meq/L	0.073	101	70	130			
Magnesium, sat. paste		46.9	meq/L	0.13	101	70	130			
Sodium, sat. paste		114	meq/L	0.043		70	130			A
Lab ID: H21070632-021AMSD	6	Sample Matrix Spike Duplicate				Run: ICP2-HE_210802B			08/03/21 14:01	
Calcium		802	mg/L	1.5	95	70	130	3.5	20	
Magnesium		547	mg/L	1.6	97	70	130	4.2	20	
Sodium		2710	mg/L	1.0		70	130	3.3	20	A
Calcium, sat. paste		40.0	meq/L	0.073	95	70	130	3.5	20	
Magnesium, sat. paste		45.0	meq/L	0.13	97	70	130	4.2	20	
Sodium, sat. paste		118	meq/L	0.043		70	130	3.3	20	A
Lab ID: H21070691-001ADUP	6	Sample Duplicate				Run: ICP2-HE_210802B			08/03/21 15:24	
Calcium		241	mg/L	1.0				2.3	30	
Magnesium		38.8	mg/L	1.0				1.8	30	
Sodium		250	mg/L	1.0				2.8	30	
Calcium, sat. paste		12.1	meq/L	0.050				2.3	30	
Magnesium, sat. paste		3.19	meq/L	0.082				1.8	30	
Sodium, sat. paste		10.9	meq/L	0.043				2.8	30	
Method: SW6010B									Batch: 57287	
Lab ID: MB-57287		Method Blank				Run: ICP2-HE_210802B			08/03/21 15:45	
Zinc		ND	mg/kg	1						
Lab ID: LFB-57287		Laboratory Fortified Blank				Run: ICP2-HE_210802B			08/03/21 15:57	
Zinc		51.0	mg/kg	1.1	100	80	120			
Lab ID: LCS-57287		Laboratory Control Sample				Run: ICP2-HE_210802B			08/03/21 16:01	
Zinc		231	mg/kg	5.1	100	75.3	111.7			
Lab ID: H21070593-079ADIL		Serial Dilution				Run: ICP2-HE_210802B			08/03/21 16:17	
Zinc		98.5	mg/kg-dry	27		0	0		10	N
Lab ID: H21070593-079APDS		Post Digestion/Distillation Spike				Run: ICP2-HE_210802B			08/03/21 16:21	
Zinc		316	mg/kg-dry	5.6	83	75	125			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

A - Analyte level was greater than four times the spike level - in accordance with the method, percent recovery is not calculated

N - Analyte concentration was not sufficiently high to calculate a Relative Percent Difference (RPD) for the serial dilution test

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **SW6010B**										Batch: 57287
Lab ID: **H21070593-079AMS**	Sample Matrix Spike					Run: ICP2-HE_210802B				08/03/21 16:25
Zinc		155	mg/kg-dry	5.2	121	75	125			
- S= Spike recovery outside of QC advisory limits. The recovery in the Laboratory Control Sample was within QC advisory limits. This suggests that the Matrix Spike recover is due to matrix interference.										
Lab ID: **H21070593-079AMSD**	Sample Matrix Spike Duplicate					Run: ICP2-HE_210802B				08/03/21 16:29
Zinc		140	mg/kg-dry	5.4	90	75	125	10	20	
- S= Spike recovery outside of QC advisory limits. The recovery in the Laboratory Control Sample was within QC advisory limits. This suggests that the Matrix Spike recover is due to matrix interference.										

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**								Analytical Run: ICPMS205-H_210803A		
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							08/03/21 12:06	
Arsenic			0.0608	mg/L	0.0010	101	90	110			
Copper			0.0616	mg/L	0.0010	103	90	110			
Lab ID:	**ICSA**	2	Interference Check Sample A							08/03/21 12:31	
Arsenic			0.0000600	mg/L	0.0010						
Copper			0.0000177	mg/L	0.0010						
Lab ID:	**ICSAB**	2	Interference Check Sample AB							08/03/21 12:35	
Arsenic			0.0102	mg/L	0.0010	102	70	130			
Copper			0.0202	mg/L	0.0010	101	70	130			
Lab ID:	**CCV**	2	Continuing Calibration Verification Standard							08/03/21 12:42	
Arsenic			0.0516	mg/L	0.0010	103	90	110			
Copper			0.0513	mg/L	0.0010	103	90	110			
Lab ID:	**CCB**	2	Continuing Calibration Blank							08/03/21 12:45	
Arsenic			0.0000141	mg/L	0.0010						
Copper			0.0000549	mg/L	0.0010						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**									Analytical Run: ICPMS205-H_210804A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							08/04/21 12:01	
Cadmium			0.0310	mg/L	0.0010	103	90	110			
Lead			0.0594	mg/L	0.0010	99	90	110			
Lab ID:	**ICSA**	2	Interference Check Sample A							08/04/21 12:08	
Cadmium			0.000141	mg/L	0.0010						
Lead			-0.0000992	mg/L	0.0010						
Lab ID:	**ICSAB**	2	Interference Check Sample AB							08/04/21 12:13	
Cadmium			0.0108	mg/L	0.0010	108	70	130			
Lead			-0.000115	mg/L	0.0010		0	0			
Lab ID:	**CCV**	2	Continuing Calibration Verification Standard							08/04/21 12:20	
Cadmium			0.0509	mg/L	0.0010	102	90	110			
Lead			0.0492	mg/L	0.0010	98	90	110			
Lab ID:	**CCB**	2	Continuing Calibration Blank							08/04/21 12:22	
Cadmium			2.69E-06	mg/L	0.0010						
Lead			-0.000176	mg/L	0.0010						
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							08/04/21 17:53	
Cadmium			0.0310	mg/L	0.0010	103	90	110			
Lead			0.0590	mg/L	0.0010	98	90	110			
Lab ID:	**ICSA**	2	Interference Check Sample A							08/04/21 17:58	
Cadmium			0.000127	mg/L	0.0010						
Lead			0.0000317	mg/L	0.0010						
Lab ID:	**ICSAB**	2	Interference Check Sample AB							08/04/21 18:03	
Cadmium			0.0106	mg/L	0.0010	106	70	130			
Lead			0.0000428	mg/L	0.0010		0	0			
Method:	**SW6020**										Batch: 57287
Lab ID:	**MB-57287**	4	Method Blank				Run: ICPMS205-H_210804A			08/04/21 12:27	
Arsenic			ND	mg/kg	0.2						
Cadmium			ND	mg/kg	0.04						
Copper			ND	mg/kg	1						
Lead			ND	mg/kg	0.5						
Lab ID:	**LCS-57287**	4	Laboratory Control Sample				Run: ICPMS205-H_210804A			08/04/21 12:34	
Arsenic			182	mg/kg	1.0	93	71.4	105.1			
Cadmium			104	mg/kg	1.0	105	73.9	106.1			
Copper			135	mg/kg	3.1	99	76.6	108.8			
Lead			112	mg/kg	1.3	107	74.4	108.6			
Lab ID:	**LFB-57287**	4	Laboratory Fortified Blank				Run: ICPMS205-H_210804A			08/04/21 16:29	
Arsenic			53.1	mg/kg	1.0	104	80	120			
Cadmium			27.9	mg/kg	1.0	109	80	120			
Copper			55.1	mg/kg	3.3	108	80	120			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**										Batch: 57287
Lab ID:	**LFB-57287**	4	Laboratory Fortified Blank				Run: ICPMS205-H_210804A			08/04/21 16:29	
Lead			55.9	mg/kg	1.3	110	80	120			
Lab ID:	**H21070593-079ADIL**	4	Serial Dilution				Run: ICPMS205-H_210804A			08/04/21 16:40	
Arsenic			38.6	mg/kg-dry	2.1		0	0	7.1	10	
Cadmium			ND	mg/kg-dry	1.0		0	0		10	
Copper			459	mg/kg-dry	17		0	0	0.8	10	
Lead			141	mg/kg-dry	6.8		0	0	1.0	10	
Lab ID:	**H21070593-079APDS1**	4	Post Digestion/Distillation Spike				Run: ICPMS205-H_210804A			08/04/21 16:42	
Arsenic			49.7	mg/kg-dry	1.0	104	75	125			
Cadmium			14.1	mg/kg-dry	1.0	105	75	125			
Copper			482	mg/kg-dry	3.4		75	125			A
Lead			151	mg/kg-dry	1.4		75	125			A
Lab ID:	**H21070593-079AMS**	4	Sample Matrix Spike				Run: ICPMS205-H_210804A			08/04/21 16:45	
Arsenic			84.0	mg/kg-dry	1.0	95	75	125			
Cadmium			25.9	mg/kg-dry	1.0	102	75	125			
Copper			464	mg/kg-dry	3.2		75	125			A
Lead			166	mg/kg-dry	1.3	52	75	125			S
Lab ID:	**H21070593-079AMSD**	4	Sample Matrix Spike Duplicate				Run: ICPMS205-H_210804A			08/04/21 16:47	
Arsenic			84.7	mg/kg-dry	1.0	95	75	125	0.8	20	
Cadmium			26.8	mg/kg-dry	1.0	103	75	125	3.3	20	
Copper			468	mg/kg-dry	3.3		75	125	0.9	20	A
Lead			158	mg/kg-dry	1.3	34	75	125	5.1	20	S

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

A - Analyte level was greater than four times the spike level - in accordance with the method, percent recovery is not calculated

S - Spike recovery outside of advisory limits

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice

Work Order: H21070691

Report Date: 08/10/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: USDA20b										Batch: R167148
Lab ID: H21070691-001ADUP		Sample Duplicate				Run: SOIL CALC_210805A				08/05/21 09:33
Sodium Adsorption Ratio (SAR)		3.94	unitless	0.10				1.8	30	
Lab ID: LCS-57254		Laboratory Control Sample				Run: SOIL CALC_210805A				08/05/21 09:33
Sodium Adsorption Ratio (SAR)		9.57	unitless	0.10	109	80	120			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 10/04/21

Client: MT Dept of Justice **Work Order:** H21070691 **Report Date:** 08/10/21

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **USDA27a**										Batch: 57254
Lab ID: **LCS-57254**		Laboratory Control Sample				Run: SOIL DRYING OVEN 2_21080				07/30/21 08:04
Saturation		38.1	%	0.10	91	80	120			
Lab ID: **H21070691-001ADUP**		Sample Duplicate				Run: SOIL DRYING OVEN 2_21080				07/30/21 08:18
Saturation		58.1	%	0.10				1.1	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

Work Order Receipt Checklist

MT Dept of Justice

H21070691

Login completed by: Wanda Johnson

Date Received: 7/27/2021

Reviewed by: BL2000\wjohnson

Received by: abc

Reviewed Date: 7/28/2021

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	4.9°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

No date/time on sample bag, used information from COC. wj 7/27/2021

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing information)

Company/Name	Water & Environmental Technologies
Contact	Jay Slocum
Phone	(406) 723-1579
Mailing Address	480 E. Park Street
City, State, Zip	Butte MT 59701
Email	jslocum@waterenvtech.com
Receive Invoice	☐ Hard Copy ☒ Email
Receive Report	☐ Hard Copy ☒ Email
Purchase Order	
Quote	
Bottle Order	

Report Information (if different than Account Information)

Company/Name	Same as Acc. Info.
Contact	
Phone	
Mailing Address	
City, State Zip	
Email	
Receive Report	☐ Hard Copy ☒ Email

Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other_____

Comments

Project Information

Project Name, PWSID, Permit, etc.	Parrot ET Cover
Sampler Name	Lexie Kautzman
Sampler Phone	(406) 565-7223
Sample Origin State	MT
EPA/State Compliance	☒ Yes ☐ No
Lab provided preservatives were used	☐ Yes ☒ No

MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling -- See Instructions Page

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	Saturation Percent	Electrical Conductivity	Metals Total As, Cd, Cu, Pb, Zn	SAR	pH			See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	20210721-Parrot-ET-C-Z49	7/21/21	11:00	1	S	X	X	X	X	X	X	X					H2107069 1
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Lexie Kautzman	7/27/21 1:40 PM	Lexie Kautzman			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Amanda Carlson	7/27/21 13:40	Amanda Carlson

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
hand	4	Y (N) C B	Y N	4.9 °C	(Y) N	(Y) N	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

October 19, 2021

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H21100040

Project Name: Parrot ET Cover

Energy Laboratories Inc Helena MT received the following 2 samples for MT Dept of Justice on 10/1/2021 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H21100040-001	20210929-Parrot-ET-C-660-West	09/29/21 15:00	10/01/21	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage Soil Preparation USDA1
H21100040-002	20210929-Parrot-ET-C-659-East	09/29/21 15:00	10/01/21	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: 20210929-Parrot-ET-C-660-West
Lab ID: H21100040-001
Matrix: Soil

Project: Parrot ET Cover
Collection Date: 09/29/21 15:00
DateReceived: 10/01/21
Report Date: 10/19/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	16.4	wt%		0.2		D2974	10/11/21 07:54 / sah		DRYING OVEN 2_211012B	5	PMOIST_211011_A
Sand	46	%		1		ASA15-5	10/06/21 10:05 / stp	10/04/21 11:10	HYDROMETER_211008A	24	58407
Silt	47	%		1		ASA15-5	10/06/21 10:05 / stp	10/04/21 11:10	HYDROMETER_211008A	24	58407
Clay	7	%		1		ASA15-5	10/06/21 10:05 / stp	10/04/21 11:10	HYDROMETER_211008A	24	58407
Texture	L			1		ASA15-5	10/06/21 10:05 / stp	10/04/21 11:10	HYDROMETER_211008A	24	58407
SATURATED PASTE											
Saturation	65.7	%		0.1		USDA27a	10/12/21 09:28 / sah	10/11/21 09:51	RYING OVEN 2_211014A	54	58540
SATURATED PASTE											
pH, sat. paste	7.7	s.u.		0.1		ASA10-3	10/12/21 09:41 / sah	10/11/21 09:51	- ORION A211_211012A	47	58540
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	3.0	mmhos/cm		0.1		ASA10-3	10/12/21 14:09 / sah	10/11/21 09:51	SOIL EC_211012A	50	58540
Calcium, sat. paste	15.2	meq/L		0.05		SW6010B	10/13/21 04:40 / sld	10/11/21 09:51	ICP2-HE_211012B	249	58540
Magnesium, sat. paste	3.71	meq/L		0.08		SW6010B	10/13/21 04:40 / sld	10/11/21 09:51	ICP2-HE_211012B	249	58540
Sodium, sat. paste	11.5	meq/L		0.04		SW6010B	10/13/21 04:40 / sld	10/11/21 09:51	ICP2-HE_211012B	249	58540
Sodium Adsorption Ratio (SAR)	3.8	unitless		0.1		USDA20b	10/15/21 10:40 / stp	10/11/21 09:51	SOIL CALC_211015A	1	58540
3050 EXTRACTABLE METALS											
Arsenic	5	mg/kg		1		SW6020	10/12/21 12:53 / dck	10/11/21 09:00	ICPMS205-H_211012A	38	58477
Cadmium	ND	mg/kg		1		SW6020	10/12/21 12:53 / dck	10/11/21 09:00	ICPMS205-H_211012A	38	58477
Copper	20	mg/kg	D	3		SW6020	10/12/21 12:53 / dck	10/11/21 09:00	ICPMS205-H_211012A	38	58477
Lead	9	mg/kg		1		SW6020	10/12/21 12:53 / dck	10/11/21 09:00	ICPMS205-H_211012A	38	58477
Zinc	44	mg/kg	D	8		SW6020	10/12/21 12:53 / dck	10/11/21 09:00	ICPMS205-H_211012A	38	58477

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: 20210929-Parrot-ET-C-659-East
Lab ID: H21100040-002
Matrix: Soil

Project: Parrot ET Cover
Collection Date: 09/29/21 15:00
DateReceived: 10/01/21
Report Date: 10/19/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	14.2	wt%		0.2		D2974	10/11/21 07:53 / sah		DRYING OVEN 2_211012B	1	PMOIST_211011_A
Sand	48	%		1		ASA15-5	10/06/21 10:05 / stp	10/04/21 11:10	HYDROMETER_211008A	25	58407
Silt	46	%		1		ASA15-5	10/06/21 10:05 / stp	10/04/21 11:10	HYDROMETER_211008A	25	58407
Clay	6	%		1		ASA15-5	10/06/21 10:05 / stp	10/04/21 11:10	HYDROMETER_211008A	25	58407
Texture	SL			1		ASA15-5	10/06/21 10:05 / stp	10/04/21 11:10	HYDROMETER_211008A	25	58407
SATURATED PASTE											
Saturation	64.3	%		0.1		USDA27a	10/12/21 09:28 / sah	10/11/21 09:51	RYING OVEN 2_211014A	55	58540
SATURATED PASTE											
pH, sat. paste	7.8	s.u.		0.1		ASA10-3	10/12/21 09:42 / sah	10/11/21 09:51	- ORION A211_211012A	48	58540
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	2.8	mmhos/cm		0.1		ASA10-3	10/12/21 14:10 / sah	10/11/21 09:51	SOIL EC_211012A	51	58540
Calcium, sat. paste	13.5	meq/L		0.05		SW6010B	10/13/21 05:03 / sld	10/11/21 09:51	ICP2-HE_211012B	255	58540
Magnesium, sat. paste	3.24	meq/L		0.08		SW6010B	10/13/21 05:03 / sld	10/11/21 09:51	ICP2-HE_211012B	255	58540
Sodium, sat. paste	11.3	meq/L		0.04		SW6010B	10/13/21 05:03 / sld	10/11/21 09:51	ICP2-HE_211012B	255	58540
Sodium Adsorption Ratio (SAR)	3.9	unitless		0.1		USDA20b	10/15/21 10:40 / stp	10/11/21 09:51	SOIL CALC_211015A	2	58540
3050 EXTRACTABLE METALS											
Arsenic	6	mg/kg		1		SW6020	10/12/21 12:55 / dck	10/11/21 09:00	ICPMS205-H_211012A	39	58477
Cadmium	ND	mg/kg		1		SW6020	10/12/21 12:55 / dck	10/11/21 09:00	ICPMS205-H_211012A	39	58477
Copper	27	mg/kg	D	3		SW6020	10/12/21 12:55 / dck	10/11/21 09:00	ICPMS205-H_211012A	39	58477
Lead	11	mg/kg		1		SW6020	10/12/21 12:55 / dck	10/11/21 09:00	ICPMS205-H_211012A	39	58477
Zinc	55	mg/kg	D	8		SW6020	10/12/21 12:55 / dck	10/11/21 09:00	ICPMS205-H_211012A	39	58477

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21100040

BatchID: 211011_1_COND-S-PAS

Date: *19-Oct-21*

Run ID :Run Order: **SOIL EC_211012A: 45** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_211011_1** Method: **ASA10-3**

Analysis Date: **10/12/21 14:06** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.50	0.10	1.413	0	106	90	110				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL EC_211012A: 46** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_211011_1** Method: **ASA10-3**

Analysis Date: **10/12/21 14:06** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	5.09	0.10	5	0	102	90	110				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL EC_211012A: 47** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_211011_1** Method: **ASA10-3**

Analysis Date: **10/12/21 14:07** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	0.982	0.10	1	0	98	90	110				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: 211011_1_PH-S-PASTE
Date: *19-Oct-21*

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_211011_1** Method: **ASA10-3**
Analysis Date: **10/12/21 09:38** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.04	0.10	7	0	101	98.6	101.4				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_211011_1** Method: **ASA10-3**
Analysis Date: **10/12/21 09:39** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.03	0.10	7	0	100	98.6	101.4				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_211011_1** Method: **ASA10-3**
Analysis Date: **10/12/21 09:40** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	4.03	0.10	4	0	101	97.5	102.5				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: 58407
Date: *19-Oct-21*

Run ID :Run Order: **SOIL HYDROMETER_211008A: 26** SampType: **Sample Duplicate** Lab ID: **H21100040-002ADUP** Method: **ASA15-5**
Analysis Date: **10/06/21 10:05** Units: **%** **Prep Info:** Prep Date: **10/4/2021** Prep Method: **ASA15-5**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	50.0	1.0		0				48	**4.1**	20	
Silt	44.0	1.0		0				46	**4.4**	20	
Clay	6.00	1.0		0				6	**0.0**	20	
Texture	SL	1.0		0				0			

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL HYDROMETER_211008A: 27** SampType: **Laboratory Control Sample** Lab ID: **LCS-58407** Method: **ASA15-5**
Analysis Date: **10/06/21 10:05** Units: **%** **Prep Info:** Prep Date: **10/4/2021** Prep Method: **ASA15-5**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	46.0	1.0	42	0	**110**	70	130				
Silt	29.0	1.0	32	0	**91**	70	130				
Clay	25.0	1.0	26	0	**96**	70	130				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: 58477
Date: *19-Oct-21*

Run ID :Run Order: **ICPMS205-H_211012A: 35** SampType: **Method Blank** Lab ID: **MB-58477** Method: **SW6020**
Analysis Date: **10/12/21 12:46** Units: **mg/kg** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.2									
Cadmium	0.04	0.04									
Copper	ND	1									
Lead	ND	0.5									
Zinc	ND	3									

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICPMS205-H_211012A: 41** SampType: **Laboratory Control Sample** Lab ID: **LCS-58477** Method: **SW6020**
Analysis Date: **10/12/21 13:00** Units: **mg/kg** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	175	1.0	196	0	**89**	66.4	104				
Cadmium	104	1.0	99	0	**105**	79.2	121				
Copper	137	3.2	137	0	**100**	73.9	113				
Lead	112	1.3	105	0	**106**	71.6	128				
Zinc	253	7.7	231	0	**110**	83.1	125				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICPMS205-H_211012A: 42** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-58477** Method: **SW6020**
Analysis Date: **10/12/21 13:02** Units: **mg/kg** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	53.9	1.0	51	0	**106**	80	120				
Cadmium	28.4	1.0	25.5	0	**111**	80	120				
Copper	56.4	3.3	51	0	**111**	80	120				
Lead	55.6	1.3	51	0	**109**	80	120				
Zinc	55.5	7.9	51	0	**109**	80	120				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: 58477
Date: *19-Oct-21*

Run ID :Run Order: **ICPMS205-H_211012A: 43** SampType: **Post Digestion/Distillation Spike** Lab ID: **H21100040-002APDS1** Method: **SW6020**
Analysis Date: **10/12/21 13:04** Units: **mg/kg** **Prep Info:** Prep Date: **10/11/2021** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	18.7	1.0	12.55	6.463	**97**	75	125				
Cadmium	12.9	1.0	12.55	0.1791	**101**	75	125				
Copper	39.6	3.2	12.55	27.36	**98**	75	125				
Lead	23.6	1.3	12.55	11.44	**97**	75	125				
Zinc	65.9	7.8	12.55	54.74		75	125				A

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICPMS205-H_211012A: 44** SampType: **Sample Matrix Spike** Lab ID: **H21100040-002AMS** Method: **SW6020**
Analysis Date: **10/12/21 13:06** Units: **mg/kg** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	58.8	1.0	50.5	6.463	**104**	75	125				
Cadmium	28.0	1.0	25.25	0.1791	**110**	75	125				
Copper	86.3	3.2	50.5	27.36	**117**	75	125				
Lead	69.4	1.3	50.5	11.44	**115**	75	125				
Zinc	115	7.8	50.5	54.74	**119**	75	125				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICPMS205-H_211012A: 45** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H21100040-002AMSD** Method: **SW6020**
Analysis Date: **10/12/21 13:09** Units: **mg/kg** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	59.9	1.0	49.8	6.463	**107**	75	125	58.84	**1.8**	20	
Cadmium	28.2	1.0	24.9	0.1791	**112**	75	125	28	**0.6**	20	
Copper	85.0	3.2	49.8	27.36	**116**	75	125	86.31	**1.5**	20	
Lead	69.8	1.3	49.8	11.44	**117**	75	125	69.38	**0.6**	20	
Zinc	118	7.7	49.8	54.74	**127**	75	125	114.6	**2.7**	20	S

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21100040 — **BatchID: 58540** — **Date:** *19-Oct-21*

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Laboratory Control Sample** Lab ID: **LCS-58540** Method: **ASA10-3**

Analysis Date: **10/12/21 09:41** Units: **s.u.** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.99	0.10	8.042	0	99	95	105				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Sample Duplicate** Lab ID: **H21100040-002ADUP** Method: **ASA10-3**

Analysis Date: **10/12/21 09:43** Units: **s.u.** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.80	0.10		0				7.8	0.0	20	

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL EC_211012A: 48** SampType: **Method Blank** Lab ID: **MB-58540** Method: **ASA10-3**

Analysis Date: **10/12/21 14:07** Units: **mmhos/cm** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	ND	0.05									

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL EC_211012A: 49** SampType: **Laboratory Control Sample** Lab ID: **LCS-58540** Method: **ASA10-3**

Analysis Date: **10/12/21 14:08** Units: **mmhos/cm** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.38	0.10	4.21	0	104	80	120				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL EC_211012A: 52** SampType: **Sample Duplicate** Lab ID: **H21100040-002ADUP** Method: **ASA10-3**

Analysis Date: **10/12/21 14:10** Units: **mmhos/cm** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	2.94	0.10		0				2.836	3.7	20	

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: 58540
Date: *19-Oct-21*

Run ID :Run Order: **ICP2-HE_211012B: 246** SampType: **Method Blank** Lab ID: **MB-58540** Method: **SW6010B**
Analysis Date: **10/13/21 04:28** Units: **mg/L** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	0.1									
Magnesium	ND	0.02									
Sodium	ND	0.02									
Calcium, sat. paste	ND	0.007									
Magnesium, sat. paste	ND	0.002									
Sodium, sat. paste	ND	0.0009									

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICP2-HE_211012B: 247** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-58540** Method: **SW6010B**
Analysis Date: **10/13/21 04:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	49.4	1.0	50	0	**99**	80	120				
Magnesium	49.4	1.0	50	0	**99**	80	120				
Sodium	50.6	1.0	50	0	**101**	80	120				
Calcium, sat. paste	2.47	0.050	2.495	0	**99**	80	120				
Magnesium, sat. paste	4.07	0.082	4.115	0	**99**	80	120				
Sodium, sat. paste	2.20	0.043	2.175	0	**101**	80	120				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICP2-HE_211012B: 248** SampType: **Laboratory Control Sample** Lab ID: **LCS-58540** Method: **SW6010B**
Analysis Date: **10/13/21 04:36** Units: **mg/L** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	234	1.0	217.6	0	**107**	70	130				
Magnesium	86.5	1.0	84.86	0	**102**	70	130				
Sodium	696	1.0	613	0	**114**	70	130				
Calcium, sat. paste	11.7	0.050	10.86	0	**107**	70	130				
Magnesium, sat. paste	7.12	0.082	6.984	0	**102**	70	130				
Sodium, sat. paste	30.3	0.043	26.65	0	**114**	70	130				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: 58540
Date: *19-Oct-21*

Run ID :Run Order: **ICP2-HE_211012B: 253** SampType: **Sample Matrix Spike** Lab ID: **H21100040-001AMS2** Method: **SW6010B**
Analysis Date: **10/13/21 04:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	403	1.0	100	304.2	99	70	130				
Magnesium	143	1.0	100	45.1	98	70	130				
Sodium	355	1.0	100	265	90	70	130				
Calcium, sat. paste	20.1	0.050	4.99	15.18	99	70	130				
Magnesium, sat. paste	11.8	0.082	8.23	3.712	98	70	130				
Sodium, sat. paste	15.4	0.043	4.35	11.52	90	70	130				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICP2-HE_211012B: 254** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H21100040-001AMSD2** Method: **SW6010B**
Analysis Date: **10/13/21 05:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	400	1.0	100	304.2	96	70	130	403	0.7	20	
Magnesium	145	1.0	100	45.1	100	70	130	143.1	1.4	20	
Sodium	364	1.0	100	265	99	70	130	354.9	2.5	20	
Calcium, sat. paste	20.0	0.050	4.99	15.18	96	70	130	20.11	0.7	20	
Magnesium, sat. paste	11.9	0.082	8.23	3.712	100	70	130	11.78	1.4	20	
Sodium, sat. paste	15.8	0.043	4.35	11.52	99	70	130	15.43	2.5	20	

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICP2-HE_211012B: 256** SampType: **Sample Duplicate** Lab ID: **H21100040-002Adup** Method: **SW6010B**
Analysis Date: **10/13/21 05:07** Units: **mg/L** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	277	1.0		0				271.4	2.0	30	
Magnesium	40.3	1.0		0				39.34	2.4	30	
Sodium	269	1.0		0				260.3	3.3	30	
Calcium, sat. paste	13.8	0.050		0				13.54	2.0	30	
Magnesium, sat. paste	3.32	0.082		0				3.238	2.4	30	
Sodium, sat. paste	11.7	0.043		0				11.32	3.3	30	

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: 58540
Date: *19-Oct-21*

Run ID :Run Order: **SOIL CALC_211015A: 3** SampType: **Sample Duplicate** Lab ID: **H21100040-002ADUP** Method: **USDA20b**
Analysis Date: **10/15/21 10:40** Units: **unitless** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	4.00	0.10		0				3.91	**2.3**	30	

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL CALC_211015A: 4** SampType: **Laboratory Control Sample** Lab ID: **LCS-58540** Method: **USDA20b**
Analysis Date: **10/15/21 10:40** Units: **unitless** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	9.87	0.10	8.798	0	**112**	80	120				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: 58540
Date: *19-Oct-21*

Run ID :Run Order: **SOIL DRYING OVEN 2_211014A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-58540** Method: **USDA27a**
Analysis Date: **10/12/21 09:28** Units: **%** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	42.3	0.10	41.64	0	**102**	80	120				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **SOIL DRYING OVEN 2_211014A: 5** SampType: **Sample Duplicate** Lab ID: **H21100040-002ADUP** Method: **USDA27a**
Analysis Date: **10/12/21 09:28** Units: **%** **Prep Info:** Prep Date: **10/11/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	64.7	0.10		0				64.34	**0.6**	20	

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21100040

BatchID: PMOIST_211011_A

Date: *19-Oct-21*

Run ID :Run Order: **SOIL DRYING OVEN 2_211012B: 3** SampType: **Sample Duplicate** Lab ID: **H21100040-002A DUP** Method: **D2974**

Analysis Date: **10/11/21 07:53** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	14.1	0.20		0				14.16	**0.6**	20	

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: R169141
Date: *19-Oct-21*

Run ID :Run Order: **ICPMS205-H_211012A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **10/12/21 11:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0632	0.0010	0.06	0	105	90	110				
Cadmium	0.0321	0.0010	0.03	0	107	90	110				
Copper	0.0639	0.0010	0.06	0	106	90	110				
Lead	0.0630	0.0010	0.06	0	105	90	110				
Zinc	0.0649	0.0013	0.06	0	108	90	110				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICPMS205-H_211012A: 15** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **10/12/21 12:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0000353	0.0010		0							
Cadmium	0.000134	0.0010		0							
Copper	-0.0000906	0.0010		0							
Lead	-0.000163	0.0010		0							
Zinc	-0.000300	0.0013		0							

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICPMS205-H_211012A: 17** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **10/12/21 12:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0101	0.0010	0.01	0	101	70	130				
Cadmium	0.0104	0.0010	0.01	0	104	70	130				
Copper	0.0198	0.0010	0.02	0	99	70	130				
Lead	-0.000320	0.0010		0		0	0				
Zinc	0.00955	0.0013	0.01	0	95	70	130				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21100040

BatchID: R169141

Date: *19-Oct-21*

Run ID :Run Order: **ICPMS205-H_211012A: 20** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6020**

Analysis Date: **10/12/21 12:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0512	0.0010	0.05	0	102	90	110				
Cadmium	0.0526	0.0010	0.05	0	105	90	110				
Copper	0.0519	0.0010	0.05	0	104	90	110				
Lead	0.0516	0.0010	0.05	0	103	90	110				
Zinc	0.0530	0.0013	0.05	0	106	90	110				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICPMS205-H_211012A: 21** SampType: **Continuing Calibration Blank** Lab ID: **CCB** Method: **SW6020**

Analysis Date: **10/12/21 12:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0000338	0.0010		0							
Cadmium	0.0000251	0.0010		0							
Copper	-0.0000657	0.0010		0							
Lead	-0.000336	0.0010		0							
Zinc	-0.000569	0.0013		0							

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21100040
BatchID: R169168
Date: *19-Oct-21*

Run ID :Run Order: **ICP2-HE_211012B: 13** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6010B**
Analysis Date: **10/12/21 09:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	39.1	1.0	40	0	98	90	110				
Magnesium	40.2	1.0	40	0	100	90	110				
Sodium	39.4	1.0	40	0	99	90	110				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICP2-HE_211012B: 14** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6010B**
Analysis Date: **10/12/21 10:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	24.9	1.0	25	0	100	90	110				
Magnesium	25.0	1.0	25	0	100	90	110				
Sodium	24.7	1.0	25	0	99	90	110				

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICP2-HE_211012B: 15** SampType: **Continuing Calibration Blank** Lab ID: **ICB** Method: **SW6010B**
Analysis Date: **10/12/21 10:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	0.0734	1.0		0							
Magnesium	0.0306	1.0		0							
Sodium	-0.0000600	1.0		0							

Associated samples: **H21100040-001A, H21100040-002A**

Run ID :Run Order: **ICP2-HE_211012B: 17** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6010B**
Analysis Date: **10/12/21 10:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	465	1.0	500	0	93	80	120				
Magnesium	455	1.0	500	0	91	80	120				
Sodium	0.0324	1.0		0		0	0				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21100040

BatchID: R169168

Date: *19-Oct-21*

Run ID :Run Order: **ICP2-HE_211012B: 18** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6010B**

Analysis Date: **10/12/21 10:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	461	1.0	500	0	**92**	80	120				
Magnesium	457	1.0	500	0	**91**	80	120				
Sodium	19.9	1.0	20	0	**100**	80	120				

Associated samples: **H21100040-001A, H21100040-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Work Order Receipt Checklist

Login completed by: Date Received:

Reviewed by: Received by:

Reviewed Date: Carrier name:

Shipping container/cooler in good condition?	Yes ☐	No ☑	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☑	Not Present ☐
Chain of custody present?	Yes ☐	No ☑	
Chain of custody signed when relinquished and received?	Yes ☐	No ☑	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☐	No ☑	
Sample containers intact?	Yes ☐	No ☑	
Sufficient sample volume for indicated test?	Yes ☐	No ☑	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☐	No ☑	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☑	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing information)

Company/Name	Water + Environmental Technologies
Contact	Rial Gunlikson
Phone	406-471-5336
Mailing Address	480 E. Park Street
City, State, Zip	Butte, MT 59701
Email	rgunlikson@waterenvtech.com
Receive Invoice	☐Hard Copy ☑Email
Receive Report	☐Hard Copy ☐Email
Purchase Order	
Quote	
Bottle Order	

Report Information (if different than Account Information)

Company/Name	Same as account Info.
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	
Receive Report	☐Hard Copy ☑Email

Special Report/Formats:
☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other

Comments

Project Information

Project Name, PWSID, Permit, etc.	Parrot ET Cover
Sampler Name	Rial Gunlikson
Sampler Phone	(406) 471-5336
Sample Origin State	MT
EPA/State Compliance	☑Yes ☐ No
Lab provided preservatives were used	☐ Yes ☐ No

MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Analysis Requested

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	Saturation %	Electrical Conductivity	Metals: As, Cd, Cu, Pb, Zn	SAR	pH			See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1 20210929-Parrot-ET-C-660-West	9/29	3:00 pm	1	S	x	x	x	x	x	x	x					H211000410
2 20210929-Parrot-ET-C-659-East	9/29	3:00 pm	1	S	x	x	x	x	x	x	x					
3																
4																
5																
6																
7																
8																
9																
10																

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Rial Gunlikson	10/1/21 1:50 pm				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print) Rebecca Toolie	Date/Time 10-1-21 1355	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
hand	Y	Y (N) C B	Y N	13.1 °C	Y (N)	(Y) N	CC Cash Check	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

December 21, 2021

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H21110448

Project Name: Parrot Tailings

Energy Laboratories Inc Helena MT received the following 6 samples for MT Dept of Justice on 11/17/2021 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H21110448-001	E 855	10/05/21 17:00	11/17/21	Soil	Metals, Saturated Paste Conductivity, Saturated Paste Extract ICP-MS Scan Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage Soil Preparation USDA1
H21110448-002	E 856	10/05/21 17:00	11/17/21	Soil	Metals, Saturated Paste Conductivity, Saturated Paste Extract ICP-MS Scan Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage
H21110448-003	E 857	10/05/21 17:00	11/17/21	Soil	Same As Above
H21110448-004	E 858	10/05/21 17:00	11/17/21	Soil	Same As Above
H21110448-005	E 862	10/05/21 17:00	11/17/21	Soil	Same As Above
H21110448-006	E 864	10/05/21 17:00	11/17/21	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 855
Lab ID: H21110448-001
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	14.9	wt%		0.2		D2974	11/18/21 16:24 / iej		ORYING OVEN 2_211119	A : 1	PMOIST_211118_A
Sand	30	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 5	59157
Silt	42	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 5	59157
Clay	28	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 5	59157
Texture	CL			1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 5	59157
SATURATED PASTE											
Saturation	65.0	%		0.1		USDA27a	11/23/21 07:52 / jjp	11/22/21 10:13	ORYING OVEN 2_211124	A : 2	59216
SATURATED PASTE											
pH, sat. paste	4.2	s.u.		0.1		ASA10-3	11/23/21 08:38 / jjp	11/22/21 10:13	R - ORION A211_211123	A : 5	59216
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	8.8	mmhos/cm		0.1		ASA10-3	11/23/21 13:03 / sah	11/22/21 10:13	SOIL EC_211124	A : 6	59216
Calcium, sat. paste	42.6	meq/L	D	0.07		SW6010B	11/24/21 02:51 / sld	11/22/21 10:13	ICP2-HE_211123	A : 182	59216
Magnesium, sat. paste	23.3	meq/L		0.08		SW6010B	11/24/21 02:51 / sld	11/22/21 10:13	ICP2-HE_211123	A : 182	59216
Sodium, sat. paste	12.8	meq/L		0.04		SW6010B	11/24/21 02:51 / sld	11/22/21 10:13	ICP2-HE_211123	A : 182	59216
Sodium Adsorption Ratio (SAR)	2.2	unitless		0.1		USDA20b	12/06/21 09:16 / stp	11/22/21 10:13	SOIL CALC_211206	B : 1	59216
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Aluminum	27200	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Antimony	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Arsenic	25.1	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Barium	295	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Beryllium	1.67	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Boron	6.99	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Bromine	573	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Cadmium	19.2	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Calcium	4310	mg/kg		50.0		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Cerium	90.2	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173
Cesium	7.46	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 26	59173

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 855
Lab ID: H21110448-001
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Chromium	20.7	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Cobalt	11.2	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Copper	5160	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Dysprosium	6.21	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Erbium	4.57	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Europium	1.09	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Gadolinium	6.71	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Gallium	41.7	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Gold	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Hafnium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Holmium	1.29	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Iodine	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Iridium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Iron	29600	mg/kg		5.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Lanthanum	45.3	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Lead	97.7	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Magnesium	7000	mg/kg		50.0		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Manganese	218	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Molybdenum	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Neodymium	34.3	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Nickel	14.5	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Niobium	1.24	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Osmium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Palladium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Platinum	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Potassium	4400	mg/kg		50.0		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Rhodium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Rubidium	56.4	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Ruthenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Selenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Silver	1.43	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Sodium	463	mg/kg		50.0		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 855
Lab ID: H21110448-001
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Strontium	41.8	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Tantalum	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Thallium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Thorium 232	94.2	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Tin	2.83	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Titanium	1460	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Tungsten	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Uranium	2.62	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Vanadium	49.1	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Ytterbium	3.38	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Zinc	2570	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173
Zirconium	29.6	mg/kg		1.00		ICPMS SCAN	11/22/21 18:57 / dck	11/18/21 15:50	ICPMS205-H_211122C	26	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 856
Lab ID: H21110448-002
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	6.2	wt%		0.2		D2974	11/18/21 16:24 / iej		ORYING OVEN 2_211119	A : 3	PMOIST_211118_A
Sand	64	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 6	59157
Silt	18	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 6	59157
Clay	18	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 6	59157
Texture	SL			1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 6	59157
SATURATED PASTE											
Saturation	38.0	%		0.1		USDA27a	11/23/21 08:17 / jjp	11/22/21 10:13	ORYING OVEN 2_211124	A : 3	59216
SATURATED PASTE											
pH, sat. paste	3.4	s.u.		0.1		ASA10-3	11/23/21 08:39 / jjp	11/22/21 10:13	R - ORION A211_211123	A : 6	59216
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	4.9	mmhos/cm		0.1		ASA10-3	11/23/21 13:04 / sah	11/22/21 10:13	SOIL EC_211124	A : 7	59216
Calcium, sat. paste	24.7	meq/L		0.05		SW6010B	11/24/21 02:55 / sld	11/22/21 10:13	ICP2-HE_211123	A : 183	59216
Magnesium, sat. paste	6.27	meq/L		0.08		SW6010B	11/24/21 02:55 / sld	11/22/21 10:13	ICP2-HE_211123	A : 183	59216
Sodium, sat. paste	1.70	meq/L		0.04		SW6010B	11/24/21 02:55 / sld	11/22/21 10:13	ICP2-HE_211123	A : 183	59216
Sodium Adsorption Ratio (SAR)	0.4	unitless		0.1		USDA20b	12/06/21 09:16 / stp	11/22/21 10:13	SOIL CALC_211206	B : 2	59216
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Aluminum	14400	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Antimony	4.24	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Arsenic	494	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Barium	170	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Beryllium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Boron	5.73	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Bromine	272	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Cadmium	7.67	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Calcium	2160	mg/kg		50.0		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Cerium	24.5	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173
Cesium	3.66	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 27	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 856
Lab ID: H21110448-002
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Chromium	14.3	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Cobalt	5.33	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Copper	2110	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Dysprosium	1.25	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Erbium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A : 148		59173
Europium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Gadolinium	1.50	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Gallium	23.6	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Gold	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A : 148		59173
Hafnium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A : 148		59173
Holmium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Iodine	4.06	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Iridium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A : 148		59173
Iron	31100	mg/kg		5.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Lanthanum	13.5	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Lead	299	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A : 148		59173
Magnesium	3990	mg/kg		50.0		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Manganese	172	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Molybdenum	1.97	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Neodymium	10.2	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Nickel	6.77	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Niobium	1.25	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Osmium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A : 148		59173
Palladium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Platinum	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A : 148		59173
Potassium	3510	mg/kg		50.0		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Rhodium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Rubidium	37.0	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Ruthenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Selenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Silver	19.9	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173
Sodium	437	mg/kg		50.0		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C : 27		59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 856
Lab ID: H21110448-002
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Strontium	57.8	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C	27	59173
Tantalum	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A	148	59173
Thallium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A	148	59173
Thorium 232	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A	148	59173
Tin	11.9	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C	27	59173
Titanium	919	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C	27	59173
Tungsten	7.11	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A	148	59173
Uranium	4.83	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A	148	59173
Vanadium	43.9	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C	27	59173
Ytterbium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:27 / sld	11/18/21 15:50	ICPMS205-H_211124A	148	59173
Zinc	996	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C	27	59173
Zirconium	9.37	mg/kg		1.00		ICPMS SCAN	11/22/21 18:59 / dck	11/18/21 15:50	ICPMS205-H_211122C	27	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 857
Lab ID: H21110448-003
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	5.2	wt%		0.2		D2974	11/18/21 16:24 / iej		ORYING OVEN 2_211119	A : 5	PMOIST_211118_A
Sand	78	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 7	59157
Silt	10	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 7	59157
Clay	12	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 7	59157
Texture	SL			1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 7	59157
SATURATED PASTE											
Saturation	27.1	%		0.1		USDA27a	11/23/21 08:18 / jjp	11/22/21 10:13	ORYING OVEN 2_211124	A : 4	59216
SATURATED PASTE											
pH, sat. paste	6.3	s.u.		0.1		ASA10-3	11/23/21 08:41 / jjp	11/22/21 10:13	R - ORION A211_211123	A : 7	59216
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	2.9	mmhos/cm		0.1		ASA10-3	11/23/21 13:04 / sah	11/22/21 10:13	SOIL EC_211124	A : 8	59216
Calcium, sat. paste	28.7	meq/L		0.05		SW6010B	11/24/21 03:17 / sld	11/22/21 10:13	ICP2-HE_211123	A : 188	59216
Magnesium, sat. paste	5.61	meq/L		0.08		SW6010B	11/24/21 03:17 / sld	11/22/21 10:13	ICP2-HE_211123	A : 188	59216
Sodium, sat. paste	3.54	meq/L		0.04		SW6010B	11/24/21 03:17 / sld	11/22/21 10:13	ICP2-HE_211123	A : 188	59216
Sodium Adsorption Ratio (SAR)	0.9	unitless		0.1		USDA20b	12/06/21 09:16 / stp	11/22/21 10:13	SOIL CALC_211206	B : 3	59216
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Aluminum	3080	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Antimony	21.2	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Arsenic	449	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Barium	112	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Beryllium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Boron	5.65	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Bromine	342	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Cadmium	7.36	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Calcium	2560	mg/kg		50.0		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Cerium	6.08	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173
Cesium	1.72	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 28	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 857
Lab ID: H21110448-003
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Chromium	3.24	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Cobalt	1.56	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Copper	1880	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Dysprosium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Erbium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A : 149		59173
Europium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Gadolinium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Gallium	16.5	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Gold	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A : 149		59173
Hafnium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A : 149		59173
Holmium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Iodine	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Iridium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A : 149		59173
Iron	14600	mg/kg		5.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Lanthanum	3.35	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Lead	867	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A : 149		59173
Magnesium	712	mg/kg		50.0		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Manganese	72.9	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Molybdenum	3.73	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Neodymium	3.35	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Nickel	1.77	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Niobium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Osmium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A : 149		59173
Palladium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Platinum	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A : 149		59173
Potassium	1120	mg/kg		50.0		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Rhodium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Rubidium	9.58	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Ruthenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Selenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Silver	72.3	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173
Sodium	176	mg/kg		50.0		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C : 28		59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 857
Lab ID: H21110448-003
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Strontium	27.2	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C	28	59173
Tantalum	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A	149	59173
Thallium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A	149	59173
Thorium 232	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A	149	59173
Tin	6.22	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C	28	59173
Titanium	102	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C	28	59173
Tungsten	49.8	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A	149	59173
Uranium	2.99	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A	149	59173
Vanadium	10.9	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C	28	59173
Ytterbium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:29 / sld	11/18/21 15:50	ICPMS205-H_211124A	149	59173
Zinc	2310	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C	28	59173
Zirconium	1.68	mg/kg		1.00		ICPMS SCAN	11/22/21 19:01 / dck	11/18/21 15:50	ICPMS205-H_211122C	28	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 858
Lab ID: H21110448-004
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	6.2	wt%		0.2		D2974	11/18/21 16:24 / iej		ORYING OVEN 2_211119	A : 7	PMOIST_211118_A
Sand	86	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 9	59157
Silt	8	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 9	59157
Clay	6	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 9	59157
Texture	LS			1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201	A : 9	59157
SATURATED PASTE											
Saturation	27.9	%		0.1		USDA27a	11/23/21 08:19 / jjp	11/22/21 10:13	ORYING OVEN 2_211124	A : 6	59216
SATURATED PASTE											
pH, sat. paste	7.4	s.u.		0.1		ASA10-3	11/23/21 08:43 / jjp	11/22/21 10:13	R - ORION A211_211123	A : 9	59216
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	2.8	mmhos/cm		0.1		ASA10-3	11/23/21 13:06 / sah	11/22/21 10:13	SOIL EC_211124	A : 10	59216
Calcium, sat. paste	32.8	meq/L		0.05		SW6010B	11/24/21 03:35 / sld	11/22/21 10:13	ICP2-HE_211123	A : 192	59216
Magnesium, sat. paste	0.96	meq/L		0.08		SW6010B	11/24/21 03:35 / sld	11/22/21 10:13	ICP2-HE_211123	A : 192	59216
Sodium, sat. paste	0.61	meq/L		0.04		SW6010B	11/24/21 03:35 / sld	11/22/21 10:13	ICP2-HE_211123	A : 192	59216
Sodium Adsorption Ratio (SAR)	0.2	unitless		0.1		USDA20b	12/06/21 09:16 / stp	11/22/21 10:13	SOIL CALC_211206	B : 5	59216
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Aluminum	872	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Antimony	18.7	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Arsenic	555	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Barium	90.1	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Beryllium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Boron	5.78	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Bromine	219	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Cadmium	5.62	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Calcium	1770	mg/kg		50.0		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Cerium	3.28	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173
Cesium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122	C : 29	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 858
Lab ID: H21110448-004
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Chromium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Cobalt	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Copper	1660	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Dysprosium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Erbium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A : 150		59173
Europium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Gadolinium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Gallium	13.9	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Gold	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A : 150		59173
Hafnium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A : 150		59173
Holmium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Iodine	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Iridium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A : 150		59173
Iron	12700	mg/kg		5.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Lanthanum	1.72	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Lead	527	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A : 150		59173
Magnesium	132	mg/kg		50.0		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Manganese	24.9	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Molybdenum	1.64	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Neodymium	1.82	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Nickel	1.16	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Niobium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Osmium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A : 150		59173
Palladium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Platinum	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A : 150		59173
Potassium	448	mg/kg		50.0		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Rhodium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Rubidium	4.65	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Ruthenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Selenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Silver	71.6	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173
Sodium	ND	mg/kg		50.0		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C : 29		59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 858
Lab ID: H21110448-004
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Strontium	19.7	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C	29	59173
Tantalum	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A	150	59173
Thallium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A	150	59173
Thorium 232	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A	150	59173
Tin	6.52	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C	29	59173
Titanium	22.1	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C	29	59173
Tungsten	34.8	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A	150	59173
Uranium	1.76	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A	150	59173
Vanadium	3.03	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C	29	59173
Ytterbium	ND	mg/kg		1.00		ICPMS SCAN	11/24/21 17:31 / sld	11/18/21 15:50	ICPMS205-H_211124A	150	59173
Zinc	1880	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C	29	59173
Zirconium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:03 / dck	11/18/21 15:50	ICPMS205-H_211122C	29	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 862
Lab ID: H21110448-005
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	14.6	wt%		0.2		D2974	11/18/21 16:25 / iej		ORYING OVEN 2_211119A	9	PMOIST_211118_A
Sand	44	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201A	10	59157
Silt	30	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201A	10	59157
Clay	26	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201A	10	59157
Texture	L			1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201A	10	59157
SATURATED PASTE											
Saturation	53.6	%		0.1		USDA27a	11/23/21 08:19 / jjp	11/22/21 10:13	ORYING OVEN 2_211124A	7	59216
SATURATED PASTE											
pH, sat. paste	2.3	s.u.		0.1		ASA10-3	11/23/21 08:45 / jjp	11/22/21 10:13	- ORION A211_211123A	10	59216
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	5.1	mmhos/cm		0.1		ASA10-3	11/23/21 13:07 / sah	11/22/21 10:13	SOIL EC_211124A	11	59216
Calcium, sat. paste	13.8	meq/L		0.05		SW6010B	11/24/21 03:40 / sld	11/22/21 10:13	ICP2-HE_211123A	193	59216
Magnesium, sat. paste	3.89	meq/L		0.08		SW6010B	11/24/21 03:40 / sld	11/22/21 10:13	ICP2-HE_211123A	193	59216
Sodium, sat. paste	1.85	meq/L		0.04		SW6010B	11/24/21 03:40 / sld	11/22/21 10:13	ICP2-HE_211123A	193	59216
Sodium Adsorption Ratio (SAR)	0.6	unitless		0.1		USDA20b	12/06/21 09:16 / stp	11/22/21 10:13	SOIL CALC_211206B	6	59216
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Aluminum	17400	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Antimony	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Arsenic	2190	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Barium	197	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Beryllium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Boron	6.82	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Bromine	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Cadmium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Calcium	1470	mg/kg		50.0		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Cerium	16.5	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Cesium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 862
Lab ID: H21110448-005
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Chromium	23.0	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Cobalt	4.98	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Copper	720	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Dysprosium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Erbium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Europium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Gadolinium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Gallium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Gold	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Hafnium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Holmium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Iodine	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Iridium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Iron	34200	mg/kg		5.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Lanthanum	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Lead	325	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Magnesium	4400	mg/kg		50.0		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Manganese	130	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Molybdenum	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Neodymium	8.00	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Nickel	7.01	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Niobium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Osmium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Palladium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Platinum	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Potassium	4160	mg/kg		50.0		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Rhodium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Rubidium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Ruthenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Selenium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Silver	1.29	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Sodium	444	mg/kg		50.0		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 862
Lab ID: H21110448-005
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Strontium	47.5	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Tantalum	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Thallium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Thorium 232	34.8	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Tin	2.00	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Titanium	1160	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Tungsten	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Uranium	6.75	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Vanadium	31.2	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Ytterbium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Zinc	592	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173
Zirconium	ND	mg/kg		1.00		ICPMS SCAN	11/22/21 19:05 / dck	11/18/21 15:50	ICPMS205-H_211122C	30	59173

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 864
Lab ID: H21110448-006
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	8.5	wt%		0.2		D2974	11/18/21 16:25 / iej		RYING OVEN 2_211119A	11	PMOIST_211118_A
Sand	64	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201A	11	59157
Silt	22	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201A	11	59157
Clay	14	%		1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201A	11	59157
Texture	SL			1		ASA15-5	11/24/21 15:33 / sah	11/19/21 14:34	HYDROMETER_211201A	11	59157
SATURATED PASTE											
Saturation	37.6	%		0.1		USDA27a	11/23/21 10:30 / jjp	11/22/21 10:13	RYING OVEN 2_211124A	8	59216
SATURATED PASTE											
pH, sat. paste	3.7	s.u.		0.1		ASA10-3	11/23/21 10:35 / jjp	11/22/21 10:13	- ORION A211_211123A	11	59216
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	3.9	mmhos/cm		0.1		ASA10-3	11/23/21 13:08 / sah	11/22/21 10:13	SOIL EC_211124A	12	59216
Calcium, sat. paste	23.7	meq/L		0.05		SW6010B	11/24/21 03:44 / sld	11/22/21 10:13	ICP2-HE_211123A	194	59216
Magnesium, sat. paste	11.7	meq/L		0.08		SW6010B	11/24/21 03:44 / sld	11/22/21 10:13	ICP2-HE_211123A	194	59216
Sodium, sat. paste	3.13	meq/L		0.04		SW6010B	11/24/21 03:44 / sld	11/22/21 10:13	ICP2-HE_211123A	194	59216
Sodium Adsorption Ratio (SAR)	0.7	unitless		0.1		USDA20b	12/06/21 09:16 / stp	11/22/21 10:13	SOIL CALC_211206B	7	59216
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Aluminum	15900	mg/kg		0.127		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Antimony	0.634	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Arsenic	60.9	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Barium	180	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Beryllium	0.619	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Boron	4.75	mg/kg	D	0.254		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Bromine	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Cadmium	4.39	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Calcium	3540	mg/kg	D	12.7		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Cerium	45.3	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Cesium	5.09	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 864
Lab ID: H21110448-006
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Chromium	25.0	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Cobalt	13.7	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Copper	737	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Dysprosium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Erbium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Europium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Gadolinium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Gallium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Gold	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Hafnium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Holmium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Iodine	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Iridium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Iron	32300	mg/kg		2.00		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Lanthanum	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Lead	123	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Magnesium	5670	mg/kg	D	5.09		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Manganese	320	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Molybdenum	23.3	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Neodymium	12.7	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Nickel	13.9	mg/kg		0.127		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Niobium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Osmium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Palladium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Platinum	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Potassium	3710	mg/kg	D	25.4		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Rhodium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Rubidium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Ruthenium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Selenium	0.663	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Silver	2.10	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173
Sodium	155	mg/kg	D	2.54		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C : 31		59173

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E 864
Lab ID: H21110448-006
Matrix: Soil

Project: Parrot Tailings
Collection Date: 10/05/21 17:00
DateReceived: 11/17/21
Report Date: 12/21/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
ICP / ICPMS SCAN (HNO3+HCL SOLUBLE METALS) - SEMIQUANTITATIVE ANALYSIS											
Strontium	50.7	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Tantalum	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Thallium	0.372	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Thorium 232	17.1	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Tin	2.24	mg/kg		0.127		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Titanium	1170	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Tungsten	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Uranium	11.6	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Vanadium	112	mg/kg		0.100		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Ytterbium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Zinc	998	mg/kg	D	0.254		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173
Zirconium	ND	mg/kg	D	0.509		ICPMS SCAN	11/22/21 19:08 / dck	11/18/21 15:50	ICPMS205-H_211122C	31	59173

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 211122_1_COND-S-PAS
Date: *21-Dec-21*

Run ID :Run Order: **SOIL EC_211124A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_211122_1** Method: **ASA10-3**
Analysis Date: **11/23/21 13:11** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.38	0.10	1.413	0	98	90	110				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL EC_211124A: 2** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_211122_1** Method: **ASA10-3**
Analysis Date: **11/23/21 13:00** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.90	0.10	5	0	98	90	110				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL EC_211124A: 3** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_211122_1** Method: **ASA10-3**
Analysis Date: **11/23/21 13:01** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	0.910	0.10	1	0	91	90	110				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 211122_1_PH-S-PASTE
Date: *21-Dec-21*

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_211122_1** Method: **ASA10-3**
Analysis Date: **11/23/21 08:32** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.02	0.10	7	0	100	98.6	101.4				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_211122_1** Method: **ASA10-3**
Analysis Date: **11/23/21 08:33** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.02	0.10	7	0	100	98.6	101.4				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_211122_1** Method: **ASA10-3**
Analysis Date: **11/23/21 08:34** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	4.00	0.10	4	0	100	97.5	102.5				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59157
Date: *21-Dec-21*

Run ID :Run Order: **SOIL HYDROMETER_211201A: 8** SampType: **Sample Duplicate** Lab ID: **H21110448-003ADUP** Method: **ASA15-5**
Analysis Date: **11/24/21 15:33** Units: **%** **Prep Info:** Prep Date: **11/19/2021** Prep Method: **ASA15-5**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	80.0	1.0		0				78	**2.5**	20	
Silt	10.0	1.0		0				10	**0.0**	20	
Clay	10.0	1.0		0				12	**18**	20	
Texture	SL	1.0		0				0			

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL HYDROMETER_211201A: 12** SampType: **Laboratory Control Sample** Lab ID: **LCS-59157** Method: **ASA15-5**
Analysis Date: **11/24/21 15:33** Units: **%** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **ASA15-5**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	48.0	1.0	42	0	**114**	70	130				
Silt	30.0	1.0	32	0	**94**	70	130				
Clay	22.0	1.0	26	0	**85**	70	130				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 25** SampType: **Method Blank** Lab ID: **MB-59173** Method: **SW6020**

Analysis Date: **11/22/21 18:54** Units: **mg/kg** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **SW3050 B**

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	20									
Antimony	ND	3									
Arsenic	ND	0.2									
Barium	ND	0.3									
Beryllium	ND	0.5									
Boron	ND	10									
Cadmium	ND	0.04									
Calcium	ND	200									
Chromium	ND	1									
Cobalt	ND	0.7									
Copper	ND	1									
Iron	ND	50									
Lead	ND	0.5									
Magnesium	ND	10									
Manganese	ND	1									
Molybdenum	ND	0.2									
Nickel	ND	0.5									
Potassium	ND	40									
Selenium	ND	0.1									
Silver	ND	0.7									
Sodium	ND	100									
Strontium	ND	0.2									
Thallium	ND	0.1									
Tin	ND	5									
Titanium	ND	2									
Uranium	ND	0.02									
Vanadium	ND	0.3									
Zinc	ND	3									

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 33** SampType: **Serial Dilution** Lab ID: **H21110465-001ADIL** Method: **SW6020**

Analysis Date: **11/22/21 19:12** Units: **mg/kg-dry** **Prep Info:** Prep Date: **11/18/2021** Prep Method:

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11700	220		0		0	0	12430	**6.2**	10	
Antimony	ND	44		0		0	0	0		10	
Arsenic	29.8	2.2		0		0	0	29.07	**2.6**	10	
Barium	219	3.8		0		0	0	222.8	**1.8**	10	
Beryllium	ND	6.1		0		0	0	0		10	
Boron	ND	150		0		0	0	0		10	
Cadmium	ND	1.0		0		0	0	0.5492		10	
Calcium	ND	2800		0		0	0	872.6		10	
Chromium	ND	17		0		0	0	10.12		10	
Cobalt	ND	10		0		0	0	5.98		10	
Copper	93.1	18		0		0	0	91.5		10	N
Iron	14000	720		0		0	0	13710	**2.1**	10	
Lead	117	7.1		0		0	0	128.8	**9.7**	10	
Magnesium	1840	200		0		0	0	1827		10	N
Manganese	470	17		0		0	0	468.8	**0.3**	10	
Molybdenum	ND	3.3		0		0	0	0		10	
Nickel	9.19	6.9		0		0	0	9.535		10	N
Potassium	1270	490		0		0	0	1275		10	N
Selenium	ND	1.9		0		0	0	0		10	
Silver	ND	10		0		0	0	0		10	
Sodium	ND	1300		0		0	0	0		10	
Strontium	11.4	2.7		0		0	0	11.52		10	N
Thallium	ND	1.4		0		0	0	0		10	
Tin	ND	62		0		0	0	0		10	
Titanium	241	29		0		0	0	245.6		10	N
Uranium	1.24	1.0		0		0	0	1.302		10	N
Vanadium	15.7	4.5		0		0	0	15.2		10	N
Zinc	79.1	43		0		0	0	75.26		10	N

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 34** SampType: **Laboratory Control Sample** Lab ID: **LCS-59173** Method: **SW6020**

Analysis Date: **11/22/21 19:14** Units: **mg/kg** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **SW3050 B**

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10100	39	9830	0	103	63.5	122				
Antimony	61.7	7.6	240	0	26	12.8	37.2				
Arsenic	181	1.0	196	0	93	66.4	104				
Barium	203	1.0	187	0	108	71.8	124				
Beryllium	78.1	1.1	83.6	0	93	70	115				
Boron	113	26	129	0	87	63.9	108				
Cadmium	105	1.0	99	0	107	79.2	121				
Calcium	6290	490	6360	0	99	75.8	116				
Chromium	117	3.0	117	0	100	72.5	115				
Cobalt	114	1.8	108	0	106	79.4	126				
Copper	130	3.1	137	0	95	73.9	113				
Iron	16600	130	16300	0	102	71.9	118				
Lead	116	1.2	105	0	111	71.6	128				
Magnesium	3200	34	3280	0	98	71.2	116				
Manganese	447	2.9	434	0	103	74.4	123				
Molybdenum	125	1.0	127	0	98	61.3	124				
Nickel	85.2	1.2	86.2	0	99	70.6	116				
Potassium	3170	85	3200	0	99	69.1	125				
Selenium	191	1.0	205	0	93	72.3	111				
Silver	46.4	1.7	42.1	0	110	70.8	133				
Sodium	492	230	516	0	95	72	122				
Strontium	109	1.0	98.6	0	111	80.9	125				
Thallium	107	1.0	99.2	0	108	71.4	107.9				S
Tin	145	11	141	0	103	62.1	125				
Titanium	351	5.0	361	0	97	63.3	126				
Uranium	107	1.0	99.9	0	107	80.1	120.1				
Vanadium	115	1.0	114	0	100	73	116				
Zinc	252	7.4	231	0	109	83.1	125				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 35** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-59173** Method: **SW6020**

Analysis Date: **11/22/21 19:17** Units: **mg/kg** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **SW3050 B**

Analytes 27	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	282	40	250	0	113	80	120				
Antimony	57.6	7.9	50	0	115	80	120				
Arsenic	56.1	1.0	50	0	112	80	120				
Barium	58.0	1.0	50	0	116	80	120				
Beryllium	26.5	1.1	25	0	106	80	120				
Boron	60.4	27	50	0	121	80	120				S
Cadmium	28.9	1.0	25	0	116	80	120				
Calcium	2540	510	2500	0	102	80	120				
Chromium	55.1	3.1	50	0	110	80	120				
Cobalt	54.4	1.8	50	0	109	80	120				
Copper	55.4	3.2	50	0	111	80	120				
Iron	271	130	250	0	108	80	120				
Lead	60.0	1.3	50	0	120	80	120				
Magnesium	2820	35	2500	0	113	80	120				
Manganese	276	3.0	250	0	110	80	120				
Molybdenum	55.9	1.0	50	0	112	80	120				
Nickel	55.4	1.2	50	0	111	80	120				
Potassium	2620	88	2500	0	105	80	120				
Selenium	49.5	1.0	50	0	99	80	120				
Sodium	2830	240	2500	0	113	80	120				
Strontium	55.1	1.0	50	0	110	80	120				
Thallium	61.2	1.0	50	0	122	80	120				S
Tin	59.0	11	50	0	118	80	120				
Titanium	56.0	5.2	50	0	112	80	120				
Uranium	58.8	1.0	50	0	118	80	120				
Vanadium	55.1	1.0	50	0	110	80	120				
Zinc	54.1	7.7	50	0	108	80	120				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21110448 — **BatchID: 59173** — **Date:** *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 36** SampType: **Post Digestion/Distillation Spike** Lab ID: **H21110465-001APDS1** Method: **SW6020**

Analysis Date: **11/22/21 19:19** Units: **mg/kg-dry** **Prep Info:** Prep Date: **11/18/2021** Prep Method:

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12400	44	13.85	12430		75	125				A
Antimony	24.3	8.8	13.85	0	175	75	125				S
Arsenic	42.9	1.0	13.85	29.07	100	75	125				
Barium	240	1.0	13.85	222.8		75	125				A
Beryllium	14.4	1.2	13.85	0	104	75	125				
Boron	ND	30	13.85	0	0	75	125				S
Cadmium	15.9	1.0	13.85	0.5492	111	75	125				
Calcium	1160	570	277.1	872.6	105	75	125				
Chromium	24.7	3.4	13.85	10.12	105	75	125				
Cobalt	20.7	2.0	13.85	5.98	106	75	125				
Copper	105	3.5	13.85	91.5		75	125				A
Iron	13700	140	41.56	13710		75	125				A
Lead	144	1.4	13.85	128.8		75	125				A
Magnesium	2110	39	277.1	1827		75	125				A
Manganese	481	3.3	13.85	468.8		75	125				A
Molybdenum	16.0	1.0	13.85	0	116	75	125				
Nickel	24.0	1.4	13.85	9.535	104	75	125				
Potassium	1540	97	277.1	1275		75	125				A
Selenium	13.8	1.0	13.85	0	100	75	125				
Silver	7.81	2.0	5.542	0	141	75	125				S
Sodium	329	260	277.1	0	119	75	125				
Strontium	25.9	1.0	13.85	11.52	104	75	125				
Thallium	15.3	1.0	13.85	0	110	75	125				
Tin	18.6	12	13.85	0	134	75	125				S
Titanium	257	5.7	13.85	245.6		75	125				A
Uranium	15.8	1.0	13.85	1.302	105	75	125				
Vanadium	29.6	1.0	13.85	15.2	104	75	125				
Zinc	89.1	8.6	13.85	75.26		75	125				A

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 37** SampType: **Sample Matrix Spike** Lab ID: **H21110465-001AMS** Method: **SW6020**

Analysis Date: **11/22/21 19:21** Units: **mg/kg-dry** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **SW3050 B**

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	20600	45	277.4	12430		75	125				AE
Antimony	29.9	8.8	55.48	0	54	75	125				S
Arsenic	87.0	1.0	55.48	29.07	104	75	125				
Barium	350	1.0	55.48	222.8		75	125				A
Beryllium	28.5	1.2	27.74	0	103	75	125				
Boron	62.9	30	55.48	0	113	75	125				
Cadmium	31.7	1.0	27.74	0.5492	112	75	125				
Calcium	3700	570	2774	872.6	102	75	125				
Chromium	75.3	3.4	55.48	10.12	117	75	125				
Cobalt	64.9	2.0	55.48	5.98	106	75	125				
Copper	147	3.6	55.48	91.5	100	75	125				
Iron	12900	140	277.4	13710		75	125				AE
Lead	193	1.4	55.48	128.8	116	75	125				
Magnesium	5590	39	2774	1827	136	75	125				S
Manganese	711	3.3	277.4	468.8	87	75	125				
Molybdenum	60.3	1.0	55.48	0	109	75	125				
Nickel	70.9	1.4	55.48	9.535	111	75	125				
Potassium	6310	98	2774	1275	182	75	125				S
Selenium	53.1	1.0	55.48	0	96	75	125				
Silver	34.3	2.0	27.74	0	124	75	125				E
Sodium	2980	260	2774	0	108	75	125				
Strontium	75.2	1.0	55.48	11.52	115	75	125				
Thallium	66.8	1.0	55.48	0	120	75	125				
Tin	65.8	12	55.48	0	119	75	125				
Titanium	410	5.7	55.48	245.6		75	125				A
Uranium	66.8	1.0	55.48	1.302	118	75	125				
Vanadium	80.0	1.0	55.48	15.2	117	75	125				
Zinc	130	8.6	55.48	75.26	99	75	125				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 38** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H21110465-001AMSD** Method: **SW6020**

Analysis Date: **11/22/21 19:23** Units: **mg/kg-dry** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **SW3050 B**

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	20100	44	277.4	12430		75	125	20550	2.1	20	AE
Antimony	29.9	8.8	55.48	0	54	75	125	29.9	0.0	20	S
Arsenic	89.9	1.0	55.48	29.07	110	75	125	87.02	3.3	20	
Barium	297	1.0	55.48	222.8		75	125	350.1	16	20	A
Beryllium	28.4	1.2	27.74	0	102	75	125	28.52	0.4	20	
Boron	64.5	30	55.48	0	116	75	125	62.89	2.5	20	
Cadmium	32.4	1.0	27.74	0.5492	115	75	125	31.68	2.1	20	
Calcium	3800	570	2774	872.6	106	75	125	3696	2.8	20	
Chromium	77.3	3.4	55.48	10.12	121	75	125	75.3	2.6	20	
Cobalt	67.2	2.0	55.48	5.98	110	75	125	64.89	3.5	20	
Copper	147	3.5	55.48	91.5	100	75	125	147.1	0.3	20	
Iron	13800	140	277.4	13710		75	125	12910	6.5	20	AE
Lead	196	1.4	55.48	128.8	121	75	125	193.2	1.4	20	
Magnesium	5340	39	2774	1827	127	75	125	5592	4.6	20	S
Manganese	785	3.3	277.4	468.8	114	75	125	711.3	9.9	20	
Molybdenum	61.6	1.0	55.48	0	111	75	125	60.28	2.2	20	
Nickel	72.5	1.4	55.48	9.535	113	75	125	70.86	2.3	20	
Potassium	6280	97	2774	1275	181	75	125	6314	0.5	20	S
Selenium	54.6	1.0	55.48	0	98	75	125	53.12	2.8	20	
Silver	35.3	2.0	27.74	0	127	75	125	34.29	2.8	20	SE
Sodium	3040	260	2774	0	109	75	125	2985	1.7	20	
Strontium	75.2	1.0	55.48	11.52	115	75	125	75.19	0.1	20	
Thallium	66.1	1.0	55.48	0	119	75	125	66.8	1.1	20	
Tin	66.2	12	55.48	0	119	75	125	65.78	0.7	20	
Titanium	390	5.7	55.48	245.6		75	125	410.1	5.1	20	A
Uranium	66.5	1.0	55.48	1.302	118	75	125	66.83	0.5	20	
Vanadium	82.1	1.0	55.48	15.2	121	75	125	80.05	2.5	20	
Zinc	134	8.6	55.48	75.26	106	75	125	130.3	2.7	20	

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 43** SampType: **Serial Dilution** Lab ID: **H21110488-005ADIL** Method: **SW6020**

Analysis Date: **11/22/21 19:34** Units: **mg/kg-dry** **Prep Info:** Prep Date: **11/18/2021** Prep Method:

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5040	88		0		0	0	5158	2.2	10	
Antimony	ND	17		0		0	0	0		10	
Arsenic	1.21	1.0		0		0	0	1.04		10	N
Barium	44.3	1.5		0		0	0	42.93	3.2	10	
Beryllium	ND	2.4		0		0	0	0		10	
Boron	ND	59		0		0	0	0		10	
Cadmium	ND	1.0		0		0	0	0.09214		10	
Calcium	ND	1100		0		0	0	882.6		10	
Chromium	20.1	6.8		0		0	0	17.95		10	N
Cobalt	ND	4.0		0		0	0	1.706		10	
Copper	30.3	7.0		0		0	0	26.83		10	N
Iron	6440	290		0		0	0	5793	11	10	R
Lead	9.86	2.8		0		0	0	9.422		10	N
Magnesium	1810	78		0		0	0	1698	6.4	10	
Manganese	113	6.6		0		0	0	102	10	10	R
Molybdenum	ND	1.3		0		0	0	0		10	
Nickel	3.64	2.7		0		0	0	3.337		10	N
Potassium	1130	190		0		0	0	1014		10	N
Selenium	ND	1.0		0		0	0	0		10	
Silver	ND	4.0		0		0	0	1.482		10	
Sodium	ND	520		0		0	0	146.4		10	
Strontium	5.87	1.1		0		0	0	5.107		10	N
Thallium	ND	1.0		0		0	0	0		10	
Tin	ND	25		0		0	0	0		10	
Titanium	240	11		0		0	0	217	10	10	R
Uranium	0.963	1.0		0		0	0	0.9119		10	N
Vanadium	8.42	1.8		0		0	0	7.467		10	N
Zinc	53.6	17		0		0	0	44.04		10	N

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211124A: 140** SampType: **Method Blank** Lab ID: **MB-59173** Method: **SW6020**

Analysis Date: **11/24/21 17:08** Units: **mg/kg** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **SW3050 B**

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	20									
Antimony	ND	3									
Arsenic	ND	0.2									
Barium	ND	0.3									
Beryllium	ND	0.5									
Boron	ND	10									
Cadmium	ND	0.04									
Calcium	ND	200									
Chromium	ND	1									
Cobalt	ND	0.7									
Copper	ND	1									
Iron	ND	50									
Lead	ND	0.5									
Magnesium	ND	10									
Manganese	ND	1									
Molybdenum	ND	0.2									
Nickel	ND	0.5									
Potassium	ND	40									
Selenium	ND	0.1									
Silver	ND	0.7									
Sodium	ND	100									
Strontium	ND	0.2									
Thallium	ND	0.1									
Tin	ND	5									
Titanium	ND	2									
Uranium	ND	0.02									
Vanadium	ND	0.3									
Zinc	ND	3									

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211124A: 143** SampType: **Laboratory Control Sample** Lab ID: **LCS-59173** Method: **SW6020**

Analysis Date: **11/24/21 17:15** Units: **mg/kg** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **SW3050 B**

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9850	39	9830	0	100	46.3	130.2				
Antimony	59.5	7.6	240	0	25	0	92.9				
Arsenic	179	1.0	196	0	91	71.4	105.1				
Barium	202	1.0	187	0	108	78.6	112.8				
Beryllium	79.7	1.1	83.6	0	95	76.2	108				
Boron	116	26	129	0	90	59.5	106.2				
Cadmium	104	1.0	99	0	105	73.9	106.1				
Calcium	5950	490	6360	0	94	78.9	113.5				
Chromium	112	3.0	117	0	95	73.5	108.5				
Cobalt	116	1.8	108	0	107	74.2	105.6				S
Copper	128	3.1	137	0	93	76.6	108.8				
Iron	15500	130	16300	0	95	51.7	131.9				
Lead	108	1.2	105	0	102	74.4	108.6				
Magnesium	3200	34	3280	0	97	72.9	116.2				
Manganese	450	2.9	434	0	104	81.1	116.6				
Molybdenum	121	1.0	127	0	95	66.5	103.1				
Nickel	82.9	1.2	86.2	0	96	72.3	105				
Potassium	2870	85	3200	0	90	70.3	120.6				
Selenium	195	1.0	205	0	95	71.2	110.2				
Silver	45.6	1.7	42.1	0	108	70.8	111.9				
Sodium	474	230	516	0	92	71.3	122.5				
Strontium	108	1.0	98.6	0	109	77.4	114.6				
Thallium	99.3	1.0	99.2	0	100	71.4	107.9				
Tin	145	11	141	0	103	69.3	110.6				
Titanium	339	5.0	361	0	94	27.1	149.6				
Uranium	101	1.0	99.9	0	101	80.1	120.1				
Vanadium	108	1.0	114	0	95	67	107				
Zinc	249	7.4	231	0	108	75.3	111.7				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59173
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211124A: 144** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-59173** Method: **SW6020**

Analysis Date: **11/24/21 17:17** Units: **mg/kg** **Prep Info:** Prep Date: **11/18/2021** Prep Method: **SW3050 B**

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	279	40	250	0	**112**	80	120				
Antimony	58.2	7.9	50	0	**116**	80	120				
Arsenic	55.7	1.0	50	0	**111**	80	120				
Barium	58.1	1.0	50	0	**116**	80	120				
Beryllium	26.8	1.1	25	0	**107**	80	120				
Boron	60.2	27	50	0	**120**	80	120				
Cadmium	28.5	1.0	25	0	**114**	80	120				
Calcium	2520	510	2500	0	**101**	80	120				
Chromium	52.6	3.1	50	0	**105**	80	120				
Cobalt	52.2	1.8	50	0	**104**	80	120				
Copper	54.1	3.2	50	0	**108**	80	120				
Iron	259	130	250	0	**104**	80	120				
Lead	56.8	1.3	50	0	**114**	80	120				
Magnesium	2860	35	2500	0	**115**	80	120				
Manganese	260	3.0	250	0	**104**	80	120				
Molybdenum	54.1	1.0	50	0	**108**	80	120				
Nickel	53.6	1.2	50	0	**107**	80	120				
Potassium	2370	88	2500	0	**95**	80	120				
Selenium	51.4	1.0	50	0	**103**	80	120				
Silver	29.8	1.8	25	0	**119**	80	120				
Sodium	2690	240	2500	0	**108**	80	120				
Strontium	55.1	1.0	50	0	**110**	80	120				
Thallium	58.3	1.0	50	0	**117**	80	120				
Tin	58.4	11	50	0	**117**	80	120				
Titanium	51.1	5.2	50	0	**102**	80	120				
Uranium	57.8	1.0	50	0	**116**	80	120				
Vanadium	51.5	1.0	50	0	**103**	80	120				
Zinc	53.2	7.7	50	0	**106**	80	120				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21110448 — **BatchID: 59216** — **Date:** *21-Dec-21*

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Laboratory Control Sample** Lab ID: **LCS-59216** Method: **ASA10-3**

Analysis Date: **11/23/21 08:36** Units: **s.u.** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	8.01	0.10	8.042	0	100	95	105				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Sample Duplicate** Lab ID: **H21110448-003ADUP** Method: **ASA10-3**

Analysis Date: **11/23/21 08:41** Units: **s.u.** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	6.32	0.10		0				6.32	0.0	20	

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL EC_211124A: 4** SampType: **Method Blank** Lab ID: **MB-59216** Method: **ASA10-3**

Analysis Date: **11/23/21 13:02** Units: **mmhos/cm** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	ND	0.05									

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL EC_211124A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-59216** Method: **ASA10-3**

Analysis Date: **11/23/21 13:03** Units: **mmhos/cm** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.31	0.10	4.21	0	102	80	120				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL EC_211124A: 9** SampType: **Sample Duplicate** Lab ID: **H21110448-003ADUP** Method: **ASA10-3**

Analysis Date: **11/23/21 13:05** Units: **mmhos/cm** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	2.92	0.10		0				2.948	1.1	20	

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59216
Date: *21-Dec-21*

Run ID :Run Order: **ICP2-HE_211123A: 177** SampType: **Method Blank** Lab ID: **MB-59216** Method: **SW6010B**
Analysis Date: **11/24/21 02:28** Units: **mg/L** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	0.1									
Magnesium	ND	0.02									
Sodium	ND	0.02									
Calcium, sat. paste	ND	0.007									
Magnesium, sat. paste	ND	0.002									
Sodium, sat. paste	ND	0.0009									

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **ICP2-HE_211123A: 180** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-59216** Method: **SW6010B**
Analysis Date: **11/24/21 02:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	51.2	1.0	50	0	**102**	80	120				
Magnesium	50.3	1.0	50	0	**101**	80	120				
Sodium	48.8	1.0	50	0	**98**	80	120				
Calcium, sat. paste	2.55	0.050	2.495	0	**102**	80	120				
Magnesium, sat. paste	4.14	0.082	4.115	0	**101**	80	120				
Sodium, sat. paste	2.12	0.043	2.175	0	**98**	80	120				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **ICP2-HE_211123A: 181** SampType: **Laboratory Control Sample** Lab ID: **LCS-59216** Method: **SW6010B**
Analysis Date: **11/24/21 02:46** Units: **mg/L** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	240	1.0	217.6	0	**110**	70	130				
Magnesium	91.5	1.0	84.86	0	**108**	70	130				
Sodium	709	1.0	613	0	**116**	70	130				
Calcium, sat. paste	12.0	0.050	10.86	0	**110**	70	130				
Magnesium, sat. paste	7.53	0.082	6.984	0	**108**	70	130				
Sodium, sat. paste	30.8	0.043	26.65	0	**116**	70	130				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59216
Date: *21-Dec-21*

Run ID :Run Order: **ICP2-HE_211123A: 186** SampType: **Sample Matrix Spike** Lab ID: **H21110448-002AMS2** Method: **SW6010B**
Analysis Date: **11/24/21 03:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	722	1.0	250	494.4	91	70	130				
Magnesium	330	1.0	250	76.18	101	70	130				
Sodium	298	1.0	250	39.14	104	70	130				
Calcium, sat. paste	36.0	0.050	12.48	24.67	91	70	130				
Magnesium, sat. paste	27.1	0.082	20.58	6.269	101	70	130				
Sodium, sat. paste	13.0	0.043	10.88	1.702	104	70	130				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **ICP2-HE_211123A: 187** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H21110448-002AMSD2** Method: **SW6010B**
Analysis Date: **11/24/21 03:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	738	1.0	250	494.4	97	70	130	722.4	2.1	20	
Magnesium	330	1.0	250	76.18	102	70	130	329.6	0.3	20	
Sodium	292	1.0	250	39.14	101	70	130	298.1	2.1	20	
Calcium, sat. paste	36.8	0.050	12.48	24.67	97	70	130	36.05	2.1	20	
Magnesium, sat. paste	27.2	0.082	20.58	6.269	102	70	130	27.13	0.3	20	
Sodium, sat. paste	12.7	0.043	10.88	1.702	101	70	130	12.96	2.1	20	

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **ICP2-HE_211123A: 189** SampType: **Sample Duplicate** Lab ID: **H21110448-003Adup** Method: **SW6010B**
Analysis Date: **11/24/21 03:21** Units: **mg/L** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	569	1.0		0				574.3	0.9	30	
Magnesium	64.6	1.0		0				68.17	5.5	30	
Sodium	75.1	1.0		0				81.49	8.2	30	
Calcium, sat. paste	28.4	0.050		0				28.66	0.9	30	
Magnesium, sat. paste	5.31	0.082		0				5.611	5.5	30	
Sodium, sat. paste	3.26	0.043		0				3.543	8.2	30	

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59216
Date: *21-Dec-21*

Run ID :Run Order: **SOIL CALC_211206B: 4** SampType: **Sample Duplicate** Lab ID: **H21110448-003ADUP** Method: **USDA20b**
Analysis Date: **12/06/21 09:16** Units: **unitless** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	0.790	0.10		0				0.86	**8.5**	30	

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL CALC_211206B: 8** SampType: **Laboratory Control Sample** Lab ID: **LCS-59216** Method: **USDA20b**
Analysis Date: **12/06/21 09:16** Units: **unitless** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	9.87	0.10	8.798	0	**112**	80	120				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: 59216
Date: *21-Dec-21*

Run ID :Run Order: **SOIL DRYING OVEN 2_211124A: 1** SampType: **Laboratory Control Sample** Lab ID: **LCS-59216** Method: **USDA27a**
Analysis Date: **11/23/21 07:52** Units: **%** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	42.9	0.10	41.64	0	**103**	80	120				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **SOIL DRYING OVEN 2_211124A: 5** SampType: **Sample Duplicate** Lab ID: **H21110448-003ADUP** Method: **USDA27a**
Analysis Date: **11/23/21 08:18** Units: **%** **Prep Info:** Prep Date: **11/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	25.4	0.10		0				27.13	**6.7**	20	

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: PMOIST_211118_A
Date: *21-Dec-21*

Run ID :Run Order: **SOIL DRYING OVEN 2_211119A: 2** SampType: **Sample Duplicate** Lab ID: **H21110488-002A DUP** Method: **D2974**

Analysis Date: **11/18/21 16:27** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	5.38	0.20		0				4.98	**7.7**	20	

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21110448 — **BatchID: R170408** — **Date:** *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 15** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**

Analysis Date: **11/22/21 13:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.302	0.0033	0.3	0	101	90	110				
Antimony	0.0598	0.0010	0.06	0	100	90	110				
Arsenic	0.0655	0.0010	0.06	0	109	90	110				
Barium	0.0619	0.0010	0.06	0	103	90	110				
Beryllium	0.0294	0.0010	0.03	0	98	90	110				
Boron	0.0607	0.0058	0.06	0	101	90	110				
Cadmium	0.0316	0.0010	0.03	0	105	90	110				
Calcium	2.87	0.26	3	0	96	90	110				
Chromium	0.0637	0.0010	0.06	0	106	90	110				
Cobalt	0.0628	0.0010	0.06	0	105	90	110				
Copper	0.0638	0.0010	0.06	0	106	90	110				
Iron	0.307	0.0057	0.3	0	102	90	110				
Lead	0.0623	0.0010	0.06	0	104	90	110				
Magnesium	2.98	0.011	3	0	99	90	110				
Manganese	0.313	0.0010	0.3	0	104	90	110				
Molybdenum	0.0602	0.0010	0.06	0	100	90	110				
Nickel	0.0640	0.0010	0.06	0	107	90	110				
Potassium	2.97	0.036	3	0	99	90	110				
Selenium	0.0585	0.0010	0.06	0	97	90	110				
Silver	0.0327	0.0010	0.03	0	109	90	110				
Sodium	2.97	0.039	3	0	99	90	110				
Strontium	0.0632	0.0010	0.06	0	105	90	110				
Thallium	0.0650	0.0010	0.06	0	108	90	110				
Tin	0.0626	0.0010	0.06	0	104	90	110				
Titanium	0.0666	0.0011	0.06	0	111	90	110				S
Uranium	0.0606	0.00030	0.06	0	101	90	110				
Vanadium	0.0630	0.0010	0.06	0	105	90	110				
Zinc	0.0637	0.0013	0.06	0	106	90	110				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: R170408
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 18** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**

Analysis Date: **11/22/21 13:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	44.2	0.0033	40	0	**111**	70	130				
Antimony	-0.0000385	0.0010		0							
Arsenic	0.0000722	0.0010		0							
Barium	0.000118	0.0010		0							
Beryllium	-0.000102	0.0010		0							
Boron	0.00192	0.0058		0							
Cadmium	0.000193	0.0010		0							
Calcium	112	0.26	120	0	**93**	70	130				
Chromium	0.000975	0.0010		0							
Cobalt	0.000310	0.0010		0							
Copper	-0.000108	0.0010		0							
Iron	100	0.0057	100	0	**100**	70	130				
Lead	0.0000511	0.0010		0							
Magnesium	39.2	0.011	40	0	**98**	70	130				
Manganese	0.000192	0.0010		0		0	0				
Molybdenum	0.832	0.0010	0.8	0	**104**	70	130				
Nickel	0.000121	0.0010		0		0	0				
Potassium	40.7	0.036	40	0	**102**	70	130				
Selenium	0.0000623	0.0010		0							
Silver	0.0000144	0.0010		0							
Sodium	98.7	0.039	100	0	**99**	70	130				
Strontium	0.00137	0.0010		0							
Thallium	0.0000239	0.0010		0							
Tin	8.72E-06	0.0010		0							
Titanium	0.861	0.0011	0.8	0	**108**	70	130				
Uranium	9.23E-06	0.00030		0							
Vanadium	-0.000189	0.0010		0		0	0				
Zinc	0.000410	0.0013		0							

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: R170408
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 20** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**

Analysis Date: **11/22/21 13:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	43.6	0.0033	40	0	**109**	70	130				
Antimony	-0.0000744	0.0010		0		0	0				
Arsenic	0.0106	0.0010	0.01	0	**105**	70	130				
Barium	0.0000345	0.0010		0		0	0				
Beryllium	-0.0000654	0.0010		0		0	0				
Boron	0.000615	0.0058		0		0	0				
Cadmium	0.0106	0.0010	0.01	0	**106**	70	130				
Calcium	110	0.26	120	0	**92**	70	130				
Chromium	0.0223	0.0010	0.02	0	**112**	70	130				
Cobalt	0.0218	0.0010	0.02	0	**109**	70	130				
Copper	0.0206	0.0010	0.02	0	**103**	70	130				
Iron	100	0.0057	100	0	**100**	70	130				
Lead	-0.0000426	0.0010		0		0	0				
Magnesium	38.1	0.011	40	0	**95**	70	130				
Manganese	0.0219	0.0010	0.02	0	**109**	70	130				
Molybdenum	0.833	0.0010	0.8	0	**104**	70	130				
Nickel	0.0212	0.0010	0.02	0	**106**	70	130				
Potassium	40.7	0.036	40	0	**102**	70	130				
Selenium	0.00976	0.0010	0.01	0	**98**	70	130				
Silver	0.0211	0.0010	0.02	0	**106**	70	130				
Sodium	97.3	0.039	100	0	**97**	70	130				
Strontium	0.00134	0.0010		0		0	0				
Thallium	3.70E-06	0.0010		0		0	0				
Tin	-4.13E-06	0.0010		0		0	0				
Titanium	0.868	0.0011	0.8	0	**108**	70	130				
Uranium	-1.75E-06	0.00030		0		0	0				
Vanadium	0.0215	0.0010	0.02	0	**108**	70	130				
Zinc	0.0109	0.0013	0.01	0	**109**	70	130				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: R170408
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 23** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6020**

Analysis Date: **11/22/21 18:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0561	0.0033	0.05	0	112	90	110				S
Antimony	0.0538	0.0010	0.05	0	108	90	110				
Arsenic	0.0519	0.0010	0.05	0	104	90	110				
Barium	0.0534	0.0010	0.05	0	107	90	110				
Beryllium	0.0500	0.0010	0.05	0	100	90	110				
Boron	0.109	0.0058	0.05	0	218	90	110				S
Cadmium	0.0528	0.0010	0.05	0	106	90	110				
Calcium	13.0	0.26	12.5	0	104	90	110				
Chromium	0.0522	0.0010	0.05	0	104	90	110				
Cobalt	0.0521	0.0010	0.05	0	104	90	110				
Copper	0.0514	0.0010	0.05	0	103	90	110				
Iron	1.35	0.0057	1.3	0	104	90	110				
Lead	0.0511	0.0010	0.05	0	102	90	110				
Magnesium	13.7	0.011	12.5	0	110	90	110				
Manganese	0.0522	0.0010	0.05	0	104	90	110				
Molybdenum	0.0525	0.0010	0.05	0	105	90	110				
Nickel	0.0508	0.0010	0.05	0	102	90	110				
Potassium	12.8	0.036	12.5	0	102	90	110				
Selenium	0.0504	0.0010	0.05	0	101	90	110				
Silver	0.0212	0.0010	0.02	0	106	90	110				
Sodium	13.8	0.039	12.5	0	110	90	110				
Strontium	0.0516	0.0010	0.05	0	103	90	110				
Thallium	0.0507	0.0010	0.05	0	101	90	110				
Tin	0.0534	0.0010	0.05	0	107	90	110				
Titanium	0.0518	0.0011	0.05	0	104	90	110				
Uranium	0.0498	0.00030	0.05	0	100	90	110				
Vanadium	0.0524	0.0010	0.05	0	105	90	110				
Zinc	0.0525	0.0013	0.05	0	105	90	110				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: R170408
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211122C: 24** SampType: **Continuing Calibration Blank** Lab ID: **CCB** Method: **SW6020**

Analysis Date: **11/22/21 18:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 28	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.000847	0.0033		0							
Antimony	0.000163	0.0010		0							
Arsenic	0.0000792	0.0010		0							
Barium	0.000116	0.0010		0							
Beryllium	-0.0000723	0.0010		0							
Boron	0.0303	0.0058		0							
Cadmium	0.0000304	0.0010		0							
Calcium	0.0124	0.26		0							
Chromium	0.0000551	0.0010		0							
Cobalt	-0.0000570	0.0010		0							
Copper	-0.0000878	0.0010		0							
Iron	0.00103	0.0057		0							
Lead	-0.000243	0.0010		0							
Magnesium	0.0116	0.011		0							
Manganese	-0.0000425	0.0010		0							
Molybdenum	0.000197	0.0010		0							
Nickel	-0.000152	0.0010		0							
Potassium	0.0228	0.036		0							
Selenium	0.0000770	0.0010		0							
Silver	0.0000216	0.0010		0							
Sodium	0.0192	0.039		0							
Strontium	0.000111	0.0010		0							
Thallium	0.000135	0.0010		0							
Tin	0.0000844	0.0010		0							
Titanium	0.000138	0.0011		0							
Uranium	0.0000885	0.00030		0							
Vanadium	0.0000458	0.0010		0							
Zinc	-0.0000294	0.0013		0							

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: R170422
Date: *21-Dec-21*

Run ID :Run Order: **ICP2-HE_211123A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6010B**
Analysis Date: **11/23/21 10:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	40.4	1.0	40	0	101	90	110				
Magnesium	39.3	1.0	40	0	98	90	110				
Sodium	38.3	1.0	40	0	96	90	110				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **ICP2-HE_211123A: 7** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6010B**
Analysis Date: **11/23/21 10:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	25.8	1.0	25	0	103	90	110				
Magnesium	24.9	1.0	25	0	100	90	110				
Sodium	24.1	1.0	25	0	97	90	110				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **ICP2-HE_211123A: 8** SampType: **Continuing Calibration Blank** Lab ID: **ICB** Method: **SW6010B**
Analysis Date: **11/23/21 10:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	0.0437	1.0		0							
Magnesium	0.0125	1.0		0							
Sodium	-0.00280	1.0		0							

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Run ID :Run Order: **ICP2-HE_211123A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6010B**
Analysis Date: **11/23/21 10:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	476	1.0	500	0	95	80	120				
Magnesium	428	1.0	500	0	86	80	120				
Sodium	0.0494	1.0		0		0	0				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21110448

BatchID: R170422

Date: *21-Dec-21*

Run ID :Run Order: **ICP2-HE_211123A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6010B**

Analysis Date: **11/23/21 10:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	473	1.0	500	0	95	80	120				
Magnesium	425	1.0	500	0	85	80	120				
Sodium	19.8	1.0	20	0	99	80	120				

Associated samples: **H21110448-001A, H21110448-002A, H21110448-003A, H21110448-004A, H21110448-005A, H21110448-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: R170452
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211124A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **11/24/21 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0598	0.0010	0.06	0	100	90	110				
Thallium	0.0627	0.0010	0.06	0	105	90	110				
Uranium	0.0588	0.00030	0.06	0	98	90	110				

Associated samples: **H21110448-002A, H21110448-003A, H21110448-004A**

Run ID :Run Order: **ICPMS205-H_211124A: 15** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **11/24/21 12:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0000517	0.0010		0							
Thallium	4.69E-06	0.0010		0							
Uranium	6.77E-06	0.00030		0							

Associated samples: **H21110448-002A, H21110448-003A, H21110448-004A**

Run ID :Run Order: **ICPMS205-H_211124A: 17** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **11/24/21 12:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	-0.0000540	0.0010		0		0	0				
Thallium	-0.0000202	0.0010		0		0	0				
Uranium	5.31E-07	0.00030		0		0	0				

Associated samples: **H21110448-002A, H21110448-003A, H21110448-004A**

Run ID :Run Order: **ICPMS205-H_211124A: 20** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6020**
Analysis Date: **11/24/21 12:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0503	0.0010	0.05	0	101	90	110				
Thallium	0.0495	0.0010	0.05	0	99	90	110				
Uranium	0.0499	0.00030	0.05	0	100	90	110				

Associated samples: **H21110448-002A, H21110448-003A, H21110448-004A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21110448
BatchID: R170452
Date: *21-Dec-21*

Run ID :Run Order: **ICPMS205-H_211124A: 21** SampType: **Continuing Calibration Blank** Lab ID: **CCB** Method: **SW6020**

Analysis Date: **11/24/21 12:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	-0.000262	0.0010		0							
Thallium	0.0000352	0.0010		0							
Uranium	0.0000344	0.00030		0							

Associated samples: **H21110448-002A, H21110448-003A, H21110448-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Work Order Receipt Checklist

MT Dept of Justice

H21110448

Login completed by: Wanda Johnson

Date Received: 11/17/2021

Reviewed by: BL2000\spester

Received by: JCS

Reviewed Date: 12/21/2021

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.0°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

No date/time on sample containers, used time of 17:00 due to cleint put 4-5 pm. Confirmed with clients samples were taken in October. wjj 11/17/2021 Discussed with R. Gunlikson regarding "ICP Scan", confirmed by client they want a metals scan. wjj 11/18/2021

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing information)

Company/Name: Water + Environmental Technologies
Contact: Rial Gunlikson
Phone: 406-471-5336
Mailing Address: 480 East Park St.
City, State, Zip: Butte, MT 59701
Email: rgunlikson@waterenvtech.com / jslacum@waterenvtech.com
Receive Invoice ☐Hard Copy ☑Email | Receive Report ☐Hard Copy ☐Email
Purchase Order | Quote | Bottle Order

Report Information (if different than Account Information)

Company/Name: Same as account Info.
Contact
Phone
Mailing Address
City, State, Zip
Email
Receive Report ☐Hard Copy ☑Email
Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other

Comments

Project Information

Project Name, PWSID, Permit, etc.: Parrot Tailings
Sampler Name: Kane Gabrielsen | Sampler Phone: (406)445-7868
Sample Origin State: MT | EPA/State Compliance ☑Yes ☐ No
Lab provided preservatives were used ☐ Yes ☐ No
MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	Saturation %	Electrical Conductivity	Metals IC P Scan Full List	SAR (if enough material)	pH			See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	E855	10/05	4-5pm			x	x	x	x	x	x	x					H21110448
2	E856	10/05	4-5pm			x	x	x	x	x	x	x					
3	E857	10/05	4-5pm			x	x	x	x	x	x	x					
4	E858	10/05	4-5pm			x	x	x	x	x	x	x					
5	E862	10/05	4-5pm			x	x	x	x	x	x	x					
6	E864	10/05	4-5pm			x	x	x	x	x	x	x					
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Kane Gabrielsen	11-17-21/1012	[signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (Print)	Date/Time	Signature
				JESSICA [illegible]	11/17/2021 1012	[signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
HAND	Y	Y (N) C B	Y N	2.0 °C	(Y) N	(Y) N	CC Cash Check	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

December 29, 2021

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H21120610

Project Name: Parrot Tailings Removal

Energy Laboratories Inc Helena MT received the following 3 samples for MT Dept of Justice on 12/22/2021 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H21120610-001	1339	12/16/21 11:00	12/22/21	Soil	Metals by ICP/ICPMS, Total Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Saturated Paste Extraction ASA Soil Preparation USDA1
H21120610-002	1341	12/16/21 11:00	12/22/21	Soil	Metals by ICP/ICPMS, Total Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Saturated Paste Extraction ASA
H21120610-003	1344	12/16/21 11:00	12/22/21	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: 1339
Lab ID: H21120610-001
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/16/21 11:00
DateReceived: 12/22/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture (As Received)	8.8	wt%		0.2		D2974	12/23/21 08:26 / jjp		RYING OVEN 2_211227A	21	PMOIST_211223_A
SATURATED PASTE											
pH, sat. paste	7.7	s.u.		0.1		ASA10-3	12/28/21 10:14 / jjp	12/23/21 09:19	- ORION A211_211229A	23	59600
3050 EXTRACTABLE METALS											
Arsenic	9	mg/kg-dry		1		SW6020	12/29/21 11:49 / dck	12/28/21 08:04	ICPMS205-H_211229A	26	59637
Cadmium	ND	mg/kg-dry		1		SW6020	12/29/21 11:49 / dck	12/28/21 08:04	ICPMS205-H_211229A	26	59637
Copper	1280	mg/kg-dry	D	3		SW6020	12/29/21 11:49 / dck	12/28/21 08:04	ICPMS205-H_211229A	26	59637
Lead	121	mg/kg-dry		1		SW6020	12/29/21 11:49 / dck	12/28/21 08:04	ICPMS205-H_211229A	26	59637
Zinc	322	mg/kg-dry	D	8		SW6020	12/29/21 11:49 / dck	12/28/21 08:04	ICPMS205-H_211229A	26	59637

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: 1341
Lab ID: H21120610-002
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/16/21 11:00
DateReceived: 12/22/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture (As Received)	6.8	wt%		0.2		D2974	12/23/21 08:26 / jjp		RYING OVEN 2_211227A	23	PMOIST_211223_A
SATURATED PASTE											
pH, sat. paste	7.3	s.u.		0.1		ASA10-3	12/28/21 10:15 / jjp	12/23/21 09:19	- ORION A211_211229A	24	59600
3050 EXTRACTABLE METALS											
Arsenic	9	mg/kg-dry		1		SW6020	12/29/21 11:53 / dck	12/28/21 08:04	ICPMS205-H_211229A	28	59637
Cadmium	ND	mg/kg-dry		1		SW6020	12/29/21 11:53 / dck	12/28/21 08:04	ICPMS205-H_211229A	28	59637
Copper	1520	mg/kg-dry	D	3		SW6020	12/29/21 11:53 / dck	12/28/21 08:04	ICPMS205-H_211229A	28	59637
Lead	110	mg/kg-dry		1		SW6020	12/29/21 11:53 / dck	12/28/21 08:04	ICPMS205-H_211229A	28	59637
Zinc	303	mg/kg-dry	D	8		SW6020	12/29/21 11:53 / dck	12/28/21 08:04	ICPMS205-H_211229A	28	59637

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: 1344
Lab ID: H21120610-003
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/16/21 11:00
DateReceived: 12/22/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture (As Received)	9.0	wt%		0.2		D2974	12/23/21 08:26 / jjp		RYING OVEN 2_211227A	25	PMOIST_211223_A
SATURATED PASTE											
pH, sat. paste	4.3	s.u.		0.1		ASA10-3	12/28/21 10:16 / jjp	12/23/21 09:19	- ORION A211_211229A	25	59600
3050 EXTRACTABLE METALS											
Arsenic	17	mg/kg-dry		1		SW6020	12/29/21 11:56 / dck	12/28/21 08:04	ICPMS205-H_211229A	29	59637
Cadmium	ND	mg/kg-dry		1		SW6020	12/29/21 11:56 / dck	12/28/21 08:04	ICPMS205-H_211229A	29	59637
Copper	1490	mg/kg-dry	D	3		SW6020	12/29/21 11:56 / dck	12/28/21 08:04	ICPMS205-H_211229A	29	59637
Lead	125	mg/kg-dry		1		SW6020	12/29/21 11:56 / dck	12/28/21 08:04	ICPMS205-H_211229A	29	59637
Zinc	419	mg/kg-dry	D	8		SW6020	12/29/21 11:56 / dck	12/28/21 08:04	ICPMS205-H_211229A	29	59637

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120610
BatchID: 211227_1_PH-S-PASTE
Date: *29-Dec-21*

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_211227_1** Method: **ASA10-3**
Analysis Date: **12/28/21 09:47** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.03	0.10	7	0	100	98.6	101.4				

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_211227_1** Method: **ASA10-3**
Analysis Date: **12/28/21 09:49** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.04	0.10	7	0	101	98.6	101.4				

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_211227_1** Method: **ASA10-3**
Analysis Date: **12/28/21 09:49** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	4.00	0.10	4	0	100	97.5	102.5				

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120610
BatchID: 59600
Date: *29-Dec-21*

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Laboratory Control Sample** Lab ID: **LCS-59600** Method: **ASA10-3**
Analysis Date: **12/28/21 09:50** Units: **s.u.** **Prep Info:** Prep Date: **12/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.96	0.10	8.042	0	**99**	95	105				

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Sample Duplicate** Lab ID: **H21120542-011ADUP** Method: **ASA10-3**
Analysis Date: **12/28/21 10:11** Units: **s.u.** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.67	0.10		0				7.79	**1.6**	20	

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21120610 — **BatchID: 59637** — **Date:** *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211229A: 22** SampType: **Method Blank** Lab ID: **MB-59637** Method: **SW6020**

Analysis Date: **12/29/21 11:40** Units: **mg/kg** **Prep Info:** Prep Date: **12/28/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.2									
Cadmium	ND	0.04									
Copper	ND	1									
Lead	ND	0.5									
Zinc	ND	3									

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **ICPMS205-H_211229A: 27** SampType: **Serial Dilution** Lab ID: **H21120610-001ADIL** Method: **SW6020**

Analysis Date: **12/29/21 11:51** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/28/2021** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.57	1.9		0		0	0	8.605		10	N
Cadmium	0.672	1.0		0		0	0	0.7294		10	N
Copper	1270	16		0		0	0	1279	**0.7**	10	
Lead	112	6.3		0		0	0	120.8	**7.3**	10	
Zinc	325	38		0		0	0	322.1		10	N

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **ICPMS205-H_211229A: 30** SampType: **Laboratory Control Sample** Lab ID: **LCS-59637** Method: **SW6020**

Analysis Date: **12/29/21 11:58** Units: **mg/kg** **Prep Info:** Prep Date: **12/28/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	172	1.0	196	0	**88**	66.4	104				
Cadmium	104	1.0	99	0	**105**	79.2	121				
Copper	132	3.2	137	0	**96**	73.9	113				
Lead	107	1.3	105	0	**102**	71.6	128				
Zinc	249	7.7	231	0	**108**	83.1	125				

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120610
BatchID: 59637
Date: *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211229A: 31** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-59637** Method: **SW6020**
Analysis Date: **12/29/21 12:00** Units: **mg/kg** **Prep Info:** Prep Date: **12/28/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	54.8	1.0	50	0	110	80	120				
Cadmium	27.8	1.0	25	0	111	80	120				
Copper	54.9	3.2	50	0	110	80	120				
Lead	56.0	1.3	50	0	112	80	120				
Zinc	53.0	7.7	50	0	106	80	120				

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **ICPMS205-H_211229A: 32** SampType: **Post Digestion/Distillation Spike** Lab ID: **H21120610-001APDS1** Method: **SW6020**
Analysis Date: **12/29/21 12:03** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/28/2021** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	21.5	1.0	12.28	8.605	105	75	125				
Cadmium	14.0	1.0	12.28	0.7294	108	75	125				
Copper	1280	3.1	12.28	1279		75	125				A
Lead	132	1.3	12.28	120.8		75	125				A
Zinc	334	7.6	12.28	322.1		75	125				A

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **ICPMS205-H_211229A: 33** SampType: **Sample Matrix Spike** Lab ID: **H21120610-001AMS** Method: **SW6020**
Analysis Date: **12/29/21 12:05** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/28/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	63.4	1.0	49.25	8.605	111	75	125				
Cadmium	28.2	1.0	24.62	0.7294	112	75	125				
Copper	1340	3.2	49.25	1279		75	125				A
Lead	188	1.3	49.25	120.8	137	75	125				S
Zinc	404	7.6	49.25	322.1		75	125				A

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21120610

BatchID: 59637

Date: *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211229A: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H21120610-001AMSD** Method: **SW6020**

Analysis Date: **12/29/21 12:07** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/28/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	60.5	1.0	49.2	8.605	**106**	75	125	63.35	**4.6**	20	
Cadmium	26.8	1.0	24.6	0.7294	**106**	75	125	28.2	**5.1**	20	
Copper	1300	3.2	49.2	1279		75	125	1343	**3.2**	20	A
Lead	172	1.3	49.2	120.8	**103**	75	125	188.4	**9.3**	20	
Zinc	375	7.6	49.2	322.1		75	125	403.5	**7.2**	20	A

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21120610

BatchID: PMOIST_211223_A

Date: *29-Dec-21*

Run ID :Run Order: **SOIL DRYING OVEN 2_211227A: 2** SampType: **Sample Duplicate** Lab ID: **H21120610-002A DUP** Method: **D2974**

Analysis Date: **12/23/21 08:33** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture (As Received)	6.77	0.20		0				6.78	**0.2**	20	

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120610
BatchID: R171294
Date: *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211229A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **12/29/21 11:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0626	0.0010	0.06	0	104	90	110				
Cadmium	0.0312	0.0010	0.03	0	104	90	110				
Copper	0.0613	0.0010	0.06	0	102	90	110				
Lead	0.0603	0.0010	0.06	0	101	90	110				
Zinc	0.0621	0.0013	0.06	0	104	90	110				

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **ICPMS205-H_211229A: 15** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **12/29/21 11:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0000718	0.0010		0							
Cadmium	0.000160	0.0010		0							
Copper	-0.000116	0.0010		0							
Lead	-0.0000285	0.0010		0							
Zinc	0.000171	0.0013		0							

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Run ID :Run Order: **ICPMS205-H_211229A: 17** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **12/29/21 11:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0102	0.0010	0.01	0	102	70	130				
Cadmium	0.0106	0.0010	0.01	0	106	70	130				
Copper	0.0204	0.0010	0.02	0	102	70	130				
Lead	-0.0000347	0.0010		0		0	0				
Zinc	0.0105	0.0013	0.01	0	105	70	130				

Associated samples: **H21120610-001A, H21120610-002A, H21120610-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Work Order Receipt Checklist

MT Dept of Justice

H21120610

Login completed by: Wanda Johnson

Date Received: 12/22/2021

Reviewed by: BL2000\spester

Received by: wjj

Reviewed Date: 12/29/2021

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	18.6°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

No collection date/time on sample containers, used information from the COC. wjj 12/22/2021

ENERGY LABORATORIES
Trust our People, Trust our Data.

Chain of Custody & Analytical Request Record

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Page _____ of _____

Account Information (Billing information)

Company/Name	NRDP - Parrot Tailings Removal (700157)
Contact	Jim Ford
Phone	439-2108
Mailing Address	1920 7th Ave PO Box 201425
City, State, Zip	Helena, MT 59620-1425
Email	JFord@mt.gov
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☐Email
Purchase Order	
Quote	
Bottle Order	

Report Information (if different than Account Information)

Company/Name	Water & Environmental Technologies
Contact	Rial Gunlikson
Phone	406-471-5336
Mailing Address	460 East Park St
City, State, Zip	Butte, MT 59701
Email	rgunlikson@waterenvtech.com
Receive Report	☐Hard Copy ☒Email

Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other_____

Comments

1.) Rush TAT
2.) Archive samples

Project Information

Project Name, PWSID Permit, etc.	Parrot Tailings Removal
Sampler Name	Rial Gunlikson
Sampler Phone	406 471-5336
Sample Origin State	MT
EPA/State Compliance	~~☐Yes~~ ☒No
Lab provided preservatives were used	☐ Yes ☐ No

MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Analysis Requested

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Metals - As, Cd, Cu, Pb, Zn	pH								See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1 1339	12/10/21	~11am	1	S	x	x									x	H211206 10
2 1341	↓	↓	1	S	x	x									x	
3 1344	↓	↓	1	S	x	x									x	
4																
5																
6																
7																
8																
9																
10																

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	John Trudnowski	12/22/21 1538	[signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Wanda John	12-22-21 15	[signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
hand	—	Y N C B	Y N	18.1°C	Y N	Y N	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-06/08 v.2

ANALYTICAL SUMMARY REPORT

December 29, 2021

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H21120542
Project Name: Parrot Tailings Removal

Energy Laboratories Inc Helena MT received the following 12 samples for MT Dept of Justice on 12/21/2021 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H21120542-001	E1352	12/20/21 10:00	12/21/21	Soil	Metals by ICP/ICPMS, Total Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Saturated Paste Extraction ASA
H21120542-002	E1353	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-003	E1354	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-004	E1355	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-005	E1356	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-006	E1357	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-007	E1358	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-008	E1359	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-009	E1360	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-010	E1366	12/20/21 12:00	12/21/21	Soil	Same As Above
H21120542-011	E1376	12/21/21 10:00	12/21/21	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage
H21120542-012	E1377	12/21/21 10:00	12/21/21	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1352
Lab ID: H21120542-001
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 10:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	7.7	wt%		0.2		D2974	12/22/21 08:46 / dma		DRYING OVEN 2_211222A	1	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	7.3	s.u.		0.1		ASA10-3	12/28/21 09:56 / jjp	12/23/21 09:19	R - ORION A211_211229A	9	59600
3050 EXTRACTABLE METALS											
Arsenic	54	mg/kg-dry		1		SW6020	12/28/21 12:09 / dck	12/27/21 09:00	ICPMS205-H_211228A	47	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:09 / dck	12/27/21 09:00	ICPMS205-H_211228A	47	59615
Copper	242	mg/kg-dry	D	3		SW6020	12/27/21 18:57 / dck	12/27/21 09:00	ICPMS205-H_211227A	172	59615
Lead	208	mg/kg-dry		1		SW6020	12/27/21 18:57 / dck	12/27/21 09:00	ICPMS205-H_211227A	172	59615
Zinc	79	mg/kg-dry	D	8		SW6020	12/28/21 12:09 / dck	12/27/21 09:00	ICPMS205-H_211228A	47	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1353
Lab ID: H21120542-002
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	11.8	wt%		0.2		D2974	12/22/21 08:47 / dma		DRYING OVEN 2_211222A	3	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	7.6	s.u.		0.1		ASA10-3	12/28/21 09:57 / jjp	12/23/21 09:19	- ORION A211_211229A	10	59600
3050 EXTRACTABLE METALS											
Arsenic	44	mg/kg-dry		1		SW6020	12/28/21 12:12 / dck	12/27/21 09:00	ICPMS205-H_211228A	48	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:12 / dck	12/27/21 09:00	ICPMS205-H_211228A	48	59615
Copper	408	mg/kg-dry	D	3		SW6020	12/27/21 19:01 / dck	12/27/21 09:00	ICPMS205-H_211227A	174	59615
Lead	197	mg/kg-dry		1		SW6020	12/27/21 19:01 / dck	12/27/21 09:00	ICPMS205-H_211227A	174	59615
Zinc	122	mg/kg-dry	D	8		SW6020	12/28/21 12:12 / dck	12/27/21 09:00	ICPMS205-H_211228A	48	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1354
Lab ID: H21120542-003
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	11.2	wt%		0.2		D2974	12/22/21 08:47 / dma		DRYING OVEN 2_211222A	7	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	7.7	s.u.		0.1		ASA10-3	12/28/21 09:59 / jjp	12/23/21 09:19	- ORION A211_211229A	11	59600
3050 EXTRACTABLE METALS											
Arsenic	43	mg/kg-dry		1		SW6020	12/28/21 12:23 / dck	12/27/21 09:00	ICPMS205-H_211228A	53	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:23 / dck	12/27/21 09:00	ICPMS205-H_211228A	53	59615
Copper	371	mg/kg-dry	D	3		SW6020	12/27/21 19:20 / dck	12/27/21 09:00	ICPMS205-H_211227A	182	59615
Lead	202	mg/kg-dry		1		SW6020	12/27/21 19:20 / dck	12/27/21 09:00	ICPMS205-H_211227A	182	59615
Zinc	118	mg/kg-dry	D	7		SW6020	12/28/21 12:23 / dck	12/27/21 09:00	ICPMS205-H_211228A	53	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1355
Lab ID: H21120542-004
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	11.6	wt%		0.2		D2974	12/22/21 08:48 / dma		DRYING OVEN 2_211222A	9	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	5.6	s.u.		0.1		ASA10-3	12/28/21 10:00 / jjp	12/23/21 09:19	- ORION A211_211229A	12	59600
3050 EXTRACTABLE METALS											
Arsenic	61	mg/kg-dry		1		SW6020	12/28/21 12:25 / dck	12/27/21 09:00	ICPMS205-H_211228A	54	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:25 / dck	12/27/21 09:00	ICPMS205-H_211228A	54	59615
Copper	385	mg/kg-dry	D	3		SW6020	12/27/21 19:22 / dck	12/27/21 09:00	ICPMS205-H_211227A	183	59615
Lead	500	mg/kg-dry		1		SW6020	12/27/21 19:22 / dck	12/27/21 09:00	ICPMS205-H_211227A	183	59615
Zinc	179	mg/kg-dry	D	8		SW6020	12/28/21 12:25 / dck	12/27/21 09:00	ICPMS205-H_211228A	54	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1356
Lab ID: H21120542-005
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	10.0	wt%		0.2		D2974	12/22/21 08:48 / dma		RYING OVEN 2_211222A	11	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	7.4	s.u.		0.1		ASA10-3	12/28/21 10:01 / jjp	12/23/21 09:19	- ORION A211_211229A	13	59600
3050 EXTRACTABLE METALS											
Arsenic	49	mg/kg-dry		1		SW6020	12/28/21 12:28 / dck	12/27/21 09:00	ICPMS205-H_211228A	55	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:28 / dck	12/27/21 09:00	ICPMS205-H_211228A	55	59615
Copper	316	mg/kg-dry	D	3		SW6020	12/27/21 19:24 / dck	12/27/21 09:00	ICPMS205-H_211227A	184	59615
Lead	263	mg/kg-dry		1		SW6020	12/27/21 19:24 / dck	12/27/21 09:00	ICPMS205-H_211227A	184	59615
Zinc	159	mg/kg-dry	D	8		SW6020	12/28/21 12:28 / dck	12/27/21 09:00	ICPMS205-H_211228A	55	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1357
Lab ID: H21120542-006
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	6.8	wt%		0.2		D2974	12/22/21 08:48 / dma		RYING OVEN 2_211222A	13	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	4.3	s.u.		0.1		ASA10-3	12/28/21 10:02 / jjp	12/23/21 09:19	- ORION A211_211229A	14	59600
3050 EXTRACTABLE METALS											
Arsenic	50	mg/kg-dry		1		SW6020	12/28/21 12:30 / dck	12/27/21 09:00	ICPMS205-H_211228A	56	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:30 / dck	12/27/21 09:00	ICPMS205-H_211228A	56	59615
Copper	561	mg/kg-dry	D	3		SW6020	12/27/21 19:27 / dck	12/27/21 09:00	ICPMS205-H_211227A	185	59615
Lead	348	mg/kg-dry		1		SW6020	12/27/21 19:27 / dck	12/27/21 09:00	ICPMS205-H_211227A	185	59615
Zinc	125	mg/kg-dry	D	7		SW6020	12/28/21 12:30 / dck	12/27/21 09:00	ICPMS205-H_211228A	56	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1358
Lab ID: H21120542-007
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	6.7	wt%		0.2		D2974	12/22/21 08:49 / dma		RYING OVEN 2_211222A	15	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	4.4	s.u.		0.1		ASA10-3	12/28/21 10:04 / jjp	12/23/21 09:19	- ORION A211_211229A	15	59600
3050 EXTRACTABLE METALS											
Arsenic	47	mg/kg-dry		1		SW6020	12/28/21 12:32 / dck	12/27/21 09:00	ICPMS205-H_211228A	57	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:32 / dck	12/27/21 09:00	ICPMS205-H_211228A	57	59615
Copper	555	mg/kg-dry	D	3		SW6020	12/27/21 19:29 / dck	12/27/21 09:00	ICPMS205-H_211227A	186	59615
Lead	189	mg/kg-dry		1		SW6020	12/27/21 19:29 / dck	12/27/21 09:00	ICPMS205-H_211227A	186	59615
Zinc	127	mg/kg-dry	D	8		SW6020	12/28/21 12:32 / dck	12/27/21 09:00	ICPMS205-H_211228A	57	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1359
Lab ID: H21120542-008
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	8.5	wt%		0.2		D2974	12/22/21 08:49 / dma		RYING OVEN 2_211222A	17	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	4.4	s.u.		0.1		ASA10-3	12/28/21 10:07 / jjp	12/23/21 09:19	- ORION A211_211229A	17	59600
3050 EXTRACTABLE METALS											
Arsenic	44	mg/kg-dry		1		SW6020	12/28/21 12:35 / dck	12/27/21 09:00	ICPMS205-H_211228A	58	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:35 / dck	12/27/21 09:00	ICPMS205-H_211228A	58	59615
Copper	547	mg/kg-dry	D	3		SW6020	12/27/21 19:31 / dck	12/27/21 09:00	ICPMS205-H_211227A	187	59615
Lead	200	mg/kg-dry		1		SW6020	12/27/21 19:31 / dck	12/27/21 09:00	ICPMS205-H_211227A	187	59615
Zinc	137	mg/kg-dry	D	8		SW6020	12/28/21 12:35 / dck	12/27/21 09:00	ICPMS205-H_211228A	58	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1360
Lab ID: H21120542-009
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	7.6	wt%		0.2		D2974	12/22/21 08:49 / dma		RYING OVEN 2_211222A	19	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	4.4	s.u.		0.1		ASA10-3	12/28/21 10:08 / jjp	12/23/21 09:19	- ORION A211_211229A	18	59600
3050 EXTRACTABLE METALS											
Arsenic	53	mg/kg-dry		1		SW6020	12/28/21 12:37 / dck	12/27/21 09:00	ICPMS205-H_211228A	59	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:37 / dck	12/27/21 09:00	ICPMS205-H_211228A	59	59615
Copper	643	mg/kg-dry	D	3		SW6020	12/27/21 19:34 / dck	12/27/21 09:00	ICPMS205-H_211227A	188	59615
Lead	226	mg/kg-dry		1		SW6020	12/27/21 19:34 / dck	12/27/21 09:00	ICPMS205-H_211227A	188	59615
Zinc	179	mg/kg-dry	D	8		SW6020	12/28/21 12:37 / dck	12/27/21 09:00	ICPMS205-H_211228A	59	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1366
Lab ID: H21120542-010
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/20/21 12:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	8.5	wt%		0.2		D2974	12/22/21 08:50 / dma		RYING OVEN 2_211222A	21	PMOIST_211222_B
SATURATED PASTE											
pH, sat. paste	4.2	s.u.		0.1		ASA10-3	12/28/21 10:09 / jjp	12/23/21 09:19	- ORION A211_211229A	19	59600
3050 EXTRACTABLE METALS											
Arsenic	50	mg/kg-dry		1		SW6020	12/28/21 12:39 / dck	12/27/21 09:00	ICPMS205-H_211228A	60	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:39 / dck	12/27/21 09:00	ICPMS205-H_211228A	60	59615
Copper	454	mg/kg-dry	D	3		SW6020	12/27/21 19:36 / dck	12/27/21 09:00	ICPMS205-H_211227A	189	59615
Lead	354	mg/kg-dry		1		SW6020	12/27/21 19:36 / dck	12/27/21 09:00	ICPMS205-H_211227A	189	59615
Zinc	110	mg/kg-dry	D	8		SW6020	12/28/21 12:39 / dck	12/27/21 09:00	ICPMS205-H_211228A	60	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1376
Lab ID: H21120542-011
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/21/21 10:00
DateReceived: 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	17.8	wt%		0.2		D2974	12/22/21 08:50 / dma		RYING OVEN 2_211222A	23	PMOIST_211222_B
Sand	36	%		1		ASA15-5	12/28/21 12:20 / sah	12/23/21 09:16	HYDROMETER_211229A	5	59616
Silt	50	%		1		ASA15-5	12/28/21 12:20 / sah	12/23/21 09:16	HYDROMETER_211229A	5	59616
Clay	14	%		1		ASA15-5	12/28/21 12:20 / sah	12/23/21 09:16	HYDROMETER_211229A	5	59616
Texture	SiL			1		ASA15-5	12/28/21 12:20 / sah	12/23/21 09:16	HYDROMETER_211229A	5	59616
SATURATED PASTE											
Saturation	71.5	%		0.1		USDA27a	12/28/21 09:20 / sah	12/23/21 09:19	RYING OVEN 2_211229A	2	59600
SATURATED PASTE											
pH, sat. paste	7.8	s.u.		0.1		ASA10-3	12/28/21 10:10 / jjp	12/23/21 09:19	- ORION A211_211229A	20	59600
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	0.9	mmhos/cm		0.1		ASA10-3	12/28/21 13:53 / jjp	12/23/21 09:19	SOIL EC_211229A	21	59600
Calcium, sat. paste	4.71	meq/L		0.05		SW6010B	12/28/21 20:45 / sld	12/23/21 09:19	ICP2-HE_211228A	141	59600
Magnesium, sat. paste	1.42	meq/L		0.08		SW6010B	12/28/21 20:45 / sld	12/23/21 09:19	ICP2-HE_211228A	141	59600
Sodium, sat. paste	4.26	meq/L		0.04		SW6010B	12/28/21 20:45 / sld	12/23/21 09:19	ICP2-HE_211228A	141	59600
Sodium Adsorption Ratio (SAR)	2.4	unitless		0.1		USDA20b	12/29/21 09:30 / stp	12/23/21 09:19	SOIL CALC_211229B	26	59600
3050 EXTRACTABLE METALS											
Arsenic	5	mg/kg-dry		1		SW6020	12/28/21 12:41 / dck	12/27/21 09:00	ICPMS205-H_211228A	61	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:41 / dck	12/27/21 09:00	ICPMS205-H_211228A	61	59615
Copper	22	mg/kg-dry	D	3		SW6020	12/27/21 19:38 / dck	12/27/21 09:00	ICPMS205-H_211227A	190	59615
Lead	11	mg/kg-dry		1		SW6020	12/27/21 19:38 / dck	12/27/21 09:00	ICPMS205-H_211227A	190	59615
Zinc	56	mg/kg-dry	D	8		SW6020	12/28/21 12:41 / dck	12/27/21 09:00	ICPMS205-H_211228A	61	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1377
Lab ID: H21120542-012
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 12/21/21 10:00 **DateReceived:** 12/21/21
Report Date: 12/29/21

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	15.8	wt%		0.2		D2974	12/22/21 08:51 / dma		RYING OVEN 2_211222A	25	PMOIST_211222_B
Sand	38	%		1		ASA15-5	12/28/21 12:20 / sah	12/23/21 09:16	HYDROMETER_211229A	6	59616
Silt	48	%		1		ASA15-5	12/28/21 12:20 / sah	12/23/21 09:16	HYDROMETER_211229A	6	59616
Clay	14	%		1		ASA15-5	12/28/21 12:20 / sah	12/23/21 09:16	HYDROMETER_211229A	6	59616
Texture	L			1		ASA15-5	12/28/21 12:20 / sah	12/23/21 09:16	HYDROMETER_211229A	6	59616
SATURATED PASTE											
Saturation	69.5	%		0.1		USDA27a	12/28/21 09:20 / sah	12/23/21 09:19	RYING OVEN 2_211229A	4	59600
SATURATED PASTE											
pH, sat. paste	7.7	s.u.		0.1		ASA10-3	12/28/21 10:13 / jjp	12/23/21 09:19	- ORION A211_211229A	22	59600
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	1.1	mmhos/cm		0.1		ASA10-3	12/28/21 14:01 / jjp	12/23/21 09:19	SOIL EC_211229A	23	59600
Calcium, sat. paste	6.01	meq/L		0.05		SW6010B	12/28/21 20:53 / sld	12/23/21 09:19	ICP2-HE_211228A	143	59600
Magnesium, sat. paste	1.74	meq/L		0.08		SW6010B	12/28/21 20:53 / sld	12/23/21 09:19	ICP2-HE_211228A	143	59600
Sodium, sat. paste	5.78	meq/L		0.04		SW6010B	12/28/21 20:53 / sld	12/23/21 09:19	ICP2-HE_211228A	143	59600
Sodium Adsorption Ratio (SAR)	2.9	unitless		0.1		USDA20b	12/29/21 09:30 / stp	12/23/21 09:19	SOIL CALC_211229B	28	59600
3050 EXTRACTABLE METALS											
Arsenic	10	mg/kg-dry		1		SW6020	12/28/21 12:44 / dck	12/27/21 09:00	ICPMS205-H_211228A	62	59615
Cadmium	ND	mg/kg-dry		1		SW6020	12/28/21 12:44 / dck	12/27/21 09:00	ICPMS205-H_211228A	62	59615
Copper	34	mg/kg-dry	D	3		SW6020	12/27/21 19:40 / dck	12/27/21 09:00	ICPMS205-H_211227A	191	59615
Lead	135	mg/kg-dry		1		SW6020	12/27/21 19:40 / dck	12/27/21 09:00	ICPMS205-H_211227A	191	59615
Zinc	68	mg/kg-dry	D	8		SW6020	12/28/21 12:44 / dck	12/27/21 09:00	ICPMS205-H_211228A	62	59615

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: 211227_1_COND-S-PAS
Date: *29-Dec-21*

Run ID :Run Order: **SOIL EC_211229A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_211227_1** Method: **ASA10-3**
Analysis Date: **12/28/21 13:22** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.42	0.10	1.413	0	100	90	110				

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL EC_211229A: 2** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_211227_1** Method: **ASA10-3**
Analysis Date: **12/28/21 13:23** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.82	0.10	5	0	97	90	110				

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL EC_211229A: 3** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_211227_1** Method: **ASA10-3**
Analysis Date: **12/28/21 13:24** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	0.988	0.10	1	0	99	90	110				

Associated samples: **H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21120542 — **BatchID: 211227_1_PH-S-PASTE** — **Date:** *29-Dec-21*

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_211227_1** Method: **ASA10-3**

Analysis Date: **12/28/21 09:47** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.03	0.10	7	0	100	98.6	101.4				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_211227_1** Method: **ASA10-3**

Analysis Date: **12/28/21 09:49** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.04	0.10	7	0	101	98.6	101.4				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_211227_1** Method: **ASA10-3**

Analysis Date: **12/28/21 09:49** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	4.00	0.10	4	0	100	97.5	102.5				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21120542 — **BatchID: 59600** — **Date:** *29-Dec-21*

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Laboratory Control Sample** Lab ID: **LCS-59600** Method: **ASA10-3**

Analysis Date: **12/28/21 09:50** Units: **s.u.** **Prep Info:** Prep Date: **12/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.96	0.10	8.042	0	99	95	105				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL PH METER - ORION A211_21** SampType: **Sample Duplicate** Lab ID: **H21120542-011ADUP** Method: **ASA10-3**

Analysis Date: **12/28/21 10:11** Units: **s.u.** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.67	0.10		0				7.79	1.6	20	

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL EC_211229A: 4** SampType: **Method Blank** Lab ID: **MB-59600** Method: **ASA10-3**

Analysis Date: **12/28/21 13:25** Units: **mmhos/cm** **Prep Info:** Prep Date: **12/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	ND	0.05									

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL EC_211229A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-59600** Method: **ASA10-3**

Analysis Date: **12/28/21 13:25** Units: **mmhos/cm** **Prep Info:** Prep Date: **12/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.31	0.10	4.21	0	102	80	120				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL EC_211229A: 22** SampType: **Sample Duplicate** Lab ID: **H21120542-011ADUP** Method: **ASA10-3**

Analysis Date: **12/28/21 13:56** Units: **mmhos/cm** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	0.817	0.10		0				0.8655	5.7	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: 59600
Date: *29-Dec-21*

Run ID :Run Order: **SOIL EC_211229A: 22** SampType: **Sample Duplicate** Lab ID: **H21120542-011ADUP** Method: **ASA10-3**

Analysis Date: **12/28/21 13:56** Units: **mmhos/cm** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: 59600
Date: *29-Dec-21*

Run ID :Run Order: **ICP2-HE_211228A: 129** SampType: **Method Blank** Lab ID: **MB-59600** Method: **SW6010B**
Analysis Date: **12/28/21 20:00** Units: **mg/L** **Prep Info:** Prep Date: **12/22/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	0.1									
Magnesium	ND	0.02									
Sodium	ND	0.02									
Calcium, sat. paste	ND	0.007									
Magnesium, sat. paste	ND	0.002									
Sodium, sat. paste	ND	0.0009									

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICP2-HE_211228A: 130** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-59600** Method: **SW6010B**
Analysis Date: **12/28/21 20:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	51.6	1.0	50	0	**103**	80	120				
Magnesium	50.0	1.0	50	0	**100**	80	120				
Sodium	49.9	1.0	50	0	**100**	80	120				
Calcium, sat. paste	2.57	0.050	2.495	0	**103**	80	120				
Magnesium, sat. paste	4.12	0.082	4.115	0	**100**	80	120				
Sodium, sat. paste	2.17	0.043	2.175	0	**100**	80	120				

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICP2-HE_211228A: 131** SampType: **Laboratory Control Sample** Lab ID: **LCS-59600** Method: **SW6010B**
Analysis Date: **12/28/21 20:08** Units: **mg/L** **Prep Info:** Prep Date: **12/22/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	236	1.0	217.6	0	**108**	70	130				
Magnesium	83.6	1.0	84.86	0	**98**	70	130				
Sodium	661	1.0	613	0	**108**	70	130				
Calcium, sat. paste	11.8	0.050	10.86	0	**108**	70	130				
Magnesium, sat. paste	6.88	0.082	6.984	0	**98**	70	130				
Sodium, sat. paste	28.7	0.043	26.65	0	**108**	70	130				

Associated samples: **H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: 59600
Date: *29-Dec-21*

Run ID :Run Order: **ICP2-HE_211228A: 136** SampType: **Sample Matrix Spike** Lab ID: **H21120536-001AMS2** Method: **SW6010B**
Analysis Date: **12/28/21 20:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	214	1.0	100	116.6	97	70	130				
Magnesium	136	1.0	100	37.94	98	70	130				
Sodium	329	1.0	100	236.7	92	70	130				
Calcium, sat. paste	10.7	0.050	4.99	5.82	97	70	130				
Magnesium, sat. paste	11.2	0.082	8.23	3.123	98	70	130				
Sodium, sat. paste	14.3	0.043	4.35	10.29	92	70	130				

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICP2-HE_211228A: 137** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H21120536-001AMSD2** Method: **SW6010B**
Analysis Date: **12/28/21 20:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	214	1.0	100	116.6	97	70	130	214.1	0.0	20	
Magnesium	134	1.0	100	37.94	96	70	130	135.7	1.3	20	
Sodium	328	1.0	100	236.7	92	70	130	329	0.2	20	
Calcium, sat. paste	10.7	0.050	4.99	5.82	97	70	130	10.68	0.0	20	
Magnesium, sat. paste	11.0	0.082	8.23	3.123	96	70	130	11.16	1.3	20	
Sodium, sat. paste	14.3	0.043	4.35	10.29	92	70	130	14.3	0.2	20	

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICP2-HE_211228A: 142** SampType: **Sample Duplicate** Lab ID: **H21120542-011ADUP** Method: **SW6010B**
Analysis Date: **12/28/21 20:49** Units: **mg/L** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	93.9	1.0		0				94.48	0.6	30	
Magnesium	17.4	1.0		0				17.29	0.9	30	
Sodium	98.8	1.0		0				98.08	0.7	30	
Calcium, sat. paste	4.69	0.050		0				4.715	0.6	30	
Magnesium, sat. paste	1.44	0.082		0				1.423	0.9	30	
Sodium, sat. paste	4.30	0.043		0				4.265	0.7	30	

Associated samples: **H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21120542

BatchID: 59600

Date: *29-Dec-21*

Run ID :Run Order: **SOIL CALC_211229B: 27** SampType: **Sample Duplicate** Lab ID: **H21120542-011ADUP** Method: **USDA20b**

Analysis Date: **12/29/21 09:30** Units: **unitless** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	2.46	0.10		0				2.43	**1.2**	30	

Associated samples: **H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: 59600
Date: *29-Dec-21*

Run ID :Run Order: **SOIL DRYING OVEN 2_211229A: 1** SampType: **Laboratory Control Sample** Lab ID: **LCS-59600** Method: **USDA27a**
Analysis Date: **12/28/21 09:19** Units: **%** **Prep Info:** Prep Date: **12/22/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	41.0	0.10	41.64	0	**99**	80	120				

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL DRYING OVEN 2_211229A: 3** SampType: **Sample Duplicate** Lab ID: **H21120542-011ADUP** Method: **USDA27a**
Analysis Date: **12/28/21 09:20** Units: **%** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	70.4	0.10		0				71.5	**1.6**	20	

Associated samples: **H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21120542 — **BatchID: 59615** — **Date:** *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211227A: 168** SampType: **Method Blank** Lab ID: **MB-59615** Method: **SW6020**

Analysis Date: **12/27/21 18:47** Units: **mg/kg** **Prep Info:** Prep Date: **12/27/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.2									
Cadmium	ND	0.04									
Copper	ND	1									
Lead	ND	0.5									
Zinc	ND	3									

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211227A: 173** SampType: **Serial Dilution** Lab ID: **H21120542-001ADIL** Method: **SW6020**

Analysis Date: **12/27/21 18:59** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/27/2021** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	56.2	2.0		0		0	0	55.86	**0.7**	10	
Cadmium	ND	1.0		0		0	0	0.2111		10	
Copper	240	16		0		0	0	242	**0.7**	10	
Lead	205	6.4		0		0	0	208.2	**1.6**	10	
Zinc	85.7	39		0		0	0	81.54		10	N

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211227A: 175** SampType: **Laboratory Control Sample** Lab ID: **LCS-59615** Method: **SW6020**

Analysis Date: **12/27/21 19:04** Units: **mg/kg** **Prep Info:** Prep Date: **12/27/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	177	1.0	196	0	**90**	66.4	104				
Cadmium	107	1.0	99	0	**108**	79.2	121				
Copper	133	3.2	137	0	**97**	73.9	113				
Lead	105	1.3	105	0	**100**	71.6	128				
Zinc	260	7.7	231	0	**113**	83.1	125				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H21120542 — **BatchID: 59615** — **Date:** *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211227A: 176** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-59615** Method: **SW6020**

Analysis Date: **12/27/21 19:06** Units: **mg/kg** **Prep Info:** Prep Date: **12/27/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	57.1	1.0	49.8	0	**115**	80	120				
Cadmium	28.5	1.0	24.9	0	**115**	80	120				
Copper	55.0	3.2	49.8	0	**110**	80	120				
Lead	52.5	1.3	49.8	0	**105**	80	120				
Zinc	56.2	7.7	49.8	0	**113**	80	120				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211227A: 177** SampType: **Post Digestion/Distillation Spike** Lab ID: **H21120542-001APDS1** Method: **SW6020**

Analysis Date: **12/27/21 19:08** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/27/2021** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	70.7	1.0	12.48	55.86		75	125				A
Cadmium	14.4	1.0	12.48	0.2111	**113**	75	125				
Copper	265	3.2	12.48	242		75	125				A
Lead	227	1.3	12.48	208.2		75	125				A
Zinc	96.8	7.7	12.48	81.54		75	125				A

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211227A: 178** SampType: **Sample Matrix Spike** Lab ID: **H21120542-001AMS** Method: **SW6020**

Analysis Date: **12/27/21 19:11** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/27/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	110	1.0	49.7	55.86	**109**	75	125				
Cadmium	27.3	1.0	24.85	0.2111	**109**	75	125				
Copper	325	3.2	49.7	242		75	125				A
Lead	253	1.3	49.7	208.2		75	125				A
Zinc	140	7.7	49.7	81.54	**118**	75	125				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: 59615
Date: *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211227A: 179** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H21120542-001AMSD** Method: **SW6020**

Analysis Date: **12/27/21 19:13** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/27/2021** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	100	1.0	49.55	55.86	**90**	75	125	109.9	**9.1**	20	
Cadmium	27.7	1.0	24.78	0.2111	**111**	75	125	27.31	**1.3**	20	
Copper	285	3.2	49.55	242		75	125	324.5	**13**	20	A
Lead	243	1.3	49.55	208.2		75	125	253.2	**3.9**	20	A
Zinc	140	7.6	49.55	81.54	**119**	75	125	140	**0.3**	20	

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: 59616
Date: *29-Dec-21*

Run ID :Run Order: **SOIL HYDROMETER_211229A: 7** SampType: **Laboratory Control Sample** Lab ID: **LCS-59616** Method: **ASA15-5**
Analysis Date: **12/28/21 12:20** Units: **%** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA15-5**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	48.0	1.0	42	0	**114**	70	130				
Silt	28.0	1.0	32	0	**88**	70	130				
Clay	24.0	1.0	26	0	**92**	70	130				

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL HYDROMETER_211229A: 8** SampType: **Laboratory Control Sample** Lab ID: **LCS-DUP** Method: **ASA15-5**
Analysis Date: **12/28/21 12:20** Units: **%** **Prep Info:** Prep Date: **12/23/2021** Prep Method: **ASA15-5**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	46.0	1.0	42	0	**110**	70	130				
Silt	30.0	1.0	32	0	**94**	70	130				
Clay	24.0	1.0	26	0	**92**	70	130				

Associated samples: **H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: PMOIST_211222_B
Date: *29-Dec-21*

Run ID :Run Order: **SOIL DRYING OVEN 2_211222A: 5** SampType: **Sample Duplicate** Lab ID: **H21120542-002A DUP** Method: **D2974**

Analysis Date: **12/22/21 08:47** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	11.9	0.20		0				11.76	**1.4**	20	

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **SOIL DRYING OVEN 2_211222A: 2** SampType: **Sample Duplicate** Lab ID: **H21120542-012A DUP** Method: **D2974**

Analysis Date: **12/22/21 08:51** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	16.7	0.20		0				15.85	**5.5**	20	

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: R171233
Date: *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211227A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **12/27/21 11:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0611	0.0010	0.06	0	102	90	110				
Lead	0.0599	0.0010	0.06	0	100	90	110				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211227A: 15** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **12/27/21 11:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	-0.000132	0.0010		0							
Lead	-0.0000864	0.0010		0							

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211227A: 17** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **12/27/21 11:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0192	0.0010	0.02	0	96	70	130				
Lead	-0.000107	0.0010		0		0	0				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211227A: 124** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **12/27/21 16:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0617	0.0010	0.06	0	103	90	110				
Lead	0.0602	0.0010	0.06	0	100	90	110				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: R171233
Date: *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211227A: 127** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**

Analysis Date: **12/27/21 16:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	2.33E-06	0.0010		0							
Lead	0.0000281	0.0010		0							

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211227A: 129** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**

Analysis Date: **12/27/21 16:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0189	0.0010	0.02	0	**95**	70	130				
Lead	0.0000273	0.0010		0		0	0				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: R171252
Date: *29-Dec-21*

Run ID :Run Order: **ICPMS205-H_211228A: 13** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **12/28/21 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0646	0.0010	0.06	0	108	90	110				
Cadmium	0.0313	0.0010	0.03	0	104	90	110				
Zinc	0.0643	0.0013	0.06	0	107	90	110				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211228A: 16** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **12/28/21 10:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0000420	0.0010		0							
Cadmium	0.000120	0.0010		0							
Zinc	0.000176	0.0013		0							

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICPMS205-H_211228A: 18** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **12/28/21 11:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0100	0.0010	0.01	0	100	70	130				
Cadmium	0.0104	0.0010	0.01	0	104	70	130				
Zinc	0.00985	0.0013	0.01	0	98	70	130				

Associated samples: **H21120542-001A, H21120542-002A, H21120542-003A, H21120542-004A, H21120542-005A, H21120542-006A, H21120542-007A, H21120542-008A, H21120542-009A, H21120542-010A, H21120542-011A, H21120542-012A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H21120542
BatchID: R171255
Date: *29-Dec-21*

Run ID :Run Order: **ICP2-HE_211228A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6010B**
Analysis Date: **12/28/21 09:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	41.1	1.0	40	0	103	90	110				
Magnesium	40.6	1.0	40	0	102	90	110				
Sodium	40.1	1.0	40	0	100	90	110				

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICP2-HE_211228A: 7** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6010B**
Analysis Date: **12/28/21 09:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	25.6	1.0	25	0	103	90	110				
Magnesium	25.3	1.0	25	0	101	90	110				
Sodium	25.6	1.0	25	0	102	90	110				

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICP2-HE_211228A: 8** SampType: **Continuing Calibration Blank** Lab ID: **ICB** Method: **SW6010B**
Analysis Date: **12/28/21 09:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	0.0553	1.0		0							
Magnesium	0.0166	1.0		0							
Sodium	-0.0137	1.0		0							

Associated samples: **H21120542-011A, H21120542-012A**

Run ID :Run Order: **ICP2-HE_211228A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6010B**
Analysis Date: **12/28/21 09:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	474	1.0	500	0	95	80	120				
Magnesium	454	1.0	500	0	91	80	120				
Sodium	0.0433	1.0		0		0	0				

Associated samples: **H21120542-011A, H21120542-012A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H21120542

BatchID: R171255

Date: *29-Dec-21*

Run ID :Run Order: **ICP2-HE_211228A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6010B**

Analysis Date: **12/28/21 09:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	474	1.0	500	0	**95**	80	120				
Magnesium	456	1.0	500	0	**91**	80	120				
Sodium	20.1	1.0	20	0	**101**	80	120				

Associated samples: **H21120542-011A, H21120542-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Work Order Receipt Checklist

MT Dept of Justice

H21120542

Login completed by: Wanda Johnson

Date Received: 12/21/2021

Reviewed by: BL2000\spester

Received by: wjj

Reviewed Date: 12/29/2021

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	-0.3°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

Report metals same as historically. wjj 12/23/2021

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Chain of Custody & Analytical Request Record

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Account Information (Billing information)

Company/Name: NRD-Parrot Tailings Removal (#700157)
Contact: Jim Ford
Phone: 406-439-2108
Mailing Address: 1720 9th Ave. P.O. Box 201425
City, State, Zip: Helena, MT 59620-1425
Email: JFord@mt.gov
Receive Invoice: ☐ Hard Copy ☒ Email | Receive Report: ☐ Hard Copy ☐ Email
Purchase Order | Quote | Bottle Order

Report Information (if different than Account Information)

Company/Name: Water + Environmental Technologies
Contact: Rial Gunlikson
Phone: 406-471-5336
Mailing Address: 480 East Park St.
City, State, Zip: Butte, MT 59701
Email: rgunlikson@waterenvtech.com
Receive Report: ☐ Hard Copy ☒ Email
Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other

Comments

1.) Please Rush
2.) Please Archive 1352-1366 Pg. #1
Dry Weight Basis

Project Information

Project Name, PWSID, Permit, etc.: Parrot Tailings Removal
Sampler Name: Rial Gunlikson | Sampler Phone: 406-471-5336
Sample Origin State: MT | EPA/State Compliance: ☒ Yes ☐ No
Lab provided preservatives were used: ☐ Yes ☐ No
MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Metals: ICP As, Cd, Cu, Pb, Zn	pH	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	E1352	12/20	10AM-2PM	1	S	X	X		X	H21120542
2	E1353	12/20	" "	1	S	X	X		X	
3	E1354	12/20	" "	1	S	X	X		X	
4	E1355	12/20	" "	1	S	X	X		X	
5	E1356	12/20	" "	1	S	X	X		X	
6	E1357	12/20	" "	1	S	X	X		X	
7	E1358	12/20	" "	1	S	X	X		X	
8	E1359	12/20	" "	1	S	X	X		X	
9	E1360	12/20	" "	1	S	X	X		X	
10	E1366	12/20	" "	1	S	X	X		X	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Rial Gunlikson	12/21/21 2:00pm	[signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				[illegible]	12-21-21 14:00	[signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
hand del	Y	Y N C B	Y N	-0.3 °C	Y N	Y N	CC Cash Check	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

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Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing information)

Company/Name	
Contact	
Phone	
Mailing Address	
City, State Zip	
Email	
Receive Invoice ☐Hard Copy ☐Email	Receive Report ☐Hard Copy ☐Email
Purchase Order	Quote / Bottle Order

Report Information (if different than Account Information)

Company/Name	iWater + Environmental Technologies
Contact	Rial Gunlikson
Phone	406-471-5336
Mailing Address	480 East Park St.
City, State, Zip	Butte, MT 59701
Email	rgunlikson@waterenutech.com
Receive Report	☐Hard Copy ☑Email

Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other_____

Comments

Dry weight Basis

Project Information

Project Name, PWSID, Permit, etc.	Parrot Tailings Removal
Sampler Name: Rial Gunlikson	Sampler Phone: 406-471-5336
Sample Origin State: MT	EPA/State Compliance ☑Yes ☐ No
Lab provided preservatives were used	[ ] Yes [ ] No

MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	Saturation %	Electrical Conductivity	Metals: As, Cd, Cu, Pb, Zn	SAR	pH			See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	E1376	12/21/21	10:00AM	1	S	X	X	X	X	X	X	X					H21120542
2	E1377	12/21/21	10:00AM	1	S	X	X	X	X	X	X	X					
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Rial Gunlikson	12/21/21 2:00pm	[signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				[signature]	12-21-21 14:00	[signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
hand del	Y	Y (N) C B	Y N	-0.3 °C	Y (N)	(Y) N	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

April 05, 2022

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H22030510

Project Name: Parrot Tailings Removal

Energy Laboratories Inc Helena MT received the following 2 samples for MT Dept of Justice on 3/21/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H22030510-001	E-1556 West	03/18/22 13:00	03/21/22	Solid	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage Soil Preparation USDA1
H22030510-002	E-1557 South	03/18/22 13:00	03/21/22	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E-1556 West
Lab ID: H22030510-001
Matrix: Solid

Project: Parrot Tailings Removal
Collection Date: 03/18/22 13:00 **DateReceived:** 03/21/22
Report Date: 04/05/22

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	15.9	wt%		0.2		D2974	03/22/22 12:13 / jjp		RYING OVEN 2_220323C	: 15	R173141
Sand	38	%		1		ASA15-5	03/24/22 13:32 / sah	03/22/22 14:01	HYDROMETER_220325A	: 1	60581
Silt	49	%		1		ASA15-5	03/24/22 13:32 / sah	03/22/22 14:01	HYDROMETER_220325A	: 1	60581
Clay	13	%		1		ASA15-5	03/24/22 13:32 / sah	03/22/22 14:01	HYDROMETER_220325A	: 1	60581
Texture	L			1		ASA15-5	03/24/22 13:32 / sah	03/22/22 14:01	HYDROMETER_220325A	: 1	60581
SATURATED PASTE											
Saturation	62.5	%		0.1		USDA27a	03/23/22 09:23 / SR	03/22/22 14:01	RYING OVEN 2_220325B	: 2	60582
SATURATED PASTE											
pH, sat. paste	7.8	s.u.		0.1		ASA10-3	03/24/22 08:57 / sah	03/22/22 14:01	R - ORION A211_220325A	: 5	60582
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	2.1	mmhos/cm		0.1		ASA10-3	03/24/22 10:30 / sah	03/22/22 14:01	SOIL EC_220325A	: 6	60582
Calcium, sat. paste	11.4	meq/L		0.05		SW6010B	03/29/22 20:22 / sld	03/22/22 14:01	ICP2-HE_220329B	: 34	60582
Magnesium, sat. paste	3.41	meq/L		0.08		SW6010B	03/29/22 20:22 / sld	03/22/22 14:01	ICP2-HE_220329B	: 34	60582
Sodium, sat. paste	10.3	meq/L	D	0.06		SW6010B	03/29/22 20:22 / sld	03/22/22 14:01	ICP2-HE_220329B	: 34	60582
Sodium Adsorption Ratio (SAR)	3.8	unitless		0.1		USDA20b	03/30/22 08:39 / stp		SOIL CALC_220330A	: 4	R173345
3050 EXTRACTABLE METALS											
Arsenic	7	mg/kg-dry		1		SW6020	03/25/22 07:29 / dck	03/24/22 08:52	ICPMS205-H_220323C	: 76	60606
Cadmium	ND	mg/kg-dry		1		SW6020	03/25/22 07:29 / dck	03/24/22 08:52	ICPMS205-H_220323C	: 76	60606
Copper	26	mg/kg-dry	D	8		SW6020	03/25/22 07:29 / dck	03/24/22 08:52	ICPMS205-H_220323C	: 76	60606
Lead	13	mg/kg-dry	D	3		SW6020	03/25/22 07:29 / dck	03/24/22 08:52	ICPMS205-H_220323C	: 76	60606
Zinc	63	mg/kg-dry	D	20		SW6020	03/25/22 07:29 / dck	03/24/22 08:52	ICPMS205-H_220323C	: 76	60606

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E-1557 South
Lab ID: H22030510-002
Matrix: Solid

Project: Parrot Tailings Removal
Collection Date: 03/18/22 13:00 **DateReceived:** 03/21/22
Report Date: 04/05/22

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	15.6	wt%		0.2		D2974	03/23/22 09:02 / jjp		RYING OVEN 2_220324A	15	R173174
Sand	44	%		1		ASA15-5	03/24/22 13:32 / sah	03/22/22 14:01	HYDROMETER_220325A	2	60581
Silt	41	%		1		ASA15-5	03/24/22 13:32 / sah	03/22/22 14:01	HYDROMETER_220325A	2	60581
Clay	15	%		1		ASA15-5	03/24/22 13:32 / sah	03/22/22 14:01	HYDROMETER_220325A	2	60581
Texture	L			1		ASA15-5	03/24/22 13:32 / sah	03/22/22 14:01	HYDROMETER_220325A	2	60581
SATURATED PASTE											
Saturation	61.8	%		0.1		USDA27a	03/23/22 09:23 / SR	03/22/22 14:01	RYING OVEN 2_220325B	3	60582
SATURATED PASTE											
pH, sat. paste	7.8	s.u.		0.1		ASA10-3	03/24/22 08:58 / sah	03/22/22 14:01	R - ORION A211_220325A	6	60582
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	1.9	mmhos/cm		0.1		ASA10-3	03/24/22 10:31 / sah	03/22/22 14:01	SOIL EC_220325A	7	60582
Calcium, sat. paste	9.21	meq/L		0.05		SW6010B	03/29/22 20:26 / sld	03/22/22 14:01	ICP2-HE_220329B	35	60582
Magnesium, sat. paste	2.49	meq/L		0.08		SW6010B	03/29/22 20:26 / sld	03/22/22 14:01	ICP2-HE_220329B	35	60582
Sodium, sat. paste	9.97	meq/L	D	0.06		SW6010B	03/29/22 20:26 / sld	03/22/22 14:01	ICP2-HE_220329B	35	60582
Sodium Adsorption Ratio (SAR)	4.1	unitless		0.1		USDA20b	03/30/22 08:39 / stp		SOIL CALC_220330A	5	R173345
3050 EXTRACTABLE METALS											
Arsenic	10	mg/kg-dry		1		SW6020	03/25/22 07:36 / dck	03/24/22 08:52	ICPMS205-H_220323C	78	60606
Cadmium	ND	mg/kg-dry		1		SW6020	03/25/22 07:36 / dck	03/24/22 08:52	ICPMS205-H_220323C	78	60606
Copper	70	mg/kg-dry	D	8		SW6020	03/25/22 07:36 / dck	03/24/22 08:52	ICPMS205-H_220323C	78	60606
Lead	31	mg/kg-dry	D	3		SW6020	03/25/22 07:36 / dck	03/24/22 08:52	ICPMS205-H_220323C	78	60606
Zinc	112	mg/kg-dry	D	20		SW6020	03/25/22 07:36 / dck	03/24/22 08:52	ICPMS205-H_220323C	78	60606

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22030510

BatchID: 220323_1_COND-S-PAS

Date: *05-Apr-22*

Run ID :Run Order: **SOIL EC_220325A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_220323_1** Method: **ASA10-3**

Analysis Date: **03/24/22 10:25** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.37	0.10	1.413	0	97	90	110				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL EC_220325A: 2** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_220323_1** Method: **ASA10-3**

Analysis Date: **03/24/22 10:26** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.65	0.10	5	0	93	90	110				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL EC_220325A: 3** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_220323_1** Method: **ASA10-3**

Analysis Date: **03/24/22 10:28** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	0.923	0.10	1	0	92	90	110				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: 220323_1_PH-S-PASTE
Date: *05-Apr-22*

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_220323_1** Method: **ASA10-3**
Analysis Date: **03/24/22 08:53** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.03	0.10	7	0	100	98.6	101.4				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_220323_1** Method: **ASA10-3**
Analysis Date: **03/24/22 08:54** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.03	0.10	7	0	100	98.6	101.4				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_220323_1** Method: **ASA10-3**
Analysis Date: **03/24/22 08:55** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	4.02	0.10	4	0	100	97.5	102.5				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H22030510 — **BatchID: 60581** — **Date:** *05-Apr-22*

Run ID :Run Order: **SOIL HYDROMETER_220325A: 3** SampType: **Sample Duplicate** Lab ID: **H22030510-002ADUP** Method: **ASA15-5**

Analysis Date: **03/24/22 13:32** Units: **%** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA15-5**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	44.0	1.0		0				44	**0.0**	20	
Silt	43.0	1.0		0				41	**4.8**	20	
Clay	13.0	1.0		0				15	**14**	20	
Texture	L	1.0		0				0			

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL HYDROMETER_220325A: 10** SampType: **Laboratory Control Sample** Lab ID: **LCS-60581** Method: **ASA15-5**

Analysis Date: **03/24/22 13:32** Units: **%** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA15-5**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	46.0	1.0	48	0	**96**	70	130				
Silt	31.0	1.0	29	0	**107**	70	130				
Clay	23.0	1.0	23	0	**100**	70	130				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: 60582
Date: *05-Apr-22*

Run ID :Run Order: **SOIL EC_220325A: 4** SampType: **Method Blank** Lab ID: **MB-60582** Method: **ASA10-3**
Analysis Date: **03/24/22 10:28** Units: **mmhos/cm** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	ND	0.05									

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL EC_220325A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-60582** Method: **ASA10-3**
Analysis Date: **03/24/22 10:29** Units: **mmhos/cm** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	3.92	0.10	3.886	0	**101**	80	120				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL EC_220325A: 8** SampType: **Sample Duplicate** Lab ID: **H22030510-002ADUP** Method: **ASA10-3**
Analysis Date: **03/24/22 10:32** Units: **mmhos/cm** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.90	0.10		0				1.887	**0.5**	20	

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Laboratory Control Sample** Lab ID: **LCS-60582** Method: **ASA10-3**
Analysis Date: **03/24/22 08:57** Units: **s.u.** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	8.05	0.10	7.976	0	**101**	95	105				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Sample Duplicate** Lab ID: **H22030510-002ADUP** Method: **ASA10-3**
Analysis Date: **03/24/22 08:59** Units: **s.u.** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.84	0.10		0				7.84	**0.0**	20	

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: 60582
Date: *05-Apr-22*

Run ID :Run Order: **ICP2-HE_220324B: 98** SampType: **Method Blank** Lab ID: **MB-60582** Method: **SW6010B**
Analysis Date: **03/24/22 18:14** Units: **mg/L** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	0.1									
Magnesium	0.03	0.02									
Sodium	ND	0.02									
Calcium, sat. paste	ND	0.007									
Magnesium, sat. paste	0.003	0.002									
Sodium, sat. paste	ND	0.0009									

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICP2-HE_220324B: 99** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-60582** Method: **SW6010B**
Analysis Date: **03/24/22 18:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	52.0	1.0	50	0	**104**	80	120				
Magnesium	51.2	1.0	50	0	**102**	80	120				
Sodium	54.3	1.0	50	0	**109**	80	120				
Calcium, sat. paste	2.59	0.050	2.495	0	**104**	80	120				
Magnesium, sat. paste	4.21	0.082	4.115	0	**102**	80	120				
Sodium, sat. paste	2.36	0.043	2.175	0	**109**	80	120				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICP2-HE_220324B: 100** SampType: **Laboratory Control Sample** Lab ID: **LCS-60582** Method: **SW6010B**
Analysis Date: **03/24/22 18:21** Units: **mg/L** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	325	1.0	300.9	0	**108**	70	130				
Magnesium	129	1.0	116.5	0	**111**	70	130				
Sodium	580	1.0	486.9	0	**119**	70	130				
Calcium, sat. paste	16.2	0.050	15.02	0	**108**	70	130				
Magnesium, sat. paste	10.6	0.082	9.584	0	**111**	70	130				
Sodium, sat. paste	25.2	0.043	21.17	0	**119**	70	130				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: 60582
Date: *05-Apr-22*

Run ID :Run Order: **ICP2-HE_220324B: 103** SampType: **Sample Matrix Spike** Lab ID: **H22030078-001AMS2** Method: **SW6010B**
Analysis Date: **03/24/22 18:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	625	1.0	100	540		70	130				A
Magnesium	206	1.0	100	105.4	**101**	70	130				
Sodium	220	1.0	100	104.2	**116**	70	130				
Calcium, sat. paste	31.2	0.050	4.99	26.95		70	130				A
Magnesium, sat. paste	17.0	0.082	8.23	8.674	**101**	70	130				
Sodium, sat. paste	9.56	0.043	4.35	4.532	**115**	70	130				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICP2-HE_220324B: 106** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H22030078-001AMSD2** Method: **SW6010B**
Analysis Date: **03/24/22 18:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	629	1.0	100	540		70	130	624.6	**0.7**	20	A
Magnesium	205	1.0	100	105.4	**100**	70	130	206.2	**0.6**	20	
Sodium	212	1.0	100	104.2	**108**	70	130	219.8	**3.5**	20	
Calcium, sat. paste	31.4	0.050	4.99	26.95		70	130	31.17	**0.7**	20	A
Magnesium, sat. paste	16.9	0.082	8.23	8.674	**100**	70	130	16.97	**0.6**	20	
Sodium, sat. paste	9.23	0.043	4.35	4.532	**108**	70	130	9.556	**3.5**	20	

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICP2-HE_220329B: 33** SampType: **Method Blank** Lab ID: **MB-60582** Method: **SW6010B**
Analysis Date: **03/29/22 20:18** Units: **mg/L** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	0.1									
Magnesium	ND	0.02									
Sodium	ND	0.7									
Calcium, sat. paste	ND	0.007									
Magnesium, sat. paste	ND	0.002									
Sodium, sat. paste	ND	0.03									

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: 60582
Date: *05-Apr-22*

Run ID :Run Order: **ICP2-HE_220329B: 36** SampType: **Sample Duplicate** Lab ID: **H22030510-002Adup** Method: **SW6010B**

Analysis Date: **03/29/22 20:29** Units: **mg/L** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	186	1.0		0				184.6	**0.6**	30	
Magnesium	30.1	1.0		0				30.23	**0.3**	30	
Sodium	230	1.4		0				229.4	**0.4**	30	
Calcium, sat. paste	9.26	0.050		0				9.21	**0.6**	30	
Magnesium, sat. paste	2.48	0.082		0				2.488	**0.3**	30	
Sodium, sat. paste	10.0	0.061		0				9.973	**0.4**	30	

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: 60582
Date: *05-Apr-22*

Run ID :Run Order: **SOIL DRYING OVEN 2_220325B: 1** SampType: **Laboratory Control Sample** Lab ID: **LCS-60582** Method: **USDA27a**
Analysis Date: **03/24/22 08:33** Units: **%** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	38.2	0.10	41.7	0	**92**	80	120				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL DRYING OVEN 2_220325B: 4** SampType: **Sample Duplicate** Lab ID: **H22030510-002ADUP** Method: **USDA27a**
Analysis Date: **03/23/22 09:24** Units: **%** **Prep Info:** Prep Date: **3/22/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	62.4	0.10		0				61.77	**1.1**	20	

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: 60606
Date: *05-Apr-22*

Run ID :Run Order: **ICPMS205-H_220323C: 73** SampType: **Method Blank** Lab ID: **MB-60606** Method: **SW6020**
Analysis Date: **03/25/22 07:17** Units: **mg/kg** **Prep Info:** Prep Date: **3/24/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.2									
Cadmium	ND	0.04									
Copper	ND	1									
Lead	ND	0.5									
Zinc	ND	3									

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICPMS205-H_220323C: 77** SampType: **Serial Dilution** Lab ID: **H22030510-001ADIL** Method: **SW6020**
Analysis Date: **03/25/22 07:32** Units: **mg/kg-dry** **Prep Info:** Prep Date: **3/24/2022** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	7.10	4.7		0		0	0	6.909		10	N
Cadmium	ND	1.1		0		0	0	0		10	
Copper	ND	38		0		0	0	25.72		10	
Lead	ND	15		0		0	0	13.31		10	
Zinc	ND	92		0		0	0	62.69		10	

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICPMS205-H_220323C: 79** SampType: **Laboratory Control Sample** Lab ID: **LCS-60606** Method: **SW6020**
Analysis Date: **03/25/22 07:40** Units: **mg/kg** **Prep Info:** Prep Date: **3/24/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	178	1.0	196	0	**91**	66.4	104				
Cadmium	98.2	1.0	99	0	**99**	79.2	121				
Copper	127	6.4	137	0	**93**	73.9	113				
Lead	99.4	2.6	105	0	**95**	71.6	128				
Zinc	256	15	231	0	**111**	83.1	125				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: 60606
Date: *05-Apr-22*

Run ID :Run Order: **ICPMS205-H_220323C: 80** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-60606** Method: **SW6020**
Analysis Date: **03/25/22 07:43** Units: **mg/kg** **Prep Info:** Prep Date: **3/24/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	53.8	1.0	49.7	0	108	80	120				
Cadmium	26.6	1.0	24.85	0	107	80	120				
Copper	53.0	6.4	49.7	0	107	80	120				
Lead	50.3	2.6	49.7	0	101	80	120				
Zinc	54.3	15	49.7	0	109	80	120				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICPMS205-H_220323C: 81** SampType: **Post Digestion/Distillation Spike** Lab ID: **H22030510-001APDS1** Method: **SW6020**
Analysis Date: **03/25/22 07:47** Units: **mg/kg-dry** **Prep Info:** Prep Date: **3/24/2022** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	38.1	1.0	29.65	6.909	105	75	125				
Cadmium	30.9	1.0	29.65	0	104	75	125				
Copper	56.9	7.6	29.65	25.72	105	75	125				
Lead	43.1	3.1	29.65	13.31	100	75	125				
Zinc	94.1	18	29.65	62.69	106	75	125				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICPMS205-H_220323C: 82** SampType: **Sample Matrix Spike** Lab ID: **H22030510-001AMS** Method: **SW6020**
Analysis Date: **03/25/22 07:51** Units: **mg/kg-dry** **Prep Info:** Prep Date: **3/24/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	67.6	1.0	58.12	6.909	105	75	125				
Cadmium	30.6	1.0	29.06	0	105	75	125				
Copper	86.1	7.4	58.12	25.72	104	75	125				
Lead	72.8	3.0	58.12	13.31	102	75	125				
Zinc	125	18	58.12	62.69	108	75	125				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22030510

BatchID: 60606

Date: *05-Apr-22*

Run ID :Run Order: **ICPMS205-H_220323C: 83** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H22030510-001AMSD** Method: **SW6020**

Analysis Date: **03/25/22 07:54** Units: **mg/kg-dry** **Prep Info:** Prep Date: **3/24/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	69.4	1.0	59.37	6.909	**105**	75	125	67.65	**2.6**	20	
Cadmium	31.4	1.0	29.68	0	**106**	75	125	30.6	**2.4**	20	
Copper	86.5	7.6	59.37	25.72	**102**	75	125	86.13	**0.4**	20	
Lead	72.0	3.1	59.37	13.31	**99**	75	125	72.82	**1.1**	20	
Zinc	124	18	59.37	62.69	**103**	75	125	125.4	**1.2**	20	

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: R173174
Date: *05-Apr-22*

Run ID :Run Order: **SOIL DRYING OVEN 2_220324A: 1** SampType: **Sample Duplicate** Lab ID: **H22030510-002ADUP** Method: **D2974**

Analysis Date: **03/23/22 09:02** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	15.1	0.20		0				15.61	**3.5**	20	

Associated samples: **H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: R173224
Date: *05-Apr-22*

Run ID :Run Order: **ICPMS205-H_220323C: 64** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **03/24/22 21:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0661	0.0010	0.06	0	110	90	110				
Cadmium	0.0322	0.0010	0.03	0	107	90	110				
Copper	0.0640	0.0010	0.06	0	107	90	110				
Lead	0.0629	0.0010	0.06	0	105	90	110				
Zinc	0.0638	0.0013	0.06	0	106	90	110				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICPMS205-H_220323C: 66** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **03/24/22 22:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0000516	0.0010		0							
Cadmium	0.000132	0.0010		0							
Copper	0.0000484	0.0010		0							
Lead	0.000442	0.0010		0							
Zinc	-0.0000728	0.0013		0							

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICPMS205-H_220323C: 68** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **03/24/22 22:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0108	0.0010	0.01	0	108	70	130				
Cadmium	0.0111	0.0010	0.01	0	111	70	130				
Copper	0.0213	0.0010	0.02	0	106	70	130				
Lead	0.000373	0.0010		0		0	0				
Zinc	0.0106	0.0013	0.01	0	106	70	130				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: R173224
Date: *05-Apr-22*

Run ID :Run Order: **ICPMS205-H_220323C: 70** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6020**
Analysis Date: **03/25/22 07:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0512	0.0010	0.05	0	102	90	110				
Cadmium	0.0516	0.0010	0.05	0	103	90	110				
Copper	0.0504	0.0010	0.05	0	101	90	110				
Lead	0.0490	0.0010	0.05	0	98	90	110				
Zinc	0.0524	0.0013	0.05	0	105	90	110				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICPMS205-H_220323C: 71** SampType: **Continuing Calibration Blank** Lab ID: **CCB** Method: **SW6020**
Analysis Date: **03/25/22 07:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0000835	0.0010		0							
Cadmium	0.0000191	0.0010		0							
Copper	0.000158	0.0010		0							
Lead	-0.0000707	0.0010		0							
Zinc	0.0000399	0.0013		0							

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: R173345
Date: *05-Apr-22*

Run ID :Run Order: **SOIL CALC_220330A: 6** SampType: **Sample Duplicate** Lab ID: **H22030510-002ADUP** Method: **USDA20b**
Analysis Date: **03/30/22 08:39** Units: **unitless** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	4.13	0.10		0				4.12	**0.2**	30	

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **SOIL CALC_220330A: 7** SampType: **Laboratory Control Sample** Lab ID: **LCS-60582** Method: **USDA20b**
Analysis Date: **03/30/22 08:39** Units: **unitless** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	6.89	0.10	6.034	0	**114**	80	120				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22030510
BatchID: R173347
Date: *05-Apr-22*

Run ID :Run Order: **ICP2-HE_220329B: 20** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6010B**
Analysis Date: **03/29/22 16:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	39.5	1.0	40	0	99	90	110				
Magnesium	39.5	1.0	40	0	99	90	110				
Sodium	39.9	1.0	40	0	100	90	110				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICP2-HE_220329B: 21** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6010B**
Analysis Date: **03/29/22 16:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	25.2	1.0	25	0	101	90	110				
Magnesium	25.4	1.0	25	0	102	90	110				
Sodium	26.1	1.0	25	0	104	90	110				

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICP2-HE_220329B: 22** SampType: **Continuing Calibration Blank** Lab ID: **ICB** Method: **SW6010B**
Analysis Date: **03/29/22 16:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	0.0168	1.0		0							
Magnesium	0.00756	1.0		0							
Sodium	0.00251	1.0		0							

Associated samples: **H22030510-001A, H22030510-002A**

Run ID :Run Order: **ICP2-HE_220329B: 24** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6010B**
Analysis Date: **03/29/22 17:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	480	1.0	500	0	96	80	120				
Magnesium	421	1.0	500	0	84	80	120				
Sodium	0.0565	1.0		0		0	0				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22030510

BatchID: R173347

Date: *05-Apr-22*

Run ID :Run Order: **ICP2-HE_220329B: 25** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6010B**

Analysis Date: **03/29/22 17:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	476	1.0	500	0	**95**	80	120				
Magnesium	427	1.0	500	0	**85**	80	120				
Sodium	19.0	1.0	20	0	**95**	80	120				

Associated samples: **H22030510-001A, H22030510-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Work Order Receipt Checklist

MT Dept of Justice

H22030510

Login completed by: Rebecca A. Tooke

Date Received: 3/21/2022

Reviewed by: BL2000\spester

Received by: RAT

Reviewed Date: 3/29/2022

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	5.9°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

No date/time on bags. Used date and time from COC. 3/21/22 rt

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing Information)

Company/Name: NRD-Parrot Tailings Removal (#700157)
Contact: Sim Ford
Phone: 406-439-2108
Mailing Address: 1720 9th Ave. P.O. Box 201425
City, State, Zip: Helena, MT 59620-1425
Email: SFord@mt.gov
Receive Invoice: ☐Hard Copy ☒Email | Receive Report: ☐Hard Copy ☐Email
Purchase Order | Quote | Bottle Order

Report Information (if different than Account Information)

Company/Name: Water + Environmental Technologies
Contact: Rial Gunlikson
Phone: 406-471-5336
Mailing Address: 480 E Park St.
City, State, Zip: Butte, MT 59701
Email: rgunlikson@waterenvtech.com
Receive Report: ☐Hard Copy ☒Email
Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other_____

Comments

method 6010
Dry Weight basis

Project Information

Project Name, PWSID, Permit, etc.: Parrot Tailings Removal
Sampler Name: Rial Gunlikson | Sampler Phone: 406-471-5336
Sample Origin State: MT | EPA/State Compliance: ☒Yes ☐ No

URANIUM MINING CLIENTS MUST indicate sample type.
☐ NOT Source or Byproduct Material
☐ Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING
☐ 11e.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	Saturation %	Electrical Conductivity	Metals: As, Cd, Cu, Pb, Zn	SAR	pH				See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1 E-1556 West	3/18/22	1:00pm	1	S	x	x	x	x	x	x	x						H22030510
2 E-1557 South	3/18/22	1:00pm	1	S	x	x	x	x	x	x	x						
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Rial Gunlikson	3/21/22 1:29pm	[signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print): Rebecca Wolle	Date/Time: 3-21-22 1:28	Signature: [signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
hand		Y (N) C B	Y N	5.9 °C	Y (N)	(Y) N	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

June 28, 2022

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H22060592
Project Name: Parrot Tailings Removal

Energy Laboratories Inc Helena MT received the following 4 samples for MT Dept of Justice on 6/17/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H22060592-001	E1657	06/15/22 12:15	06/17/22	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage Soil Preparation USDA1
H22060592-002	E1658	06/15/22 12:15	06/17/22	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage
H22060592-003	E1659	06/15/22 12:15	06/17/22	Soil	Same As Above
H22060592-004	E1660	06/15/22 12:15	06/17/22	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1657
Lab ID: H22060592-001
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 06/15/22 12:15
DateReceived: 06/17/22
Report Date: 06/28/22

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	24.2	wt%		0.2		D2974	06/20/22 09:11 / jjp		)RYING OVEN 2_220621B	: 4	PMOIST_220620_A
Sand	42	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 1	61932
Silt	46	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 1	61932
Clay	12	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 1	61932
Texture	L			1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 1	61932
SATURATED PASTE											
Saturation	76.0	%		0.1		USDA27a	06/22/22 08:19 / sah	06/20/22 09:32	)RYING OVEN 2_220627A	: 9	61929
SATURATED PASTE											
pH, sat. paste	7.9	s.u.		0.1		ASA10-3	06/22/22 08:55 / sah	06/20/22 09:32	- ORION A211_220627A	: 52	61929
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	0.5	mmhos/cm		0.1		ASA10-3	06/22/22 10:10 / sah	06/20/22 09:32	SOIL EC_220627A	: 55	61929
Calcium, sat. paste	0.85	meq/L		0.05		SW6010B	06/22/22 14:13 / sld	06/20/22 09:32	ICP2-HE_220622B	: 40	61929
Magnesium, sat. paste	0.35	meq/L		0.08		SW6010B	06/22/22 14:13 / sld	06/20/22 09:32	ICP2-HE_220622B	: 40	61929
Sodium, sat. paste	4.57	meq/L		0.04		SW6010B	06/22/22 14:13 / sld	06/20/22 09:32	ICP2-HE_220622B	: 40	61929
Sodium Adsorption Ratio (SAR)	5.9	unitless		0.1		USDA20b	06/27/22 13:14 / stp		SOIL CALC_220627A	: 9	R175982
3050 EXTRACTABLE METALS											
Arsenic	3	mg/kg		1		SW6020	06/26/22 00:10 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 57	61941
Cadmium	ND	mg/kg		1		SW6020	06/25/22 18:38 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 23	61941
Copper	19	mg/kg	D	6		SW6020	06/25/22 18:38 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 23	61941
Lead	10	mg/kg	D	3		SW6020	06/25/22 18:38 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 23	61941
Zinc	53	mg/kg	D	20		SW6020	06/25/22 18:38 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 23	61941

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1658
Lab ID: H22060592-002
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 06/15/22 12:15
DateReceived: 06/17/22
Report Date: 06/28/22

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	25.3	wt%		0.2		D2974	06/20/22 09:11 / jjp		)RYING OVEN 2_220621B	: 6	PMOIST_220620_A
Sand	44	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 2	61932
Silt	44	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 2	61932
Clay	12	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 2	61932
Texture	L			1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 2	61932
SATURATED PASTE											
Saturation	75.4	%		0.1		USDA27a	06/22/22 08:19 / sah	06/20/22 09:32	RYING OVEN 2_220627A	: 10	61929
SATURATED PASTE											
pH, sat. paste	7.8	s.u.		0.1		ASA10-3	06/22/22 08:56 / sah	06/20/22 09:32	- ORION A211_220627A	: 53	61929
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	1.0	mmhos/cm		0.1		ASA10-3	06/22/22 10:11 / sah	06/20/22 09:32	SOIL EC_220627A	: 56	61929
Calcium, sat. paste	2.35	meq/L		0.05		SW6010B	06/22/22 14:17 / sld	06/20/22 09:32	ICP2-HE_220622B	: 41	61929
Magnesium, sat. paste	0.50	meq/L		0.08		SW6010B	06/22/22 14:17 / sld	06/20/22 09:32	ICP2-HE_220622B	: 41	61929
Sodium, sat. paste	8.52	meq/L		0.04		SW6010B	06/22/22 14:17 / sld	06/20/22 09:32	ICP2-HE_220622B	: 41	61929
Sodium Adsorption Ratio (SAR)	7.1	unitless		0.1		USDA20b	06/27/22 13:14 / stp		SOIL CALC_220627A	: 10	R175982
3050 EXTRACTABLE METALS											
Arsenic	3	mg/kg		1		SW6020	06/26/22 00:17 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 60	61941
Cadmium	ND	mg/kg		1		SW6020	06/25/22 18:42 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 25	61941
Copper	17	mg/kg	D	6		SW6020	06/25/22 18:42 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 25	61941
Lead	11	mg/kg	D	3		SW6020	06/25/22 18:42 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 25	61941
Zinc	50	mg/kg	D	20		SW6020	06/25/22 18:42 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 25	61941

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1659
Lab ID: H22060592-003
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 06/15/22 12:15
DateReceived: 06/17/22
Report Date: 06/28/22

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	21.8	wt%		0.2		D2974	06/20/22 09:11 / jjp		RYING OVEN 2_220621B	: 10	PMOIST_220620_A
Sand	44	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 3	61932
Silt	46	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 3	61932
Clay	10	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 3	61932
Texture	L			1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	: 3	61932
SATURATED PASTE											
Saturation	74.6	%		0.1		USDA27a	06/22/22 08:19 / sah	06/20/22 09:32	RYING OVEN 2_220627A	: 11	61929
SATURATED PASTE											
pH, sat. paste	7.5	s.u.		0.1		ASA10-3	06/22/22 08:57 / sah	06/20/22 09:32	- ORION A211_220627A	: 54	61929
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	1.7	mmhos/cm		0.1		ASA10-3	06/22/22 10:12 / sah	06/20/22 09:32	SOIL EC_220627A	: 57	61929
Calcium, sat. paste	10.5	meq/L		0.05		SW6010B	06/22/22 14:21 / sld	06/20/22 09:32	ICP2-HE_220622B	: 42	61929
Magnesium, sat. paste	2.63	meq/L		0.08		SW6010B	06/22/22 14:21 / sld	06/20/22 09:32	ICP2-HE_220622B	: 42	61929
Sodium, sat. paste	7.73	meq/L		0.04		SW6010B	06/22/22 14:21 / sld	06/20/22 09:32	ICP2-HE_220622B	: 42	61929
Sodium Adsorption Ratio (SAR)	3.0	unitless		0.1		USDA20b	06/27/22 13:14 / stp		SOIL CALC_220627A	: 11	R175982
3050 EXTRACTABLE METALS											
Arsenic	3	mg/kg		1		SW6020	06/26/22 00:22 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 62	61941
Cadmium	ND	mg/kg		1		SW6020	06/26/22 00:22 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 62	61941
Copper	17	mg/kg	D	6		SW6020	06/25/22 18:44 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 26	61941
Lead	12	mg/kg	D	3		SW6020	06/25/22 18:44 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 26	61941
Zinc	50	mg/kg	D	20		SW6020	06/25/22 18:44 / dck	06/21/22 08:15	ICPMS205-H_220625A	: 26	61941

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1660
Lab ID: H22060592-004
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 06/15/22 12:15
DateReceived: 06/17/22
Report Date: 06/28/22

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	21.7	wt%		0.2		D2974	06/20/22 09:12 / jjp		RYING OVEN 2_220621B	12	PMOIST_220620_A
Sand	42	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	4	61932
Silt	42	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	4	61932
Clay	16	%		1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	4	61932
Texture	L			1		ASA15-5	06/21/22 09:40 / sah	06/20/22 10:49	HYDROMETER_220627A	4	61932
SATURATED PASTE											
Saturation	68.0	%		0.1		USDA27a	06/22/22 08:20 / sah	06/20/22 09:32	RYING OVEN 2_220627A	13	61929
SATURATED PASTE											
pH, sat. paste	7.6	s.u.		0.1		ASA10-3	06/22/22 08:59 / sah	06/20/22 09:32	- ORION A211_220627A	56	61929
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	1.0	mmhos/cm		0.1		ASA10-3	06/22/22 10:13 / sah	06/20/22 09:32	SOIL EC_220627A	59	61929
Calcium, sat. paste	4.71	meq/L		0.05		SW6010B	06/22/22 14:36 / sld	06/20/22 09:32	ICP2-HE_220622B	46	61929
Magnesium, sat. paste	1.25	meq/L		0.08		SW6010B	06/22/22 14:36 / sld	06/20/22 09:32	ICP2-HE_220622B	46	61929
Sodium, sat. paste	5.90	meq/L		0.04		SW6010B	06/22/22 14:36 / sld	06/20/22 09:32	ICP2-HE_220622B	46	61929
Sodium Adsorption Ratio (SAR)	3.4	unitless		0.1		USDA20b	06/27/22 13:14 / stp		SOIL CALC_220627A	12	R175982
3050 EXTRACTABLE METALS											
Arsenic	3	mg/kg		1		SW6020	06/26/22 00:26 / dck	06/21/22 08:15	ICPMS205-H_220625A	64	61941
Cadmium	ND	mg/kg		1		SW6020	06/26/22 00:26 / dck	06/21/22 08:15	ICPMS205-H_220625A	64	61941
Copper	16	mg/kg	D	6		SW6020	06/26/22 00:26 / dck	06/21/22 08:15	ICPMS205-H_220625A	64	61941
Lead	16	mg/kg	D	3		SW6020	06/25/22 18:47 / dck	06/21/22 08:15	ICPMS205-H_220625A	27	61941
Zinc	53	mg/kg	D	20		SW6020	06/26/22 00:26 / dck	06/21/22 08:15	ICPMS205-H_220625A	64	61941

Report Definitions:
RL - Analyte Reporting Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
D - Reporting Limit (RL) increased due to sample matrix

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22060592

BatchID: 220621_1_COND-S-PAS

Date: *28-Jun-22*

Run ID :Run Order: **SOIL EC_220627A: 44** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_220621_1** Method: **ASA10-3**

Analysis Date: **06/22/22 10:01** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.37	0.10	1.413	0	97	90	110				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL EC_220627A: 45** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_220621_1** Method: **ASA10-3**

Analysis Date: **06/22/22 10:03** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.70	0.10	5	0	94	90	110				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL EC_220627A: 46** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_220621_1** Method: **ASA10-3**

Analysis Date: **06/22/22 10:04** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	0.956	0.10	1	0	96	90	110				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22060592
BatchID: 220621_1_PH-S-PASTE
Date: *28-Jun-22*

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_220621_1** Method: **ASA10-3**
Analysis Date: **06/22/22 08:46** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.02	0.10	7	0	100	98.6	101.4				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_220621_1** Method: **ASA10-3**
Analysis Date: **06/22/22 08:47** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.03	0.10	7	0	100	98.6	101.4				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_220621_1** Method: **ASA10-3**
Analysis Date: **06/22/22 08:48** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	4.02	0.10	4	0	100	97.5	102.5				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22060592
BatchID: 61929
Date: *28-Jun-22*

Run ID :Run Order: **SOIL EC_220627A: 47** SampType: **Method Blank** Lab ID: **MB-61929** Method: **ASA10-3**
Analysis Date: **06/22/22 10:04** Units: **mmhos/cm** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	ND	0.05									

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL EC_220627A: 48** SampType: **Laboratory Control Sample** Lab ID: **LCS-61929** Method: **ASA10-3**
Analysis Date: **06/22/22 10:05** Units: **mmhos/cm** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	3.71	0.10	3.886	0	**96**	80	120				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL EC_220627A: 58** SampType: **Sample Duplicate** Lab ID: **H22060592-003ADUP** Method: **ASA10-3**
Analysis Date: **06/22/22 10:13** Units: **mmhos/cm** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.77	0.10		0				1.735	**2.0**	20	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Laboratory Control Sample** Lab ID: **LCS-61929** Method: **ASA10-3**
Analysis Date: **06/22/22 08:49** Units: **s.u.** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	8.06	0.10	7.976	0	**101**	95	105				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Sample Duplicate** Lab ID: **H22060592-003ADUP** Method: **ASA10-3**
Analysis Date: **06/22/22 08:58** Units: **s.u.** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.56	0.10		0				7.54	**0.3**	20	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H22060592 — **BatchID: 61929** — **Date:** *28-Jun-22*

Run ID :Run Order: **ICP2-HE_220622B: 29** SampType: **Method Blank** Lab ID: **MB-61929** Method: **SW6010B**

Analysis Date: **06/22/22 13:32** Units: **mg/L** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	0.1									
Magnesium	ND	0.02									
Sodium	0.02	0.02									
Calcium, sat. paste	ND	0.007									
Magnesium, sat. paste	ND	0.002									
Sodium, sat. paste	0.0009	0.0009									

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICP2-HE_220622B: 30** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-61929** Method: **SW6010B**

Analysis Date: **06/22/22 13:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	53.1	1.0	50	0	**106**	80	120				
Magnesium	51.2	1.0	50	0	**102**	80	120				
Sodium	51.7	1.0	50	0	**103**	80	120				
Calcium, sat. paste	2.65	0.050	2.495	0	**106**	80	120				
Magnesium, sat. paste	4.22	0.082	4.115	0	**102**	80	120				
Sodium, sat. paste	2.25	0.043	2.175	0	**103**	80	120				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICP2-HE_220622B: 31** SampType: **Laboratory Control Sample** Lab ID: **LCS-61929** Method: **SW6010B**

Analysis Date: **06/22/22 13:39** Units: **mg/L** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	314	1.0	303	0	**104**	70	130				
Magnesium	115	1.0	118.6	0	**97**	70	130				
Sodium	519	1.0	509.9	0	**102**	70	130				
Calcium, sat. paste	15.7	0.050	15.12	0	**104**	70	130				
Magnesium, sat. paste	9.48	0.082	9.763	0	**97**	70	130				
Sodium, sat. paste	22.6	0.043	22.17	0	**102**	70	130				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22060592
BatchID: 61929
Date: *28-Jun-22*

Run ID :Run Order: **ICP2-HE_220622B: 38** SampType: **Sample Matrix Spike** Lab ID: **H22060557-001BMS2** Method: **SW6010B**
Analysis Date: **06/22/22 14:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	293	1.0	100	192.3	101	70	130				
Magnesium	168	1.0	100	69.38	99	70	130				
Sodium	454	1.0	100	364.7	90	70	130				
Calcium, sat. paste	14.6	0.050	4.99	9.598	101	70	130				
Magnesium, sat. paste	13.8	0.082	8.23	5.71	99	70	130				
Sodium, sat. paste	19.8	0.043	4.35	15.85	90	70	130				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICP2-HE_220622B: 39** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H22060557-001BMSD2** Method: **SW6010B**
Analysis Date: **06/22/22 14:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	296	1.0	100	192.3	103	70	130	293.3	0.7	20	
Magnesium	168	1.0	100	69.38	99	70	130	167.9	0.4	20	
Sodium	463	1.0	100	364.7	98	70	130	454.4	1.9	20	
Calcium, sat. paste	14.7	0.050	4.99	9.598	103	70	130	14.64	0.7	20	
Magnesium, sat. paste	13.9	0.082	8.23	5.71	99	70	130	13.82	0.4	20	
Sodium, sat. paste	20.1	0.043	4.35	15.85	98	70	130	19.76	1.9	20	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICP2-HE_220622B: 43** SampType: **Sample Duplicate** Lab ID: **H22060592-003Adup** Method: **SW6010B**
Analysis Date: **06/22/22 14:25** Units: **mg/L** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	217	1.0		0				211.2	2.6	30	
Magnesium	32.4	1.0		0				31.9	1.6	30	
Sodium	179	1.0		0				177.8	0.8	30	
Calcium, sat. paste	10.8	0.050		0				10.54	2.6	30	
Magnesium, sat. paste	2.67	0.082		0				2.625	1.6	30	
Sodium, sat. paste	7.79	0.043		0				7.733	0.8	30	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22060592
BatchID: 61929
Date: *28-Jun-22*

Run ID :Run Order: **SOIL DRYING OVEN 2_220627A: 6** SampType: **Laboratory Control Sample** Lab ID: **LCS-61929** Method: **USDA27a**
Analysis Date: **06/22/22 08:18** Units: **%** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	42.0	0.10	41.7	0	**101**	80	120				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL DRYING OVEN 2_220627A: 1** SampType: **Sample Duplicate** Lab ID: **H22060592-003ADUP** Method: **USDA27a**
Analysis Date: **06/22/22 08:20** Units: **%** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	74.6	0.10		0				74.64	**0.1**	20	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H22060592 — **BatchID: 61932** — **Date:** *28-Jun-22*

Run ID :Run Order: **SOIL HYDROMETER_220627A: 5** SampType: **Sample Duplicate** Lab ID: **H22060592-004ADUP** Method: **ASA15-5**

Analysis Date: **06/21/22 09:40** Units: **%** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA15-5**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	44.0	1.0		0				42	**4.7**	20	
Silt	41.0	1.0		0				42	**2.4**	20	
Clay	15.0	1.0		0				16	**6.5**	20	
Texture	L	1.0		0				0			

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL HYDROMETER_220627A: 6** SampType: **Laboratory Control Sample** Lab ID: **LCS-61932** Method: **ASA15-5**

Analysis Date: **06/21/22 09:40** Units: **%** **Prep Info:** Prep Date: **6/20/2022** Prep Method: **ASA15-5**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	48.0	1.0	48	0	**100**	70	130				
Silt	28.0	1.0	29	0	**97**	70	130				
Clay	24.0	1.0	23	0	**104**	70	130				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H22060592 — **BatchID: 61941** — **Date:** *28-Jun-22*

Run ID :Run Order: **ICPMS205-H_220625A: 22** SampType: **Method Blank** Lab ID: **MB-61941** Method: **SW6020**

Analysis Date: **06/25/22 18:36** Units: **mg/kg** **Prep Info:** Prep Date: **6/21/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.4									
Cadmium	ND	0.09									
Copper	ND	3									
Lead	ND	1									
Zinc	ND	7									

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICPMS205-H_220625A: 24** SampType: **Serial Dilution** Lab ID: **H22060592-001ADIL** Method: **SW6020**

Analysis Date: **06/25/22 18:40** Units: **mg/kg** **Prep Info:** Prep Date: **6/21/2022** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	3.9		0		0	0	3.487		10	
Cadmium	ND	1.0		0		0	0	0		10	
Copper	ND	32		0		0	0	18.91		10	
Lead	ND	13		0		0	0	10.1		10	
Zinc	ND	77		0		0	0	53.24		10	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICPMS205-H_220625A: 28** SampType: **Laboratory Control Sample** Lab ID: **LCS-61941** Method: **SW6020**

Analysis Date: **06/25/22 18:49** Units: **mg/kg** **Prep Info:** Prep Date: **6/21/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	196	1.0	196	0	**100**	66.4	104				
Cadmium	105	1.0	99	0	**106**	79.2	121				
Copper	131	6.4	137	0	**96**	73.9	113				
Lead	110	2.6	105	0	**105**	71.6	128				
Zinc	249	16	231	0	**108**	83.1	125				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22060592
BatchID: 61941
Date: *28-Jun-22*

Run ID :Run Order: **ICPMS205-H_220625A: 29** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-61941** Method: **SW6020**
Analysis Date: **06/25/22 18:51** Units: **mg/kg** **Prep Info:** Prep Date: **6/21/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	57.7	1.0	49.5	0	**117**	80	120				
Cadmium	28.0	1.0	24.75	0	**113**	80	120				
Copper	52.8	6.3	49.5	0	**107**	80	120				
Lead	55.0	2.5	49.5	0	**111**	80	120				
Zinc	52.1	15	49.5	0	**105**	80	120				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICPMS205-H_220625A: 30** SampType: **Post Digestion/Distillation Spike** Lab ID: **H22060592-001APDS1** Method: **SW6020**
Analysis Date: **06/25/22 18:53** Units: **mg/kg** **Prep Info:** Prep Date: **6/21/2022** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	30.1	1.0	24.9	3.487	**107**	75	125				
Cadmium	27.5	1.0	24.9	0	**110**	75	125				
Copper	44.6	6.4	24.9	18.91	**103**	75	125				
Lead	36.5	2.6	24.9	10.1	**106**	75	125				
Zinc	75.0	15	24.9	53.24	**88**	75	125				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICPMS205-H_220625A: 31** SampType: **Sample Matrix Spike** Lab ID: **H22060592-001AMS** Method: **SW6020**
Analysis Date: **06/25/22 18:55** Units: **mg/kg** **Prep Info:** Prep Date: **6/21/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	58.3	1.0	49.8	3.487	**110**	75	125				
Cadmium	26.8	1.0	24.9	0	**108**	75	125				
Copper	72.3	6.4	49.8	18.91	**107**	75	125				
Lead	65.0	2.6	49.8	10.1	**110**	75	125				
Zinc	108	15	49.8	53.24	**110**	75	125				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22060592

BatchID: 61941

Date: *28-Jun-22*

Run ID :Run Order: **ICPMS205-H_220625A: 32** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H22060592-001AMSD** Method: **SW6020**

Analysis Date: **06/25/22 18:57** Units: **mg/kg** **Prep Info:** Prep Date: **6/21/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	59.8	1.0	50	3.487	**113**	75	125	58.32	**2.5**	20	
Cadmium	26.8	1.0	25	0	**107**	75	125	26.79	**0.2**	20	
Copper	72.6	6.4	50	18.91	**107**	75	125	72.31	**0.5**	20	
Lead	64.8	2.6	50	10.1	**109**	75	125	65.04	**0.3**	20	
Zinc	108	15	50	53.24	**109**	75	125	107.8	**0.1**	20	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22060592

BatchID: PMOIST_220620_A

Date: *28-Jun-22*

Run ID :Run Order: **SOIL DRYING OVEN 2_220621B: 8** SampType: **Sample Duplicate** Lab ID: **H22060592-002A DUP** Method: **D2974**

Analysis Date: **06/20/22 09:11** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	25.6	0.20		0				25.34	**1.2**	20	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22060592
BatchID: R175887
Date: *28-Jun-22*

Run ID :Run Order: **ICP2-HE_220622B: 19** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6010B**
Analysis Date: **06/22/22 12:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	39.5	1.0	40	0	99	90	110				
Magnesium	39.6	1.0	40	0	99	90	110				
Sodium	40.7	1.0	40	0	102	90	110				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICP2-HE_220622B: 20** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6010B**
Analysis Date: **06/22/22 12:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	25.4	1.0	25	0	102	90	110				
Magnesium	25.1	1.0	25	0	100	90	110				
Sodium	25.5	1.0	25	0	102	90	110				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICP2-HE_220622B: 21** SampType: **Continuing Calibration Blank** Lab ID: **ICB** Method: **SW6010B**
Analysis Date: **06/22/22 13:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	-0.00428	1.0		0							
Magnesium	-0.00111	1.0		0							
Sodium	0.0184	1.0		0							

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICP2-HE_220622B: 23** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6010B**
Analysis Date: **06/22/22 13:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	466	1.0	500	0	93	80	120				
Magnesium	443	1.0	500	0	89	80	120				
Sodium	0.0827	1.0		0		0	0				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22060592

BatchID: R175887

Date: *28-Jun-22*

Run ID :Run Order: **ICP2-HE_220622B: 24** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6010B**

Analysis Date: **06/22/22 13:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	470	1.0	500	0	**94**	80	120				
Magnesium	446	1.0	500	0	**89**	80	120				
Sodium	21.1	1.0	20	0	**106**	80	120				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22060592
BatchID: R175972
Date: *28-Jun-22*

Run ID :Run Order: **ICPMS205-H_220625A: 46** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **06/25/22 20:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0600	0.0010	0.06	0	100	90	110				
Cadmium	0.0301	0.0010	0.03	0	100	90	110				
Copper	0.0591	0.0010	0.06	0	99	90	110				
Lead	0.0594	0.0010	0.06	0	99	90	110				
Zinc	0.0589	0.0013	0.06	0	98	90	110				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICPMS205-H_220625A: 49** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **06/25/22 20:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	-2.43E-07	0.0010		0							
Cadmium	0.0000531	0.0010		0							
Copper	0.000135	0.0010		0							
Lead	0.0000795	0.0010		0							
Zinc	0.000803	0.0013		0							

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **ICPMS205-H_220625A: 51** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **06/25/22 20:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.00938	0.0010	0.01	0	94	70	130				
Cadmium	0.00963	0.0010	0.01	0	96	70	130				
Copper	0.0188	0.0010	0.02	0	94	70	130				
Lead	0.0000994	0.0010		0		0	0				
Zinc	0.00960	0.0013	0.01	0	96	70	130				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22060592

BatchID: R175972

Date: *28-Jun-22*

Run ID :Run Order: **ICPMS205-H_220625A: 54** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6020**

Analysis Date: **06/26/22 00:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0520	0.0010	0.05	0	**104**	90	110				
Cadmium	0.0498	0.0010	0.05	0	**100**	90	110				
Copper	0.0492	0.0010	0.05	0	**98**	90	110				
Lead	0.0491	0.0010	0.05	0	**98**	90	110				
Zinc	0.0490	0.0013	0.05	0	**98**	90	110				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22060592

BatchID: R175982

Date: *28-Jun-22*

Run ID :Run Order: **SOIL CALC_220627A: 8** SampType: **Laboratory Control Sample** Lab ID: **LCS-61929** Method: **USDA20b**

Analysis Date: **06/20/22 09:24** Units: **unitless** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	6.36	0.10	6.034	0	**105**	80	120				

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Run ID :Run Order: **SOIL CALC_220627A: 13** SampType: **Sample Duplicate** Lab ID: **H22060592-003ADUP** Method: **USDA20b**

Analysis Date: **06/27/22 13:14** Units: **unitless** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	3.00	0.10		0				3.01	**0.3**	30	

Associated samples: **H22060592-001A, H22060592-002A, H22060592-003A, H22060592-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Work Order Receipt Checklist

MT Dept of Justice

H22060592

Login completed by: Wanda Johnson

Date Received: 6/17/2022

Reviewed by: BL2000\spester

Received by: amh

Reviewed Date: 6/28/2022

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	18.4°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

No time/date of collection on containers, ID's on bag E1659 has "South" and E1660 has "North", used information from the COC. wjj 6/17/2022

LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 1

Account Information (Billing information)

Company/Name: NRD-Parrot Tailings Removal (#700157)
Contact: Jim Ford
Phone: 406-439-2108
Mailing Address: 1720 9th Ave P.O. Box 201425
City, State, Zip: Helena, MT 59620-1425
Email: JFord@mt.gov
Receive Invoice: ☐ Hard Copy ☑ Email | Receive Report: ☐ Hard Copy ☐ Email
Purchase Order: | Quote: | Bottle Order:

Report Information (if different than Account Information)

Company/Name: Water + Environmental Technologies
Contact: Rial Gunlikson
Phone: 406-471-5336
Mailing Address: 480 East Park St.
City, State, Zip: Butte, MT 59701
Email: rgunlikson@waterenvtech.com
Receive Report: ☐ Hard Copy ☑ Email
Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other

Comments

Project Information

Project Name, PWSID, Permit, etc.: Parrot Tailings Removal
Sampler Name: Rial Gunlikson | Sampler Phone: 406-471-5336
Sample Origin State: MT | EPA/State Compliance: ☑ Yes ☐ No

URANIUM MINING CLIENTS MUST indicate sample type.
☐ NOT Source or Byproduct Material
☐ Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING
☐ 11e.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	Saturation %	Electrical Conductivity	Metals: As, Cd, Cu, Pb, Zn	SAR	pH			See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1	E1657	6/15/22	12:15 pm			X	X	X	X	X	X	X					H22060592
2	E1658	6/15/22	" "			X	X	X	X	X	X	X					
3	E1659	6/15/22	" "			X	X	X	X	X	X	X					
4	E1660	6/15/22	" "			X	X	X	X	X	X	X					
5																	
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Rial Gunlikson	6/17/22 10:45 am	[signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				A Sanger	6/17/22 1045	[signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
hand	4	Y N C B	Y N	18.42 °C	Y N	Y N	CC Cash Check	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-10/18 v.3

ANALYTICAL SUMMARY REPORT

September 02, 2022

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H22080680
Project Name: Not Indicated

Energy Laboratories Inc Helena MT received the following 2 samples for MT Dept of Justice on 8/22/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H22080680-001	E1317	08/22/22 9:00	08/22/22	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage Soil Preparation USDA1
H22080680-002	E1318	08/22/22 9:00	08/22/22	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1317
Lab ID: H22080680-001
Matrix: Soil

Project: Not Indicated
Collection Date: 08/22/22 09:00
DateReceived: 08/22/22
Report Date: 09/02/22

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	20.4	wt%		0.2		D2974	08/25/22 09:49 / jjp		RYING OVEN 2_220825B	: 49	PMOIST_220824_A
Sand	44	%		1		ASA15-5	08/25/22 12:02 / sah	08/24/22 15:00	HYDROMETER_220826A	: 28	62987
Silt	45	%		1		ASA15-5	08/25/22 12:02 / sah	08/24/22 15:00	HYDROMETER_220826A	: 28	62987
Clay	11	%		1		ASA15-5	08/25/22 12:02 / sah	08/24/22 15:00	HYDROMETER_220826A	: 28	62987
Texture	L			1		ASA15-5	08/25/22 12:02 / sah	08/24/22 15:00	HYDROMETER_220826A	: 28	62987
SATURATED PASTE											
Saturation	76.7	%		0.1		USDA27a	08/25/22 08:27 / sah	08/24/22 13:30	RYING OVEN 2_220831B	: 2	62996
SATURATED PASTE											
pH, sat. paste	7.5	s.u.		0.1		ASA10-3	08/25/22 09:20 / swj	08/24/22 13:30	- ORION A211_220826A	: 11	62996
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	3.1	mmhos/cm		0.1		ASA10-3	08/25/22 13:14 / sah	08/24/22 13:30	SOIL EC_220826A	: 12	62996
Calcium, sat. paste	16.8	meq/L		0.05		SW6010B	08/26/22 02:54 / sld	08/24/22 13:30	ICP2-HE_220825A	: 200	62996
Magnesium, sat. paste	3.44	meq/L		0.08		SW6010B	08/26/22 02:54 / sld	08/24/22 13:30	ICP2-HE_220825A	: 200	62996
Sodium, sat. paste	17.3	meq/L		0.04		SW6010B	08/26/22 02:54 / sld	08/24/22 13:30	ICP2-HE_220825A	: 200	62996
Sodium Adsorption Ratio (SAR)	5.4	unitless		0.1		USDA20b	08/26/22 08:52 / stp	08/24/22 13:30	SOIL CALC_220826A	: 125	62996
3050 EXTRACTABLE METALS											
Arsenic	4	mg/kg		1		SW6020	08/26/22 17:20 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 25	62974
Cadmium	ND	mg/kg		1		SW6020	08/26/22 17:20 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 25	62974
Copper	22	mg/kg	D	6		SW6020	08/26/22 17:20 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 25	62974
Lead	10	mg/kg	D	3		SW6020	08/26/22 17:20 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 25	62974
Zinc	51	mg/kg	D	20		SW6020	08/26/22 17:20 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 25	62974

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1318
Lab ID: H22080680-002
Matrix: Soil

Project: Not Indicated
Collection Date: 08/22/22 09:00
DateReceived: 08/22/22
Report Date: 09/02/22

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	12.2	wt%		0.2		D2974	08/25/22 09:49 / jjp		RYING OVEN 2_220825B	: 51	PMOIST_220824_A
Sand	38	%		1		ASA15-5	08/25/22 12:02 / sah	08/24/22 15:00	HYDROMETER_220826A	: 29	62987
Silt	53	%		1		ASA15-5	08/25/22 12:02 / sah	08/24/22 15:00	HYDROMETER_220826A	: 29	62987
Clay	9	%		1		ASA15-5	08/25/22 12:02 / sah	08/24/22 15:00	HYDROMETER_220826A	: 29	62987
Texture	SiL			1		ASA15-5	08/25/22 12:02 / sah	08/24/22 15:00	HYDROMETER_220826A	: 29	62987
SATURATED PASTE											
Saturation	86.2	%		0.1		USDA27a	08/25/22 08:27 / sah	08/24/22 13:30	RYING OVEN 2_220831B	: 3	62996
SATURATED PASTE											
pH, sat. paste	7.4	s.u.		0.1		ASA10-3	08/25/22 09:21 / swj	08/24/22 13:30	- ORION A211_220826A	: 12	62996
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	2.1	mmhos/cm		0.1		ASA10-3	08/25/22 13:15 / sah	08/24/22 13:30	SOIL EC_220826A	: 13	62996
Calcium, sat. paste	6.85	meq/L		0.05		SW6010B	08/26/22 03:06 / sld	08/24/22 13:30	ICP2-HE_220825A	: 203	62996
Magnesium, sat. paste	1.35	meq/L		0.08		SW6010B	08/26/22 03:06 / sld	08/24/22 13:30	ICP2-HE_220825A	: 203	62996
Sodium, sat. paste	13.6	meq/L		0.04		SW6010B	08/26/22 03:06 / sld	08/24/22 13:30	ICP2-HE_220825A	: 203	62996
Sodium Adsorption Ratio (SAR)	6.7	unitless		0.1		USDA20b	08/26/22 08:52 / stp	08/24/22 13:30	SOIL CALC_220826A	: 126	62996
3050 EXTRACTABLE METALS											
Arsenic	3	mg/kg		1		SW6020	08/26/22 17:23 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 26	62974
Cadmium	ND	mg/kg		1		SW6020	08/26/22 17:23 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 26	62974
Copper	20	mg/kg	D	6		SW6020	08/26/22 17:23 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 26	62974
Lead	12	mg/kg	D	3		SW6020	08/26/22 17:23 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 26	62974
Zinc	51	mg/kg	D	20		SW6020	08/26/22 17:23 / dck	08/23/22 09:58	ICPMS205-H_220826C	: 26	62974

Report Definitions:
RL - Analyte Reporting Limit
D - Reporting Limit (RL) increased due to sample matrix
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 220824_1_COND-S-PAS
Date: *02-Sep-22*

Run ID :Run Order: **SOIL EC_220826A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_220824_1** Method: **ASA10-3**
Analysis Date: **08/25/22 13:05** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.40	0.10	1.413	0	99	90	110				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL EC_220826A: 2** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_220824_1** Method: **ASA10-3**
Analysis Date: **08/25/22 13:07** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.71	0.10	5	0	94	90	110				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL EC_220826A: 3** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_220824_1** Method: **ASA10-3**
Analysis Date: **08/25/22 13:07** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	0.946	0.10	1	0	95	90	110				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 220824_1_PH-S-PASTE
Date: *02-Sep-22*

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_220824_1** Method: **ASA10-3**
Analysis Date: **08/25/22 09:12** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.03	0.10	7	0	100	98.6	101.4				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_220824_1** Method: **ASA10-3**
Analysis Date: **08/25/22 09:12** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.03	0.10	7	0	100	98.6	101.4				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_220824_1** Method: **ASA10-3**
Analysis Date: **08/25/22 09:13** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	4.01	0.10	4	0	100	97.5	102.5				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 62974
Date: *02-Sep-22*

Run ID :Run Order: **ICPMS205-H_220826C: 22** SampType: **Method Blank** Lab ID: **MB-62974** Method: **SW6020**
Analysis Date: **08/26/22 17:13** Units: **mg/kg** **Prep Info:** Prep Date: **8/23/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.2									
Cadmium	ND	0.04									
Copper	ND	1									
Lead	ND	0.5									
Zinc	ND	3									

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICPMS205-H_220826C: 23** SampType: **Laboratory Control Sample** Lab ID: **LCS-62974** Method: **SW6020**
Analysis Date: **08/26/22 17:16** Units: **mg/kg** **Prep Info:** Prep Date: **8/23/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	176	1.0	196	0	**90**	66.4	104				
Cadmium	105	1.0	99	0	**106**	79.2	121				
Copper	129	6.4	137	0	**94**	73.9	113				
Lead	108	2.6	105	0	**102**	71.6	128				
Zinc	246	15	231	0	**106**	83.1	125				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICPMS205-H_220826C: 27** SampType: **Serial Dilution** Lab ID: **H22080680-002ADIL** Method: **SW6020**
Analysis Date: **08/26/22 17:25** Units: **mg/kg** **Prep Info:** Prep Date: **8/23/2022** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	3.9		0		0	0	3.439		10	
Cadmium	ND	1.0		0		0	0	0		10	
Copper	ND	32		0		0	0	19.77		10	
Lead	ND	13		0		0	0	12.35		10	
Zinc	ND	76		0		0	0	50.73		10	

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 62974
Date: *02-Sep-22*

Run ID :Run Order: **ICPMS205-H_220826C: 28** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-62974** Method: **SW6020**
Analysis Date: **08/26/22 17:28** Units: **mg/kg** **Prep Info:** Prep Date: **8/23/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	53.6	1.0	48.5	0	111	80	120				
Cadmium	27.0	1.0	24.25	0	111	80	120				
Copper	53.0	6.2	48.5	0	109	80	120				
Lead	51.9	2.5	48.5	0	107	80	120				
Zinc	49.6	15	48.5	0	102	80	120				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICPMS205-H_220826C: 29** SampType: **Post Digestion/Distillation Spike** Lab ID: **H22080680-002APDS1** Method: **SW6020**
Analysis Date: **08/26/22 17:30** Units: **mg/kg** **Prep Info:** Prep Date: **8/23/2022** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	29.2	1.0	24.7	3.439	104	75	125				
Cadmium	27.0	1.0	24.7	0	109	75	125				
Copper	45.4	6.3	24.7	19.77	104	75	125				
Lead	38.6	2.5	24.7	12.35	106	75	125				
Zinc	75.6	15	24.7	50.73	101	75	125				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICPMS205-H_220826C: 30** SampType: **Sample Matrix Spike** Lab ID: **H22080680-002AMS** Method: **SW6020**
Analysis Date: **08/26/22 17:32** Units: **mg/kg** **Prep Info:** Prep Date: **8/23/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	55.4	1.0	49.55	3.439	105	75	125				
Cadmium	27.0	1.0	24.78	0	109	75	125				
Copper	76.2	6.3	49.55	19.77	114	75	125				
Lead	66.0	2.5	49.55	12.35	108	75	125				
Zinc	112	15	49.55	50.73	124	75	125				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22080680

BatchID: 62974

Date: *02-Sep-22*

Run ID :Run Order: **ICPMS205-H_220826C: 31** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H22080680-002AMSD** Method: **SW6020**

Analysis Date: **08/26/22 17:35** Units: **mg/kg** **Prep Info:** Prep Date: **8/23/2022** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	54.0	1.0	49.5	3.439	**102**	75	125	55.39	**2.5**	20	
Cadmium	26.4	1.0	24.75	0	**106**	75	125	26.96	**2.3**	20	
Copper	73.0	6.3	49.5	19.77	**107**	75	125	76.23	**4.4**	20	
Lead	66.1	2.5	49.5	12.35	**109**	75	125	65.98	**0.2**	20	
Zinc	110	15	49.5	50.73	**121**	75	125	112.1	**1.5**	20	

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 62987
Date: *02-Sep-22*

Run ID :Run Order: **SOIL HYDROMETER_220826A: 30** SampType: **Sample Duplicate** Lab ID: **H22080680-002ADUP** Method: **ASA15-5**
Analysis Date: **08/25/22 12:02** Units: **%** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA15-5**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	38.0	1.0		0				38	**0.0**	20	
Silt	53.0	1.0		0				53	**0.0**	20	
Clay	9.00	1.0		0				9	**0.0**	20	
Texture	SiL	1.0		0				0			

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL HYDROMETER_220826A: 31** SampType: **Laboratory Control Sample** Lab ID: **LCS-62987** Method: **ASA15-5**
Analysis Date: **08/25/22 12:02** Units: **%** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA15-5**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	48.0	1.0	48	0	**100**	70	130				
Silt	33.0	1.0	29	0	**114**	70	130				
Clay	19.0	1.0	23	0	**83**	70	130				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice — Prepared by Helena, MT Branch

Work Order: H22080680 — **BatchID: 62996** — **Date:** *02-Sep-22*

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Laboratory Control Sample** Lab ID: **LCS-62996** Method: **ASA10-3**

Analysis Date: **08/25/22 09:14** Units: **s.u.** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	8.07	0.10	7.976	0	101	95	105				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL PH METER - ORION A211_22** SampType: **Sample Duplicate** Lab ID: **H22080680-002ADUP** Method: **ASA10-3**

Analysis Date: **08/25/22 09:22** Units: **s.u.** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.45	0.10		0				7.43	0.3	20	

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL EC_220826A: 4** SampType: **Method Blank** Lab ID: **MB-62996** Method: **ASA10-3**

Analysis Date: **08/25/22 13:08** Units: **mmhos/cm** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	ND	0.05									

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL EC_220826A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-62996** Method: **ASA10-3**

Analysis Date: **08/25/22 13:09** Units: **mmhos/cm** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	3.56	0.10	3.886	0	92	80	120				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL EC_220826A: 14** SampType: **Sample Duplicate** Lab ID: **H22080680-002ADUP** Method: **ASA10-3**

Analysis Date: **08/25/22 13:15** Units: **mmhos/cm** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	2.08	0.10		0				2.077	0.3	20	

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 62996
Date: *02-Sep-22*

Run ID :Run Order: **ICP2-HE_220825A: 186** SampType: **Method Blank** Lab ID: **MB-62996** Method: **SW6010B**
Analysis Date: **08/26/22 02:00** Units: **mg/L** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	0.1									
Magnesium	ND	0.02									
Sodium	0.02	0.02									
Calcium, sat. paste	ND	0.007									
Magnesium, sat. paste	ND	0.002									
Sodium, sat. paste	0.001	0.0009									

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICP2-HE_220825A: 187** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-62996** Method: **SW6010B**
Analysis Date: **08/26/22 02:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	46.8	1.0	50	0	94	80	120				
Magnesium	46.6	1.0	50	0	93	80	120				
Sodium	47.0	1.0	50	0	94	80	120				
Calcium, sat. paste	2.34	0.050	2.495	0	94	80	120				
Magnesium, sat. paste	3.84	0.082	4.115	0	93	80	120				
Sodium, sat. paste	2.04	0.043	2.175	0	94	80	120				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICP2-HE_220825A: 188** SampType: **Laboratory Control Sample** Lab ID: **LCS-62996** Method: **SW6010B**
Analysis Date: **08/26/22 02:08** Units: **mg/L** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	276	1.0	303	0	91	70	130				
Magnesium	100	1.0	118.6	0	85	70	130				
Sodium	499	1.0	509.9	0	98	70	130				
Calcium, sat. paste	13.8	0.050	15.12	0	91	70	130				
Magnesium, sat. paste	8.25	0.082	9.763	0	85	70	130				
Sodium, sat. paste	21.7	0.043	22.17	0	98	70	130				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 62996
Date: *02-Sep-22*

Run ID :Run Order: **ICP2-HE_220825A: 193** SampType: **Sample Matrix Spike** Lab ID: **H22080668-001AMS2** Method: **SW6010B**
Analysis Date: **08/26/22 02:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	248	1.0	100	166.8	82	70	130				
Magnesium	154	1.0	100	65.03	89	70	130				
Sodium	212	1.0	100	118.9	93	70	130				
Calcium, sat. paste	12.4	0.050	4.99	8.326	82	70	130				
Magnesium, sat. paste	12.7	0.082	8.23	5.352	89	70	130				
Sodium, sat. paste	9.23	0.043	4.35	5.17	93	70	130				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICP2-HE_220825A: 194** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H22080668-001AMSD2** Method: **SW6010B**
Analysis Date: **08/26/22 02:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	251	1.0	100	166.8	84	70	130	248.4	1.2	20	
Magnesium	156	1.0	100	65.03	91	70	130	154.2	1.0	20	
Sodium	212	1.0	100	118.9	93	70	130	212.2	0.3	20	
Calcium, sat. paste	12.5	0.050	4.99	8.326	84	70	130	12.4	1.2	20	
Magnesium, sat. paste	12.8	0.082	8.23	5.352	91	70	130	12.69	1.0	20	
Sodium, sat. paste	9.20	0.043	4.35	5.17	93	70	130	9.227	0.3	20	

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICP2-HE_220825A: 204** SampType: **Sample Duplicate** Lab ID: **H22080680-002Adup** Method: **SW6010B**
Analysis Date: **08/26/22 03:10** Units: **mg/L** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	135	1.0		0				137.3	1.9	30	
Magnesium	16.1	1.0		0				16.37	1.4	30	
Sodium	314	1.0		0				313.4	0.2	30	
Calcium, sat. paste	6.72	0.050		0				6.849	1.9	30	
Magnesium, sat. paste	1.33	0.082		0				1.347	1.4	30	
Sodium, sat. paste	13.7	0.043		0				13.63	0.2	30	

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 62996
Date: *02-Sep-22*

Run ID :Run Order: **SOIL CALC_220826A: 127** SampType: **Sample Duplicate** Lab ID: **H22080680-002ADUP** Method: **USDA20b**
Analysis Date: **08/26/22 08:52** Units: **unitless** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	6.81	0.10		0				6.73	**1.2**	30	

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL CALC_220826A: 128** SampType: **Laboratory Control Sample** Lab ID: **LCS-62996** Method: **USDA20b**
Analysis Date: **08/26/22 08:52** Units: **unitless** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	6.54	0.10	6.034	0	**108**	80	120				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: 62996
Date: *02-Sep-22*

Run ID :Run Order: **SOIL DRYING OVEN 2_220831B: 1** SampType: **Laboratory Control Sample** Lab ID: **LCS-62996** Method: **USDA27a**
Analysis Date: **08/25/22 08:27** Units: **%** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	41.9	0.10	41.7	0	**100**	80	120				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **SOIL DRYING OVEN 2_220831B: 4** SampType: **Sample Duplicate** Lab ID: **H22080680-002ADUP** Method: **USDA27a**
Analysis Date: **08/25/22 08:27** Units: **%** **Prep Info:** Prep Date: **8/24/2022** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	87.7	0.10		0				86.17	**1.8**	20	

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22080680

BatchID: PMOIST_220824_A

Date: *02-Sep-22*

Run ID :Run Order: **SOIL DRYING OVEN 2_220825B: 5** SampType: **Sample Duplicate** Lab ID: **H22080727-002A DUP** Method: **D2974**

Analysis Date: **08/25/22 09:49** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	23.3	0.20		0				23.19	**0.4**	20	

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: R177727
Date: *02-Sep-22*

Run ID :Run Order: **ICP2-HE_220825A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6010B**
Analysis Date: **08/25/22 11:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	40.0	1.0	40	0	100	90	110				
Magnesium	40.0	1.0	40	0	100	90	110				
Sodium	40.6	1.0	40	0	102	90	110				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICP2-HE_220825A: 7** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6010B**
Analysis Date: **08/25/22 11:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	25.1	1.0	25	0	100	90	110				
Magnesium	25.0	1.0	25	0	100	90	110				
Sodium	25.8	1.0	25	0	103	90	110				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICP2-HE_220825A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6010B**
Analysis Date: **08/25/22 11:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	482	1.0	500	0	96	80	120				
Magnesium	452	1.0	500	0	90	80	120				
Sodium	0.0772	1.0		0		0	0				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICP2-HE_220825A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6010B**
Analysis Date: **08/25/22 11:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	478	1.0	500	0	96	80	120				
Magnesium	451	1.0	500	0	90	80	120				
Sodium	20.1	1.0	20	0	100	80	120				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H22080680
BatchID: R177772
Date: *02-Sep-22*

Run ID :Run Order: **ICPMS205-H_220826C: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **08/26/22 11:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0637	0.0010	0.06	0	106	90	110				
Cadmium	0.0314	0.0010	0.03	0	105	90	110				
Copper	0.0635	0.0010	0.06	0	106	90	110				
Lead	0.0613	0.0010	0.06	0	102	90	110				
Zinc	0.0608	0.0013	0.06	0	101	90	110				

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICPMS205-H_220826C: 15** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **08/26/22 12:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	-1.19E-06	0.0010		0							
Cadmium	0.000146	0.0010		0							
Copper	0.000180	0.0010		0							
Lead	-0.000155	0.0010		0							
Zinc	-0.000140	0.0013		0							

Associated samples: **H22080680-001A, H22080680-002A**

Run ID :Run Order: **ICPMS205-H_220826C: 17** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **08/26/22 12:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0104	0.0010	0.01	0	104	70	130				
Cadmium	0.0104	0.0010	0.01	0	103	70	130				
Copper	0.0202	0.0010	0.02	0	101	70	130				
Lead	-0.000186	0.0010		0		0	0				
Zinc	0.00921	0.0013	0.01	0	92	70	130				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H22080680

BatchID: R177772

Date: *02-Sep-22*

Run ID :Run Order: **ICPMS205-H_220826C: 20** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6020**

Analysis Date: **08/26/22 17:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0503	0.0010	0.05	0	**101**	90	110				
Cadmium	0.0504	0.0010	0.05	0	**101**	90	110				
Copper	0.0499	0.0010	0.05	0	**100**	90	110				
Lead	0.0504	0.0010	0.05	0	**101**	90	110				
Zinc	0.0515	0.0013	0.05	0	**103**	90	110				

Associated samples: **H22080680-001A, H22080680-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Work Order Receipt Checklist

MT Dept of Justice

H22080680

Login completed by: Rebecca A. Tooke

Date Received: 8/22/2022

Reviewed by: spester

Received by: wjj

Reviewed Date: 9/2/2022

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	0.9°C On Ice - From Field		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

Relinquished time from client does not match received time by laboratory.

IDs on sample bags are 20220817-Parrot-ET-C-1317 and 20220817-Parrot-ET-C-1318. IDs on COC are E1317 and E1318. Per call back from Rial we are to use IDs on COC. 8/23/22 rt

ENERGY LABORATORIES
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Chain of Custody & Analytical Request Record

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Page 1 of 1

Account Information (Billing information)

Company/Name	NRD-Parrot Tailings Removal (#700157)
Contact	Jim Ford
Phone	406-439-2108
Mailing Address	1720 9th Ave. P.O. Box 201425
City, State, Zip	Helena, MT 59620-1425
Email	JFord@mt.gov
Receive Invoice	☐Hard Copy ☑Email
Receive Report	☐Hard Copy ☐Email
Purchase Order	
Quote	
Bottle Order	

Report Information (if different than Account Information)

Company/Name	Water + Environmental Technologies
Contact	Rial Gunlikson
Phone	406-471-5336
Mailing Address	480 East Park St.
City, State, Zip	Butte, MT 59701
Email	rgunlikson@water-envtech.com
Receive Report	☐Hard Copy ☑Email

Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other_____

Comments

Project Information

Project Name, PWSID, Permit, etc.	
Sampler Name	Sampler Phone
Sample Origin State	EPA/State Compliance ☐ Yes ☐ No

MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	Saturation %	Electrical Conductivity	Metals: As, Cd, Cu, Pb, Zn	SAR	PH			See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1	E1317	8/22	9:00AM	1	S	X	X	X	X	X	X	X					H22080680
2	E1318	8/22	9:00AM	1	S	X	X	X	X	X	X	X					
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Rial Gunlikson	8/22/22 9:00AM	[signature]	Rachel Hadley	8/22/22 9:00	[signature]
	Rachel Hadley	8/22/22 1600	[signature]	Received by Laboratory (print) Wanda Sohn	8-22-22 16:50	[signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
handdrill/ Courier	Y	(Y) N (C) B	(Y) N	0.9 °C	(Y) N	(Y) N	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested
This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-12/16 v 1

ANALYTICAL SUMMARY REPORT

May 15, 2023

MT Dept of Justice
Natural Resource Damage Program
Helena, MT 59620-1425

Work Order: H23050062
Project Name: Parrot Tailings Removal

Energy Laboratories Inc Helena MT received the following 6 samples for MT Dept of Justice on 5/2/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H23050062-001	E1836	04/24/23 9:30	05/02/23	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Percent Moisture Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage Soil Preparation USDA1
H23050062-002	E1837	04/24/23 9:30	05/02/23	Soil	Metals by ICP/ICPMS, Total Metals, Saturated Paste Conductivity, Saturated Paste Extract Moisture pH, Saturated Paste Percent Moisture Total Metals Digestion by SW3050B Particle Size Analysis / Texture Prep ASA15-5 Saturated Paste Extraction ASA Particle Size Analysis / Texture Sodium Adsorption Ratio Saturation Percentage
H23050062-003	E1838	04/24/23 9:30	05/02/23	Soil	Same As Above
H23050062-004	E1839	04/24/23 9:30	05/02/23	Soil	Same As Above
H23050062-005	E1840	04/24/23 9:30	05/02/23	Soil	Same As Above
H23050062-006	E1841	04/24/23 9:30	05/02/23	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1836
Lab ID: H23050062-001
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 04/24/23 09:30
DateReceived: 05/02/23
Report Date: 05/15/23

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	21.0	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	61	PMOIST_230502_A
PHYSICAL CHARACTERISTICS											
Moisture	21.0	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	25	PMOIST_230502_A
Sand	38	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	2	66298
Silt	49	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	2	66298
Clay	13	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	2	66298
Texture	L			1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	2	66298
SATURATED PASTE											
Saturation	77.6	%		0.1		USDA27a	05/04/23 08:16 / sah	05/02/23 12:43	RYING OVEN 2_230505A	2	66282
SATURATED PASTE											
pH, sat. paste	7.5	s.u.		0.1		ASA10-3	05/04/23 08:58 / dma	05/02/23 12:43	R - ORION A211_230505B	8	66282
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	4.1	mmhos/cm		0.1		ASA10-3	05/04/23 10:59 / dma	05/02/23 12:43	SOIL EC_230505A	36	66282
Calcium, sat. paste	15.6	meq/L		0.05		SW6010B	05/04/23 15:00 / slj	05/02/23 12:43	ICP2-HE_230504B	40	66282
Magnesium, sat. paste	2.95	meq/L		0.08		SW6010B	05/04/23 15:00 / slj	05/02/23 12:43	ICP2-HE_230504B	40	66282
Sodium, sat. paste	21.9	meq/L		0.04		SW6010B	05/04/23 15:00 / slj	05/02/23 12:43	ICP2-HE_230504B	40	66282
Sodium Adsorption Ratio (SAR)	7.2	unitless		0.1		USDA20b	05/08/23 14:31 / SR		SOIL CALC_230508A	7	R184341
3050 EXTRACTABLE METALS											
Arsenic	4	mg/kg-dry		1		SW6020	05/05/23 12:20 / slj	05/04/23 09:25	ICPMS205-H_230505A	52	66304
Cadmium	ND	mg/kg-dry		1		SW6020	05/05/23 12:20 / slj	05/04/23 09:25	ICPMS205-H_230505A	52	66304
Copper	18	mg/kg-dry		2		SW6020	05/05/23 12:20 / slj	05/04/23 09:25	ICPMS205-H_230505A	52	66304
Lead	13	mg/kg-dry		1		SW6020	05/05/23 12:20 / slj	05/04/23 09:25	ICPMS205-H_230505A	52	66304
Zinc	51	mg/kg-dry		8		SW6020	05/05/23 12:20 / slj	05/04/23 09:25	ICPMS205-H_230505A	52	66304

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1837
Lab ID: H23050062-002
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 04/24/23 09:30
DateReceived: 05/02/23
Report Date: 05/15/23

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	19.6	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	63	PMOIST_230502_A
PHYSICAL CHARACTERISTICS											
Moisture	19.6	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	27	PMOIST_230502_A
Sand	36	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	3	66298
Silt	51	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	3	66298
Clay	13	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	3	66298
Texture	SiL			1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	3	66298
SATURATED PASTE											
Saturation	82.1	%		0.1		USDA27a	05/04/23 08:16 / sah	05/02/23 12:43	RYING OVEN 2_230505A	3	66282
SATURATED PASTE											
pH, sat. paste	7.4	s.u.		0.1		ASA10-3	05/04/23 08:59 / dma	05/02/23 12:43	R - ORION A211_230505B	9	66282
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	3.7	mmhos/cm		0.1		ASA10-3	05/04/23 11:01 / dma	05/02/23 12:43	SOIL EC_230505A	37	66282
Calcium, sat. paste	16.0	meq/L		0.05		SW6010B	05/04/23 15:04 / slj	05/02/23 12:43	ICP2-HE_230504B	41	66282
Magnesium, sat. paste	3.38	meq/L		0.08		SW6010B	05/04/23 15:04 / slj	05/02/23 12:43	ICP2-HE_230504B	41	66282
Sodium, sat. paste	16.6	meq/L		0.04		SW6010B	05/04/23 15:04 / slj	05/02/23 12:43	ICP2-HE_230504B	41	66282
Sodium Adsorption Ratio (SAR)	5.3	unitless		0.1		USDA20b	05/08/23 14:31 / SR		SOIL CALC_230508A	8	R184341
3050 EXTRACTABLE METALS											
Arsenic	4	mg/kg-dry		1		SW6020	05/05/23 12:25 / slj	05/04/23 09:25	ICPMS205-H_230505A	54	66304
Cadmium	ND	mg/kg-dry		1		SW6020	05/05/23 12:25 / slj	05/04/23 09:25	ICPMS205-H_230505A	54	66304
Copper	19	mg/kg-dry		2		SW6020	05/05/23 12:25 / slj	05/04/23 09:25	ICPMS205-H_230505A	54	66304
Lead	12	mg/kg-dry		1		SW6020	05/05/23 12:25 / slj	05/04/23 09:25	ICPMS205-H_230505A	54	66304
Zinc	51	mg/kg-dry		8		SW6020	05/05/23 12:25 / slj	05/04/23 09:25	ICPMS205-H_230505A	54	66304

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1838
Lab ID: H23050062-003
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 04/24/23 09:30
DateReceived: 05/02/23
Report Date: 05/15/23

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	23.4	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	: 65	PMOIST_230502_A
PHYSICAL CHARACTERISTICS											
Moisture	23.4	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	: 29	PMOIST_230502_A
Sand	36	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	: 4	66298
Silt	51	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	: 4	66298
Clay	13	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	: 4	66298
Texture	SiL			1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	: 4	66298
SATURATED PASTE											
Saturation	80.0	%		0.1		USDA27a	05/04/23 08:16 / sah	05/02/23 12:43	RYING OVEN 2_230505A	: 4	66282
SATURATED PASTE											
pH, sat. paste	7.5	s.u.		0.1		ASA10-3	05/04/23 09:01 / dma	05/02/23 12:43	- ORION A211_230505B	: 10	66282
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	3.6	mmhos/cm		0.1		ASA10-3	05/04/23 11:01 / dma	05/02/23 12:43	SOIL EC_230505A	: 38	66282
Calcium, sat. paste	11.5	meq/L		0.05		SW6010B	05/04/23 15:08 / slj	05/02/23 12:43	ICP2-HE_230504B	: 42	66282
Magnesium, sat. paste	2.00	meq/L		0.08		SW6010B	05/04/23 15:08 / slj	05/02/23 12:43	ICP2-HE_230504B	: 42	66282
Sodium, sat. paste	20.4	meq/L		0.04		SW6010B	05/04/23 15:08 / slj	05/02/23 12:43	ICP2-HE_230504B	: 42	66282
Sodium Adsorption Ratio (SAR)	7.8	unitless		0.1		USDA20b	05/08/23 14:31 / SR		SOIL CALC_230508A	: 9	R184341
3050 EXTRACTABLE METALS											
Arsenic	4	mg/kg-dry		1		SW6020	05/05/23 12:28 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 55	66304
Cadmium	ND	mg/kg-dry		1		SW6020	05/05/23 12:28 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 55	66304
Copper	21	mg/kg-dry		2		SW6020	05/05/23 12:28 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 55	66304
Lead	12	mg/kg-dry		1		SW6020	05/05/23 12:28 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 55	66304
Zinc	58	mg/kg-dry		8		SW6020	05/05/23 12:28 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 55	66304

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1839
Lab ID: H23050062-004
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 04/24/23 09:30
DateReceived: 05/02/23
Report Date: 05/15/23

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	22.5	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	67	PMOIST_230502_A
PHYSICAL CHARACTERISTICS											
Moisture	22.5	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	31	PMOIST_230502_A
Sand	38	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	5	66298
Silt	51	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	5	66298
Clay	11	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	5	66298
Texture	SiL			1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	5	66298
SATURATED PASTE											
Saturation	79.8	%		0.1		USDA27a	05/04/23 08:16 / sah	05/02/23 12:43	RYING OVEN 2_230505A	6	66282
SATURATED PASTE											
pH, sat. paste	7.4	s.u.		0.1		ASA10-3	05/04/23 09:04 / dma	05/02/23 12:43	- ORION A211_230505B	12	66282
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	2.8	mmhos/cm		0.1		ASA10-3	05/04/23 11:04 / dma	05/02/23 12:43	SOIL EC_230505A	40	66282
Calcium, sat. paste	8.95	meq/L		0.05		SW6010B	05/04/23 15:16 / slj	05/02/23 12:43	ICP2-HE_230504B	44	66282
Magnesium, sat. paste	1.76	meq/L		0.08		SW6010B	05/04/23 15:16 / slj	05/02/23 12:43	ICP2-HE_230504B	44	66282
Sodium, sat. paste	15.4	meq/L		0.04		SW6010B	05/04/23 15:16 / slj	05/02/23 12:43	ICP2-HE_230504B	44	66282
Sodium Adsorption Ratio (SAR)	6.6	unitless		0.1		USDA20b	05/08/23 14:31 / SR		SOIL CALC_230508A	11	R184341
3050 EXTRACTABLE METALS											
Arsenic	3	mg/kg-dry		1		SW6020	05/05/23 12:30 / slj	05/04/23 09:25	ICPMS205-H_230505A	56	66304
Cadmium	ND	mg/kg-dry		1		SW6020	05/05/23 12:30 / slj	05/04/23 09:25	ICPMS205-H_230505A	56	66304
Copper	19	mg/kg-dry		2		SW6020	05/05/23 12:30 / slj	05/04/23 09:25	ICPMS205-H_230505A	56	66304
Lead	11	mg/kg-dry		1		SW6020	05/05/23 12:30 / slj	05/04/23 09:25	ICPMS205-H_230505A	56	66304
Zinc	50	mg/kg-dry		8		SW6020	05/05/23 12:30 / slj	05/04/23 09:25	ICPMS205-H_230505A	56	66304

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1840
Lab ID: H23050062-005
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 04/24/23 09:30
DateReceived: 05/02/23
Report Date: 05/15/23

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	28.1	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	: 69	PMOIST_230502_A
PHYSICAL CHARACTERISTICS											
Moisture	28.1	wt%		0.2		D2974	05/02/23 12:58 / dma		RYING OVEN 2_230503A	: 33	PMOIST_230502_A
Sand	36	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	: 6	66298
Silt	51	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	: 6	66298
Clay	13	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	: 6	66298
Texture	SiL			1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	: 6	66298
SATURATED PASTE											
Saturation	84.2	%		0.1		USDA27a	05/04/23 08:17 / sah	05/02/23 12:43	RYING OVEN 2_230505A	: 7	66282
SATURATED PASTE											
pH, sat. paste	7.6	s.u.		0.1		ASA10-3	05/04/23 09:05 / dma	05/02/23 12:43	- ORION A211_230505B	: 13	66282
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	2.9	mmhos/cm		0.1		ASA10-3	05/04/23 11:05 / dma	05/02/23 12:43	SOIL EC_230505A	: 41	66282
Calcium, sat. paste	6.76	meq/L		0.05		SW6010B	05/04/23 15:20 / slj	05/02/23 12:43	ICP2-HE_230504B	: 45	66282
Magnesium, sat. paste	1.13	meq/L		0.08		SW6010B	05/04/23 15:20 / slj	05/02/23 12:43	ICP2-HE_230504B	: 45	66282
Sodium, sat. paste	19.0	meq/L		0.04		SW6010B	05/04/23 15:20 / slj	05/02/23 12:43	ICP2-HE_230504B	: 45	66282
Sodium Adsorption Ratio (SAR)	9.6	unitless		0.1		USDA20b	05/08/23 14:31 / SR		SOIL CALC_230508A	: 12	R184341
3050 EXTRACTABLE METALS											
Arsenic	4	mg/kg-dry		1		SW6020	05/05/23 12:33 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 57	66304
Cadmium	ND	mg/kg-dry		1		SW6020	05/05/23 12:33 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 57	66304
Copper	19	mg/kg-dry		2		SW6020	05/05/23 12:33 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 57	66304
Lead	17	mg/kg-dry		1		SW6020	05/05/23 12:33 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 57	66304
Zinc	58	mg/kg-dry		8		SW6020	05/05/23 12:33 / slj	05/04/23 09:25	ICPMS205-H_230505A	: 57	66304

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT Dept of Justice
Client Sample ID: E1841
Lab ID: H23050062-006
Matrix: Soil

Project: Parrot Tailings Removal
Collection Date: 04/24/23 09:30
DateReceived: 05/02/23
Report Date: 05/15/23

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
Moisture	22.4	wt%		0.2		D2974	05/02/23 12:59 / dma		RYING OVEN 2_230503A	71	PMOIST_230502_A
PHYSICAL CHARACTERISTICS											
Moisture	22.4	wt%		0.2		D2974	05/02/23 12:59 / dma		RYING OVEN 2_230503A	35	PMOIST_230502_A
Sand	38	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	8	66298
Silt	47	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	8	66298
Clay	15	%		1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	8	66298
Texture	L			1		ASA15-5	05/04/23 14:26 / sah	05/03/23 15:10	HYDROMETER_230508A	8	66298
SATURATED PASTE											
Saturation	81.9	%		0.1		USDA27a	05/04/23 08:17 / sah	05/02/23 12:43	RYING OVEN 2_230505A	8	66282
SATURATED PASTE											
pH, sat. paste	7.4	s.u.		0.1		ASA10-3	05/04/23 09:06 / dma	05/02/23 12:43	- ORION A211_230505B	14	66282
SATURATED PASTE EXTRACT											
Conductivity, sat. paste	0.7	mmhos/cm		0.1		ASA10-3	05/04/23 11:06 / dma	05/02/23 12:43	SOIL EC_230505A	42	66282
Calcium, sat. paste	1.99	meq/L		0.05		SW6010B	05/04/23 15:24 / slj	05/02/23 12:43	ICP2-HE_230504B	46	66282
Magnesium, sat. paste	0.51	meq/L		0.08		SW6010B	05/04/23 15:24 / slj	05/02/23 12:43	ICP2-HE_230504B	46	66282
Sodium, sat. paste	3.73	meq/L		0.04		SW6010B	05/04/23 15:24 / slj	05/02/23 12:43	ICP2-HE_230504B	46	66282
Sodium Adsorption Ratio (SAR)	3.3	unitless		0.1		USDA20b	05/08/23 14:31 / SR		SOIL CALC_230508A	13	R184341
3050 EXTRACTABLE METALS											
Arsenic	4	mg/kg-dry		1		SW6020	05/05/23 12:35 / slj	05/04/23 09:25	ICPMS205-H_230505A	58	66304
Cadmium	ND	mg/kg-dry		1		SW6020	05/05/23 12:35 / slj	05/04/23 09:25	ICPMS205-H_230505A	58	66304
Copper	25	mg/kg-dry		2		SW6020	05/05/23 12:35 / slj	05/04/23 09:25	ICPMS205-H_230505A	58	66304
Lead	12	mg/kg-dry		1		SW6020	05/05/23 12:35 / slj	05/04/23 09:25	ICPMS205-H_230505A	58	66304
Zinc	53	mg/kg-dry		8		SW6020	05/05/23 12:35 / slj	05/04/23 09:25	ICPMS205-H_230505A	58	66304

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H23050062

BatchID: 230503_1_COND-S-PAS

Date: *15-May-23*

Run ID :Run Order: **SOIL EC_230505A: 28** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_230503_1** Method: **ASA10-3**

Analysis Date: **05/04/23 10:40** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.45	0.10	1.413	0	102	90	110				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL EC_230505A: 29** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_230503_1** Method: **ASA10-3**

Analysis Date: **05/04/23 10:41** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	5.47	0.10	5	0	109	90	110				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL EC_230505A: 30** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_230503_1** Method: **ASA10-3**

Analysis Date: **05/04/23 10:53** Units: **mmhos/cm** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	1.04	0.10	1	0	104	90	110				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: 230503_1_PH-S-PASTE
Date: *15-May-23*

Run ID :Run Order: **SOIL PH METER - ORION A211_23** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV_1_230503_1** Method: **ASA10-3**
Analysis Date: **05/04/23 08:49** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.06	0.10	7	0	101	98.6	101.4				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL PH METER - ORION A211_23** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV_1_230503_1** Method: **ASA10-3**
Analysis Date: **05/04/23 08:49** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.05	0.10	7	0	101	98.6	101.4				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL PH METER - ORION A211_23** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV1_1_230503_1** Method: **ASA10-3**
Analysis Date: **05/04/23 08:50** Units: **s.u.** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	4.01	0.10	4	0	100	97.5	102.5				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: 66282
Date: *15-May-23*

Run ID :Run Order: **SOIL EC_230505A: 31** SampType: **Method Blank** Lab ID: **MB-66282** Method: **ASA10-3**
Analysis Date: **05/04/23 10:54** Units: **mmhos/cm** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	ND	0.05									

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL EC_230505A: 32** SampType: **Laboratory Control Sample** Lab ID: **LCS-66282** Method: **ASA10-3**
Analysis Date: **05/04/23 10:55** Units: **mmhos/cm** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	4.63	0.10	3.886	0	**119**	80	120				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL EC_230505A: 39** SampType: **Sample Duplicate** Lab ID: **H23050062-003ADUP** Method: **ASA10-3**
Analysis Date: **05/04/23 11:02** Units: **mmhos/cm** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Conductivity, sat. paste	3.65	0.10		0				3.574	**2.1**	20	

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL PH METER - ORION A211_23** SampType: **Laboratory Control Sample** Lab ID: **LCS-66282** Method: **ASA10-3**
Analysis Date: **05/04/23 08:53** Units: **s.u.** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.94	0.10	7.976	0	**100**	95	105				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL PH METER - ORION A211_23** SampType: **Sample Duplicate** Lab ID: **H23050062-003ADUP** Method: **ASA10-3**
Analysis Date: **05/04/23 09:03** Units: **s.u.** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH, sat. paste	7.50	0.10		0				7.5	**0.0**	20	

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: 66282
Date: *15-May-23*

Run ID :Run Order: **ICP2-HE_230504B: 29** SampType: **Method Blank** Lab ID: **MB-66282** Method: **SW6010B**
Analysis Date: **05/04/23 14:19** Units: **mg/L** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	0.2									
Magnesium	ND	0.05									
Sodium	ND	0.03									
Calcium, sat. paste	ND	0.009									
Magnesium, sat. paste	ND	0.004									
Sodium, sat. paste	ND	0.001									

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICP2-HE_230504B: 30** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-66282** Method: **SW6010B**
Analysis Date: **05/04/23 14:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	52.7	1.0	50	0	**105**	80	120				
Magnesium	49.7	1.0	50	0	**99**	80	120				
Sodium	50.5	1.0	50	0	**101**	80	120				
Calcium, sat. paste	2.63	0.050	2.495	0	**105**	80	120				
Magnesium, sat. paste	4.09	0.082	4.115	0	**99**	80	120				
Sodium, sat. paste	2.20	0.043	2.175	0	**101**	80	120				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICP2-HE_230504B: 31** SampType: **Laboratory Control Sample** Lab ID: **LCS-66282** Method: **SW6010B**
Analysis Date: **05/04/23 14:27** Units: **mg/L** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	347	1.0	303	0	**115**	70	130				
Magnesium	116	1.0	118.6	0	**98**	70	130				
Sodium	532	1.0	509.9	0	**104**	70	130				
Calcium, sat. paste	17.3	0.050	15.12	0	**115**	70	130				
Magnesium, sat. paste	9.58	0.082	9.763	0	**98**	70	130				
Sodium, sat. paste	23.1	0.043	22.17	0	**104**	70	130				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: 66282
Date: *15-May-23*

Run ID :Run Order: **ICP2-HE_230504B: 36** SampType: **Sample Matrix Spike** Lab ID: **H23050055-001AMS2** Method: **SW6010B**
Analysis Date: **05/04/23 14:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	223	1.0	100	122.2	101	70	130				
Magnesium	129	1.0	100	31.2	98	70	130				
Sodium	462	1.0	100	368	94	70	130				
Calcium, sat. paste	11.1	0.050	4.99	6.095	101	70	130				
Magnesium, sat. paste	10.6	0.082	8.23	2.568	98	70	130				
Sodium, sat. paste	20.1	0.043	4.35	16	94	70	130				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICP2-HE_230504B: 37** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H23050055-001AMSD2** Method: **SW6010B**
Analysis Date: **05/04/23 14:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	226	1.0	100	122.2	104	70	130	223.2	1.4	20	
Magnesium	130	1.0	100	31.2	99	70	130	129.2	0.5	20	
Sodium	455	1.0	100	368	87	70	130	461.9	1.6	20	
Calcium, sat. paste	11.3	0.050	4.99	6.095	104	70	130	11.14	1.4	20	
Magnesium, sat. paste	10.7	0.082	8.23	2.568	99	70	130	10.63	0.5	20	
Sodium, sat. paste	19.8	0.043	4.35	16	87	70	130	20.08	1.6	20	

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICP2-HE_230504B: 43** SampType: **Sample Duplicate** Lab ID: **H23050062-003Adup** Method: **SW6010B**
Analysis Date: **05/04/23 15:12** Units: **mg/L** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	240	1.0		0				231.2	3.8	30	
Magnesium	24.7	1.0		0				24.25	1.9	30	
Sodium	487	1.0		0				468.4	3.9	30	
Calcium, sat. paste	12.0	0.050		0				11.54	3.8	30	
Magnesium, sat. paste	2.03	0.082		0				1.996	1.9	30	
Sodium, sat. paste	21.2	0.043		0				20.37	3.9	30	

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: 66282
Date: *15-May-23*

Run ID :Run Order: **SOIL DRYING OVEN 2_230505A: 1** SampType: **Laboratory Control Sample** Lab ID: **LCS-66282** Method: **USDA27a**
Analysis Date: **05/04/23 08:15** Units: **%** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	39.2	0.10	41.7	0	**94**	80	120				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL DRYING OVEN 2_230505A: 5** SampType: **Sample Duplicate** Lab ID: **H23050062-003ADUP** Method: **USDA27a**
Analysis Date: **05/04/23 08:16** Units: **%** **Prep Info:** Prep Date: **5/2/2023** Prep Method: **ASA**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Saturation	80.5	0.10		0				80.04	**0.6**	20	

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: 66298
Date: *15-May-23*

Run ID :Run Order: **SOIL HYDROMETER_230508A: 1** SampType: **Laboratory Control Sample** Lab ID: **LCS-66298** Method: **ASA15-5**
Analysis Date: **05/04/23 14:25** Units: **%** **Prep Info:** Prep Date: **5/3/2023** Prep Method: **ASA15-5**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	48.0	1.0	48	0	**100**	70	130				
Silt	27.0	1.0	29	0	**93**	70	130				
Clay	25.0	1.0	23	0	**109**	70	130				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL HYDROMETER_230508A: 7** SampType: **Sample Duplicate** Lab ID: **H23050062-005ADUP** Method: **ASA15-5**
Analysis Date: **05/04/23 14:26** Units: **%** **Prep Info:** Prep Date: **5/3/2023** Prep Method: **ASA15-5**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sand	38.0	1.0		0				36	**5.4**	20	
Silt	49.0	1.0		0				51	**4.0**	20	
Clay	13.0	1.0		0				13	**0.0**	20	
Texture	L	1.0		0				0			

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: 66304
Date: *15-May-23*

Run ID :Run Order: **ICPMS205-H_230505A: 51** SampType: **Method Blank** Lab ID: **MB-66304** Method: **SW6020**
Analysis Date: **05/05/23 12:18** Units: **mg/kg** **Prep Info:** Prep Date: **5/4/2023** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.2									
Cadmium	ND	0.03									
Copper	ND	0.7									
Lead	ND	0.4									
Zinc	ND	3									

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICPMS205-H_230505A: 53** SampType: **Serial Dilution** Lab ID: **H23050062-001ADIL** Method: **SW6020**
Analysis Date: **05/05/23 12:23** Units: **mg/kg-dry** **Prep Info:** Prep Date: **5/4/2023** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	3.74	2.0		0		0	0	3.839		10	N
Cadmium	ND	1.0		0		0	0	0.1683		10	
Copper	17.2	9.1		0		0	0	17.85		10	N
Lead	11.4	5.5		0		0	0	12.64		10	N
Zinc	52.0	38		0		0	0	50.72		10	N

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICPMS205-H_230505A: 59** SampType: **Laboratory Control Sample** Lab ID: **LCS-66304** Method: **SW6020**
Analysis Date: **05/05/23 12:38** Units: **mg/kg** **Prep Info:** Prep Date: **5/4/2023** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	163	1.0	196	0	**83**	66.4	104				
Cadmium	104	1.0	99	0	**105**	79.2	121				
Copper	131	1.8	137	0	**96**	73.9	113				
Lead	107	1.1	105	0	**102**	71.6	128				
Zinc	242	7.6	231	0	**105**	83.1	125				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: 66304
Date: *15-May-23*

Run ID :Run Order: **ICPMS205-H_230505A: 60** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-66304** Method: **SW6020**
Analysis Date: **05/05/23 12:40** Units: **mg/kg** **Prep Info:** Prep Date: **5/4/2023** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	55.2	1.0	49.35	0	112	80	120				
Cadmium	28.2	1.0	24.68	0	114	80	120				
Copper	58.2	1.8	49.35	0	118	80	120				
Lead	56.0	1.1	49.35	0	113	80	120				
Zinc	54.9	7.6	49.35	0	111	80	120				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICPMS205-H_230505A: 61** SampType: **Post Digestion/Distillation Spike** Lab ID: **H23050062-001APDS1** Method: **SW6020**
Analysis Date: **05/05/23 12:43** Units: **mg/kg-dry** **Prep Info:** Prep Date: **5/4/2023** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	16.5	1.0	12.42	3.839	102	75	125				
Cadmium	13.8	1.0	12.42	0.1683	109	75	125				
Copper	30.9	1.8	12.42	17.85	105	75	125				
Lead	26.0	1.1	12.42	12.64	107	75	125				
Zinc	62.5	7.7	12.42	50.72		75	125				A

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICPMS205-H_230505A: 62** SampType: **Sample Matrix Spike** Lab ID: **H23050062-001AMS** Method: **SW6020**
Analysis Date: **05/05/23 12:45** Units: **mg/kg-dry** **Prep Info:** Prep Date: **5/4/2023** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	53.2	1.0	49.95	3.839	99	75	125				
Cadmium	27.6	1.0	24.98	0.1683	110	75	125				
Copper	75.0	1.8	49.95	17.85	114	75	125				
Lead	67.8	1.1	49.95	12.64	111	75	125				
Zinc	111	7.7	49.95	50.72	121	75	125				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H23050062

BatchID: 66304

Date: *15-May-23*

Run ID :Run Order: **ICPMS205-H_230505A: 63** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H23050062-001AMSD** Method: **SW6020**

Analysis Date: **05/05/23 12:48** Units: **mg/kg-dry** **Prep Info:** Prep Date: **5/4/2023** Prep Method: **SW3050 B**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	56.9	1.0	49.55	3.839	**107**	75	125	53.2	**6.7**	20	
Cadmium	28.7	1.0	24.78	0.1683	**115**	75	125	27.65	**3.8**	20	
Copper	80.2	1.8	49.55	17.85	**126**	75	125	75	**6.8**	20	S
Lead	71.6	1.1	49.55	12.64	**119**	75	125	67.85	**5.3**	20	
Zinc	117	7.6	49.55	50.72	**134**	75	125	111	**5.4**	20	S

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice

Prepared by Helena, MT Branch

Work Order: H23050062

BatchID: PMOIST_230502_A

Date: *15-May-23*

Run ID :Run Order: **SOIL DRYING OVEN 2_230503A: 2** SampType: **Sample Duplicate** Lab ID: **H23050054-010C DUP** Method: **D2974**

Analysis Date: **05/02/23 12:12** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	4.80	0.20		0				5.31	**10**	20	

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: R184287
Date: *15-May-23*

Run ID :Run Order: **ICP2-HE_230504B: 15** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6010B**
Analysis Date: **05/04/23 11:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	40.2	1.0	40	0	100	90	110				
Magnesium	40.0	1.0	40	0	100	90	110				
Sodium	41.0	1.0	40	0	103	90	110				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICP2-HE_230504B: 16** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6010B**
Analysis Date: **05/04/23 11:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	25.9	1.0	25	0	104	90	110				
Magnesium	25.8	1.0	25	0	103	90	110				
Sodium	25.2	1.0	25	0	101	90	110				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICP2-HE_230504B: 19** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6010B**
Analysis Date: **05/04/23 12:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	470	1.0	500	0	94	80	120				
Magnesium	503	1.0	500	0	101	80	120				
Sodium	0.0178	1.0		0		0	0				U

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICP2-HE_230504B: 20** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6010B**
Analysis Date: **05/04/23 12:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	466	1.0	500	0	93	80	120				
Magnesium	503	1.0	500	0	101	80	120				
Sodium	20.0	1.0	20	0	100	80	120				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: R184306
Date: *15-May-23*

Run ID :Run Order: **ICPMS205-H_230505A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW6020**
Analysis Date: **05/05/23 10:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0569	0.0010	0.06	0	95	90	110				
Cadmium	0.0290	0.0010	0.03	0	97	90	110				
Copper	0.0587	0.0010	0.06	0	98	90	110				
Lead	0.0569	0.0010	0.06	0	95	90	110				
Zinc	0.0583	0.0013	0.06	0	97	90	110				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICPMS205-H_230505A: 15** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **SW6020**
Analysis Date: **05/05/23 10:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0000391	0.0010		0							U
Cadmium	0.0000761	0.0010		0							U
Copper	-0.0000586	0.0010		0							U
Lead	-0.0000277	0.0010		0							U
Zinc	0.000148	0.0013		0							U

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICPMS205-H_230505A: 17** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **SW6020**
Analysis Date: **05/05/23 10:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.00970	0.0010	0.01	0	97	70	130				
Cadmium	0.00957	0.0010	0.01	0	96	70	130				
Copper	0.0193	0.0010	0.02	0	97	70	130				
Lead	-0.0000219	0.0010		0		0	0				U
Zinc	0.00992	0.0013	0.01	0	99	70	130				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: R184306
Date: *15-May-23*

Run ID :Run Order: **ICPMS205-H_230505A: 20** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6020**
Analysis Date: **05/05/23 10:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0497	0.0010	0.05	0	**99**	90	110				
Cadmium	0.0506	0.0010	0.05	0	**101**	90	110				
Copper	0.0502	0.0010	0.05	0	**100**	90	110				
Lead	0.0499	0.0010	0.05	0	**100**	90	110				
Zinc	0.0513	0.0013	0.05	0	**103**	90	110				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **ICPMS205-H_230505A: 49** SampType: **Continuing Calibration Verification Standard** Lab ID: **CCV** Method: **SW6020**
Analysis Date: **05/05/23 12:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0518	0.0010	0.05	0	**104**	90	110				
Cadmium	0.0506	0.0010	0.05	0	**101**	90	110				
Copper	0.0518	0.0010	0.05	0	**104**	90	110				
Lead	0.0507	0.0010	0.05	0	**101**	90	110				
Zinc	0.0520	0.0013	0.05	0	**104**	90	110				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

ANALYTICAL QC SUMMARY REPORT

Client: MT Dept of Justice
Prepared by Helena, MT Branch
Work Order: H23050062
BatchID: R184341
Date: *15-May-23*

Run ID :Run Order: **SOIL CALC_230508A: 10** SampType: **Sample Duplicate** Lab ID: **H23050062-003ADUP** Method: **USDA20b**
Analysis Date: **05/08/23 14:31** Units: **unitless** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	8.00	0.10		0				7.83	**2.1**	30	

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Run ID :Run Order: **SOIL CALC_230508A: 14** SampType: **Laboratory Control Sample** Lab ID: **LCS-66282** Method: **USDA20b**
Analysis Date: **05/08/23 14:31** Units: **unitless** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium Adsorption Ratio (SAR)	6.30	0.10	6.034	0	**104**	80	120				

Associated samples: **H23050062-001A, H23050062-002A, H23050062-003A, H23050062-004A, H23050062-005A, H23050062-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Work Order Receipt Checklist

MT Dept of Justice

H23050062

Login completed by: Taylor K. Jones

Date Received: 5/2/2023

Reviewed by: wjohnson

Received by: tkj

Reviewed Date: 5/2/2023

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	21.8°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

The collection time and date were not provided on the sample containers. Proceeded with the collection time and date provided on the COC.
Analyze on dry weight basis per email/phone conversation from Stephen Frazee on 5/2/23.
tj 5/3/23

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Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing information)

Company/Name: NRD - Parrot Tailings removal (#700157)
Contact: Sim Ford
Phone: 406-439-2108
Mailing Address: 1720 9th Ave. P.O. Box 201425
City, State, Zip: Helena, MT 59620-1425
Email: SFord@mt.gov
Receive Invoice ☐Hard Copy ☑Email | Receive Report ☐Hard Copy ☐Email
Purchase Order | Quote | Bottle Order

Report Information (if different than Account Information)

Company/Name: Water + Environmental Technologies
Contact: Rial Gunlikson
Phone: 406-471-5336
Mailing Address: 480 East Park St.
City, State, Zip: Butte, MT 59701
Email: rgunlikson@waterenvtech.com
Receive Report ☐Hard Copy ☑Email
Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other

Comments

Project Information

Project Name, PWSID, Permit, etc.: Parrot Tailings Removal
Sampler Name: Rial Gunlikson | Sampler Phone: 406-471-5336
Sample Origin State | EPA/State Compliance ☑ Yes ☐ No
MINING CLIENTS, please indicate sample type.
*If ore has been processed or refined, call before sending.
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)*

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	Texture Class	Particle Size	Saturation %	Electrical Conductivity	Metals: As, Cd, Cu, Pb, Zn	SAR	pH			See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	E1836	4/24	9:30 AM	1	S	x	x	x	x	x	x	x					H23050062
2	E1837			1	S	x	x	x	x	x	x	x					
3	E1838			1	S	x	x	x	x	x	x	x					
4	E1839			1	S	x	x	x	x	x	x	x					
5	E1840			1	S	x	x	x	x	x	x	x					
6	E1841			1	S	x	x	x	x	x	x	x					
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Rial Gunlikson	5/2/23 @		CORY ORRINO 10:30	5/2/23 10:30	
	Relinquished by (print) CORY ORRINO	Date/Time 5/2/23 12:02pm	Signature	Received by Laboratory (print) Taylor Jones	Date/Time 5/2/23 1202	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
Hand	Y	Y N C B	Y N	21.8 °C	Y N	Y N	CC Cash Check	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-12/16 v.1

Table C6. Parrot Removal In-Situ - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Individual Field ID	Field XRF Results, ppm				
						As	Cd	Cu	Pb	Zn
NWE ET Area	NWE ET area- North of Shields Ave. SE stockpile.	In situ samples - NWE soil grading. Graded material is topsoil/vegetative material from 0-12". Original disposal lcoation was county landfill. Sample results redirected disposal to MR.	SE Stockpile near NWE Meter Station/SP-NWE-A: Est. 150 yd3	0-12" soil grubbing	20210506-Parrot-OB-Insitu-001	29	<LOD	**1522**	107	570
					20210506-Parrot-OB-Insitu-002	27	<LOD	**1559**	126	606
					20210506-Parrot-OB-Insitu-003	20	<LOD	**1213**	88	484
	NWE ET area - North of Shields Ave. SW stockpile		SW Stockpile near Shields Ave/SP-NWE-B: Est. 740 yd3	0-12" soil grubbing	20210506-Parrot-OB-Insitu-004	30	<LOD	**1298**	120	622
					20210506-Parrot-OB-Insitu-005	<LOD	<LOD	**1421**	548	575
					20210506-Parrot-OB-Insitu-006	29	<LOD	**1075**	108	518
	NWE ET area- North of Shields Ave. NW stockpile		NW stockpile near Railroad Tracks/SP-NWE-C: Est. 444 yd3	0-12" soil grubbing	20210506-Parrot-OB-Insitu-007	24	<LOD	**1096**	97	481
					20210506-Parrot-OB-Insitu-008	21	<LOD	**1074**	110	480
					20210506-Parrot-OB-Insitu-009	25	<LOD	**1025**	85	502
NWE ET Area	NWE ET area - North of Shields Ave . North of SE guy wire anchors ~50'	In situ samples - NWE Subgrade soil beneath vegetated surface cover. Material tests varied from 6-24". Project manager wanted samples of material following the stripping/grubbing of surface vegetation and material.	~50' North of guywire anchors. NWE-SUR-A: 2,561sqft	6-24" subrgrade	20210510-Parrot-OB-Insitu-010	17	<LOD	**1308**	95	558
					20210510-Parrot-OB-Insitu-011	14	<LOD	**1209**	86	535
					20210510-Parrot-OB-Insitu-012	26	<LOD	**2067**	228	680
	NWE ET area- West of NWE meter house ~150'		~150' West of NWE meter house. NWE-SUR-B: 1,449sqft	6-24" subrgrade	20210510-Parrot-OB-Insitu-013	18	<LOD	809	73	404
					20210510-Parrot-OB-Insitu-014	16	<LOD	653	104	374
					20210510-Parrot-OB-Insitu-015	25	<LOD	735	64	371
	NWE ET area- North of AMW 8 well ~50'		~50' North of AMW 8 well site. NWE-SUR-C: 3,035sqft	6-24" subrgrade	20210510-Parrot-OB-Insitu-016	18	<LOD	**1236**	117	529
					20210510-Parrot-OB-Insitu-017	18	<LOD	**1174**	88	513
					20210510-Parrot-OB-Insitu-018	16	<LOD	**1240**	108	487
	NWE ET area- South of AMW 11 well ~75'		~75' South of AMW 11 well site. NWE-SUR-D: 5,674sqft	6-24" subrgrade	20210510-Parrot-OB-Insitu-019	<LOD	<LOD	918	130	430
					20210510-Parrot-OB-Insitu-020	17	<LOD	747	76	367
					20210510-Parrot-OB-Insitu-021	22	<LOD	771	84	414
	NWE ET area - 25' South of North berm		~25' South of North berm. Center of parcel. NWE-SUR-E: 5,212 sqft	6-24" subrgrade	20210510-Parrot-OB-Insitu-022	19	<LOD	853	88	385
					20210510-Parrot-OB-Insitu-023	27	<LOD	**1005**	95	515
					20210510-Parrot-OB-Insitu-024	21	<LOD	934	230	454
Southern Project Boarder	Southern Boarder Silt Fence Disturbance	Sampled 2 areas with 8-pt composite samples, sample current southern excavation for different soil types and textures to visually determine waste material.	Southern Boarder Silt Fence Disturbance - 8 Point Composite Sample, light brown topsoil (Composite 1)	0-12" topsoil grubbing	20210511-Parrot-OB-Insitu-025	<LOD	<LOD	87	155	245
					20210511-Parrot-OB-Insitu-026	14	<LOD	70	27	141
					20210511-Parrot-OB-Insitu-027	12	<LOD	108	63	202
	Southern Boarder Asphalt Removal Area		Southern Boarder of asphalt removal area - 8 Point Composite Sample, road base material (Composite 2)	Surface of subgrade directly below asphalt	20210511-Parrot-OB-Insitu-028	<LOD	<LOD	242	47	220
					20210511-Parrot-OB-Insitu-029	14	<LOD	364	49	238
					20210511-Parrot-OB-Insitu-030	20	<LOD	298	54	268
Southwestern excavation cut	Grab sample at base of current excavation		Yellow compacted layer of fine material surrounded by sandy overburden (Grab 1)	12" bgs	20210511-Parrot-TA-Insitu-031	158	<LOD	608	**1841**	**2602**
					20210511-Parrot-TA-Insitu-032	124	<LOD	502	**1391**	**2469**
					20210511-Parrot-TA-Insitu-033	134	<LOD	582	**1657**	**1760**
	Grab sample at base of current excavation		Light brown sandy material/overburden layer (Grab 2)	10' bgs	20210511-Parrot-OB-Insitu-034	14	<LOD	388	169	501
					20210511-Parrot-OB-Insitu-035	16	<LOD	333	74	632
					20210511-Parrot-OB-Insitu-036	15	<LOD	410	112	519
	Grab sample at base of current excavation		Gray sandy material/overburden layer (Grab 3)	10' bgs	20210511-Parrot-OB-Insitu-037	14	<LOD	122	58	555
					20210511-Parrot-OB-Insitu-038	22	<LOD	134	53	634
					20210511-Parrot-OB-Insitu-039	11	<LOD	131	38	223
	Grab sample at base of current excavation		Gray gravelly material layered between sandy overburden material (Grab 4)	8' bgs	20210511-Parrot-SG-Insitu-040	183	16	**2582**	902	**12800**
					20210511-Parrot-SG-Insitu-041	**201**	9	**2669**	**1084**	**14000**
					20210511-Parrot-SG-Insitu-042	171	15	**2209**	827	**9786**
	Grab sample at base of current excavation		Pink, rocky material, looks like normal OB material but is elevated (Grab 5)	0-2' bgs	20210511-Parrot-OB-Insitu-043	151	9	669	308	**1498**
					20210511-Parrot-OB-Insitu-044	135	<LOD	615	381	**1908**
					20210511-Parrot-OB-Insitu-045	113	<LOD	540	292	**1776**

Sampling Labeling Schema

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Note: Values in bold exceed action levels .

NA = Not Applicable

Table C6. Parrot Removal In-Situ - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	**Sample Location**	**General Description of Day's Field Work**	**Field Notes**	**Sample Depth (ft bgs)**	**Individual Field ID**	**Field XRF Results, ppm**				
						As	**Cd**	**Cu**	**Pb**	**Zn**
West Fire Hydrant Installation Dig. CC parking lot.	Grab sample of sidewall of fire hydrant dig	I took 2 grab samples from the new fire hydrant installation dig on the West side of operations area outside of security fence. ICS was removing material to tie into existing WA main with new hydrant. While excavating, I noticed yellowish sand material that was determined we needed a sample of it. ~1061sqft at 8' deep	Grab #1 - Black/gray fine gravely material - OB.	0-3' bgs	20210519-Parrot-OB-Insitu-046	68	<LOD	694	460	**1173**
					20210519-Parrot-OB-Insitu-047	**1685**	<LOD	**2733**	553	**1580**
					20210519-Parrot-OB-Insitu-048	108	<LOD	797	584	**4264**
	Grab sample of sidewall of fire hydrant dig		Grab #2 - Yellow/Orange fine material	3'-8' bgs	20210519-Parrot-TA-Insitu-049	**436**	<LOD	343	675	685
					20210519-Parrot-TA-Insitu-050	**400**	<LOD	322	790	667
					20210519-Parrot-TA-Insitu-051	**402**	<LOD	346	737	832
Topsoil & Lawn section of Parrot	3 Stockpiles of gubbed landscape (Sod, Topsoil, etc.) N side of Excavation area	ICS requested samples of the landscape material they stockpiled in 3 locations after grubbing the vegetation in preparation for Mass Excav. 3, 8-point comp in-situ samples were taken from each stockpile	East Stockpile: E-Land-SP#1. ~2,058sqft. ~111cyds	0-12" topsoil grubbing	20210601-Parrot-OB-Insitu-052	12	<LOD	202	50	196
					20210601-Parrot-OB-Insitu-053	18	<LOD	227	43	186
					20210601-Parrot-OB-Insitu-054	12	<LOD	153	56	188
			Middle Stockpile: Mid-Land-SP#2. ~1,826sqft. ~324cyds	0-12" topsoil grubbing	20210601-Parrot-OB-Insitu-055	22	<LOD	149	141	247
					20210601-Parrot-OB-Insitu-056	36	<LOD	234	154	310
					20210601-Parrot-OB-Insitu-057	21	<LOD	134	93	191
			West Stockpile: W-Land-SP#3. ~3418sqft. ~777cyds	0-12" topsoil grubbing	20210601-Parrot-OB-Insitu-058	20	<LOD	195	73	438
					20210601-Parrot-OB-Insitu-059	22	<LOD	150	72	228
					20210601-Parrot-OB-Insitu-060	24	<LOD	323	182	635
Southwestern Excavation Cut	SW corner of proposed overburden stockpile area	Insitu sampling to identify waste material at several locations	Confirmation sampling - OB Removal Area	Surface soils	20210615-Parrot-OB-Insitu-061	<LOD	<LOD	238	217	435
					20210615-Parrot-OB-Insitu-062	<LOD	<LOD	179	100	339
					20210615-Parrot-OB-Insitu-063	27	<LOD	284	183	740
					20210615-Parrot-OB-Insitu-064	52	<LOD	480	218	563
					20210615-Parrot-OB-Insitu-065	32	<LOD	294	113	307
					20210615-Parrot-OB-Insitu-066	20	<LOD	158	136	396
					20210615-Parrot-OB-Insitu-067	20	<LOD	198	137	366
					20210615-Parrot-OB-Insitu-068	28	<LOD	223	165	769
					20210615-Parrot-OB-Insitu-069	<LOD	<LOD	95	75	247
					20210615-Parrot-OB-Insitu-070	10	<LOD	198	36	195
					20210615-Parrot-OB-Insitu-071	35	<LOD	289	123	432
					20210615-Parrot-OB-Insitu-072	<LOD	<LOD	57	53	215
					20210615-Parrot-OB-Insitu-073	<LOD	<LOD	110	40	182
					20210615-Parrot-OB-Insitu-074	91	<LOD	448	703	**1077**
					20210615-Parrot-OB-Insitu-075	41	<LOD	174	111	309
					20210615-Parrot-OB-Insitu-076	8	<LOD	38	32	89
					20210615-Parrot-OB-Insitu-077	102	<LOD	731	612	**1286**
Southwestern excavation cut	SW corner of proposed overburden stockpile area	Insitu sampling to identify waste material at several locations	Confirmation sampling - OB Removal Area-Petroleum Contaminated	Surface Soils	20210615-Parrot-OB-Insitu-078	**307**	<LOD	448	764	456
					20210615-Parrot-OB-Insitu-079	**221**	<LOD	295	564	673
					20210615-Parrot-OB-Insitu-080	102	<LOD	740	**1195**	**1336**
Southern Excavation cut	Highwall Sample	Insitu sampling to identify waste material at several locations	Confirmation sampling - SL Removal Area	Surface Soils	20210615-Parrot-SL-Insitu-081	**308**	<LOD	**6368**	**1154**	**13500**
Southern Excavation cut	Highwall Sample	Insitu sampling to identify waste material at several locations	Confirmation sample-OB Removal Area-Above Slag Layer	Surface Soils	20210615-Parrot-OB-Insitu-082	80	<LOD	403	159	**1266**
					20210615-Parrot-OB-Insitu-083	10	<LOD	28	17	99
					20210615-Parrot-OB-Insitu-084	27	<LOD	205	73	617

Sampling Labeling Schema

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Table C6. Parrot Removal In-Situ - XRF Sampling - Phase 2C

Action Levels - As = 200 ppm, Cd = 20 ppm, Cu = 1000 ppm, Pb = 1000 ppm, Zn = 1000 ppm										
Grid Location	Sample Location	General Description of Day's Field Work	Field Notes	Sample Depth (ft bgs)	Individual Field ID	Field XRF Results, ppm				
						As	Cd	Cu	Pb	Zn
Southern Excavation cut	Top of berm	Insitu sampling to identify waste material at several locations	Confirmation sample-OB Removal Area-After Cleanup	Surface Soils	20210615-Parrot-OB-Insitu-085	42	<LOD	208	94	319
					20210615-Parrot-OB-Insitu-086	32	<LOD	320	142	601
					20210615-Parrot-OB-Insitu-087	25	<LOD	387	390	525
					20210615-Parrot-OB-Insitu-088	37	<LOD	340	237	592
					20210615-Parrot-OB-Insitu-089	12	<LOD	97	39	168
					20210615-Parrot-OB-Insitu-090	14	<LOD	137	59	292
					20210615-Parrot-OB-Insitu-091	9	<LOD	42	22	54
					20210615-Parrot-OB-Insitu-092	<LOD	<LOD	34	29	112
					20210615-Parrot-OB-Insitu-093	18	<LOD	134	64	367
					20210615-Parrot-OB-Insitu-094	33	<LOD	320	125	736
					20210615-Parrot-OB-Insitu-095	14	<LOD	109	37	261
					20210615-Parrot-OB-Insitu-096	49	<LOD	227	223	802
					20210615-Parrot-OB-Insitu-097	24	<LOD	199	105	719
					20210615-Parrot-OB-Insitu-098	24	<LOD	157	79	**1409**
Southern Excavation cut	S corner of 3 piles	Insitu sampling to identify waste material at several locations	Confirmation sample-Waterline Soil	Surface soils	20210615-Parrot-OB-Insitu-099	137	<LOD	218	388	240
					20210615-Parrot-OB-Insitu-100	30	<LOD	256	105	364
					20210615-Parrot-OB-Insitu-101	**317**	<LOD	**20800**	**1537**	**8412**
Northwest Perimeter Test Pits	Test Pit #1 - South - Yellow TA	Insitu shots of different colored stratifications within 3 test pits along the Northwest perimeter fence.	Test Pit 1 - Yellow TA	0-2'	20220727-Parrot-TA-Insitu-102	124	<LOD	900	274	879
					20220727-Parrot-TA-Insitu-103	106	<LOD	250	219	212
					20220727-Parrot-TA-Insitu-104	**307**	<LOD	255	495	601
	Test Pit #1 - South - Black		Test Pit 1 - Black Material	2-4'	20220727-Parrot-TA-Insitu-105	127	16	**1810**	877	**2514**
					20220727-Parrot-TA-Insitu-106	158	13	**1704**	503	**2361**
					20220727-Parrot-TA-Insitu-107	149	<LOD	**1137**	783	**1978**
	Test Pit #1 - South - Red		Test Pit 1 - Red TA	4-8'	20220727-Parrot-TA-Insitu-108	**384**	<LOD	343	**1350**	**1027**
					20220727-Parrot-TA-Insitu-109	**235**	<LOD	413	660	**1359**
					20220727-Parrot-TA-Insitu-110	**310**	<LOD	369	375	967
	Test Pit #2 - Mid - Yellow TA		Test Pit 2 - Yellow TA	0-3'	20220727-Parrot-TA-Insitu-111	**1227**	<LOD	368	609	274
					20220727-Parrot-TA-Insitu-112	**669**	<LOD	409	612	491
					20220727-Parrot-TA-Insitu-113	**308**	<LOD	316	634	**1054**
	Test Pit #2 - Mid - Black		Test Pit 2 - Black Material	3-5'	20220727-Parrot-TA-Insitu-114	**284**	17	**2641**	920	**2687**
					20220727-Parrot-TA-Insitu-115	64	<LOD	485	404	**3489**
					20220727-Parrot-TA-Insitu-116	124	10	**1217**	419	**3070**
	Test Pit #2 - Mid - Red		Test Pit 2 - Red TA	5-7'	20220727-Parrot-TA-Insitu-117	<LOD	<LOD	809	**1963**	769
					20220727-Parrot-TA-Insitu-118	31	<LOD	691	481	**1724**
					20220727-Parrot-TA-Insitu-119	29	<LOD	283	568	740
	Test Pit #3 - North - Yellow TA		Test Pit 3 - Yellow TA	0-3'	20220727-Parrot-TA-Insitu-120	**458**	<LOD	361	622	537
					20220727-Parrot-TA-Insitu-121	**490**	<LOD	235	664	550
					20220727-Parrot-TA-Insitu-122	**288**	**62**	**1105**	600	568
	Test Pit #3 - North - Black		Test Pit 3 - Black Material (Note: no underlaying Red TA in this location)	3-6'	20220727-Parrot-TA-Insitu-123	**227**	18	**2172**	**1236**	**2970**
					20220727-Parrot-TA-Insitu-124	103	<LOD	885	639	**1528**
					20220727-Parrot-TA-Insitu-125	108	<LOD	**1273**	820	**2350**

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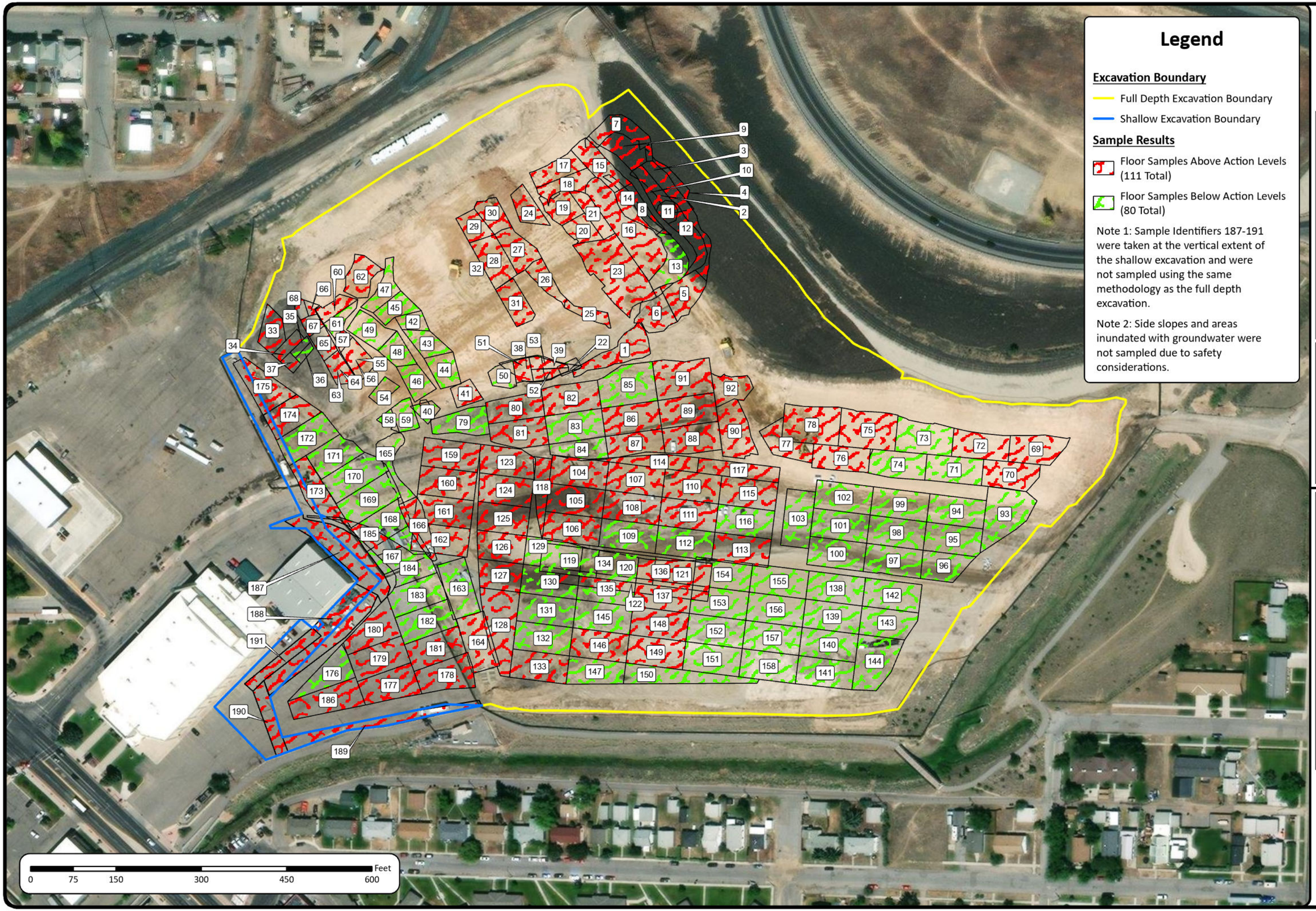

NO.	DESCRIPTION	DATE	DRAFT	REVIEW
1				
2				
3				
4				
5				

NOTES

NRDP PARROT TAILINGS REMOVAL

FLOOR SAMPLE ACTION LEVELS AND IDENTIFIERS - PHASE 2A & 2C

FIGURE 2

JOB#: (NRDPM15)

DATE: 3/20/2024

Path: K:\PROJECTS\NRDPM15 - Parrot PLC Construction Management\1200 - XRF Data\CRR Working

Water & Environmental TECHNOLOGIES

GIS Identifier	Sample ID	As	Cd	Cu	Pb	Zn
1	180911-Parrot-RK-C-139	103	8	**2185**	214	**1012**
2	180912-Parrot-RK-C-140	36	<LOD	**1725**	132	876
3	180913-Parrot-RK-C-141	**314**	<LOD	**3259**	198	639
4	180918-Parrot-RK-C-142	28	<LOD	**1314**	105	658
5	180918-Parrot-RK-C-143	41	<LOD	**1330**	54	714
6	180918-Parrot-RK-C-144	117	<LOD	**3630**	165	949
7	180918-Parrot-RK-C-145	**468**	<LOD	**1001**	404	559
8	180918-Parrot-RK-C-146	120	<LOD	**2604**	323	918
9	180919-Parrot-RK-C-162	89	<LOD	**2337**	258	811
10	180919-Parrot-RK-C-163	35	<LOD	**1174**	181	739
11	180919-Parrot-RK-C-164	68	<LOD	**1718**	267	**1092**
12	180920-Parrot-RK-C-165	67	<LOD	**1009**	274	699
13	180928-Parrot-RK-C-166	52	<LOD	876	130	771
14	180928-Parrot-RK-C-167	52	<LOD	**1145**	209	971
15	180928-Parrot-RK-C-168	45	<LOD	**1215**	191	**1087**
16	180928-Parrot-RK-C-169	54	<LOD	**1158**	157	953
17	180928-Parrot-RK-C-170	37	<LOD	**1122**	188	**1238**
18	180928-Parrot-RK-C-171	51	<LOD	569	212	**1103**
19	181001-Parrot-RK-C-175	36	<LOD	525	214	**1041**
20	181001-Parrot-RK-C-176	47	<LOD	**1893**	207	**1512**
21	181001-Parrot-RK-C-177	44	<LOD	810	215	**1078**
22	181002-Parrot-RK-C-182	66	<LOD	631	118	425
23	181002-Parrot-RK-C-183	83	<LOD	**3211**	120	786
24	181016-Parrot-RK-C-192	56	<LOD	996	333	**2336**
25	181026-Parrot-RK-C-226	114	<LOD	**2702**	200	**1356**
26	181026-Parrot-RK-C-227	49	<LOD	**1036**	109	**1072**
27	181026-Parrot-RK-C-228	58	9	**1033**	102	**1417**
28	181026-Parrot-RK-C-229	45	<LOD	910	144	**2298**
29	181026-Parrot-RK-C-230	48	<LOD	921	147	**1741**
30	181026-Parrot-RK-C-231	62	<LOD	**1626**	213	**2512**
31	181026-Parrot-RK-C-232	101	<LOD	**1236**	178	**1420**
32	181102-Parrot-Rk-C-244	67	<LOD	**1053**	244	**1593**
33	181109-Parrot-RK-C-255	58	<LOD	925	258	**1600**
34	181109-Parrot-RK-C-256	176	19	408	407	**1148**
35	181109-Parrot-RK-C-258	104	<LOD	421	192	743
36	181109-Parrot-RK-C-259	64	<LOD	333	95	515
37	181109-Parrot-RK-C-260	177	<LOD	474	391	1000
38	181112-Parrot-RK-C-261	12	<LOD	280	51	248
39	181112-Parrot-RK-C-262	104	**28**	**1934**	175	861
40	181113-Parrot-RK-C-263	87	<LOD	880	237	545
41	181113-Parrot-RK-C-266	65	20	**1201**	230	611
42	181114-Parrot-RK-C-267	39	<LOD	823	62	865

Sampling Labeling Schema

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Note: Values in bold exceed action levels .

GIS Identifier	Sample ID	As	Cd	Cu	Pb	Zn
43	181114-Parrot-RK-C-268	75	<LOD	755	94	904
44	181114-Parrot-RK-C-269	68	<LOD	832	86	724
45	181114-Parrot-RK-C-270	41	<LOD	795	32	785
46	181114-Parrot-RK-C-271	88	<LOD	931	96	675
47	181114-Parrot-RK-C-272	30	<LOD	698	42	783
48	181114-Parrot-RK-C-273	44	<LOD	658	84	768
49	181114-Parrot-RK-C-274	44	<LOD	628	51	820
50	181115-Parrot-RK-C-275	35	<LOD	564	73	465
51	181115-Parrot-RK-C-277	53	<LOD	**1870**	71	666
52	181115-Parrot-RK-C-278	68	<LOD	**4222**	206	894
53	181115-Parrot-RK-C-279	28	**71**	904	127	**1218**
54	181116-Parrot-RK-C-284	46	<LOD	553	108	846
55	181119-Parrot-RK-C-285	71	<LOD	786	151	**1480**
56	181119-Parrot-RK-C-286	24	<LOD	467	108	904
57	181119-Parrot-RK-C-287	90	<LOD	923	173	**1279**
58	181120-Parrot-RK-C-288	163	<LOD	636	198	724
59	181120-Parrot-RK-C-289	100	<LOD	378	164	356
60	181120-Parrot-RK-C-293	43	<LOD	587	121	**1038**
61	181120-Parrot-RK-C-294	92	<LOD	658	140	764
62	181128-Parrot-RK-C-298	60	<LOD	**1025**	132	**1076**
63	181129-Parrot-RK-C-299	33	<LOD	384	57	600
64	181129-Parrot-RK-C-300	37	<LOD	918	153	**1503**
65	181129-Parrot-RK-C-301	83	<LOD	**1083**	361	**1886**
66	181130-Parrot-RK-C-302	33	<LOD	716	346	**1260**
67	181130-Parrot-RK-C-303	38	<LOD	779	365	**1459**
68	181130-Parrot-RK-C-304	38	<LOD	**1860**	357	**2389**
69	20210719-Parrot-RK-C-228	17	8	**1403**	83	785
70	20210719-Parrot-RK-C-229	47	<LOD	638	129	**1261**
71	20210719-Parrot-RK-C-230	73	17	791	115	873
72	20210719-Parrot-RK-C-231	29	<LOD	760	115	**1308**
73	20210719-Parrot-RK-C-236	50	<LOD	619	172	773
74	20210719-Parrot-RK-C-237	140	<LOD	740	141	501
75	20210720-Parrot-RK-C-238	151	<LOD	**1121**	248	760
76	20210721-Parrot-RK-C-239	**364**	<LOD	**1253**	136	741
77	20210721-Parrot-RK-C-240	82	<LOD	**2704**	130	**1144**
78	20210721-Parrot-RK-C-241	93	**24**	**4965**	162	873
79	20210809-Parrot-RK-C-384	27	<LOD	635	99	729
80	20210809-Parrot-RK-C-385	48	<LOD	**1395**	123	855
81	20210809-Parrot-RK-C-386	36	9	**1017**	107	857
82	20210809-Parrot-RK-C-387	31	8	**1036**	109	766
83	20210809-Parrot-RK-C-388	25	14	725	111	813
84	20210809-Parrot-RK-C-389	38	<LOD	380	81	975

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Note: Values in bold exceed action levels .

GIS Identifier	Sample ID	As	Cd	Cu	Pb	Zn
85	20210810-Parrot-RK-C-391	29	11	537	103	831
86	20210810-Parrot-RK-C-392	25	<LOD	**1943**	101	461
87	20210810-Parrot-RK-C-393	27	<LOD	**1675**	129	520
88	20210811-Parrot-RK-C-394	34	<LOD	**1942**	113	708
89	20210811-Parrot-RK-C-395	123	<LOD	**2115**	183	787
90	20210811-Parrot-RK-C-396	59	<LOD	**1731**	87	580
91	20210811-Parrot-RK-C-397	38	<LOD	**2039**	107	623
92	20210811-Parrot-RK-C-398	43	<LOD	**2516**	157	**1074**
93	20210909-Parrot-RK-C-538	29	<LOD	669	112	592
94	20210909-Parrot-RK-C-539	52	<LOD	667	99	556
95	20210909-Parrot-RK-C-540	63	<LOD	631	94	506
96	20210909-Parrot-RK-C-541	43	<LOD	571	73	509
97	20210909-Parrot-RK-C-542	71	<LOD	435	103	428
98	20210909-Parrot-RK-C-543	31	<LOD	420	49	432
99	20210909-Parrot-RK-C-544	29	<LOD	352	41	319
100	20210909-Parrot-RK-C-545	61	<LOD	596	58	384
101	20210909-Parrot-RK-C-546	70	<LOD	358	41	280
102	20210909-Parrot-RK-C-547	40	<LOD	336	68	250
103	20210909-Parrot-RK-C-548	66	<LOD	291	35	248
104	20211007-Parrot-RK-C-678	49	12	**1152**	103	**1252**
105	20211007-Parrot-RK-C-679	50	<LOD	**1225**	127	**1199**
106	20211007-Parrot-RK-C-680	58	<LOD	**1063**	108	**1018**
107	20211007-Parrot-RK-C-681	62	8	954	78	**1603**
108	20211007-Parrot-RK-C-682	58	14	**1338**	90	802
109	20211007-Parrot-RK-C-683	120	<LOD	627	81	483
110	20211007-Parrot-RK-C-684	124	9	**2548**	156	907
111	20211007-Parrot-RK-C-685	168	<LOD	**1045**	95	846
112	20211007-Parrot-RK-C-686	176	<LOD	388	53	267
113	20211008-Parrot-RK-C-687	137	8	**1288**	67	392
114	20211008-Parrot-RK-C-688	111	<LOD	724	54	391
115	20211007-Parrot-RK-C-689	**238**	<LOD	575	32	294
116	20211008-Parrot-RK-C-690	91	<LOD	**1546**	100	364
117	20211007-Parrot-RK-C-691	66	<LOD	**2625**	85	600
118	20211008-Parrot-RK-C-692	40	15	**1726**	89	908
119	20211129-Parrot-RK-C-965	98	<LOD	585	55	350
120	20211129-Parrot-RK-C-966	141	<LOD	622	63	410
121	20211129-Parrot-RK-C-967	**286**	<LOD	549	65	395
122	20211129-Parrot-RK-C-968	**306**	<LOD	525	174	326
123	20211213-Parrot-RK-C-1014	68	<LOD	**1514**	92	**1043**
124	20211213-Parrot-RK-C-1015	102	<LOD	**1951**	109	764
125	20211213-Parrot-RK-C-1016	69	<LOD	**2132**	86	**1006**
126	20211213-Parrot-RK-C-1017	50	<LOD	**1462**	78	783

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Note: Values in bold exceed action levels .

GIS Identifier	Sample ID	As	Cd	Cu	Pb	Zn
127	20211213-Parrot-RK-C-1018	94	<LOD	**1798**	120	815
128	20211213-Parrot-RK-C-1019	76	<LOD	**1619**	104	690
129	20211214-Parrot-RK-C-1020	114	<LOD	576	71	501
130	20211214-Parrot-RK-C-1021	160	<LOD	792	75	477
131	20211214-Parrot-RK-C-1022	180	<LOD	508	52	314
132	20211214-Parrot-RK-C-1023	82	<LOD	370	52	312
133	20211214-Parrot-RK-C-1024	139	<LOD	**1163**	116	686
134	20211214-Parrot-RK-C-1025	95	<LOD	289	40	241
135	20211214-Parrot-RK-C-1026	78	<LOD	433	37	340
136	20211214-Parrot-RK-C-1027	**248**	<LOD	311	72	273
137	20211214-Parrot-RK-C-1028	**260**	<LOD	549	54	504
138	20211216-Parrot-RK-C-1034	118	<LOD	477	175	398
139	20211216-Parrot-RK-C-1035	46	<LOD	254	49	270
140	20211216-Parrot-RK-C-1036	113	<LOD	253	73	190
141	20211216-Parrot-RK-C-1037	102	<LOD	247	56	212
142	20211216-Parrot-RK-C-1038	71	<LOD	422	105	366
143	20211216-Parrot-RK-C-1039	69	<LOD	325	95	314
144	20211216-Parrot-RK-C-1040	106	<LOD	348	103	362
145	20211222-Parrot-RK-C-1078	184	<LOD	281	62	246
146	20211222-Parrot-RK-C-1079	**241**	<LOD	336	94	340
147	20211222-Parrot-RK-C-1080	179	<LOD	436	86	454
148	20211222-Parrot-RK-C-1081	**243**	<LOD	314	70	364
149	20211222-Parrot-RK-C-1082	**358**	<LOD	260	64	247
150	20220110-Parrot-RK-C-1105	118	<LOD	176	66	181
151	20220110-Parrot-RK-C-1106	129	<LOD	183	116	209
152	20220110-Parrot-RK-C-1107	112	<LOD	190	44	175
153	20220110-Parrot-RK-C-1108	45	<LOD	191	34	183
154	20220110-Parrot-RK-C-1109	54	<LOD	149	50	139
155	20220110-Parrot-RK-C-1110	57	<LOD	216	60	252
156	20220110-Parrot-RK-C-1111	45	<LOD	207	82	183
157	20220110-Parrot-RK-C-1112	38	<LOD	129	25	114
158	20220110-Parrot-RK-C-1113	26	<LOD	106	42	108
159	20220120-Parrot-RK-C-1139	26	<LOD	**1125**	129	935
160	20220120-Parrot-RK-C-1140	49	<LOD	**1399**	44	548
161	20220120-Parrot-RK-C-1141	85	<LOD	**1309**	62	544
162	20220120-Parrot-RK-C-1142	69	<LOD	**1128**	52	464
163	20220120-Parrot-RK-C-1143	121	<LOD	971	87	540
164	20220120-Parrot-RK-C-1144	49	<LOD	**2224**	116	522
165	20220627-Parrot-RK-C-1304	111	9	502	125	389
166	20220627-Parrot-RK-C-1305	141	<LOD	**1009**	206	525
167	20220825-Parrot-RK-C-1339	14	<LOD	884	56	408
168	20220825-Parrot-RK-C-1340	131	<LOD	832	199	738

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Note: Values in bold exceed action levels .

GIS Identifier	Sample ID	As	Cd	Cu	Pb	Zn
169	20220825-Parrot-RK-C-1341	197	<LOD	707	273	906
170	20220825-Parrot-RK-C-1342	135	<LOD	421	158	591
171	20220825-Parrot-RK-C-1343	154	<LOD	368	197	550
172	20220825-Parrot-RK-C-1344	123	<LOD	479	190	547
173	20220825-Parrot-RK-C-1345	91	<LOD	**1212**	120	769
174	20220825-Parrot-RK-C-1346	39	<LOD	698	150	**1038**
175	20220825-Parrot-RK-C-1347	56	14	**1423**	429	**2714**
176	20221109-Parrot-RK-C-1393	64	<LOD	408	86	325
177	20221109-Parrot-RK-C-1394	39	<LOD	**1579**	80	368
178	20221109-Parrot-RK-C-1395	63	10	**1223**	92	453
179	20221115-Parrot-RK-C-1401	143	<LOD	**1250**	204	718
180	20221115-Parrot-RK-C-1402	111	<LOD	**1260**	97	479
181	20221115-Parrot-RK-C-1403	126	<LOD	**1166**	85	462
182	20221115-Parrot-RK-C-1404	70	<LOD	753	78	371
183	20221115-Parrot-RK-C-1405	63	<LOD	540	73	404
184	20221117-Parrot-RK-C-1430	69	<LOD	806	75	475
185	20221117-Parrot-RK-C-1431	42	<LOD	**1393**	87	343
186	20221122-Parrot-RK-C-1432	80	<LOD	**2132**	236	867
187	20230707-Parrot-TA-C-1453	**339**	<LOD	299	908	512
188	20230707-Parrot-TA-C-1454	**267**	9	940	**1787**	**2145**
189	20230712-Parrot-TA-C-1456	**303**	<LOD	519	420	908
190	20230712-Parrot-TA-C-1457	**266**	9	810	**1363**	**1731**
191	20230712-Parrot-TA-C-1458	**200**	<LOD	535	705	975

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Appendix D—Construction Information

Electronic Only – Available Upon Request