

**NI43-101 Technical Report
RESOURCE ESTIMATE UPDATE
FOR THE
BULL RIVER PROJECT**



Latitude 49° 30' 15", Longitude 115° 22' 54"
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Fort Steele Mining District, British Columbia, Canada

Submitted to:

Braveheart Resources Inc.
Effective Date: December 1st, 2021
Date of Submission: January 21st, 2022

Prepared by:

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CONSENT OF QUALIFIED PERSONS

I, **Sue C. Bird, P. Eng.**, consent to the public filing of the technical report titled “**Resource Estimate Update for the Bull River Project**” (the “report”) with the effective date of December 1, 2021, by Braveheart Resources Inc. I certify that I have read the News Release dated December 8, 2021, filed by Braveheart Resources Inc. and consent to this and any other News Releases relating to the report that fairly and accurately represents the information in the Sections of the Technical Report for which I am responsible.

Dated this 21st day of January 2022

“Signed and Sealed”

Sue C. Bird, M.Sc., P.Eng.
B.C. Registration No. 25007

I, **Shane Tad Crowie, P. Eng.**, consent to the public filing of the technical report titled “**Resource Estimate Update for the Bull River Project**” (the “report”) with the effective date of December 1, 2021, by Braveheart Resources Inc. I certify that I have read the News Release dated December 8, 2021, filed by Braveheart Resources Inc. and consent to this and any other News Releases relating to the report that fairly and accurately represents the information in the Sections of the Technical Report for which I am responsible.

Dated this 21st day of January 2022

“Signed and Sealed”

Tad Crowie, P.Eng.
B.C. Registration No. 35042

CERTIFICATE & DATE – Susan C. Bird

I, Susan C. Bird, M.Sc., P.Eng. do hereby certify that as a co-author of the report titled - “Resource Estimate Update for the Bull River Project”:

1. I am a Principal of Moose Mountain Technical Services, with a business address of #210 1510 2nd St North Cranbrook BC, V1C 3L2.
2. I graduated with a Geologic Engineering degree (B.Sc.) from the Queen’s University in 1989 and a M.Sc. in Mining from Queen’s University in 1993.
3. I am a member of the Association of Professional Engineers and Geoscientists of B.C. (No. 25007).
4. I have worked as an engineering geologist for over 25 years since my graduation from university. My relevant experience with Cu and Au deposits includes acting as qualified person (QP) for the resource estimate on a number of deposits including Ascot’s PGP Property, Orla’s Cerro Quema property, Artemis Blackwater project, among others.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that because of education, experience, independence, and affiliation with a professional organization, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.
6. I have read NI43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
7. I am independent of the Vendor and the Property as defined in Item 1.5 of National Instrument 43-101.
8. I visited the property on November 6th, 2018, and again on November 2nd, 2021.
1. I am responsible for Section 1 through 27, except Section 13, 1.12, 1.13.2 and 1.15 of the report entitled: “Resource Estimate Update for the Bull River Project” with an effective date of December 1, 2021.
9. I previously co-authored a resource estimate entitled: “Resource Estimate Update for the Bull River Project” with an effective date of December 1, 2021.
10. As of the date of this certificate, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

Dated this 21st day of January 2022

“signed and sealed”

Susan C. Bird, M.Sc., P.Eng.

CERTIFICATE & DATE – Shane Tad Crowie

I, Shane Tad Crowie, P.Eng. do hereby certify that as a co-author of the report titled - “Resource Estimate Update for the Bull River Project”:

2. I am currently employed as Sr. Metallurgist with JDS Energy & Mining Inc. with an office at Suite 900 – 999 West Hastings Street, Vancouver, British Columbia, V6C 2W2I.
3. I am a graduate of the University of British Columbia with a B.A.Sc. in Mining and Mineral Process Engineering, 2001.
4. I am a Registered Professional Mining Engineer in British Columbia (#34052).
5. I have practiced my profession continuously since 2001. I have worked in technical, operations and management positions at mines in Canada. I have been responsible for recovery optimization projects, capital improvement projects, budgeting, planning, and pilot plant operations.
6. I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that because of education, experience, independence, and affiliation with a professional organization, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.
7. I have read NI43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
8. I am independent of the Vendor and the Property as defined in Item 1.5 of National Instrument 43-101.
9. I visited the property on February 24, 2021.
10. I am responsible for Section 1.12, 1.13.2, 1.15, and 13 of the report entitled: “Resource Estimate Update for the Bull River Project” with an effective date of December 1, 2021.
11. I have not had previous involvement with the company.
12. As of the date of this certificate, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

Dated this 21st day of January 2022

“signed and sealed”

Shane Tad Crowie, P.Eng.

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1 Summary

1.1 Introduction

Moose Mountain Technical Services (MMTS) has prepared a technical report (the Report) for Braveheart Resources, Inc. (Braveheart) for the Mineral Resource Estimate update of the Bull River Mine ("BRM"), a deposit containing copper, gold, and silver located in the Fort Steele Mining Division near Cranbrook, British Columbia. The property consists of 2 mineral leases and 25 mineral claims. Braveheart has a 100% ownership in the Bull River Mine in the East Kootenays of southeast British Columbia, approximately 30 kilometres from Cranbrook. Reasons for the update include;

1. Updated drilling and data verification.
2. Updated geologic modelling and modelling parameters.
3. Changes in the economic conditions, including a higher copper price.

Table 1-1 summarizes the Indicated and Inferred resource estimate for the Project at the base case Copper Equivalent (CuEq) grade of 0.9% CuEq. The in-situ resource has been constrained to cohesive shapes that have a true thickness value of greater than 2.0m to apply the "reasonable prospects of eventual economic extraction" to the resource. The average thickness of both the Indicated and Inferred resource is 5.5m.

Table 1-1 Summary of the Bull River Deposit Mineral Resource Estimate at a Base Case Cut-off of 0.9% CuEq - Effective Date December 1, 2021

Classification	Cut-off CuEq (%)	In-situ Tonnage (Ktonnes)	In-situ Grades					Metal		
			CuEq (%)	Cu (%)	Au (gpt)	Ag (gpt)	NSR (\$CDN)	Cu (000 lbs)	Au (kz)	Ag (koz)
Indicated	0.9	2,261	2.132	1.796	0.422	15.3	155.29	89,545	30.6	1,113
Inferred	0.9	1,356	1.918	1.598	0.417	13.6	139.70	47,799	18.2	594

Mineral Resource Notes:

1. The qualified person responsible for the mineral resource estimate is Sue Bird P. Eng of MMTS.
2. The base case cut-off is an NSR value of CDN\$65/tonne, based on Processing costs of CDN\$30/tonne and Underground Mining costs of CDN\$35/tonne.
3. A minimum mining width of 2.0m is assumed.
4. Mineral resources are based on a US\$1,600/oz gold price, US\$3.50/lb copper price and US\$20/oz silver price and the following smelter terms: 96.25% payable Cu, 97.5% payable Au and 90% payable Ag.
5. Forex of 0.79 US\$:CDN\$.
6. Treatment charges of US\$5/tonne for Cu, Refining charges of US\$0.005/lb Cu, US\$8/oz for Au US\$0.5/oz Ag.
7. Transportation charges of US\$100/tonne Cu concentrate.
8. Metallurgical recoveries have been estimated as 93% for Cu, 75% for Au, and 90% for Ag.
9. The mineral resource has been confined by a "reasonable prospects of eventual economic extraction" underground shape equating to an NSR cut-off of CDN\$65/tonne with all material within this shape reported as the resource.
10. The bulk density has been assigned values of 2.7 and 3.06 tonnes/m³ depending on mineralized domain.
11. Rounding as required by reporting guidelines may result in summation differences.

The mineral resources are estimated using criteria consistent with the CIM Definition Standards (CIM, 2014) and the "CIM Estimation of Mineral Resources and Reserves Best Practice Guidelines" (CIM, 2019). Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.



MMTS is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate for the Bull River property.

1.2 Terms of Reference

All currencies are expressed in Canadian dollars (\$CDN). Mineral Resources and Mineral Reserves are estimated using the 2019 edition of the Canadian Institute of Mining, Metallurgy, and Exploration (CIM) Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Best Practice Guidelines) and are reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves (2014 CIM Definition Standards).

1.3 Project Description and Location

1.3.1 Location

The Bull River Project is located approximately 30km due east of the city of Cranbrook in the Regional District of East Kootenay in British Columbia (Figure 4-1). The approximate centre of the BRM property is within at longitude 115° 22' 54" west and latitude 49° 30' 15" north. Universal Transverse Mercator (UTM) coordinates for the project centre utilizing projection North American Datum (NAD) 83, Zone 11 are approximately 616,952m east and 5,484,446m north.

1.3.2 Tenure

The project is the asset of Braveheart Resources Inc., a publicly traded company that owns 100% of the property. The property is comprised of 25 mineral claims and 2 mineral leases covering 10,374 hectares (ha) (Figure 4-2).

1.4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

BRM is located approximately 50km by road from Cranbrook, British Columbia. Access to the BRM property from Cranbrook is by the Crowsnest Highway, then paved road until the final 6-kilometer all-weather gravel Bull River Road.

The mean annual temperature is 8.5°C. Mean high temperatures occur in July and August, averaging 18°C, and lows in December averaging -7°C. Precipitation data from Environment Canada between 1971 and 2000 for Cranbrook shows an average annual precipitation of 403mm.

The Kootenay Regional District has a long history of mining activity, and mining suppliers and contractors are locally available.

The project currently consists of a mineralized deposit containing copper, gold, and silver. Underground infrastructure to access this mineralization includes a mine ramp, ventilation raises, sumps, surface shop, and mobile equipment fleet. There is a 700 tonne per day conventional mill with an adjoining crusher building, fine ore bin, and concentrate storage area. On the property there is an administration, security, assay laboratory, metallurgical laboratory buildings and support infrastructure. The mine is currently not operating.

BRM is located on the gentle slopes that form the base of the Steeples and Lizard Mountains which are part of the Rocky Mountain Front Range System. The project is located north of the meandering Bull River which makes up part of the Kootenay River watershed.

1.5 History

Placer gold was first discovered in the early 1860's in the Bull River Canyon and numerous small mine workings have been excavated in the area since that time. No work was reported on the GBRM site until 1968 when Placid Oil optioned the property. Placid operated the historic Dalton Mine which started milling on October 1, 1971 and continued from two open pits until June 10, 1974. From 1971 to 1974, while operating as the Dalton Mine, the BRM property produced approximately 16 million lbs. of copper, 204,274 ounces of silver and 4,055 ounces of gold from two open pits.

Ross Stanfield purchased the assets of the Dalton Mine from Placid on March 5, 1976 and transferred the assets to Bull River under incorporation on March 17, 1976. Gallowai earned a 50% interest in the GBRM property through raising and expenditure of exploration dollars since its incorporation in 1980. The former name of "Gallowai Bull River Mine" (GBRM) reflected the joint ownership by the two companies.

In May 2011 the Stanfield Group of Companies filed for bankruptcy protection under the Company's Creditors Arrangement Act ("CAA").

The companies were restructured and emerged out of CAA in November 2014 as Purcell Basin Minerals Inc. On October 11, 2018 a plan of arrangement was presented to the Court wherein Braveheart Resources Inc. would acquire all the shares of Purcell Basin Minerals Inc. The acquisition was completed on January 19, 2019.

1.6 Geological Setting and Mineralization

BRM is located within the Belt-Purcell Basin, a Meso-Proterozoic intracontinental rift filled by marine and fluvial sediments that comprise the Belt-Purcell Supergroup. The western Rocky Mountains represent the eastern edge of the Purcell anticlinorium that abuts the Rocky Mountain thrust belt. BRM lies within the Rocky Mountain trench, which forms the valley of the Kootenay River system in the area and is contained within the Hosmer thrust sheet east of the inferred trace of the Rocky Mountain trench fault. The BRM deposit is hosted within poorly exposed graded turbidite beds of the middle the Aldridge Formation that lies at the base of the Purcell Supergroup. Within an approximate 30km radius of Cranbrook, British Columbia, the Aldridge Formation also hosts the Sullivan, Estella, Kootenay King, and St. Eugene mineral deposits.

The BRM mineralized zones comprise a vertical to subvertical network of sulphide-bearing quartz carbonate veins striking approximately east-west hosted in sheared and brecciated Aldridge Formation sediments. The vein systems form complex networks within, and adjacent to, the shear zone and often encompasses crushed, deformed, and brecciated host rocks. Mineralization consists of pyrite, pyrrhotite, and chalcopyrite with minor local galena, sphalerite, arsenopyrite, and cobaltite and traces of tetrahedrite and native gold

1.7 Deposit Type

The Bull River deposit has been described as a Churchill-type vein copper-silver deposit (Lefebure, 1996). The deposit type displays characteristics of relatively low tonnage (typically range from 10Kt to 1Mt) but high-grade (typically range from 1% to 4% Cu).



1.8 Exploration

There is no record of work until 1974 when exploration was conducted on nearby properties within the Stanfield Holdings. Drilling at BRM began in 1981 and was conducted more or less continuously until 2009. In 1996, work began on a 5.4m wide by 4.5m high decline at a -15% gradient to provide access for underground drilling and sampling. Bull River reports that, to date, approximately 21,000m of underground development have been done including exposure of the mineralized structures on seven levels along access drives and crosscuts.

Multiple geophysical surveys were conducted between 1972 and 1993. In 2017, TerraLogic completed airborne EM and IP surveys. The underground channel sampling program was completed by MMTS during 2011 and 2012.

1.9 Drilling

Drilling at BRM began in 1981. A combination of percussion and diamond drilling was done from surface. Once the underground access was established, the majority of the drilling was pursued underground. Braveheart has completed 11 NQ sized underground diamond drillholes in 2020 and 2021 totaling 1,869.4m. In all a total of 104,748m of diamond drilling has been recorded.

1.10 Sampling, Analysis and Security

Written protocols for sampling are documented from 1999 forward with more rigorous programs of data collection and management beginning in 2001. In 2011 and 2012 MMTS conducted a program of logging and verification sampling on 1,126 sample pulps, 68 coarse rejects and 2,035 drill core samples (including QAQC samples). Additional samples were tested for specific gravity. Additional drilling from in 2013, 2020, and 2021 conforms to current best practice sampling protocols to include QAQC samples. All preparation and assaying since 2011 has been conducted by independent, certified laboratories.

The mine site is attended daily and has video surveillance in place. Mine access is controlled through a secured gatehouse.

1.11 Data Verification

The QP concludes that the database is suitable for resource estimation. Certificate checks were made and any omissions or corrections to the data have been included in the interpolations in the resource areas. The QAQC has been reviewed by the QP. The quality and quantity of the assay data is considered sufficient for resource estimation.

1.12 Metallurgy

The metallurgy for the Bull River mineralized material is highly amenable to conventional processing methods. The recoveries, based on the existing 700 tpd plant (which does need upgrades before starting up) are 93%, 75%, and 90% for copper, gold, and silver respectively based on testwork conducted in 2015.

Ore sorting testwork that was conducted in 2021 demonstrated an amenability to that technology which could be used to add value in a future PEA study.

1.13 Conclusions and Recommendations

1.13.1 MMTS Conclusions

The QP makes the following conclusions.

- The mineral resource estimate for the Project conforms to industry best practices, and meets the requirements of CIM (CIM, 2014) following the updated CIM guidelines (CIM,2019);
- The estimate is based upon a geologic block model that incorporates 5,135 individual assays from 5,744m of drilling, 95% of which has been assayed or re-assayed in 2011 or later;
- The Mineral Resource Estimate is based on reasonable assumptions of eventual economic extraction and assuming underground mining. A CuEq cut-off value of 0.90% is the base case cut-off.
- Measured and Indicated Mineral Resources total 2,261kt at 2.132% CuEq (1.796%Cu, 0.422gpt Au and 15.3gpt Ag).
- Inferred Mineral Resources total 1,356kt at 1.918% CuEq (1.598%Cu, 0.417gpt Au and 3.6gpt Ag).
- The following factors could affect the Mineral Resources: commodity price and exchange rate assumptions; pit slope angles and other geotechnical factors; assumptions used in generating the LG pit shell, including metal recoveries, and mining and process cost assumptions.

1.13.2 JDS Conclusions

The QP makes the follow conclusions for the metallurgical characteristics of the Bull River mineralized material.

- The copper, gold, and silver recovery for the Bull River Underground was 93%, 75%, and 90% respectively.
- The mineralized material is considered to be a medium hardness for grinding;
- Ore sorting was not included in the recovery and throughput considerations for this report but could improve the project economics by rejecting waste before the processing plant which would allow for an overall higher throughput.

1.14 MMTS Recommendations

MMTS makes the following recommendations

1. Completion of the permitting process, including engagement with the Ktunaxa First nation.
2. Completion of a Preliminary Economic Assessment (PEA).
3. Continue upgrades to the surface infrastructure in support of initial milling of the surface stockpile of mineralized material.
4. Re-survey of the 2020-2021 collar locations be surveyed.
5. Rehabilitate the current mill which has a capacity of 700tpd and process the current stockpile of approximately 180,000 tonnes.

The proposed budget for the work program is outlined in Table 1-2.

Table 1-2 Bull River Mine Proposed Work Program Budget

Work Description	CDN\$
Preliminary Economic Assessment	\$ 200,000
Complete the Permitting	\$ 600,000
Total	\$ 800,000

Based on discussion between Braveheart and MMTS the recommended work program has been reduced from the previous report. The two main priorities for Braveheart during the next 12 months will be completion of a PEA and completion of the permitting process and First Nation consultation. Braveheart estimates that this will require approximately \$400,000 in spending over the next 6 months.

2 Introduction

Moose Mountain Technical Services (MMTS) has prepared a technical report (the Report) for Braveheart Resources, Inc. (Braveheart) to update the Mineral Resource Estimate (MRE) of the Bull River Mine ("BRM"), a deposit containing copper, gold, and silver located near Cranbrook, British Columbia. The BRM is 100% owned by Braveheart Resources Inc. (Braveheart).

Braveheart is a junior Canadian exploration company with assets in B.C. and Ontario, focussed on exploration at or near past producing mines, in favourable mining jurisdictions.

This report is an update to the November 4, 2018 Resource Estimate on the same deposit for Braveheart and includes:

1. Updated drilling and data verification.
2. Updated geologic modelling and modelling parameters.
3. Changes in the economic conditions, including a higher copper price.

2.1 Terms of Reference

All currencies are expressed in Canadian dollars (\$CDN) except metal prices which are in \$US.

Mineral Resources and Mineral Reserves are estimated using the 2019 edition of the Canadian Institute of Mining, Metallurgy, and Exploration (CIM) Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Best Practice Guidelines) and are reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves (2014 CIM Definition Standards).

2.2 Qualified Persons

The following serve as the qualified persons (QPs) for this Technical Report as defined in National Instrument 43-101, *Standards of Disclosure for Mineral Projects*, and in compliance with Form 43-101F1:

- Sue Bird, P.Eng., Moose Mountain Technical Services (MMTS)
- Shane Tad Crowie, P.Eng., JDS Energy & Mining Inc. (JDS)

2.3 Site Visits and Scope of Personal Inspection

A Site visit was conducted by Sue Bird, P.Eng. of MMTS on November 2nd, 2021. During the site visit and underground mine tour was done, with the locations of the newly drilled holes and the underground workings were observed. On surface, the core, the site infrastructure, core storage and cutting areas as well as the core storage area at the mine camp site were all examined.

Tad Crowie of JDS visited the site on February 24, 2021. During the site visit, the mill, surface stockpile, and underground were visited. The mill tour included a tour of the assay lab and maintenance shop.

Information and discussions were provided and held with personnel from BRM throughout the validation and resource estimation process: Mr. Rick Henderson, Mr. Tim Hewison, and with Ian Berzins, President and Chief Executive Officer and Director of Braveheart on ownership and claims status.

2.4 Effective Dates

The report has the following effective dates:

- Effective Date of the Mineral Resource Estimate: December 1, 2021.

2.5 Information Sources

The documentation reviewed and other sources of information are listed at the end of this report in Section 27 References.

2.6 Previous Technical Reports

The most recent NI43-101 compliant technical report on the Project was a resource estimate filed by MMTS on behalf of Braveheart with an effective date of 4 November 2018. The Inferred resource was 513 ktonnes grading 1.279% Cu, 0.284gpt Au, and 8.7gpt Ag for a CuEqv grade of 1.503%. Indicated resources were 2,179 ktonnes at 1.517% Cu, 0.352gpt Au and 12.2gpt Ag for a CuEqv grade of 1.809%. The MMTS estimate used a cut-off grade of 0.6% copper equivalent, where equivalency factors were calculated using metal prices of US\$3.00/lb Cu, US\$20/oz Ag, and US\$1,300/oz Au. Metallurgical recoveries of 90% Cu, 90% Ag, and 70% Au were used.

In 2013 Snowden published an NI43-101 compliant resource estimate. The Inferred resource was 1,732 ktonnes grading 1.47% Cu, 11.4gpt Ag, and 0.40gpt Au for a CuEqv grade of 1.79%. Indicated resources were 1,484 ktonnes at a 1.42% Cu, 10.0gpt Ag and 0.30gpt Au for a CuEqv grade of 1.69%. The Snowden resource used a cut-off grade of 0.6% copper equivalent, where equivalency factors were calculated using metal prices of US\$3.50/lb Cu, US\$26/oz Ag, and US\$1,500/oz Au, and a US\$/CDN\$ exchange rate of 1:1. Metallurgical recoveries of 90% Cu, 90% Ag, and 70% Au were used. No minimum mining width was applied.

In 2012 RPA published an NI43-101 compliant resource estimate, showing an inferred resource of 746,000t grading 2.61% Cu, 16.40gpt Ag, and 0.17gpt Au. The RPA resource used a cut-off grade of 1.9% copper equivalent (CuEqv), where equivalency factors considered metal prices of US\$3.50/lb Cu, US\$26/oz Ag, and US\$1,550/oz Au, a US\$/C\$ exchange rate of 1:1, metallurgical recoveries of 90% Cu, 90% Ag, and 65% Au. A minimum mining width of 3m was used.

In 2011 RPA published a NI43-101 Technical Report documenting the history of work on the property and making recommendations for data compilation and exploration.

3 Reliance on Other Experts

The QPs have relied upon and believe there is a reasonable basis for this reliance, the following expert reports, which provide information regarding sections of this Report. The QPs have fully relied upon, and disclaim responsibility for, information supplied by Braveheart experts and experts retained by Braveheart for this information through the following documents. Additional information and references which have been relied upon are summarized in Section 27 of this Report.

3.1 Mineral Tenure

The QP has not reviewed the mineral tenure, nor independently verified the legal status, ownership of the Project area or underlying property agreements. The QP has fully relied upon, the information supplied by Braveheart for Sections 4.1 and 4.2 of this Report.

Burns Fitzpatrick LLP, 2018. Letter regarding Title Opinion addressed to Braveheart Resources Inc. from Scott A. Turner to Ms. Ahn dated December 28, 2018.

The information is used in Section 4 of the Report, and in support of the Mineral Resource Estimate in Section 14.

4 Property Description and Location

The Bull River Mine (BRM) is in the Fort Steele Mining Division approximately 30km due east of the city of Cranbrook in the Regional District of East Kootenay in British Columbia (Figure 4-1). The property is the asset of Braveheart Resources Inc., who owns 100% of the property.

The approximate centre of the BRM property is within National Topographic Series Map reference 82G/11W at longitude 115° 22' 54" west and latitude 49° 30' 15" north. Universal Transverse Mercator (UTM) coordinates for the project centre utilizing projection North American Datum (NAD) 83, Zone 11 are approximately 616,952m east and 5,484,446m north. The BRM property has the remnants of previous mine operation including tailings impoundment, waste dumps, and two open pits. One pit has been backfilled with waste and the second pit is flooded. Numerous pads have been built for baseline testing of acid rock drainage and water quality monitoring.

The property is comprised of 25 mineral claims and 2 mineral leases covering 10,374ha (Figure 4-2). BRM is underlain by Mineral Tenures 515055, 515057, and 515066 and Mining Lease 212493 (Figure 4-2). The claims are listed in Appendix A. The Mining Leases cover 486.03ha and includes surface rights in addition to mineral rights. The Mining Lease was granted in February 1972 and expires February 2022, with annual lease payments of \$9,740. Sufficient work was completed on the claims to move all good-to-date on all mineral claims to January 16, 2025.

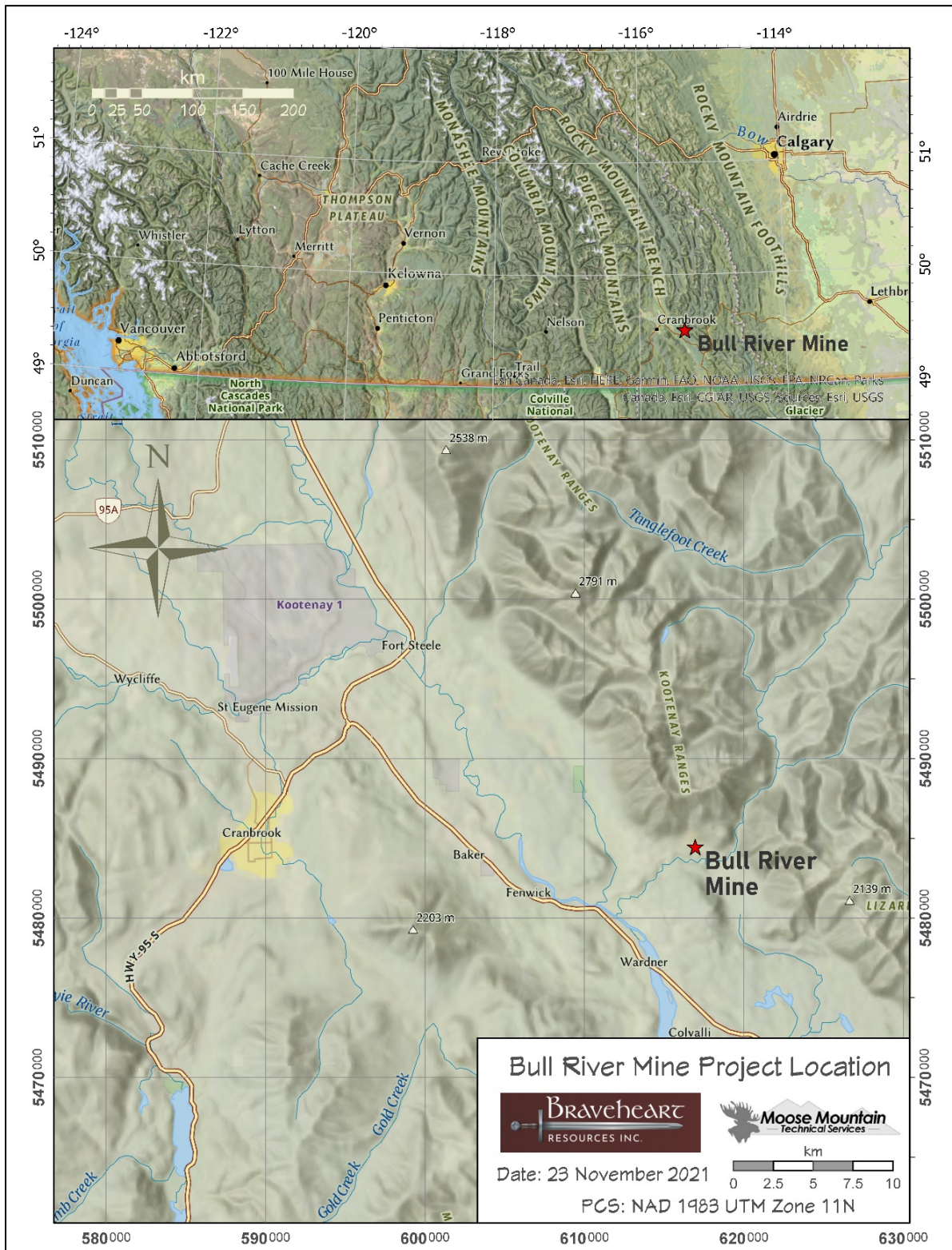


Figure 4-1 BRM Location Map (Source: MMTS 2021)

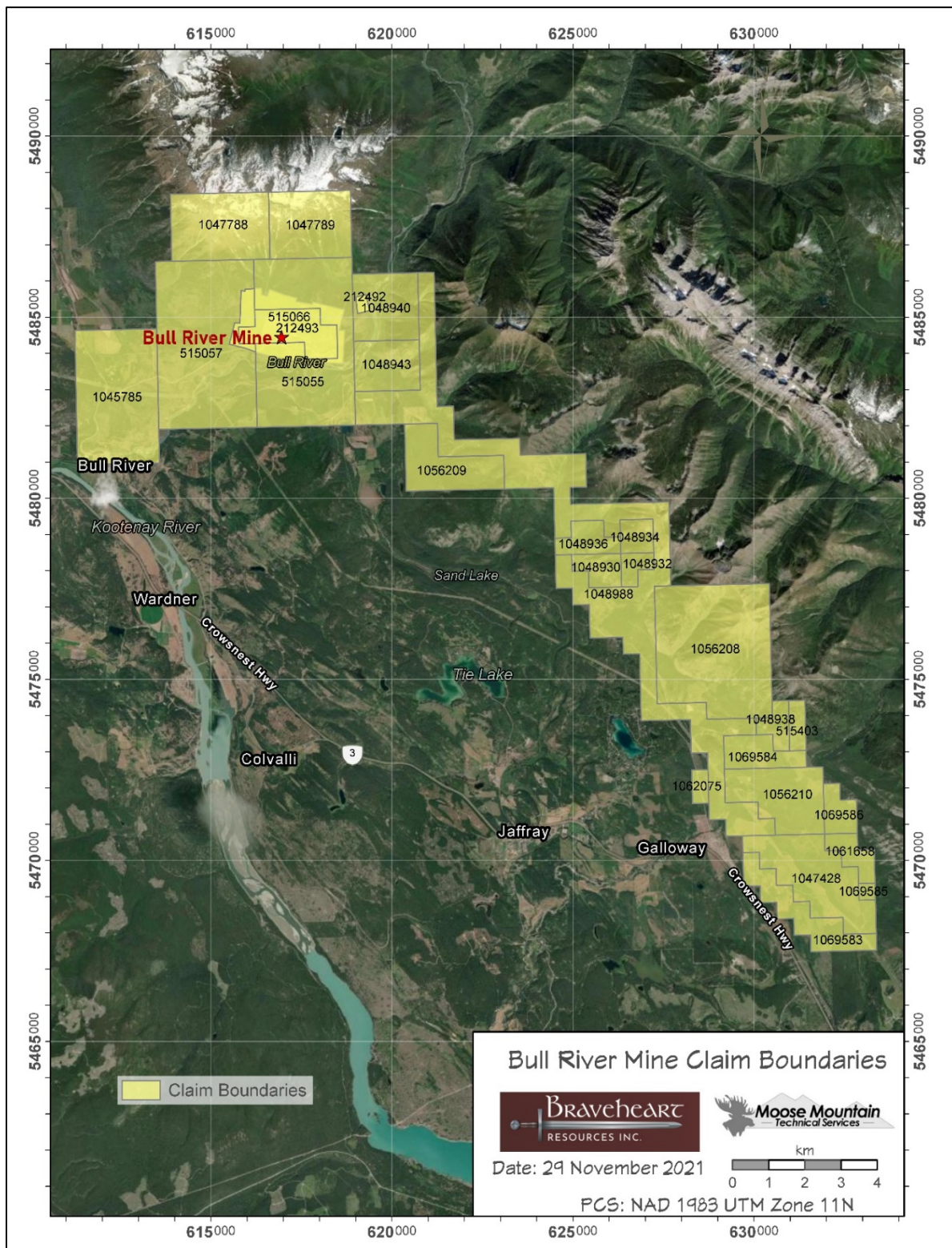


Figure 4-2 Bull River Mineral Claims (Source: MMTS 2021)



4.1 Property and Mineral Title in British Columbia

Prior to 1 June 1991, recordation in respect of a mineral claim or mining lease in British Columbia were manually recorded on, or attached to, the original application document for a mineral claim or the original lease document for a mining lease. From June 1991 to 11 January 2005, all records were entered into a computer database, maintained by the Gold Commissioner's Office. On 12 January 2005, the British Columbia mineral titles system was converted to an online registry system, MTO, and ground-staking of claims was eliminated in favour of map-staking based on grid cells.

Claims recorded prior to 12 January 2005 are referred to as legacy claims; Claims acquired through map staking are referred to as cell claims. From and after the date of changeover to map-staking, claim holders could convert legacy claims to cell claims, or maintain the original legacy claim. Legacy claims vary in size and shape, depending on the regulations that were in force at the time of staking and recordation. Cell claims comprise from 1 to 100 cells which range from 21ha in southern British Columbia to 16ha in the north.

Mineral title may also be held as part of Crown grants or freehold tenure issued under separate grant, such as a railway grant. Crown-granted mineral rights originate from staked mineral claims that were surveyed then granted from the Crown to private individuals or corporations under the legislation in effect at the time of grant.

There can be instances where there may be more than one type of mineral tenure in existence over the same land area; examples are where a Crown-granted mineral title is overlapped by a mineral tenure granted under the Mineral Tenure Act (British Columbia) (the MTA). In this case, the holder of the MTA mineral tenure is entitled only to those minerals not covered in the Crown-granted mineral title.

To keep claims in good standing in accordance with the MTA, a minimum value of work or cash-in-lieu is required annually. The minimum value of work required maintaining a legacy or cell mineral claim for one year is currently set at \$5 per hectare for the first and second anniversary years, \$10 per hectare for the third and fourth anniversary years, \$15 per hectare in the fifth and sixth anniversary years and \$20 per hectare for each subsequent anniversary year. The cash-in-lieu required to maintain a mineral claim for an anniversary year is double the value of the work commitment requirement.

The holder of a mineral claim or mining lease issued under the MTA does not have exclusive possession of the surface or exclusive right to use the surface of the land. However, the holder of such claims and leases does have the right to access the lands for the purpose of exploring for minerals and to use the surface for mining activities (exploration, development, and production).

The surface of a mineral claim or mining lease may either be privately owned or owned by the Crown.

The MTA provides for a recorded claim holder to use, enter, and occupy the surface of a claim for the exploration and development or production of minerals, including the treatment of ore and concentrates, and all operations related to the exploration and development or production of minerals and the business of mining, subject to production limits. Permits are required before undertaking most exploration or mining activity.

A mining lease is required if the claim holder wishes to produce more than 1,000 tonnes of ore in a year from each unit in a legacy claim (typically 25ha) or each cell in a cell claim. The holder of a mineral claim may obtain a mining lease for that claim if certain requirements are met (surveying if required, payment

of fees, and posting of notices). A mining lease allows the lessee to hold Crown mineral lands for up to 30 years initially and is renewable if certain conditions are met. A recorded claim holder must give surface owners of private land and leaseholders of Crown land notice before entering for any mining activity. A recorded holder is liable to compensate the surface owner for loss or damage caused by the entry, occupation, or use of the area for exploration and development or production of minerals.

4.2 Project Ownership

In January of 2019, Braveheart Resources Inc. acquired 100% of Bul River Mineral Corporation (BRMC) and all its subsidiaries and assets, including the BRM property. Headquartered in Calgary, Alberta, Braveheart is a development-stage mining company engaged in the acquisition, exploration, and development of minerals in the East and West Kootenay regions of British Columbia and Northern Ontario. Braveheart is a publicly traded company listed on the TSX Venture Exchange (CVE: BHT). Additional corporate information can be viewed online at <https://braveheartresources.com/>.

BRM lies within the traditional use area of the Ktunaxa people and the Tobacco Plains Indian Band (BC Hydro, 2005). Bull River does not have any agreements in place with the local First Nations but reports that preliminary consultations have been positive.

Tables listing the claims covering the mine site and within the Stanfield Holdings can be found in Appendix A.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

BRM is located approximately 50km by road from Cranbrook, British Columbia. Access to the BRM property from Cranbrook is by driving northeast approximately 10km via British Columbia Provincial Highway 3 (Crowsnest Highway) and then bearing southeast towards the town of Fernie, British Columbia, for approximately 26km to the paved, all-weather Wardner Fort Steele Road. The Wardner Fort Steele Road is followed northwest for eight kilometres where it intersects the all-weather gravel Bull River Road. The Bull River Road is followed east- northeast for six kilometres to the GBRM mine access road.

5.2 Climate

The mean annual temperature is 8.5°C. Mean high temperatures occur in July and August, averaging 18°C, and lows in December averaging -7°C. Precipitation data from Environment Canada between 1971 and 2000 for Cranbrook shows an average annual precipitation of 403mm (expressed in mm of water), with highest average precipitation in June (53mm) and lowest in March (20mm). There is an average of 69 days a year with precipitation in the form of rain and 32 days in the form of snow. Snowfall is recorded between October and May, with an annual mean of 13mm (expressed in mm of water). The most snow falls in December which has a mean snowfall of four millimetres (expressed in mm of water).

Climate will not adversely affect operations and work can be carried out uninterrupted twelve months a year.

5.3 Local Resources

The Kootenay Regional District has a long history of mining activity, and mining suppliers and contractors are locally available. Both experienced and general labour is readily available from the city of Cranbrook with 18,270 inhabitants (2006 census) and other smaller East Kootenay communities in the vicinity with 1,819 inhabitants (2006 census). There is abundant water available to support mining operations.

5.4 Infrastructure

Currently, the major assets and facilities (with estimated areas) associated with GBRM are:

- The mineralized body (as defined with this report).
- An administrative building (690m²) containing dry facilities.
- An assay laboratory (242m²).
- A metallurgical laboratory (141m²).
- A 700tpd conventional mill (2,020m²) with adjoining crusher building (280m²), fine ore bin (165m²), and concentrate storage facility (130m²).
- Mine shops (660m²), electrical shop (140m²), core shack (80m²), Firehall (75m²), and Mine Rescue building (120m²).

- Electrical substation connected to 115kV electrical transmission line, water wells, and septic system.
- Underground infrastructure including a mine ramp, ventilation raises, sumps, and mobile equipment fleet.
- Proximity to a rail spur used by Placid during production but no longer active.
- Access by paved all-weather roads.

5.5 Physiography

BRM is located on the gentle slopes that form the base of the Steeples and Lizard Mountains which are part of the Rocky Mountain Front Range System. The project is located north of the meandering Bull River which makes up part of the Kootenay River watershed. BRM portal elevation is approximately 950 MASL, with elevations within the Stanfield Holdings ranging from 760 MASL to 2,600 MASL.

The BRM property lies within the Ponderosa Pine and Interior Douglas Fir bio-geoclimatic zones. Grass and ground cover is dominated by rough fescue, pinegrass, Richardson's needlegrass, Idaho fescue, northwest sedge, and bluebunch wheatgrass. Shrubs found in the area include bearberry, Saskatoon and bitterbush (Ross, 2001). The terrain is characterized by open pasture and mature vegetation that is used as forage for domestic cattle, elk, big horn sheep, white tail and mule deer, and grizzly and black bears.

Overburden varies in depth and can be up to 200m thick and minimal bedrock is exposed at surface.

6 History

Placer gold was first discovered in the early 1860's in the Bull River Canyon and numerous small mine workings have been excavated in the area since that time. No work was reported on the GBRM site until 1968 when Placid Oil optioned the property. Initially, Placid was targeting dyke structures like those found at the Sullivan Mine and other Purcell Supergroup deposits but instead intersected supergene-type copper mineralization and an underlying copper-silver vein system. Table 6-1 is a summary of major events from 1952 to 2019.

The BRM property hosts the historic Dalton Mine which started milling on October 1, 1971, and continued from two open pits until June 10, 1974, producing 7,260 t (16.0 M lb) of copper, 6,354 kg (204,274 oz) of silver, and 126 kg (4,055 oz) of gold from 471,900 t milled (BC MINFILE). The Dalton Mine was owned by Placid Oil Co. (Placid). Placid attempted to go underground to access additional resources but was unsuccessful in getting the portal collared in blocky ground.

Ross Stanfield purchased the assets of the Dalton Mine from Placid on March 5, 1976 and transferred the assets to Bull River under incorporation on March 17, 1976. Gallowai earned a 50% interest in the GBRM property through raising and expenditure of exploration dollars since its incorporation in 1980. The former name of "Gallowai Bull River Mine" (GBRM) reflected the joint ownership by the two companies.

In May 2011 the Stanfield Group of Companies filed for bankruptcy protection under the Company's Creditors Arrangement Act ("CAA"). The companies were restructured and emerged out of CAA in November 2014 as Purcell Basin Minerals Inc. During the period November 2014 to May 2018 Purcell kept the property on care and maintenance while a new mine permit application was being developed to allow commencement of mining and milling. In May 2018 Purcell filed for and was granted CAA protection (MMTS, 2019).

On October 11, 2018 a plan of arrangement was presented to the Court wherein Braveheart Resources Inc. would acquire all the shares of Purcell Basin Minerals Inc. The acquisition was completed on January 19, 2019.

Table 6-1 Summary of Events at BRM

Year	Event
1952	1st Claim Holding - with Private Syndicate took control of mineral claim groups near Galloway, Fort Steele mining Division, British Columbia. Commenced active exploration - mapping and compass surveying
May 1969	Fort Steele Mineral Corporation Ltd - INCORPORATED
1970/71	Major expansion of Claim Holdings
1971	Placid Oil commenced production at Bull River
1974	Placid Oil closed Bull River
March 1976	Ross H. Stanfield Purchased assets from Placid Oil.
March 1977	Bull River Mineral Corporation Ltd - INCORPORATED
Jan. 1978	Commencement of G Zone Adit - Mtn #4 - 1100 feet
Dec. 1980	Gallowai Metal Mining Corporation - INCORPORATED

Year	Event
1996	Underground Mine development
22 July 2005	75,000 Tonne/year permit obtained
26 May 2010	Stanfield Mining Group of Companies is granted CCAA Protection
November 2014	Purcell Basin Minerals formed through a Plan of Arrangement
April 2016	Gallowai Bull River Mines Act permit is suspended
May 2018	Purcell Basin Minerals is granted CCAA Protection
October 2018	Braveheart Resources Inc. presents Plan of Arrangement and provides interim financing to Purcell
January 2019	Braveheart Resources Inc announces completed acquisition of Purcell Basin Minerals to include the Bull River Mine

6.1 Mine Site Exploration

Drilling at BRM began in 1981 and was conducted more or less continuously until 2009 in an effort to verify and expand Placid’s estimated underground resources and explore new targets. Drilling was done primarily from surface by Bull River personnel using company owned equipment. Locally, thick overburden cover necessitated the use of a rotary percussion drill to establish bedrock before a core drill could replace it and finish the drillhole. A detailed summary of exploration is included in Section 9 “Exploration” and the drilling is discussed in Section 10 “Drilling”.

6.2 Database Development

Starting in 1999, the sampling of drill core and underground channel cuts and sample preparation, security, and storage were conducted by an independent consultant under “chain of custody” protocols. The work was done by one consulting firm until 2003 except for a brief period in 2001 when a second team replaced them.

An electronic database has been developed at the property where data is current, although not complete, to 2006. A great deal of drilling was done after 2006 but not logged or sampled. MMTS’ 2011 field program included re-assaying of available sample pulps and the logging and sampling of unexamined drillholes.

The assay database was inspected and found to contain numerous tables. One assay table contains results from CanTech and the BRM assay laboratory and were partially supported by hard-copy assay certificates. Only a portion of these data, however, has corresponding hard copies. The RPA Technical Report notes that mineral resource estimates produced post-2001 used only this data. CanTech is no longer in existence but operates as a consulting firm. Another assay table contains results from AuRIC laboratories of Salt Lake City, Utah.

In the early 1980’s, a relationship was established with Munich University (MU) in Germany to provide assay services to the Stanfield Mining Group. Selected intersections from early drill programs were sent to MU and returned values that convinced Bull River that potentially unrecognized precious metals were present. The work done by the MU laboratory pre-dates ISO 9000 certification. It was noted by RPA that the MU assay results were difficult to reproduce using industry-standard fire assay methods (RPA, 2012). Bull River was sufficiently encouraged that it used a rotary percussion drill on Placid’s tailings to

investigate the potential for unexploited gold. As the MU assay data could not be verified and as mentioned, were difficult to reproduce using industry-standard fire assay methods. As stated above and for those reasons listed none of the MU assay data has been used in the MMTS update to the Resource Estimate.

MMTS's work program in 2011 and 2012 included the verification and backup documentation of the database.

6.3 Underground Development

In 1996, work began on a 5.4m wide by 4.5m high decline to provide access for underground drilling and sampling. Bull River reports that to date, approximately 21,000m of development have been done, including exposure of the mineralized structures on seven levels along access drives and crosscuts. Mapping and sampling of these headings were conducted by Bull River personnel and, later, by independent consultants. Once these underground workings were established, underground diamond drilling was done by independent contractors.

Underground work at BRM has consisted of development and sill drifting in mineralized material. Some of this broken material has been processed through the BRM mill in test batches.

Geological wireframe models of the quartz-siderite veins exist in the database. These were done by Bull River staff and geological consultants previously engaged. Bull River reports that excavation models of the underground workings based on survey data are current to the suspension of mining in 2009.

An underground mine plan was filed with the MEMPR in 2007 and all subsequent underground work was done following the parameters defined in that submission. Work underground continued, until 2009 when work was suspended due to the lack of funds.

In 2012, MMTS continued work on the property by completing additional drill core sampling, pulp re-assaying and extensive underground sampling.

6.4 Historic Resource/Reserve Estimates

From 1970 to 1998 several historic mineral resource estimates were produced for the project, for both internal purposes and public disclosure. The public disclosure is summarized in Table 6-2. The first estimates precede the 2001 date that NI43-101 Standards of Disclosure for Mineral Projects existed.

These estimates have not been reviewed in any detail by the QP. It is noted that these are historical estimate and therefore, a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. The issuer is not treating the historical estimate as current mineral resources or mineral reserves.

A report, entitled "1997 Exploration Report for Gallowai Metal Mining Corporation" by Precious & General Metals was issued quoting Kassa's non-NI43-101 compliant mineral resources prepared in 1994 and was used to support an Offering Memorandum. This report, and other exploration reports, was the subject of an Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) disciplinary committee decision in 2007 where the author, the project's registered QP, was found to have issued a report that was "deficient and misleading".

In 1998, the Stanfield Mining Group’s Consultant and Project Engineer released estimates of “Measured and Indicated Mineral Resources” at BRM of 5.3 Mt averaging 2.25% Cu, 36 g/t (1.06 oz/ton) Ag and 12 g/t (0.35 oz/ton) Au, which was quoted in British Columbia Ministry of Energy and Mines publications (Höy et al., 2000). In 1999, three British Columbia Geological Survey (BCGS) geologists visited the BRM property to gain a better understanding of the geology of the deposit and attempt to verify reported resource grades. Samples were taken from reference core and from underground workings that had intersected typical mineralized structures. The BCGS geologists could not confirm the gold grades reported by Bull River. As part of its 2010 site inspection, RPA took verification samples from underground and the comparison of those results against the BCGS results were disclosed in RPA’s 2011 Technical Report and were found to compare favourably.

Table 6-2 Historic Mineral Resource Estimates

Author	Year	Tonnage (Mt)	Cu (%)	Ag (g/t)	Au (g/t)	Cut-off Grade
F.P. Kerr, P.Eng. (Placid) ¹	1970	0.772	2.15	52.3	-	Unknown
M.C. Chiang (Placid)	1972	0.732	1.94	-	-	1.0% Cu ²
Kassa Resource Consultants ³	1984	2.00	2.25 ⁴	33.0 ⁴	10.9 ⁴	Unknown
Master Mineral Resources ⁵	1990	8.7	2.25	33.0	10.9	Unknown
Precious and General Metals	1994	8.7	2.25	33.0	10.9	Unknown
SMG’s independent consultant	1998	5.3	2.25 ⁶	36.0 ⁶	12.0 ⁶	Unknown

Notes:

- 1) Estimate done to support Placid’s Pre-Feasibility Study.
- 2) A minimum 1.44m mining width was used.
- 3) Based on assay data from Munich University.
- 4) Respective grades are averaged between classifications.
- 5) MMR estimated the tonnage of the quartz-carbonate vein material as 8.7 Mt but did not assign a grade. A grade was assigned by P&GM based on tonnage similarity with Kassa estimate.
- 6) Grade based on 1994 Kassa estimate.

6.5 Included Mineral Occurrences

This section describes other mineral occurrences, including past producers that are within the BRM claims as included in the British Columbia Ministry of Energy, Mines and Petroleum Resources MINFILE database. These notable occurrences are listed in Table 6-3 and shown in Figure 6-1 below. In the immediate BRM area there are two significant mineral occurrences, one at each end of the mine area, Old Abe in the west, and Copper King in the east. The Old Abe survey map is found in Figure 6-2.

Table 6-3 Included Mineral Occurrences

Name	MINFILE	Easting	Northing	Minerals	Status
Burt	082GSW018	631019	5473491	Zn, Pb, Cu, Ag	Showing
Cedar, G Zone	082GSW054	626582	5477867	Pb, Ag, Cu	Showing
Copper King	082GNW006	618617	5484701	Cu, Ag, Au, Pb	Past Producer
Cuckoo	082GNW028	619584	5484661	Pb, Cu, Ag	Showing
Empire Strathcona	082GSW015	631127	5473185	Cu, Pb, Ag, Au	Prospect
Great Western	082GSW040	624743	5480760	Cu, Ag, Pb, Zn, Au	Showing
Old Abe	082GNW103	616224	5485577	Cu, Ag, Au	Showing
Peacock	082GSW017	630589	5470391	Cu, Ag	Past Producer
Trilby	082GNW072	620364	5485759	Pb, Zn, Ag, Au	Showing
Viking	082GSW056	623999	5480743	Cu, Pb	Showing

6.5.1 Old Abe

The Old Abe prospect lies approximately 1,000m northwest and approximately 300m in elevation above the BRM portal. Placid drilled two holes but only minor sulphides were intersected (Mosher, 2003).

Since the work by Chiang in 1972 the area has been extensively covered by the slumping of cover material and all three portals are inaccessible. Prospecting below the middle adit produced three grab samples that show the presence of mineralization (Table 6-4).

Table 6-4 Old Abe Grab Samples, 2012

Sample	Type	Sample Weight	Au (ppb)	Cu (%)	Ag (g/t)
4368	Rock	5.25	251	0.114	19
4369	Rock	2.71	33	0.025	28
4370	Rock	1.85	346	1.064	12

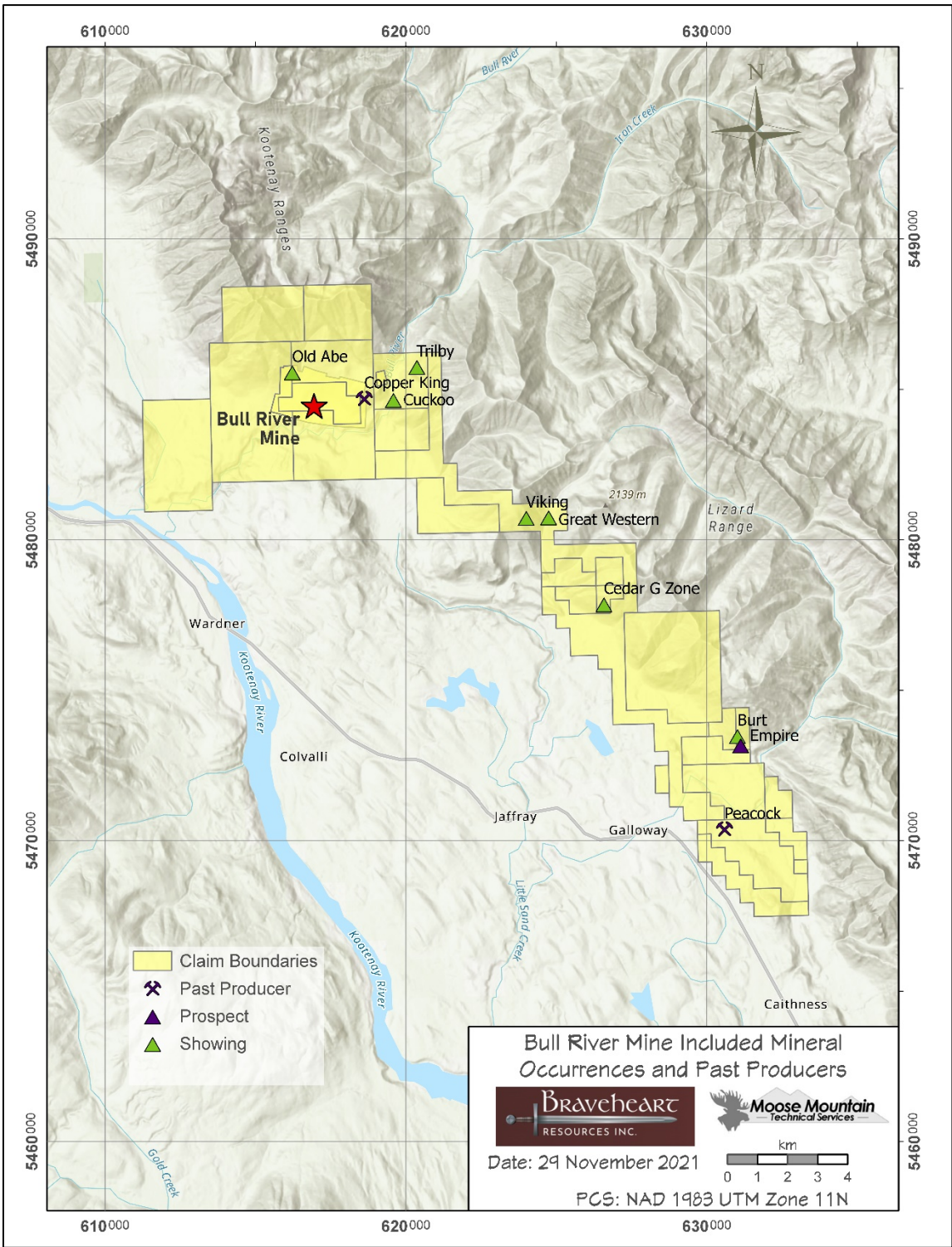


Figure 6-1 Included Mineral Occurrences (Source, MMTS 2021)

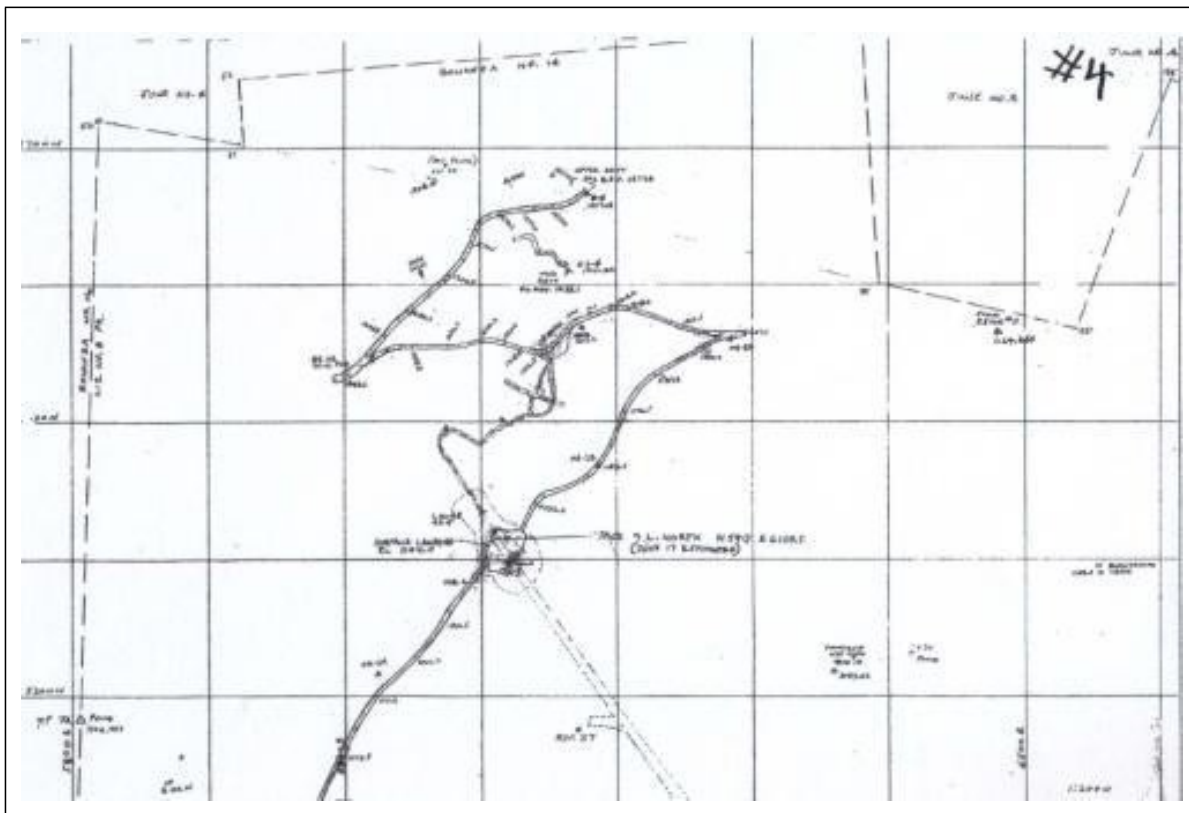


Figure 6-2 Old Abe Survey Map (Source: Snowden, 2013)

The survey map shows the location of the three adits at Old Abe, with the lower adit directly above the 9 Level workings of the Bull River mine, as surveyed in August 1999. The map (Figure 6-3) shows the geology around the three adits at Old Abe (Chiang, 1973). Photos of the upper and middle adit are shown in Figure 6-4 and Figure 6-5). Drillhole, BR-113 is in the extreme southwest, while BR-112 is due west of the middle adit. The trace of the vein is shown to be nearly north/south. MMTS samples were collected along the road below the middle adit.

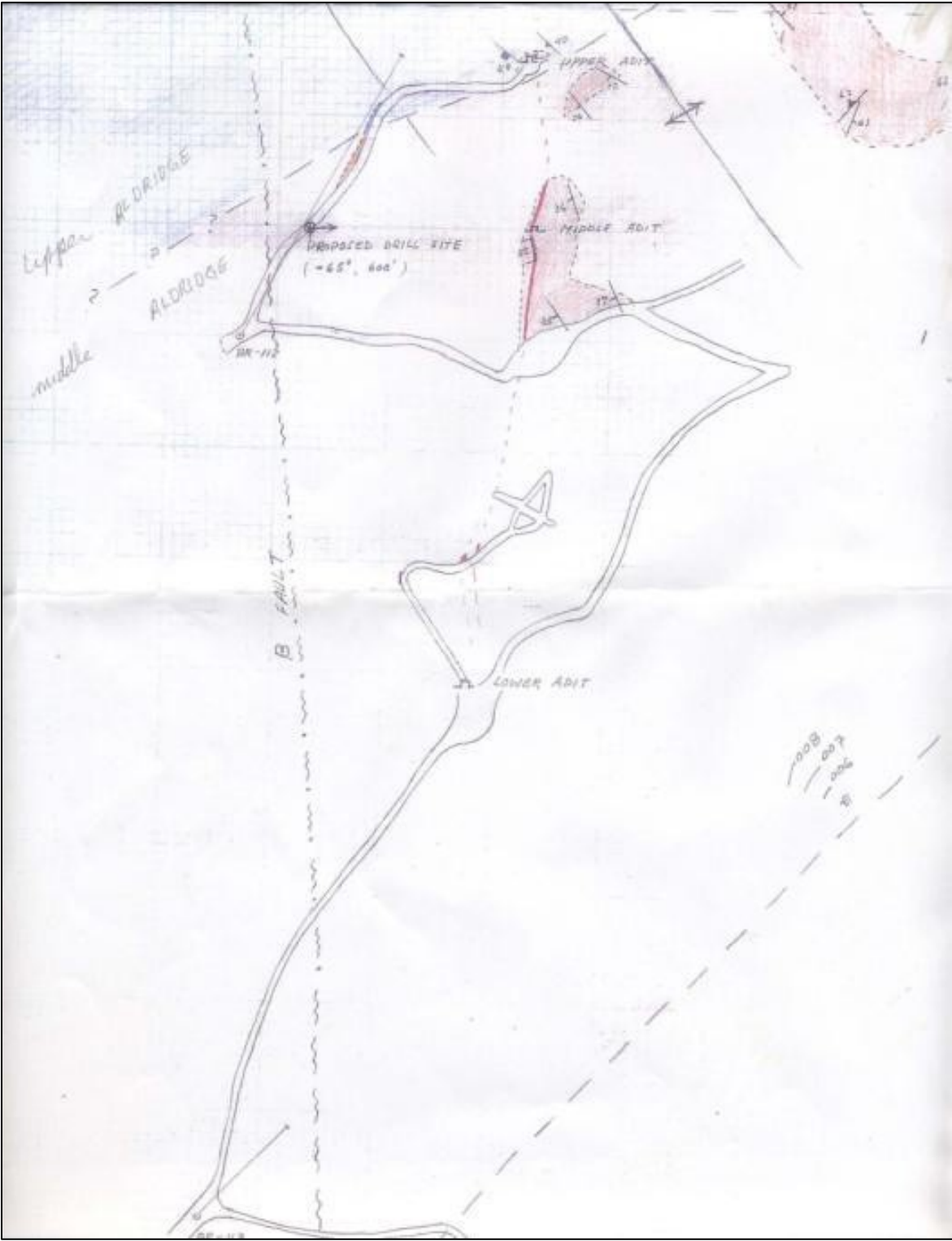


Figure 6-3 Old Abe Geology Map (Source: Snowden, 2013)



Figure 6-4 The Upper Portal at Old Abe (Source: Snowden, 2013)



Figure 6-5 The Middle Portal at Old Abe (Source: Snowden, 2013)

6.5.2 Copper King

The Copper King occurrence is located approximately 1,300m east of the BRM portal. The workings comprise two adits, the lower of which is no longer accessible. The upper adit is approximately 80m in length and was excavated along a 30m wide east trending diorite dyke. At approximately 15m along the west-bearing adit, a 20m long shaft was driven to surface (ten metres) and sunk ten metres below the level. A second shaft was sunk 15m near the western extent of the adit and several small crosscuts were driven off the access. The adit terminated with a 30cm vein exposed that was mineralized with pyrrhotite and minor chalcopyrite and arsenopyrite (Mosher, 2003).

In 1979, 3,920m of core (diameter unknown) was drilled by Bull River at Copper King (Morton, 2001a). No results were available to MMTS.

Jenks, 1972, reports that some 244m of underground tunneling was completed between 1924 and 1926. The mineralization is associated with three east/west trending diorite dykes that dip between 70° north to vertical. The individual dykes range from 24m to 43m wide for an aggregate width of approximately 91m. Jenks suggests that the dykes occupy an east/west fault system. In contact, the sediments up to 6m of light green to buff coloured clay alteration. The diorite has up to a 5% pyrite content. The quartz-siderite veins occur within and along the margins of the dykes.

Chiang, 1973, reports that the vein at Copper King is exposed in an adit for 80m and has a width of 0.3 – 0.6m and a copper grade of 1.2%. The vein consists of 55% quartz, 25% siderite, 15% rock fragments, 2% galena, 2% pyrite, and less than 1% chalcopyrite. There are a few off- shoot veins containing mainly quartz and siderite with trace galena and chalcopyrite. The main vein has the same orientation as the diorite dyke which is almost vertical and strikes east/west.

In 2012 MMTS visited the Copper King prospect and collected three rock samples (Table 6-5). The samples indicate copper, silver, and gold values above background. The entry is at the east end of the adit and the various shafts to the west, as surveyed in August 1999 (Snowden, 2013). Photos of the adits are shown in Figure 6-6 and Figure 6-7.

Table 6-5 Copper King – Rock Chip Sample Results

Sample	Type	Sample Description	Sample Weight (kg)	Au (ppb)	Cu (%)	Ag (g/t)
4365	Rock	Grabs from 3m of vein length, 0.35m vein width	0.86	351	1.957	26
4366	Rock	Channel across 0.65m vein	2.48	477	0.851	22
4367	Rock	Grabs from 2m of vein length	4.56	250	0.974	37



Figure 6-6 The Main Portal at Copper King (Source: Snowden, 2013)



Figure 6-7 Vein in Copper King Adit (Source: Snowden, 2013)



6.5.3 Trilby

Located three kilometres east of the BRM portal, the Trilby showing is located on the east side of the Bull River and hosts four short adits up to 50m long. Mineralization consists of galena, pyrite, and chalcopyrite as blebs and pods with Moyie diorite dykes that crosscut Aldridge Formation shales and argillites. The east striking, vertically dipping dykes are parallel and host sulphides pods up to 38cm wide (BC MINEFILE 082GNW072).

Field traverses were done over an area of anomalous magnetic susceptibility on these prospects. Grab and composite samples were taken from outcrop subjected to whole rock analysis and petrographic study. Bull River reported that samples of altered diorite from Copper King showed anomalous gold values and elevated Fe_2O_3 , as defined by whole rock analysis, and was the likely cause of the magnetic anomaly. The Trilby traverse also yielded samples with elevated Fe_2O_3 and petrographic analysis indicated the presence of titanium and iron in rocks adjacent to the Trilby showings (de Souza, 1999).

6.5.4 Cedar or G Zone

Located along Sand Creek Range, anomalous lead and silver occurrences were reported from surface showings and from an adit that mined into the G-Zone vein. Small raises driven from the adit were reported to have also intersected the vein that strikes northeast and varies in dip from vertical to 74° to the southeast (Mosher, 2003).

The G-Zone is hosted within a mid-Proterozoic cross fault that cuts Middle to Lower Aldridge argillite. The fault that hosts the G-Zone is one of many north-northeast- to east-northeast- trending, 70° east dipping cross faults that cut the locally flat-lying sediments. Some of these structures host high-grade silver-lead-zinc vein mineralization.

In 1997 and 1998, 335m of adit rehabilitation was done and underground drilling (depth and diameter unknown) was conducted by Bull River (Morton, 2001a). The results of this work are unknown.

6.5.5 Empire Strathcona

The Empire Strathcona adits lie southeast of GBRM near the town of Galloway, British Columbia. Mineralized quartz-siderite-calcite vein systems occur within shear zones that have been traced along strike for approximately 1,000m. Mineralization consists of stringers and blebs of chalcopyrite occurring with minor pyrite and pyrrhotite up to two metres in thickness. The sediments dip approximately 45° to the northeast and the veins dip from vertical to 50° degrees to the southwest (BC MINFILE 082GSW015).

Four adits have been excavated. The first drifted approximately 40m along the mineralized structure and a short crosscut exposes the footwall. 50m below the collar of the adit, an open cut exposes the 1.8m wide vein. The second adit, located approximately 40m in elevation below the open cut, is no longer accessible due to ground failure. The mineralized vein, however, is exposed in an open pit and measures 1.4m wide. Another adit lies approximately 30m below the second and is also impassible due to ground failure. The fourth adit, which is approximately 150m in elevation below the first, was driven approximately 70m where it intersected the 3m wide vein. A 6m drift was driven north where an 11m winze was sunk on the mineralized structure. A second drift, driven to the southeast approximately 12 m, leads to a small stope that mined the vein (Morton, 2001a).



7 Geological Setting and Mineralization

BRM is located within the Belt-Purcell Basin, a Meso-Proterozoic intracontinental rift filled by marine and fluvial sediments that comprise the Belt-Purcell Supergroup (Figure 7-1). Approximately 10% of the exposed area of these rocks is in Canada, where it is referred to as the Purcell Basin and Purcell Supergroup. The remaining 90% is within the United States where it is called the Belt Basin and Belt Supergroup (Lydon, 2007).

The western Rocky Mountains represent the eastern edge of the Purcell anticlinorium that abuts the Rocky Mountain thrust belt. Three tectono-stratigraphic terranes subdivide the area covered by the Stanfield Holdings. The Steeples Range domain is bounded to the north by the Dibble Creek fault and to the south by the Bull River Canyon fault and lies to the north of the other domains. The Sand Creek-Lizard Range domain lies south of the Bull River Canyon fault and north of the Sand Creek fault and contains the Lizard Range of mountains. The southern domain is the Broadwood Anticline whose boundary is the Sand Creek fault to the north and Mount Broadwood to the south. The Steeples Range and Sand Creek-Lizard Range domain are part of the Lizard segment of the Hosmer Thrust (Masters, 1990).

BRM lies within the Rocky Mountain trench, which forms the valley of the Kootenay River system in the area and is contained within the Hosmer thrust sheet east of the inferred trace of the Rocky Mountain trench fault. The Hosmer thrust sheet is the structurally highest thrust package in the Western Range of the Rocky Mountains. The Rocky Mountain trench fault is a west-side-down Tertiary normal fault with a minimum of five kilometres of vertical displacement. Structure in the area is dominated by broad, open, east-plunging folds (Höy et al., 2000). Near BRM, the trench is synclinal with major west dipping faults on its east side (Masters, 1990).

The BRM deposit is hosted within the Aldridge Formation that lies at the base of the Purcell Supergroup. Within an approximate 30km radius of Cranbrook, British Columbia, the Aldridge Formation also hosts the Sullivan, Estella, Kootenay King, and St. Eugene mineral deposits (Allen, 1989). The Aldridge Formation is characterized by thick successions of graded sandy turbidites and interbedded laminated siltstones and argillites. The turbidites are intruded by the dioritic to gabbroic Moyie sills and dykes. To the east, the Upper Aldridge rocks, composed of argillites and siltites, overlie the turbidites. Mineralization is typically fine-grained pyrite and pyrrhotite, up to several percent, that oxidizes when exposed on surface (Höy et al., 2000).

Regionally, the Moyie sills display the thrust and fold structures of the Late Jurassic to Early Cretaceous fault system that later cut the Tertiary-age Rocky Mountain trench fault (van der Velden and Cook, 1996). Extensional faulting and sporadic magmatism occurred from about 1,500 Ma to 1,320 Ma and is at least partially coincident with the East Kootenay Orogeny. The East Kootenay Orogeny reflects burial metamorphism of the thick sedimentary pile in the high geothermal gradient of an actively rifting environment. Syn-sedimentary faulting associated with rifting resulted in the rift-fill thicknesses of turbidites and intercalated sills of the Aldridge sequence of up to 12km. Two directions of syn-sedimentary faulting have been recognized: north to northwest trending rift-parallel (extensional) and east to northeast trending transfer faults. Examples of the former include faults that control the north trending Sullivan Corridor and the Iron Range fault northeast of Creston. Examples of the later include precursors to the Moyie-Dibble Creek fault, which lies north of GBRM, and St. Mary-Boulder Creek fault system (Lydon, 2007).

Beginning with the East Kootenay Orogeny, the northwest portion of the Purcell Basin appears to have been subjected to east-west faulting along with magmatic generation along its western boundary. During the subsequent Goat River Orogeny, the Purcell Anticlinorium was formed because of crustal shortening.

Further east, the Creston Formation is exposed. Creston Formation rocks comprise a shallow water platformal and fan-delta succession of predominantly quartzites and siltites. South of the Bull River, Creston Formation rocks are overlain by Kitchener Formation carbonate rocks. Cretaceous monzonite stocks intrude Purcell Supergroup rocks and younger Paleozoic shallow water sediments (Höy et al., 2000).

Refer to Figure 7-2 for the Regional Geology.

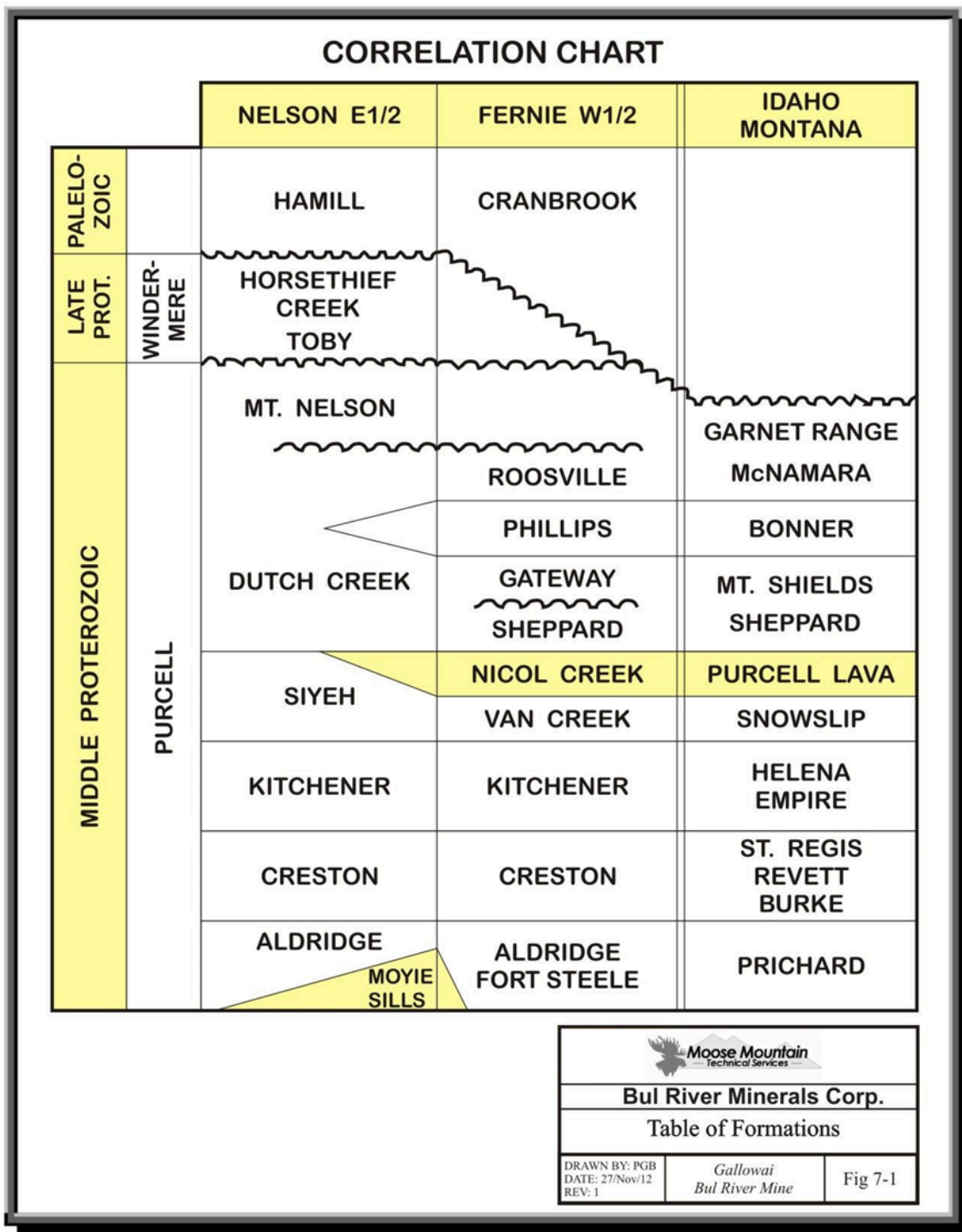


Figure 7-1 Bull River Mine Regional Stratigraphy (Source: Snowden, 2013)

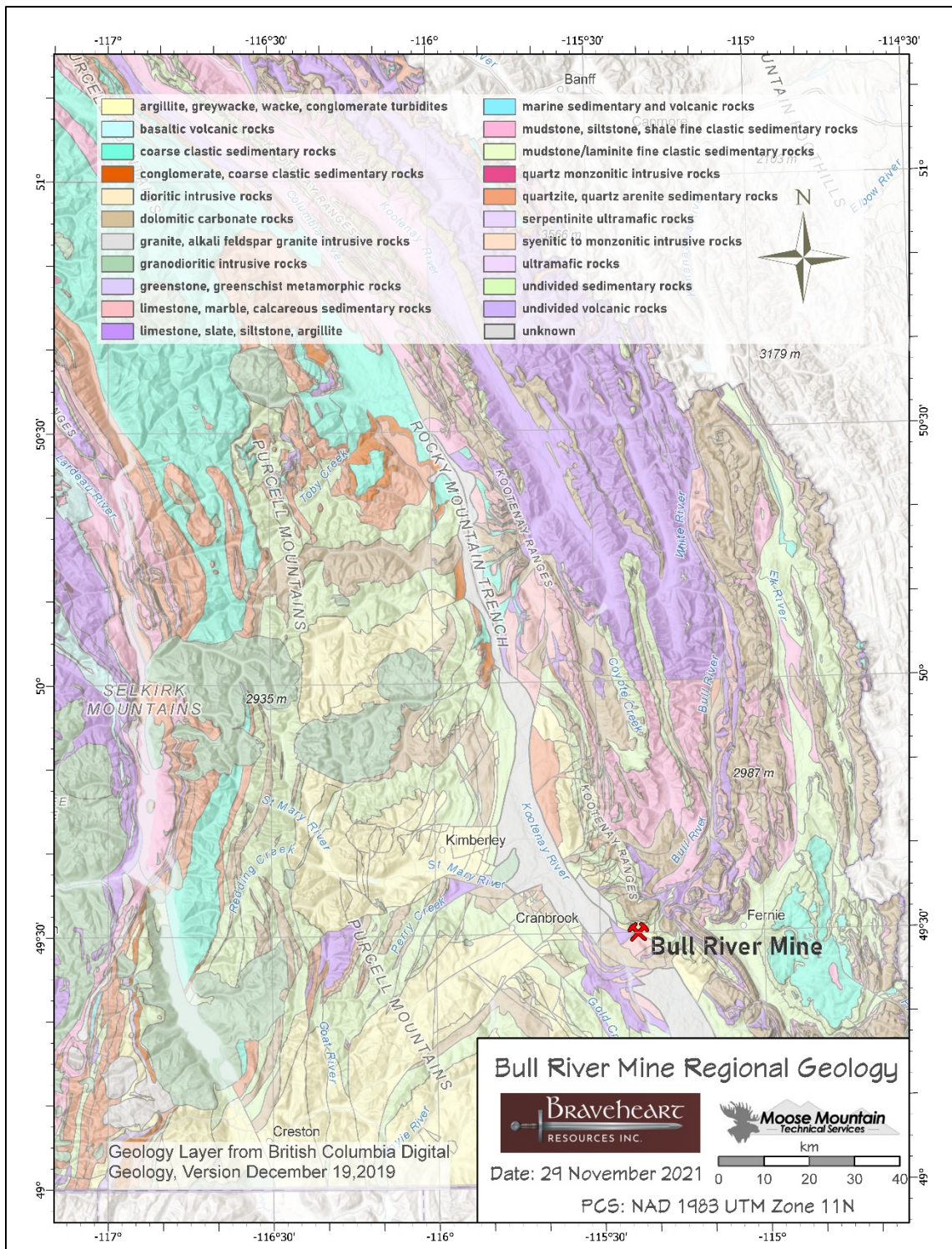


Figure 7-2 Regional Geology (Source: MMTS, 2021)



7.1 Local Geology

The BRM deposit is hosted within poorly exposed graded turbidite beds of the middle Aldridge Formation of the Middle Proterozoic Purcell Supergroup. Interbedded quartzites, siltstones, and argillites make up a turbidite sequence whose bedding plane strikes approximately east west and dips 20° to 30° to the north (Baldys, 2001). The host rocks of the deposit are a northward pinching series of anticlines and synclines (de Souza, 2000).

The quartzite unit is described by Baldys, 2001 as, in fact, thickly bedded quartz arenite and quartz wacke. The quartz arenite is dominated by sand-size fragments of quartz while the quartz wacke consists of poorly sorted mineral and rock fragments in a matrix of clay and fine silt. These arenite and wacke beds are up to one metre in thickness and are massive to graded, fining upward. Arenaceous beds are medium to thickly bedded and are commonly separated by thin layers of argillaceous siltstone.

Laminated siltstone is composed of organic carbon, biotite, feldspar, detrital quartz, sphene, tourmaline, apatite and, diagenetic pyrite, and pyrrhotite. Wispy or disseminated pyrrhotite is common and, along with pyrite, makes up less than two percent of unaltered rock.

The Aldridge Formation is intruded by a series of dykes varying in composition from diorite to gabbro known as the Moyie intrusive suite. The mid-Proterozoic Moyie dykes trend approximately east west and dip at 30° to 80° to the south and are composed predominantly of hornblende and plagioclase phenocrysts in a fine-grained groundmass of plagioclase, quartz, hornblende, chlorite, and epidote (Baldys, 2001). These dykes have been traced from the Bull River eastward to the flank of Iron Mountain where they form the target of two adits (de Souza, 2001).

Overburden consists of Pleistocene glaciofluvial and colluvial sediments and varies in thickness across the GBRM property up to 200m in thickness as defined by gravity surveys conducted in 2006.

Refer to Figure 7-3 for Local Geology.

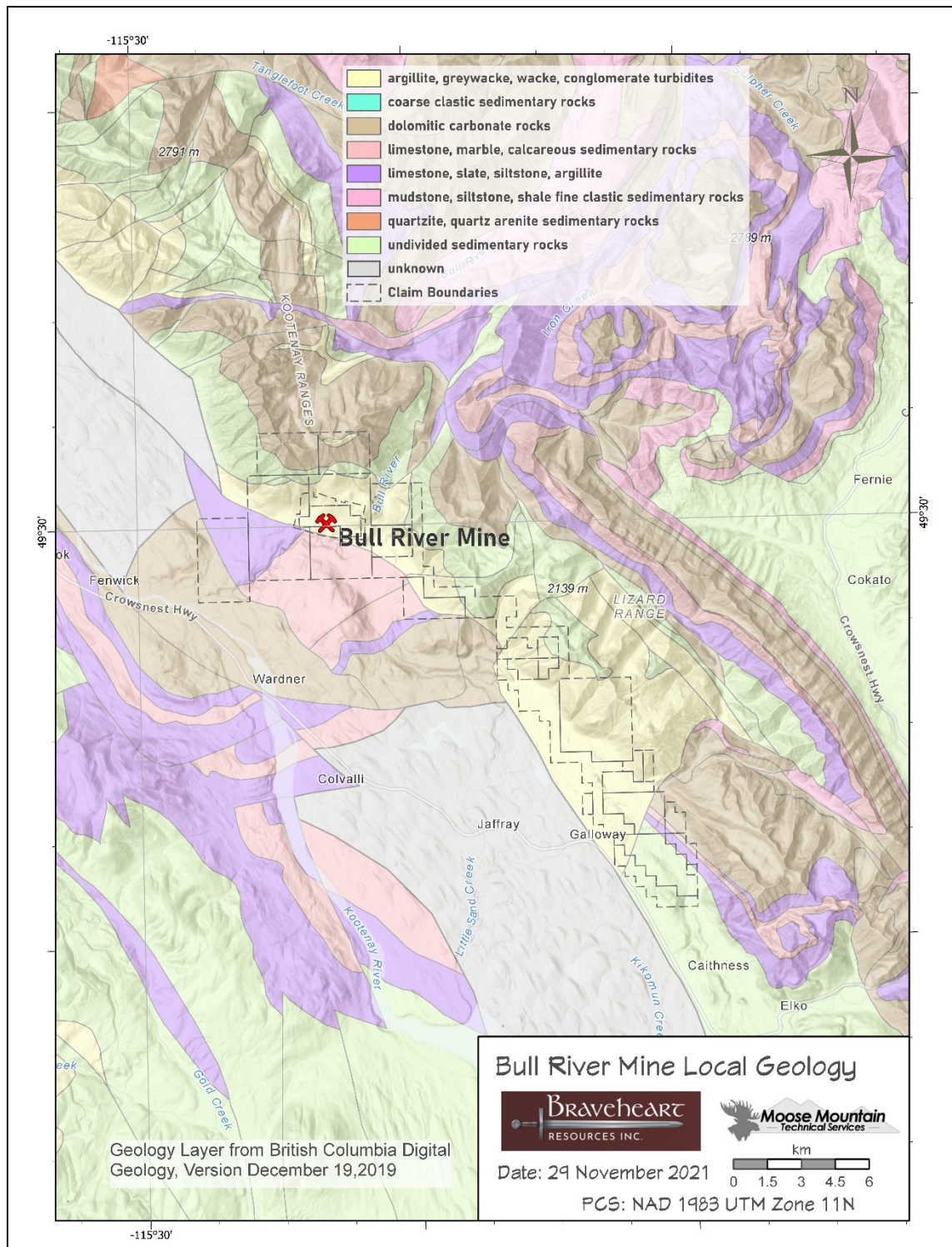


Figure 7-3 Local Geology (Source: MMTS, 2021)

7.2 Mineralization

The BRM mineralized zones comprise a vertical to subvertical network of sulphide-bearing quartz carbonate veins striking approximately east-west hosted in sheared and brecciated Aldridge Formation sediments. The vein systems form complex networks within, and adjacent to, the shear zone and often encompasses crushed, deformed, and brecciated host rocks (Baldys, 2001). Host rocks are either partly silicified and chloritized argillites, argillaceous quartzites and quartzites (Masters, 1990). The veins pinch and swell forming stockworks or thick tabular bodies that are often cut by smaller veins and stringers of quartz and quartz-siderite. The main vein structure and associated stringer zones can range from a few centimetres to 30m wide. In 1991, Masters defined five subparallel to en echelon “vein systems” and differentiated them from the Pit Zone that lies within the footwall (Masters, 1991).

Mineralization consists of pyrite, pyrrhotite, and chalcopyrite with minor local galena, sphalerite, arsenopyrite, and cobaltite and traces of tetrahedrite and native gold. Sulphides range from massive, irregular bodies within the vein system to thin discontinuous veins, veinlets, and disseminations in the host rock (Höy et al., 2000). Gangue mineralogy of the veins is variable, with the eastern parts of the deposit consisting of quartz and siderite. The western part of the vein system is dominated by siderite (Baldys, 2001).

A plan view of the modelled mineralized vein system is illustrated in Figure 7-4. The extent of the currently known mineralization is approximately 1,200m along strike, varies in width from 2.5m to 30m and has a down-dip extent of up to 450m based on currently drilling, which remains open at depth. The sub-parallel system is continuous within each of the ten illustrated veins.

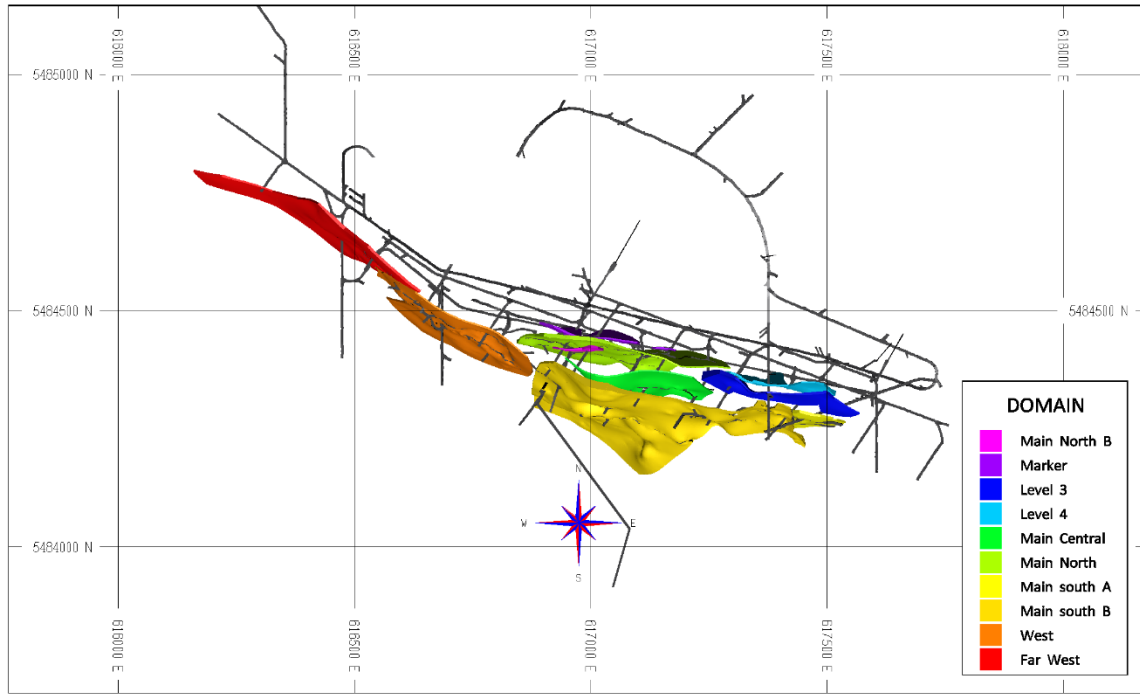


Figure 7-4 Plan View of Mineralized Domains and Underground Workings (Source: MMTS, 2021)

8 Deposit Types

The Bull River deposit has been described as a Churchill-type vein copper-silver deposit (Lefebure, 1996). The deposit type displays characteristics of relatively low tonnage (typically range from 10Kt to 1Mt) but high-grade (typically range from 1% to 4% Cu). Frequently occurring in Proterozoic-age extensional sedimentary basins, Churchill-type deposits are associated with rifting can comprise single vein to complicated vein systems that vary from centimetres to tens of metres in width and can extend hundreds of metres along strike and down dip. Commonly hosted in clastic metasediments, veins and vein systems are often spatially associated with mafic dykes and sills. The veins are generally associated with major faults related to crustal extension that controls the ascent of hydrothermal fluids to favourable sites for metal deposition. Fluids are believed to be derived from those mafic intrusives that are associated with the vein systems.

Mineralization in Churchill-type deposits is predominantly chalcopyrite, pyrite, and chalcocite with subordinate pyrrhotite, galena, bornite, tetrahedrite, argentite, and covellite and is generally younger than the host lithology. Dilation of veins is commonly caused by cross-structures or folding and results in concentrations of mineralization. Likewise, the intersection of veins is a locus of ore deposition. Mineralization can occur as massive and/or semi-massive sulphides that may be identified as conductors by electromagnetic (EM) surveys. Mafic intrusive bodies and related structures can be defined by magnetic, very low frequency (VLF), or EM surveys.

Alteration usually occurs within host rock in contact with veins and up to tens of metres from the veins with carbonization and silicification as typical alteration types in metasediments (BC MINFILE).

As a vein deposit, BRM shares similarities with the St. Eugene deposit and, to a lesser extent, with Coeur d'Alene District's quartz-Fe carbonate-galena-sphalerite-tetrahedrite deposits. The St. Eugene deposit is the largest vein deposit in the Purcell Supergroup and produced about 113kt of lead, 182t of silver, and 80kg of gold from 1.5Mt of ore mined between 1899 and 1929 from Upper Aldridge and Creston Formation rocks. It is hosted by clastic sediments metamorphosed and intruded by igneous rocks during the East Kootenay Orogeny (Lydon, 2000). Veins exhibit an echelon orientation with considerable bifurcation, divergence, and attitudinal digression typical of veins noted in deposits within the Coeur d'Alene District (de Souza, 2000).



9 Exploration

Ross Stanfield purchased the assets of the Dalton Mine from Placid on March 5, 1976. There is no record of work until 1974 when exploration was conducted on nearby properties within the Stanfield Holdings (i.e., G-Zone and Copper King, see Item 23 "Adjacent Properties").

Drilling at BRM began in 1981 and was conducted more or less continuously until 2009 to verify and expand estimated underground resources and explore new targets. Drilling programs are discussed in detail in Item 10 "Drilling".

In 1996, work began on a 5.4m wide by 4.5m high decline at a -15% gradient to provide access for underground drilling and sampling. Bull River reports that, to date, approximately 21,000m of underground development have been done including exposure of the mineralized structures on seven levels along access drives and crosscuts.

Starting in 1999, underground sampling of development walls and stopes was conducted by independent contract workers. This work, along with surface and underground diamond drilling, and baseline studies, continued the GBRM property under various practitioners until 2009 when work was suspended due to a lack of funds. Drilling commenced again in 2013 with 7 drillholes.

9.1 Geophysical Surveys

In 1972 a total of 10 complete set-ups, each 550 feet long, were surveyed to determine depth to bedrock, and locate the position of the Bull River Fault.

In 1978, approximately 1,000 line-km of aerial infrared photograph and 92.5 line-km of ground geophysical surveys were conducted over the 30 claim Steeples Group in the vicinity of BRM. The purpose of the survey was to determine if infrared aerial photography or a ground EM survey could help discover and define mineral deposits on the Stanfield Holdings. The infrared photography failed to detect any additional mineralization and EM survey found weak conductors that did not display sufficient continuity for further investigation (Allen, 1978).

In 1980, a helicopter borne EM survey was flown over the Stanfield Holdings and identified two EM-magnetic anomalies in the vicinity of the BRM. A ground geophysical program was recommended (Apex, 1981). In 1982 a 1,662.0 line-km EM-Magnetometer survey was completed on 68 claims completed by Apex Airborne Surveys Ltd.

In 1983 a 380.0 line-km VLF-EM Airborne Survey was done by Apex Airborne Surveys Ltd. 1984 12414 Bull 1 Mineral Claim Southeastern British Columbia (Morris, 1984).

In 1991, the Stanfield Holdings were explored again using helicopter borne DIGHEM magnetic and EM surveys. Results were initially interpreted by CGG GEOTERREX-DIGHEM of Mississauga, Ontario, and correlated with the known geology by MMRS. Results, according to de Souza (1999), supported known geological interpretations.

In 1993 a 337.0 line-km (Big Bear Property) and 65.0 line-km (Sand Creek Block) of DIGHEM survey was completed.

In 2017, TerraLogic completed airborne EM and IP surveys and concluded that: "The deposit exhibits a NW trending linear weak magnetic high with a much broader magnetic high with no correlating EM response. Notwithstanding, an EM response, even a weak one associated with a magnetic high could indicate a

stronger mineralized zone.” It was concluded that these characteristics should be used as an aid in defining further ground IP surveys and drill targets (TerraLogic, 2017).

9.2 Stream Sediment Geochemistry

A stream sediment sampling program was completed in 1998 over some, but not all, of the Stanfield Holdings. Bull River reported anomalous gold results from the Copper King and Trilby zones. Follow-up geological, geophysical, and geochemical surveys were recommended. The QP has not seen any results from these proposed programs and does not know if the work was done or not.

9.3 2011-2012 Verification Work

The underground channel sampling program was completed by MMTS during 2011 and 2012. The program consisted of the sampling of seven different sill drifts every 8m along the length of the vein. One meter channel samples taken across the width of the vein. A total of 2,149 samples, including QA/QC samples, were collected from 409 channels on seven levels of underground. Figure 9-1 illustrates the Channel samples done by MMTS in 2011 and 2012 with the modelled veins shown in light grey and as semi-transparent to indicate the sampling done in each vein.

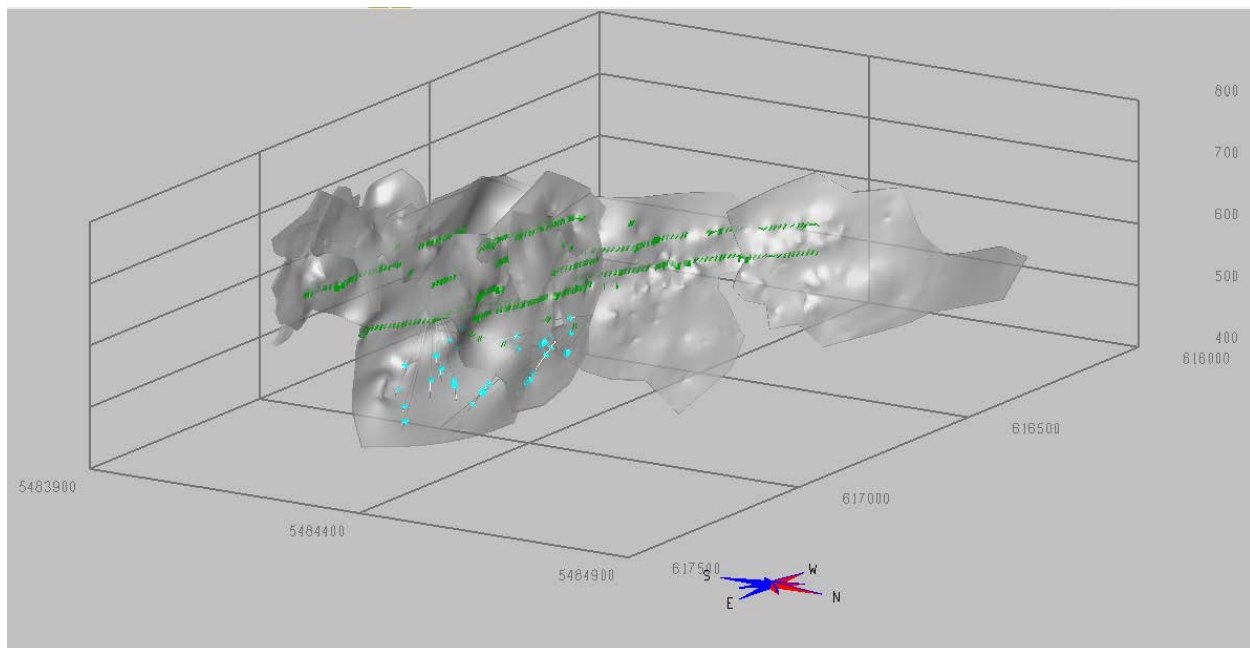


Figure 9-1 View Looking Southwest - Location of 2011-2012 Channel Samples (green) and 2013-2021 Drilling (cyan) within the Mineralized Solids (grey) (Source: MMTS 2021)

10 Drilling

10.1 Drilling by Braveheart (2020-2021)

Braveheart completed 11 NQ sized underground diamond drillholes in 2020 and 2021 totaling 1,869.4m. The drilling was conducted under contract by Atlas Drilling from the 9 east crosscut near survey station 997. The holes were fanned from nearly the same location with the potential to extend the previous resource on strike and to depth below demonstrated extent of the mineralized zones. Downhole surveys were conducted using Reflex EMS. The drilling was successful in this attempt with significant intersections at approximately the anticipated location of the target zone as shown in Table 10-1. The intersections shown do not represent the true length of the mineralized zone.

Table 10-1 Significant Intersections 2020-2021 Braveheart Drilling

Row Labels	From (m)	To (m)	Length (m)	Cu %	Ag g/t	Au g/t
BRU20-01	135.0	137.2	2.2	1.46	9.86	0.46
BRU20-02	149.6	153.2	3.6	1.08	7.53	0.40
BRU20-03	135.4	137.8	2.3	1.06	6.45	0.27
BRU20-04	129.1	131.4	2.3	1.00	6.74	1.16
BRU20-05	139.9	146.0	6.1	1.43	9.16	1.25
BRU21-01	170.9	174.8	3.9	4.58	25.54	0.59
BRU21-03	190.9	194.0	3.1	2.69	13.99	0.32
BRU21-05	107.2	110.2	3.0	2.41	16.82	27.96
BRU21-06	104.7	106.9	2.2	5.35	24.33	0.64

10.2 Drilling by Previous Owners

Drilling at BRM began in 1981. A combination of percussion and diamond drilling was done from surface. Once the underground access was established, the majority of the drilling was pursued underground.

A great deal of work has been done at BRM over the years, but documentation is incomplete. What follows is a summary of work compiled from available records, assessment reports filed with the BC government, and internal summary reports.

10.2.1 Percussion Drilling

Overburden thickness at the BRM property can exceed 200m locally. To ensure that holes intersected bedrock, Bull River initiated a procedure where a truck-mounted rotary percussion drill was used to pre-collar diamond drillholes. The hole would be advanced and cased until bedrock was established and the percussion drill would be replaced by a diamond drill.

10.2.2 Diamond Drilling

The first surface diamond drilling was reported to have occurred in 1974. Early drillhole locations were documented on drill logs relative to Placid's mine grid. These mine grid coordinates were later converted by Bull River to UTM (NAD 83) coordinates prior to input into the database. In 1995, Cansel Survey Ltd. (Cansel) of Calgary, Alberta was contracted to survey historic drill collars using UTM (NAD 83) coordinates. Collar coordinates for holes drilled prior to 1995 which have not been resurveyed are not reliable because of the lack of completeness and the questionable dependability of the conversion. In 2012, MMTS and Bull River staff located many of the old drillhole collars on the mine property and verified the Cansel Survey work.

Drilling was done using a number of different diamond drills owned by the Stanfield Mining Group using company personnel. Drillholes were sometimes spotted using a compass and chain from reference points on the Placid mine grid or by Global Position System (GPS). The hole was started using the percussion drill that cased down through the overburden until bedrock was encountered. Once the hole was anchored, the percussion drill was removed, and the core drill would set up on the established casing. Occasionally, the core drill would case through overburden as well as core the holes.

10.3 Summary of Drilling

The QP has relied on drilling statistics from Morton (2001a), shown in Table 10-2, but notes that often locations are not given. Morton included production statistics from drilling done on other areas within the Stanfield Holdings but outside of the BRM property boundaries. This results in discrepancies between the reported work and records contained in the database. Assessment reports filed on the British Columbia Assessment Report Index System (ARIS) were searched, but not all work was filed. In total there has been 104,748.2m of diamond drilling completed on the entire property.

Table 10-2 Summary of Drilling, Bull River Mines and Area

Year	Event	UG Diamond Drilling (m)	Diamond Drilling (m)	Percussion Drilling (m)
1974	Underground Drilling at Rimrock - Westcore Drilling Ltd Contract			
1975	5 Diamond Holes - Westcore - O.K.Claims			
1976	12 Diamond Drill Holes - Westcore		654.4	
1979	5 Diamond Drill Holes on Cedar 8 and Cedar 10		450.7	
1979	Diamond Drilling at G Zone		614.4	
1980	Commenced Copper King exploration - Diamond Drilling		3,920.3	
1981	Major Drilling program for Reserves Expansion at Bull River commences - Diamond Drillholes		5,733.6	
1982	Continuation of Reserves augmentation at Bull River - Diamond Drilling		3,219.9	
1983	Porcupine Hill Drilling - 3,474ft		1,058.9	
1984	Mine site		1,036.3	868.7

Year	Event	UG Diamond Drilling (m)	Diamond Drilling (m)	Percussion Drilling (m)
1985	Aspen and East/West Steeples		66.8	899.5
1986	One hole mine site and Cedar, eight holes Aspen		2,648.1	552.6
1987	Three holes mine site, one Cedar, 30 holes Aspen, Alder, Balsam, Dogwood, Elderberry, Steeples claims		2,853.2	2,812.4
1988	Two holes mine site, 25 holes at Aspen, Cedar, Dogwood, Elderberry, Steeples claims		1,488.3	1,837.3
1989	Five holes mine site, one at Aspen, 15 at Steeples claims		5,284.0	1,367.3
1990	13 holes mine site, 20 holes Aspen and Cedar claims		6,272.5	2,263.7
1991	7 holes mine site, 5 holes Dogwood and Elderberry claims		4,545.8	247.8
1992	Four holes mine site, two holes Cedar claim		2,851.1	0.0
1993	Two holes mine site		1,908.1	0.0
1994	One hole mine site, four holes Aspen and Steeples claims		406.0	617.8
1995	Two holes mine site		2,139.1	0.0
1996	One hole Cedar, 19 holes Aspen Feldspar, Dogwood, EC, Joy, Steeples claims		157.0	2,830.1
1997	Five holes Burt, Cedar, Joy, EC claims, 12 holes Aspen Feldspar, mine site, EC, Dogwood, Joy claims		3,877.4	1,145.1
1998	Underground drilling, Boisvenu, six holes mine site, six holes Aspen Feldspar	6,508.0	6,737.0	
1999	Underground drilling, Boisvenu, four holes Aspen Feldspar	11,169.0	1,741.0	
2000	Underground drilling, Boisvenu	13,275.7		
2001	Underground drilling, Boisvenu	5,629.5		
2002	Underground drilling, Boisvenu, one hole Cedar claim	846.0	1,332.6	
2004	Underground drilling, Boisvenu, 9 holes Grand	2,743.3	3,015.0	
2005	Underground drilling, Atlas, 9 holes Grand, one hole Steeples claim	541.5	5,317.0	
2006	Underground drilling, Atlas, two holes mine site	431.1	590.0	
2006	Underground drilling, Advanced	12,187.1		
2007	Underground drilling, Cabo, three holes mine site, two Aspen claims, 9 across Bull River	4,189.0	7,024.0	
2008	Underground drilling, Cabo, 18 holes mine site, two Aspen, 9 across Bull River	7,615.9	19,676.0	
2009	Underground drilling, Cabo, six holes mine site west, one hole Big Sand Cr.	7,350.8	5,106.0	

Year	Event	UG Diamond Drilling (m)	Diamond Drilling (m)	Percussion Drilling (m)
2013	Underground drilling, by Stanfield, 7 DDH	1,154.3	1,154.3	
2020	Underground drilling by Braveheart, 5 DDH	831.5	831.5	
2021	Underground drilling by Braveheart, 6 DDH	1,037.9	1,037.9	
	Totals	75,510.7	104,748.2	15,442.7

As the mineralized bodies are generally steeply dipping, the relationship between true thickness and drilled thickness is variable. Drillholes collared from underground were typically oriented to intersect the mineralization close to right angles, though the drillholes from surface had more difficulty intercepting the mineralization at high angles. The true thickness has been interpolated and veins less than 2.5m true thickness are not included in the resource. Recovery and RQD has been recorded for all the drillholes examined by MMTS. Core recovery typically is acceptable.

10.4 Verification Sampling (2011-2012)

MMTS was engaged by GBRM for a significant verification program which was undertaken in 2011 and 2012 which consisted of re-assaying of sample pulps, re-logging, and re-sampling of stored drillholes. All old drillholes at the mine site were examined, logged, and sampled. A secondary core storage area was inspected and several old drillholes from the deposit were located.

In addition to revisiting the stored drillholes and samples, an extensive underground channel sampling program was undertaken which is described in Chapter 11 of this report.

A summary of drillholes and channels within the database is given in Table 10-3. The number that has had at least one interval re-sampled or re-assayed in 2011 or later are given in the last column. This demonstrates the significant scope of the verification program.

A plan view of all the drilling and channel sampling within the Bull River resource areas is illustrated in Figure 10-1. Plotted is the QAQC status, showing the drillholes which have a certificate and were validated during the verification program, the drillholes with no certificate and those with a new certificate for Au, but historic values for Cu and Ag.

Table 10-3 Summary of Drillholes and Channels in the Database

Year	Not Defined	Drillholes	Channels	Total	Sum of Length	Number of Drillholes or Channels Assayed in 2011 or Later
Unknown	5	46	8	59	34,379	22
1999		40		40	11,167	27
2000		67		67	13,415	47
2001		24		24	5,552	9
2002		3		3	846	0
2004		20		20	2,743	8
2005		9		9	2,838	4
2006		59		59	13,380	56
2007		3		3	4,214	2
2008		16		16	7,812	8
2009		16		16	7,742	14
2012			410	410	2,146	410
2013		7		7	1,154	7
2020		5		5	832	5
2021		6		6	1,041	6
Total	5	321	418	744	109,260	625

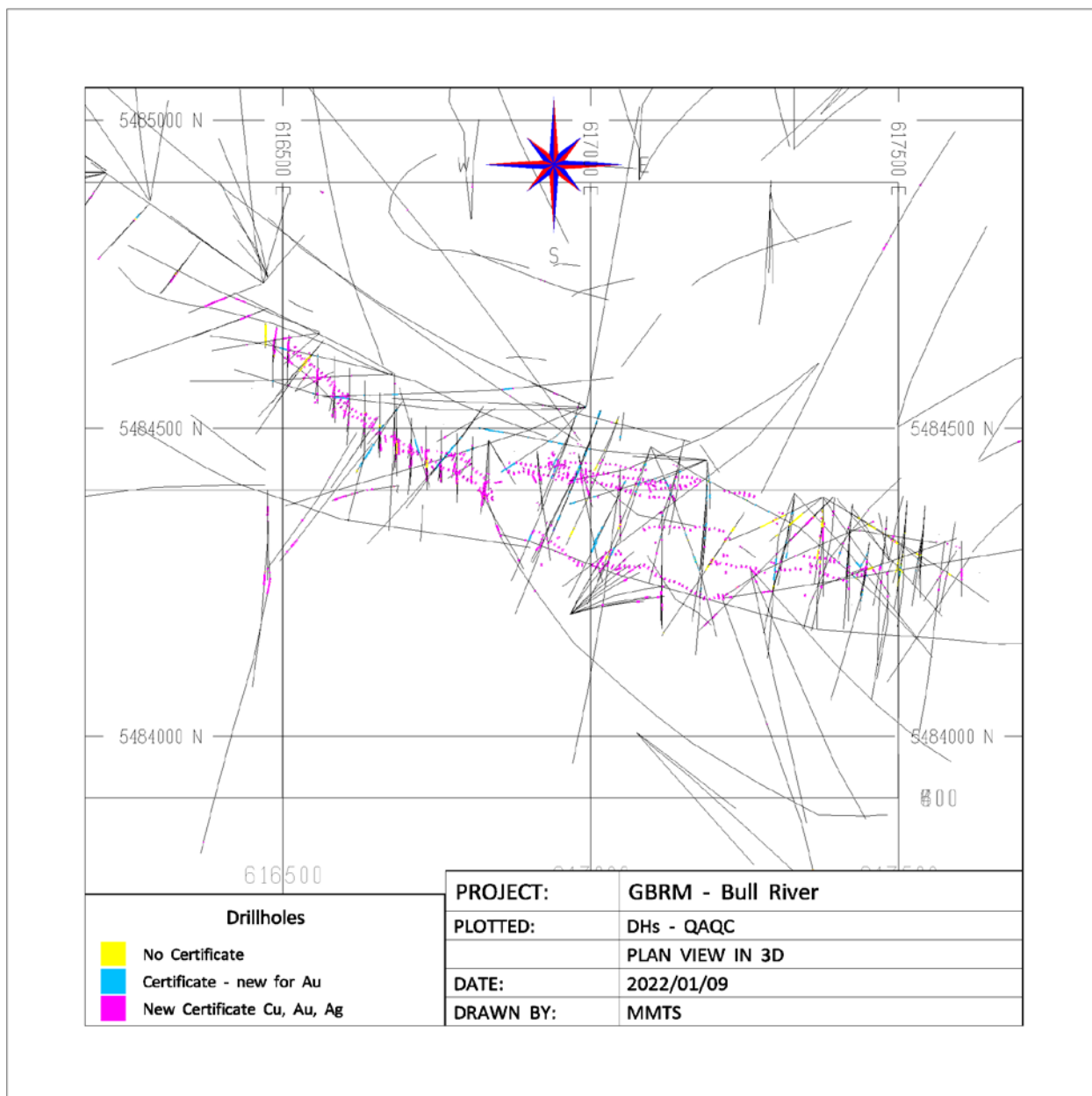


Figure 10-1 Plan View of the Drilling, Channel Sampling and Certificate Status



11 Sample Preparation, Analyses and Security

11.1 2020-2021 Sampling and Analysis by Braveheart

The drilled core was brought to surface at the end of each 8hr shift, where it was sorted, logged, photographed & sampled over zones of interest by Braveheart or MMTS geologists. The zone of interest was identified by mineralization, and sample intervals were selected according to the most dominant characteristics, with no sample intervals less than 0.3m or exceeding 0.5m in length. Sampling extended into the shoulder areas (hangingwall/footwall) a minimum of 1.0m.

Cored intervals for sampling were cut in half with a diamond saw and bagged. QAQC samples of blanks, standards and duplicates were added between the sampled intervals on every 10th sample, or as best fit for shorter sample intervals. All sample tags for respective bags were recorded. Copies of tag numbers were stapled in the core box trays corresponding to cut cored intervals. The samples were delivered to the Manitoulin Trucking depot in Cranbrook, BC. by Braveheart personnel then transported directly to Bureau Veritas in Vancouver, BC or SGS Labs in Burnaby, BC.

11.1.1 2020 Analysis

Samples were submitted to Bureau Veritas (BV) in Vancouver (formerly Acme) for processing. BV is an independent laboratory with ISO/IEC 17025 accreditation. At BV, samples were crushed to 70% passing 2mm, split to 250g and pulverized to greater than 85% passing 75µm. Three Samples, weighing 0.5g each, were subject to 4-acid digestion and analyzed by Inductively Coupled Plasma Emission Spectrometer (ICP-ES) for 23 elements including Copper, Silver and Cobalt, as well as Atomic Absorption for Copper and Iron, and Aqua Regia digestion with ICP-Mass Spectroscopy for 37 elements. Gold assays were performed with 30g samples by fire assay with ICP-ES finish.

11.1.2 2021 Analysis

Samples were submitted to SGS in Burnaby BC for preparation and analysis. SGS is an independent laboratory with ISO/IEC 17025 accreditation. Gold was assayed using 30g samples by fire assay with atomic absorption spectroscopy finish. Silver was assayed using 4-acid digestion with atomic absorption spectroscopy finish. Copper and cobalt were assayed by sodium peroxide fusion with inductively coupled plasma optical emission spectroscopy finish.

11.2 2011 - 2012 Sampling by MMTS

Logged core samples and selected historical assay pulps and rejects were analyzed by ACME Analytical Laboratories Ltd. (ACME) in Vancouver, BC (now Bureau Veritas). At the time ACME was certified ISO 9001:2008 with pending ISO/IEC 17025 accreditation. All work done by MMTS was designed by, and carried out under the supervision of, Robert Morris, P.Geo., who meets the definition of a Qualified Person (QP) as defined by NI43-101 (Snowden, 2013).

The MMTS sampling program had two components. The first consisted of re-assaying existing pulps, following established quality assurance/quality control (QA/QC) procedures, which had been returned to the GBRM from CanTech and had been stored, under lock and key, at the GBRM assay laboratory. These duplicate assays also provide a check of the original CanTech and GBRM assay laboratory results. The second component of the program was the original assaying of core that had been unlogged and unsampled before MMTS' arrival. These new core samples were subject to the same QA/QC procedures as the CanTech sample pulps (Snowden, 2013)



The sample pulps submitted to ACME did not pass ACME's preparation QA/QC protocols and were subsequently re-pulverized at additional cost. This preparation procedure, namely code P200, consists of drying the sample at 60°C and pulverizing to 85% passing 200 mesh (75µm). The samples were then subjected to the 7TD1 procedure which consists of a hot four-acid digestion for sulphide and silicate ores followed by copper and silver analysis using Inductively Coupled Plasma – Optical Emission Spectroscopy (ICP-OES) on a minimum 1 g pulp. For gold, the ACME procedure used was 3B01 which consists of a 30 g fire assay fusion (FA) with final analysis by ICP-OES. For samples that were above the tolerances of this method, procedures G601 (FA on a 30 g sample) and G612 (final gravimetric analysis of gold and silver) were used (Snowden, 2013).

11.3 Historic Sampling

Written protocols for historical sampling exist but are not dated; therefore, MMTS cannot, with any degree of confidence, presume that these procedures were followed from the inception of drilling at BRM. Other sampling protocols were documented in 2001 and appear to have been followed until 2009 when drilling was suspended until 2013 at which proper protocols have been followed by MMTS.

The verification sampling undertaken by MMTS in 2011, on behalf of Bull River, has been done under the direct supervision of a QP and a defined set of protocols (MMTS, 2011).

11.4 Pre-2001 Sampling

The written protocol states that, for diamond drill core, the logging geologist was responsible for documenting the core recovery, RQD and lithology and marking intervals for sampling. Prior to 1999, this work was conducted by Bull River personnel. In 1999, verifiable "chain-of-custody" protocols were initiated that saw the logging and sampling of drill core and underground channel samples conducted by individuals independent of Bull River (Mosher, 2003).

Samples were designated on 2m intervals in zones of weak or absent alteration and mineralization. If alteration and mineralization were favourable, samples were taken on intervals of one metre or less. Zones of poor recovery were sampled only between wooden blocks inserted by the drilling contractor (core run interval). Intact core was halved longitudinally by a core saw. Duplicate sample tags were written with one tag placed in the sample bag to accompany the halved core to the laboratory and the other was affixed to the core box.

Sample tags were prepared by the logging geologist and accompanied the samples to the laboratory. An inspection of early drill logs by MMTS found limited entries for RQD or core recovery and no other dedicated RQD files were in the electronic or hardcopy databases. For percussion drill samples, the logging geologist was required to weigh each sample and log it for recovery, RQD, and lithology. MMTS could not locate any percussion drill logs.

11.5 2001 - 2009 Sampling

In 2001, a more rigorous program of data collection and management was implemented that included written protocols for logging, sampling, and sample preparation. All procedures written for drill core applied to re-sampling as well as primary sampling. The QP notes that these new protocols were implemented when the original "chain-of-custody" team was replaced briefly in 2001 (Mosher, 2003). After the departure of the replacement team, the original group was reinstated and continued to work



at the BRM until 2003. Drilling resumed in 2004 and continued until 2009. MMTS has no evidence to support any “chain-of-custody” protocols being followed 2003.

Samples were selected by the geologist using uniform (1 m) or semi-uniform ($1\text{m} \pm 20\text{cm}$) sample lengths in mineralized zones and sample tags assigned. Core recovery was calculated for the respective sample runs and recorded in the drill log, and the core was photographed. The core was cut longitudinally in equal portions to obtain a non-biased representative sample, with half of the core placed in a sample bag and the remaining half returned to the core box for reference. In the case of re-sampling, if insufficient material was available, the core was left for reference. The QP notes that a minimal number of core photographs were found in the database.

Sampling was done selectively based on the alteration, lithology, and mineralogy at the discretion of the logging geologist. Sampling appears to have been done in, and proximal to, mineralized structures, so the sample density in the database is quite low. Part of this low density may be due to the assay database being incomplete. Bull River has gone to great effort to retain all drill core in two secure locations.

Sampling was not done for the entire length of the hole but at, or near, mineralized structures potentially excluding any mineralization not proximal to a vein structure. In the QPs opinion, the sampling methodology is adequate, and the data generated are suitable for use in the estimation of Mineral Resources.

11.6 2011 Logging and Sampling conducted by MMTS

Verification sampling has been undertaken by MMTS on behalf of GBRM in 2011 and 2012 under the direct supervision of a QP and a defined set of written protocols (MMTS, 2011). The work was conducted by MMTS employees except for one GBRM employee who cut the core samples. MMTS 2011 sampling included the following:

- 1,126 sample pulps (including QA/QC samples) located and sent for re-assaying,
- 82 drillholes logged and 1,193 samples (including QA/QC samples) taken,
- 342 samples from 24 drillholes tested for specific gravity.

In 2012 MMTS continued core logging and sampling at the mine, collecting the following:

- 842 core samples (including QA/QC samples),
- 68 coarse reject samples (including QA/QC samples),
- 264 samples from 49 drillholes tested for specific gravity.

Drill core footage blocks were visible and easily read. Drilling was conducted in imperial measure and MMTS did not convert downhole distances to metric before logging (as was previously done by Bull River).

Due to the magnitude of drillholes drilled but not logged or sampled and time constraints, MMTS selectively logged and sampled drillholes with obvious mineralization, veining and structure. The selected holes were photographed and measured against footage markers to establish core recovery. RQD measurements were taken, and the core was logged for lithology, alteration and structure (in imperial



units), and bedding and vein angles noted with respect to the core axis. Where mineralization was oxidized, the core was cut in half longitudinally to result in a fresh surface being available for inspection.

Samples were selected by the logging geologist with uniquely numbered core tags stapled to the core box, and red flagging placed at the beginning of each sample interval. As the entire hole was not logged, logging was done by sample interval and sample numbers were noted in the drill logs. By MMTS convention, samples were a minimum of 0.3m and a maximum of 1.5m in length, but preferably 1m sample long. Sampling was also continued into at least 0.5m into the footwall and hanging walls of the mineralized zones.

Drill core selected for sampling was halved longitudinally, using a core saw, as laid out by the logging geologist. The core was cut, but not sampled, by a Bull River employee. Both halves of the core were returned to the core box and sampling was done by the logging geologist. One half of the core was placed in a plastic sample bag along with a tag that matched the one affixed to the core box. The sample bag was closed using a "zap strap" plastic tie, stored in an MMTS vehicle, and taken off-site every evening. Samples were stored in the local town of Fernie, BC until enough were accumulated for shipping to the laboratory via commercial carrier. The remaining core was returned to the racks, in an orderly manner, for future reference and sampling.

Existing assay pulps from samples analyzed at CanTech and BRM were also collated for re-assay by MMTS. The pulps had been stored at the BRM site and dutifully tracked; MMTS verified their sample numbers against a master list provided by Bull River.

The procedure followed by MMTS has the potential to understate the contained mineral content since only zones of obvious veining mineralization were selected for logging and sampling. Any mineralization within the host rock lithology was less likely to be selected resulting in a potentially more conservative resource estimate.

11.7 Underground Channel Sampling

The database contains assay records from underground sampling and Morton (2001a) provides a description of the procedure. Samples were taken from mineralized material exposed in crosscuts and stopes. Sample intervals were marked, generally in 1m intervals, on the walls and surveyed from underground survey stations. Sample intervals extended beyond the vein contacts into the host lithologies (Mosher, 2003). Using a saw with a diamond impregnated blade, samples were cut approximately 1.5m from, and parallel to, the sill. Each channel was cut approximately 2.5cm wide and 2.5cm deep, chipped into clean 20L buckets at prescribed sample lengths. The sample was then transferred to an 18cm by 24cm plastic sample bag. The sample bags were labelled by location and then taken to the on-site laboratory where they were crushed, pulverized, split, and placed in a sample bag for shipping to the independent laboratory for analysis. The remaining reject was placed in a 20L plastic pail for storage on site. The database contains 80 back samples, but no written procedure is available to describe how these were taken, and they have not been included in any estimation of Mineral Resources.

Some channel sample locations were examined underground by MMTS's Bob Morris in 2011. Where observed, the channel samples were taken across host rock and mineralized vein contacts and should, in the QPs opinion, reasonably reflect the grades and true widths of the material sampled.

MMTS completed an extensive underground sampling program in 2012, collecting 2,159 samples, including standards, blanks, and duplicates (QA/QC samples). The majority of the samples were taken from the back of the sill drifts with less frequent samples from face and rib exposures.

Procedure for sampling on the back:

- For sampling the back when in a sill drift, sample lines are marked every 8m along the drift. Each line is divided into approximately 1m samples across the width of the back. The back is typically 4m to 5m wide. Sampling is done from South to North (i.e. HW to FW sides of the vein).
- Location of the sample line is measured from the nearest or most appropriate survey station.
- Coordinates of each survey station were known by GBRM staff and provided to MMTS.
- Using maps of the underground workings, the sample locations are plotted and coordinates for each sample line starting point are determined. The elevation of the nearest survey station is used for the elevation of the sample lines. Where samples are taken on a face, the distance from the back to the sample line is measured, to later determine the sample line elevation. The coordinates are entered into a database. The sample lines are entered into the database as drillholes.
- When sampling along the back, sample stations are marked every 8m from an appropriate survey station, using a measuring tape.
- Once a few sample stations are marked out, the geologist goes up in the bucket of the scoop, with a helper from GBRM. The geologist marks one metre samples across the back. The geologist then goes down, and two GBRM staff members go up in the bucket for chipping. The tarp is laid out in the bucket to collect the rock that falls during chipping. Once collecting the sample is complete the tarp is bundled up, and the sample is passed off to MMTS to bag, and tag.
- MMTS geologists supervise the chipping, to ensure it had been conducted in an appropriate manner, and the most representative samples possible were obtained.

11.8 Assay Analysis Pre 2009

Samples from drillholes in the early 1980s were analyzed at MU by fire assay (FA) and finished using atomic absorption spectrometry (AAS). Later, analyses were done using Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) and X-Ray Fluorescence Spectrometry (XRF) for gold (de Souza, 1999). Sample preparation consisted of crushing and pulverizing until 100% passed 100 μ m and re-homogenizing by mixing. Aliquot size is not known. These results were rejected by the QP for use in the estimation of Mineral Resources due to the difficulty in reproducing the data.

In 1999, a “chain-of-custody” protocol was established where samples were collected, prepared for analysis, shipped, and interpreted by individuals independent of Bull River. Prior to establishment of this protocol, about 700 samples had been collected by Bull River personnel that had not been submitted for assay. Although these samples did not meet the criteria of the protocols, they were included in the database since they were similar in magnitude and variability to those collected after the procedures were enacted (Mosher, 2003).



Both drill core and underground channel samples were processed in the GBRM laboratory. Samples were picked up daily and placed in chronological order, and sample numbers were cross checked. Each sample was crushed using a jaw crusher and then passed through a 25cm cone crusher until they were reduced to minus 10 mesh. The sample was then passed through a Johnson or Gilson splitter two or three times until a subsample of 300 g to 400 g was obtained. The sample was homogenized between each splitting using riffing pans.

Some of these samples were placed in a heat-sealed sample bag packed in a 20L plastic pail for shipping to the independent laboratory (AuRIC) for analysis. The assay samples were kept in secure storage until shipped. The remaining reject was placed in a 20L pail for secure storage on site. No details on sample preparation procedures conducted at AuRIC are available. Assay results, however, are documented and indicate that methods used include chemical assay with solvent extraction (SX) and graphite furnace atomic absorption (GFAA) finish, chemical assay with analytical finish, and hydrometallurgical extraction with analytical finish. The results from these analyses were not used by in the resource estimate due to the non-industry standard methods employed.

From November 2000 to October 2001, samples were analyzed at CanTech until Bull River hired a Certified BC Assayer (Mosher, 2003). At CanTech, one half tonne assay charges (15 g) were analyzed using near total digestion with a combination of four acids, nitric (HNO_3), perchloric (HClO_4), hydrofluoric (HF), and hydrochloric (HCl) and ICP-Optical Emission Spectrometry (OES). Copper results exceeding 5,000 ppm and silver exceeding 50 ppm were re-analyzed using AAS. QA/QC procedures called for every 25th sample to be an assay duplicate of the preceding sample and every 20th sample to be a Certified Reference Material (CRM) standard. In December 2002, all pulps analyzed at CanTech were returned to GBRM and analyzed for gold. These sample pulps, in addition to blanks and CRMs totalling 1,126 samples, were sent to ACME laboratories in Vancouver, BC by MMTS in 2011.

The GBRM laboratory was employed primarily for grade control while underground development was being conducted. It became the primary drill core and underground channel sample assay laboratory after 2001. The samples analyzed at the GBRM laboratory were crushed to approximately 3mm in size, then riffle split to approximately 500 g, and then pulverized to minus 100 mesh. A 15 g subsample was analyzed for gold by FA with an AAS finish. Copper and silver results were obtained by aqua regia digestion and AAS.

The written procedures state that internal QA/QC checks were to be done routinely and periodically inspected by the designated geologist. Bull River laboratory personnel, however, reported that, in 2010, only CRM provided by the manufacturer of the AAS were read at the beginning and end of each assay run to ensure proper instrument calibration and no other industry-standard internal QA/QC procedures were followed. The written procedures also state that precision, accuracy, and contamination checks should be monitored on a batch-to-batch basis by the designated geologist by examining results from the insertion of duplicates, blanks, and CRM, but results lacked documentation.

11.9 QAQC for 2011/2012

During the channel sampling and drill core re-sampling program MMTS routinely inserted blanks and standards into the sample stream at a nominal rate of 1 blank and two standards for every 25 samples submitted to the assay lab. In addition to the blanks and standards submitted to the assay lab MMTS also

submitted approximately 300 pulps from the GBRM mine laboratory for assay checks of Cu, Ag, and Au determinations.

11.9.1 Certified Standard Samples

Certified standard samples (standards) or CRM (certified reference materials) are used to measure the accuracy of analytical processes and are composed of material that has been thoroughly analyzed to accurately determine its grade within known error limits. Standards or CRMs are submitted by the geologists into the sample stream, and the expected value is concealed from the laboratory, even though the laboratory will inevitably know that the sample is a standard of some sort. By comparing the results of a laboratory's analysis of a standard to its certified value, the accuracy of the assay results of the laboratory is measured.

MMTS used four different CRM's or standards when submitting samples for analysis. The CRM was prepared by WCM Minerals of Burnaby, BC. The true reference values for the four CRMs are shown Table 11-1.

Table 11-1 Certified Reference Material – Expected Values

CRM Name	Certified Value			Standard Deviation		
	Cu%	Ag g/t	Au ppb	Cu	Ag	Au ppm
CU 121	0.97	33	-	0.02	1.13	-
CU 145	3.10	93	-	0.09	3.37	-
CU 163	1.06	99	4354	0.02	2.37	130
CU 184	0.192	13	195	0.004	0.76	15

11.9.1.1 Standards

MMTS analyzed the results of assays from the four materials as sampled in Table 11-2.

Table 11-2 Certified Reference Material – Number of Assay Samples

CRM Name	Number of Assays		
	Cu	Au	Ag
CU 121	31	0	31
CU 145	31	0	31
CU 163	29	29	29
CU 184	30	30	30

A standard assay is considered to have failed if it registers more than +/- 3 standard deviations from the expected value of the standard. Multiple assays registering between +/-2 and +/- 3 standard deviations (SD) from the expected value are considered problematic. A mean of assay values deviating significantly from the expected value indicates bias. The range of +/- 5% of mean of assay values can also indicate problems with accuracy.

11.9.1.2 Cu standards

Figure 11-1 through Figure 11-4 show the results for the analysis of standards for Cu.

CRM145, shown in Figure 11-1 indicates a slightly low bias, however all but two values are within the +/- 2 SD range, of these both are low, and one is so significantly low it must be considered an outlier. The expected value for CRM 145 is 3.1%, well above the typical grades encountered in this resource, meaning that the slight low bias and the one fail, are of no consequence.

The results for CRM 163, as shown in Figure 11-2, give four fails, outside of the +/- 3 SD tolerance range. However, the mean of the assays is spot on and even though only 76% of samples fall within the +/- 2 SD range, these results are considered acceptable.

Figure 11-3 gives the Cu results for CRM 121. These results are problematic as the mean of the assays falls outside of the -2SD range, and only 40% of samples are within the expected range of +/- 2SD. This could indicate a problem with the standard material and bears further investigation. Because the expected value of CRM 121 is 0.97% and close to that of CRM 163 at 1.06%, and these results are acceptable, MMTS will proceed for now with the assumption that the CRM 121 material is flawed.

Figure 11-4 shows the results for CRM 184 for Cu. Here it can be seen that the mean value is close to the expected value of 0.19% and only one sample is in the fail range.

Overall, the standard results for Cu are considered acceptable, with the caveat that further investigation of CRM 121 is suggested.

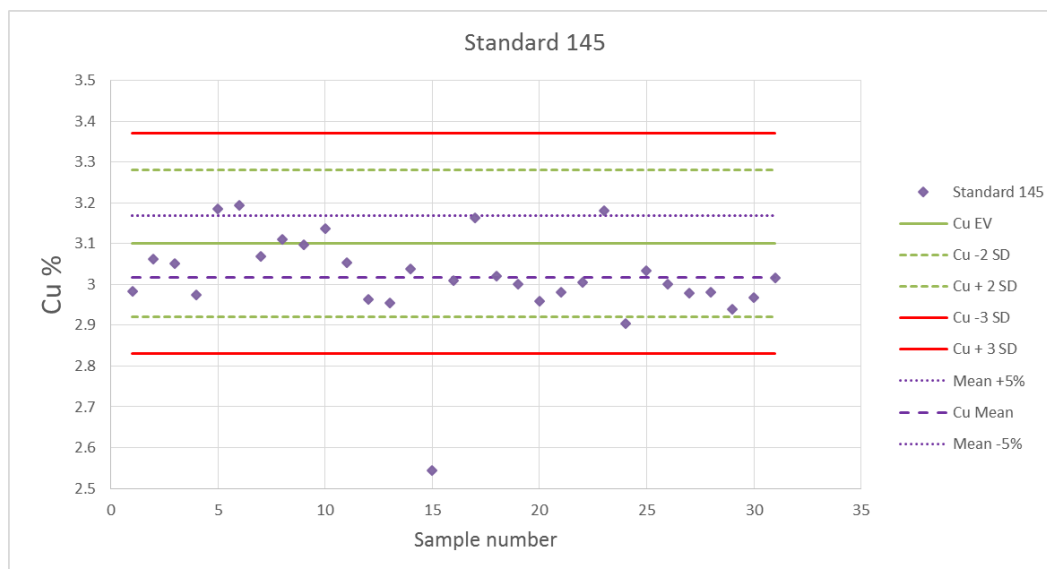


Figure 11-1 Standard 145 Cu Results (Source: MMTS, 2019)

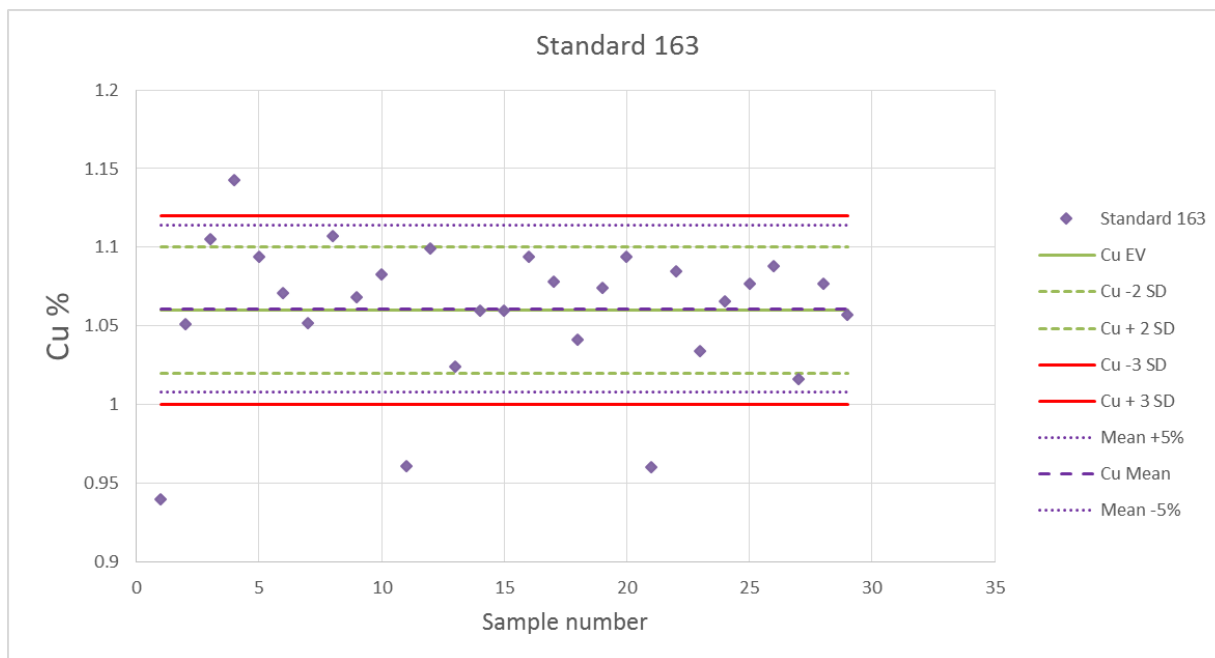


Figure 11-2 Standard 163 Cu Results (Source: MMTS, 2019)

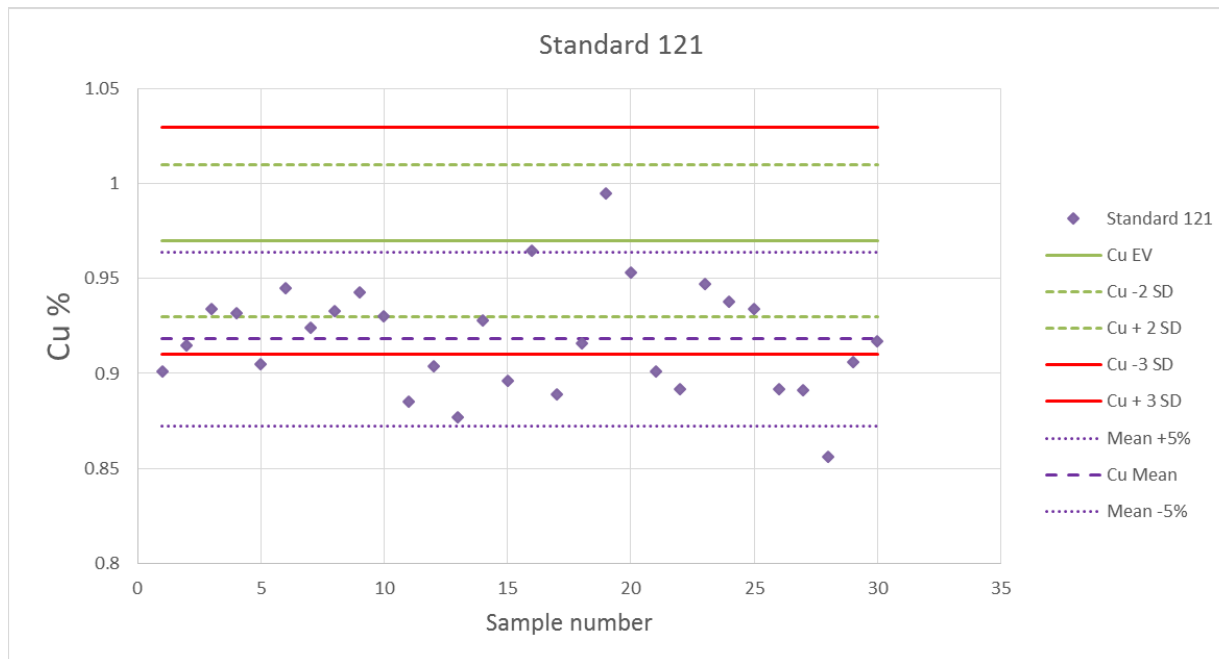


Figure 11-3 Standard 121 Cu Results (Source: MMTS, 2019)

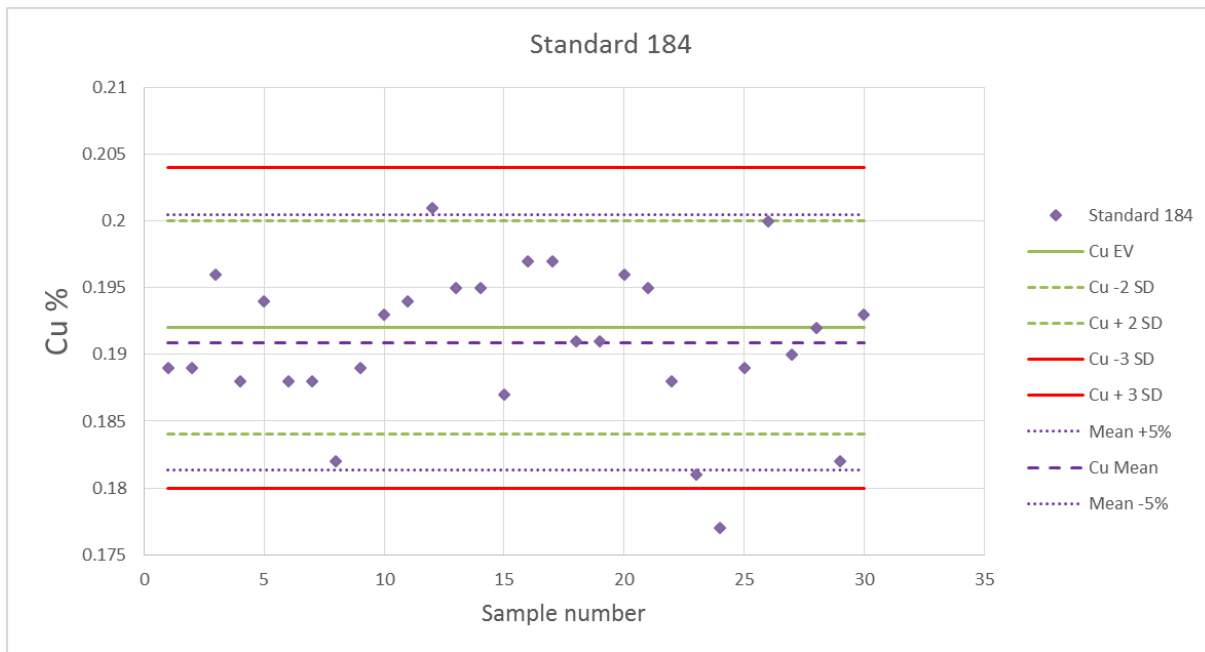


Figure 11-4 Standard 184 Cu Results (Source: MMTS, 2019)

11.9.1.3 Au Standards

The results for Au for CRM 163 presented in Figure 11-5 indicate an overall high bias and consider 17% of the samples to have failed. The expected value, of 4.35 g/t is well above capping values so this result is of little consequence.

For CRM 184, results shown in Figure 11-6, the mean of assay values is very close to the expected value of 195 ppb and all results are within the +/-2 SD range, indicating good acceptability of the assay values in this, the more relevant range for this deposit.

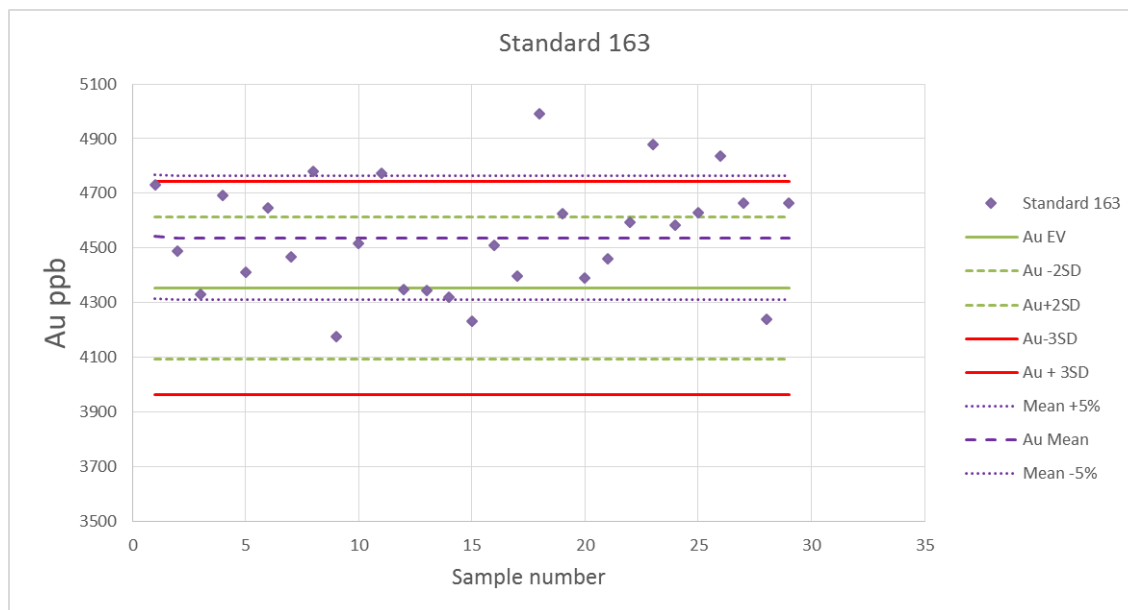


Figure 11-5 Standard 163 Au Results (Source: MMTS, 2019)

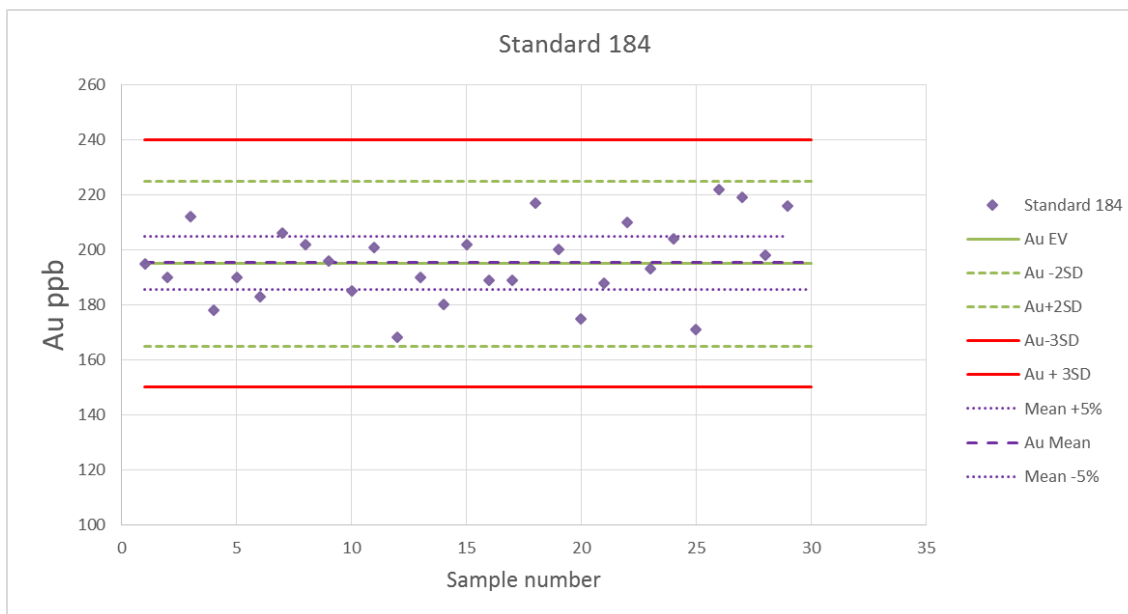


Figure 11-6 Standard 184 Au Results (Source: MMTS, 2019)

11.9.1.4 Ag Standards

For CRMs 163 and 145, it can be seen in Figure 11-7 and Figure 11-8 that, the assay results are clearly biased high, and each gives multiple fails. However, the expected value of the standards (99 and 93 g/t) are an order of magnitude above the average Ag grade of all domains (6-7 g/t), and only represent about 0.5% of

the data used in the resource estimate. These selected CRMs therefore have too high of Ag content to be meaningful to this resource estimate.

The results of CRM 122 standard analyses are given in Figure 11-9. It shows that there is only one failed sample, and the mean is close to the expected value and that these results are acceptable.

CRM 184, results shown in Figure 11-10, gives a mean values close to the expected value and only two failed assay results. This indicates acceptable results in a meaningful range of value for the deposit.

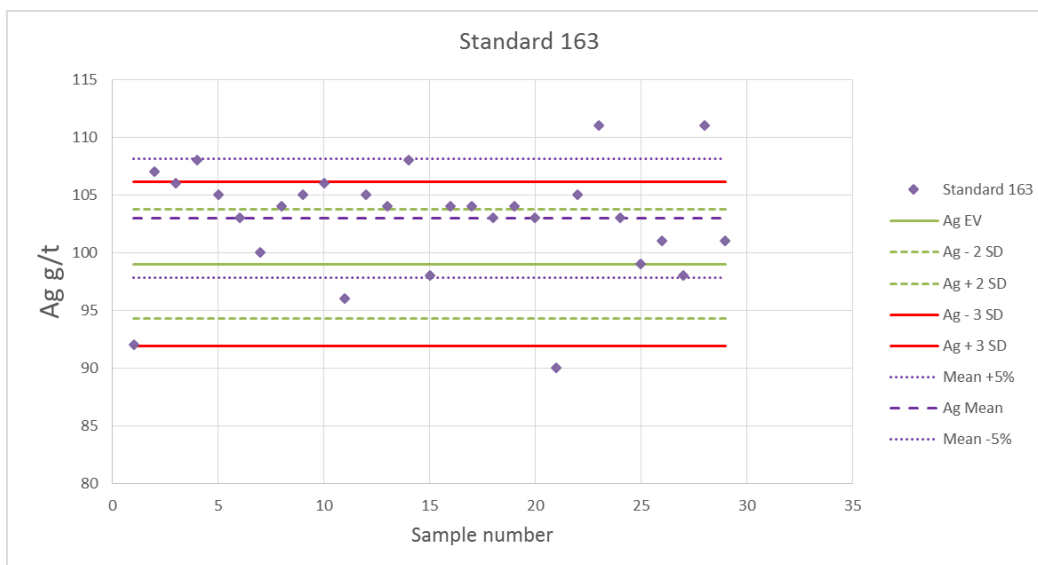


Figure 11-7 Standard 163 Ag Results (Source: MMTS, 2019)

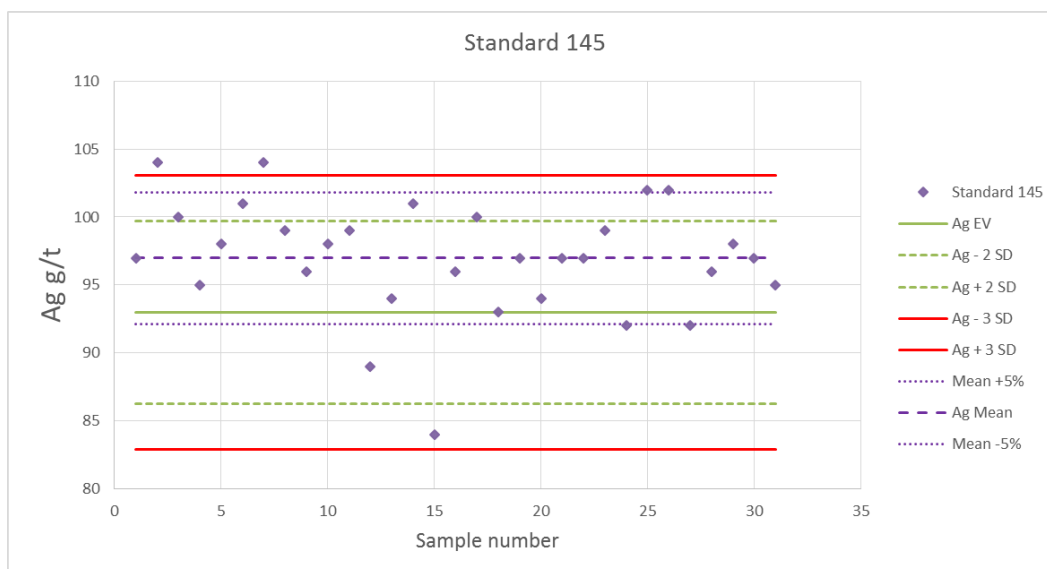


Figure 11-8 Standard 145 Ag Results (Source: MMTS, 2019)

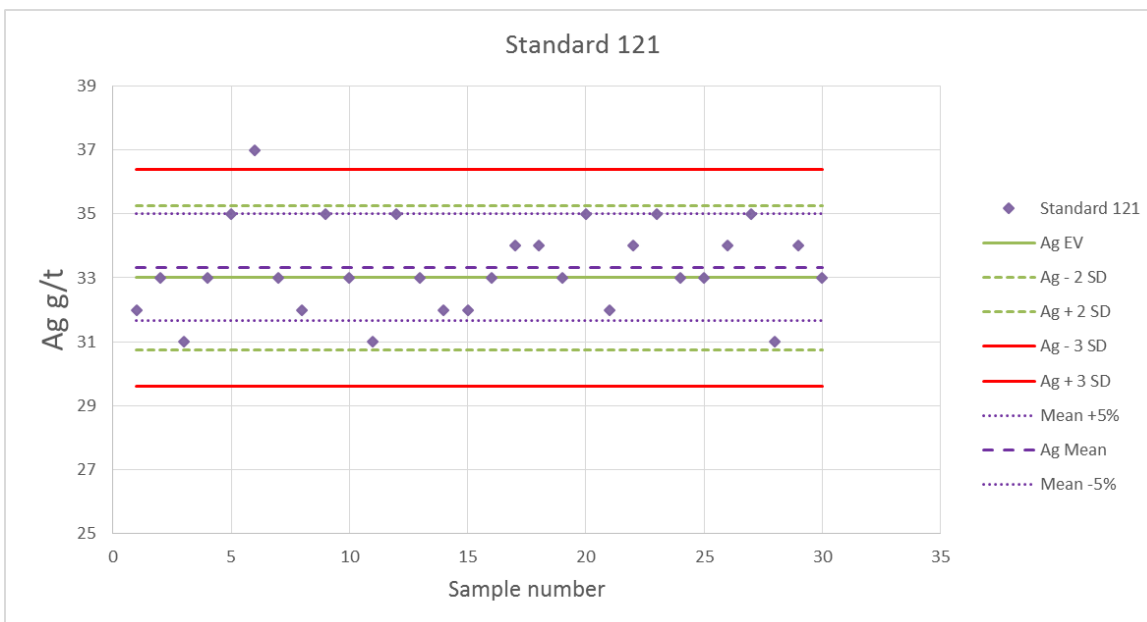


Figure 11-9 Standard 121 Ag Results (Source: MMTS, 2019)

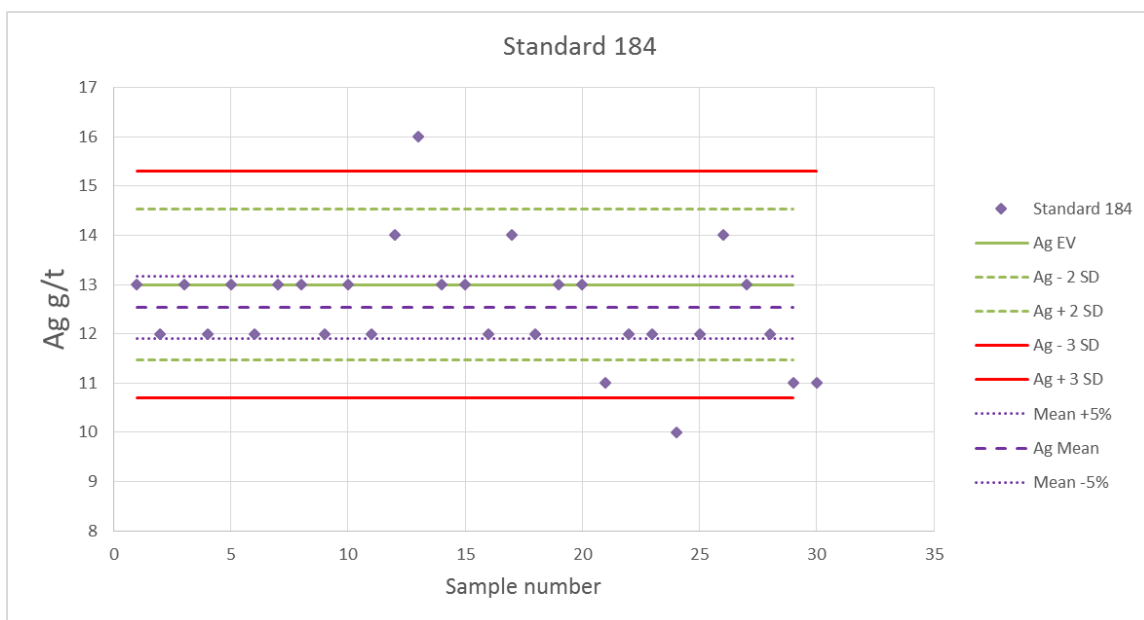


Figure 11-10 Standard 184 Ag Results (Source: MMTS, 2019)

11.9.2 Blanks

Field blank samples are composed of material that is known to contain Au, Cu and Ag grades that are less than the detection limit of the analytical method in use and are inserted by the geologists into the sample

stream. Blank sample analysis is a method of determining sample switching and cross-contamination of samples during the sample preparation or analysis processes.

MMTS analysed the results of the 129 blank insertions into the Au, Cu and Ag sample assay streams. One of the samples in the data base had higher than expected assay values for a blank; however, the sample weight was also 8.08 kg, significantly higher than other sample weights of 0.05 to 0.1 kg. This result was discarded from the dataset. MMTS found no evidence of systematic contamination during the sample preparation phase as there are very few samples of all three elements (Cu, Ag, and Au) exceeding five times detection limits. The results of the analysis are shown in the graphs below.

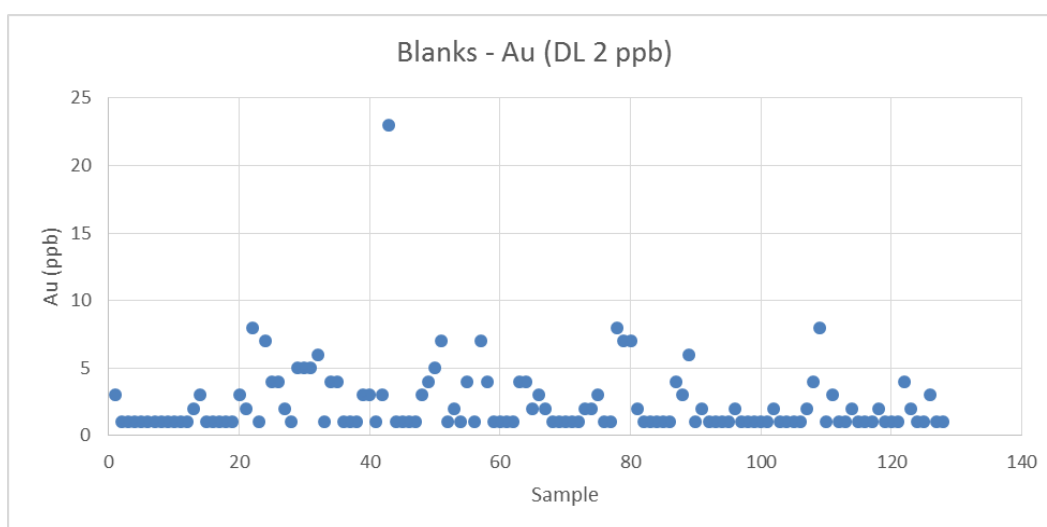


Figure 11-11 Au Blanks Chart (Source: MMTS, 2019)

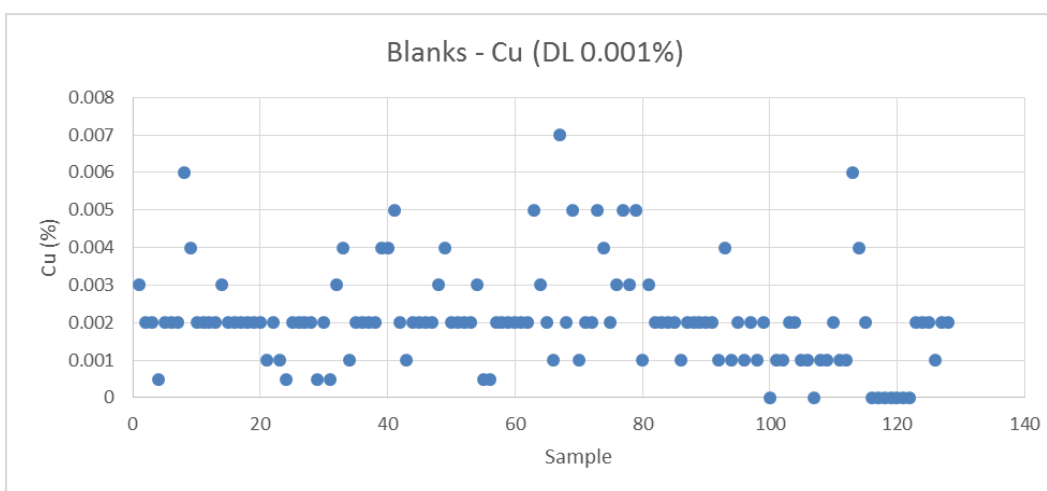


Figure 11-12 Cu Blank Chart (Source: MMTS, 2019)

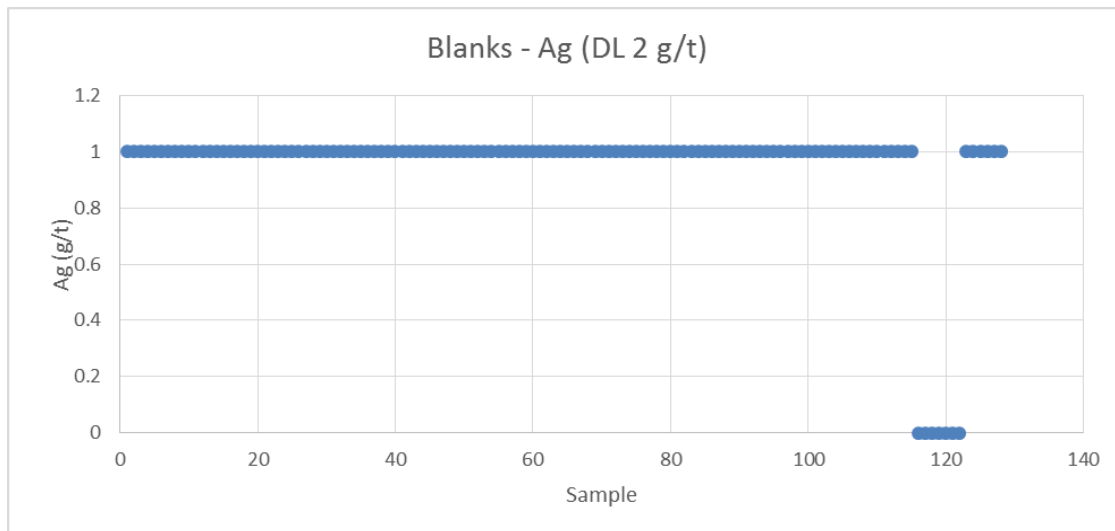


Figure 11-13 Ag Blank Chart (Source: MMTS, 2019)

11.9.3 Duplicate Analysis

The precision of sampling and analytical results can be measured by analyzing the same sample using the same methodology. The variance between the measured results is a measure of their precision. Precision is affected by mineralogical factors such as grain size and distribution and inconsistencies in the sample preparation and analysis processes.

A brief description of the plots employed in the analysis of MMTS duplicate data, as presented in this report, are briefly described below:

Scatter plot: assesses the degree of scatter of the duplicate result plotted against the original value, which allows for bias characterisation and regression calculations.

Ranked half absolute relative difference (HARD) plot: half absolute relative difference of samples plotted against their rank % value. For field duplicate samples, the sample threshold is accepted to be approximately 30% or below at the 90th percentile, depending on the nature of mineralisation.

Both field and pulp duplicates are analyzed here. Because field duplicates come from split pieces of core, these results are inherently more variable and say something about the nature of the deposit. Pulp duplicates, on the other hand, serve to check repeatability at a single lab or are used to validate results between two different labs.

11.9.3.1 Field Duplicates

Data from drillholes and channel samples before 2010 contained 119 duplicate pairs. The assays values from the pairs are presented in Figure 11-14 through Figure 11-16 below. It is shown that the Cu assays approximate a 1:1 correspondence and have an R2 value of 0.8656. Similarly, the Ag assays shown in Figure 11-15 also approximate 1:1 correspondence and have a slightly higher R2 value. The Au values in Figure 11-16 show a correspondence like 1:1, but do not have good correlation. This is to be expected, due to the generally nuggety mineralization for gold.

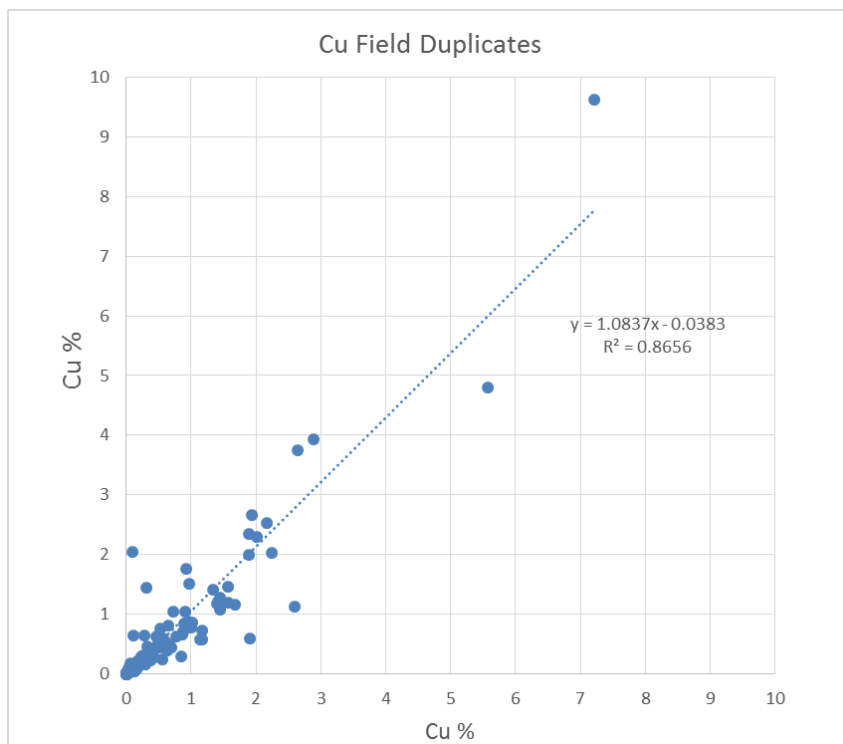


Figure 11-14 Field Duplicate Pairs – Cu (Source: MMTS, 2019)

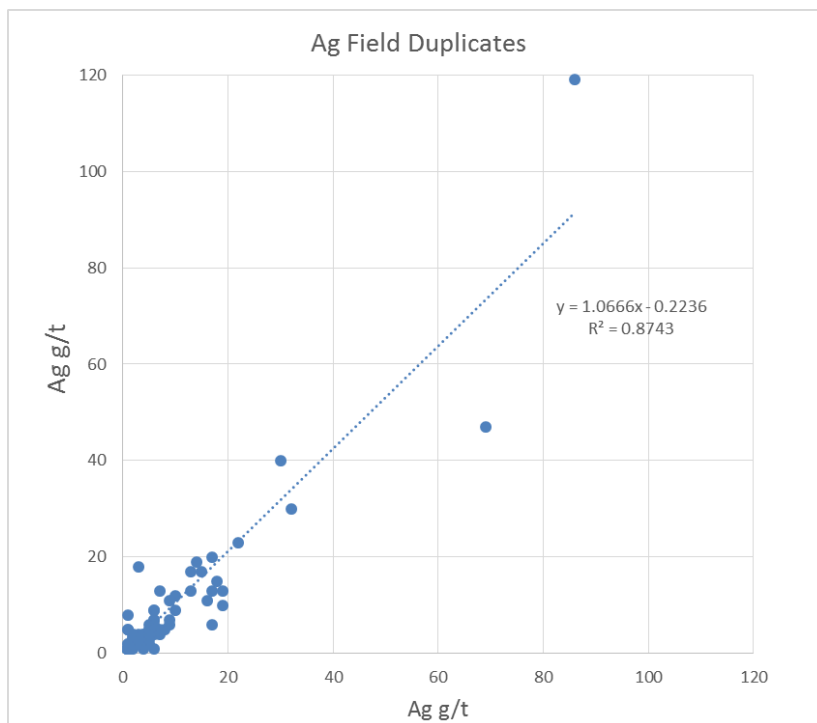


Figure 11-15 Field Duplicate Pairs – Ag (Source: MMTS, 2019)

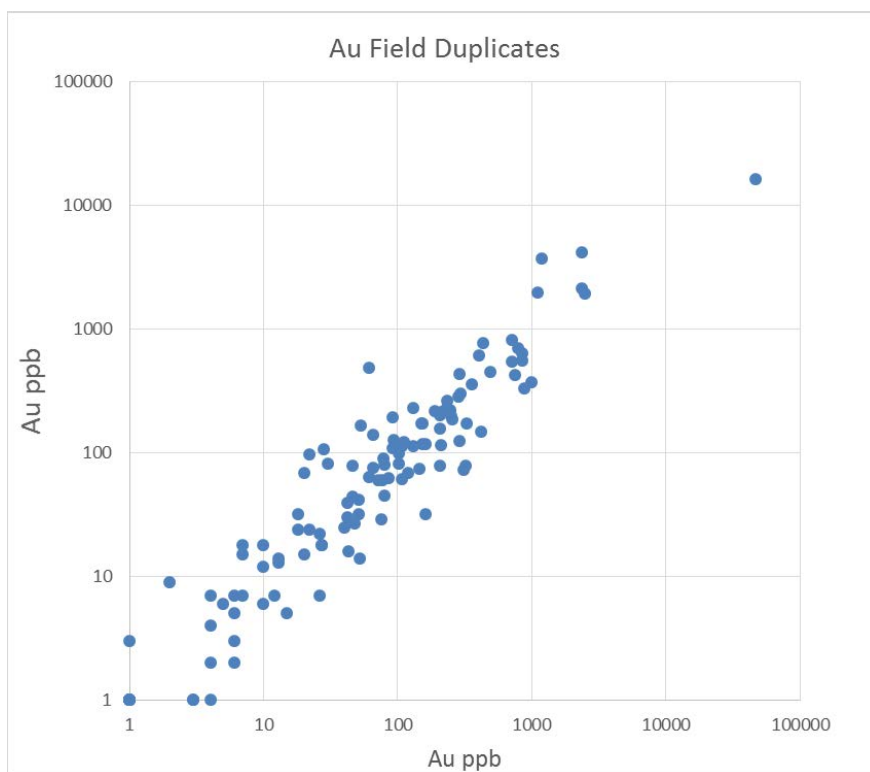


Figure 11-16 Field Duplicate Pairs – Au (Source: MMTS, 2019)

The comparison of the field duplicates using the Half Average Relative Difference (HARD) is presented the ranked plots in Figure 11-17 through Figure 11-19. It is desired that less than 30% of field duplicate pairs would give greater than 10% HARD. Results for Cu are given in Figure 11-17 and it is seen that approximately 60% have greater than 10% HARD. For Ag, in Figure 11-18, approximately 35% have greater than 10% HARD, and For Au in Figure 11-19, 65% have greater than 10% HARD. The frequent high relative difference in split core sample assay values indicates high variability within the deposit for Au in particular.

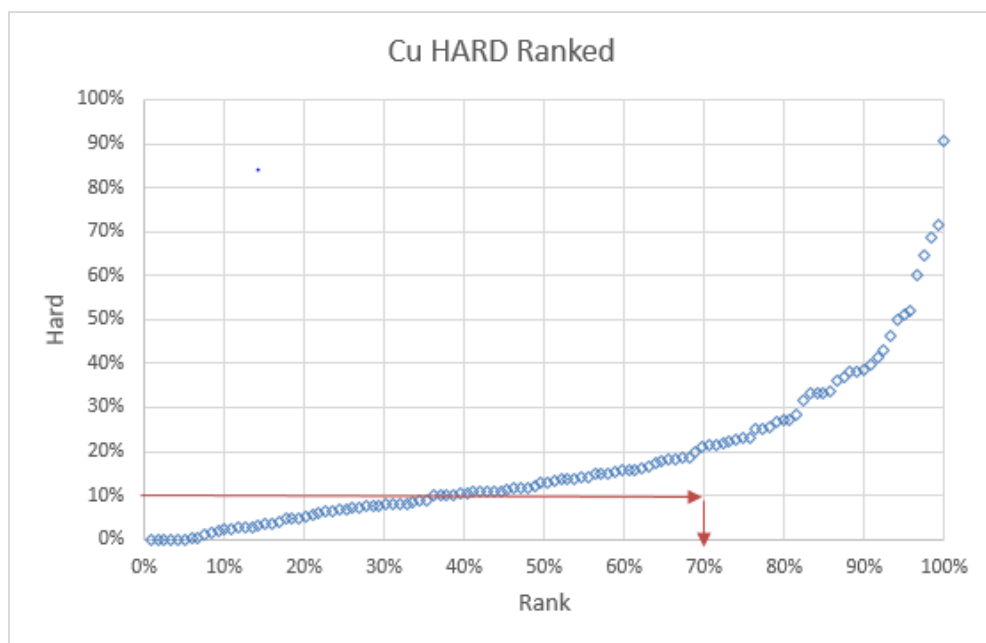


Figure 11-17 Field Duplicates HARD Ranked Plot – Cu (Source: MMTS, 2019)

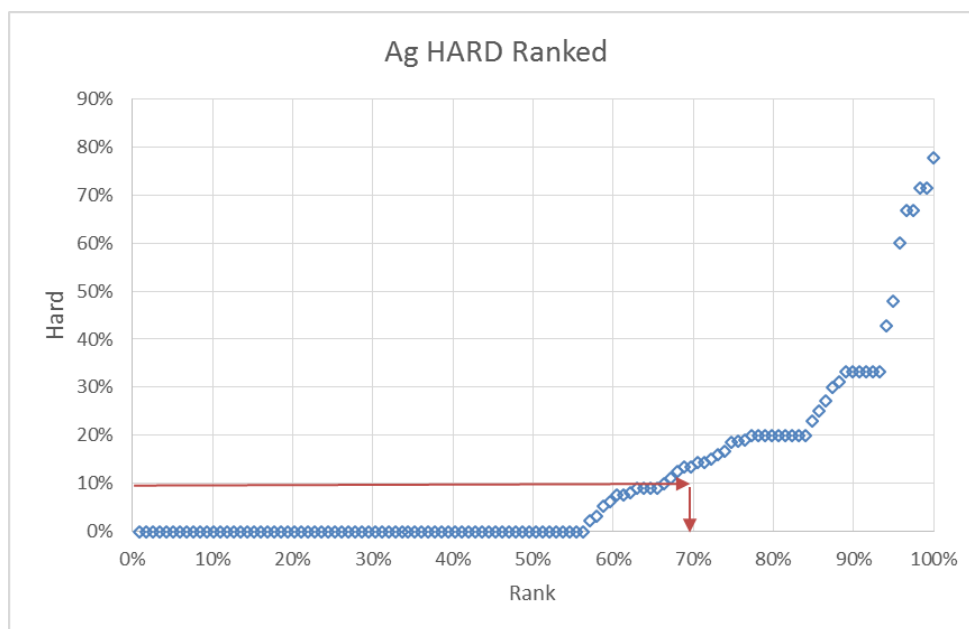


Figure 11-18 Field Duplicates HARD Ranked Plot – Ag (Source: MMTS, 2019)

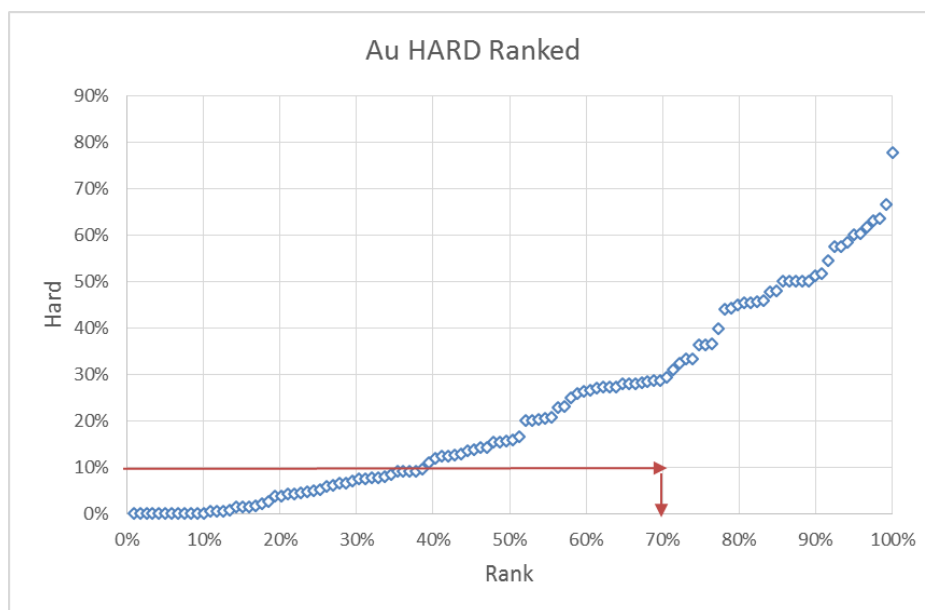


Figure 11-19 Field Duplicates HARD Ranked Plot – Au (Source: MMTS, 2019)

11.9.3.2 Pulp Duplicates

Pulp duplicates identified in the MMTS database were compared to the original values listed for the “Old Number/TM sample. The analysis of this pulp duplicate comparison is presented here. The analyzed pairs do not include the data if either pair is at or below the detection limit, or above the capping value used in this resource estimate of 10% Cu.

A scatter plot of 257 duplicate pairs of Cu values is shown in Figure 11-20. The data shows good correlation and a nearly 1:1 slope indicating little bias in the pairs. The plot of ranked HARD values is given in Figure 11-21. The criteria for pulp duplicates are that 90% are expected to show less than 10% HARD, and here it is seen that only 83% meet this criteria. Because there is no significant bias, the results are considered acceptable.

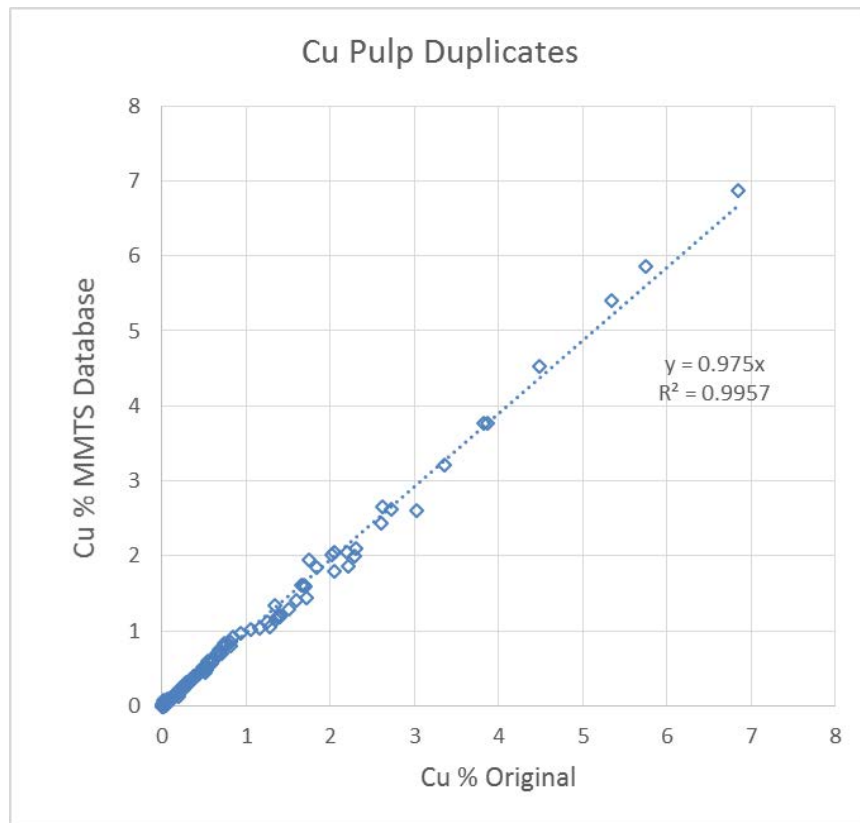


Figure 11-20 Pulp Duplicates Cu (Source: MMTS, 2019)

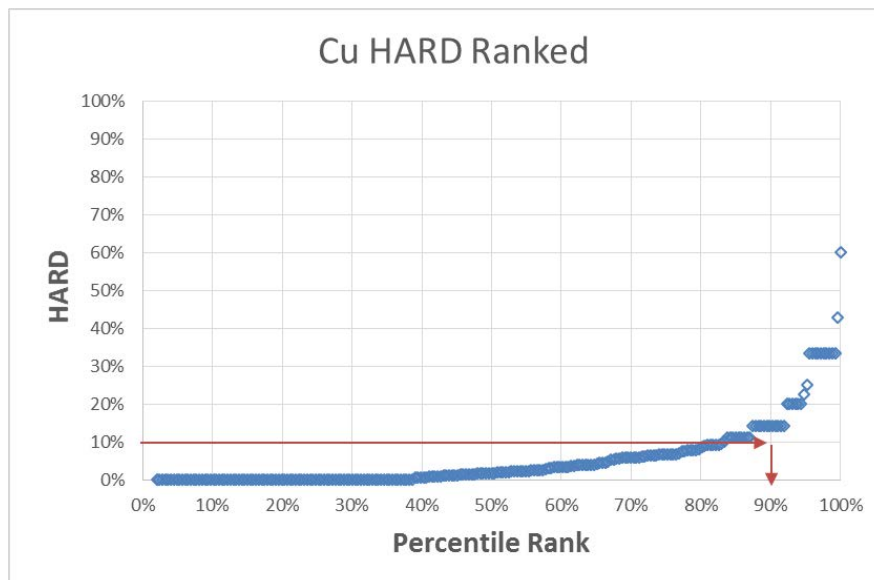


Figure 11-21 Ranked HARD for Cu Pulp Duplicates (Source: MMTS, 2019)

A scatter plot of 533 Au pulp duplicate paired values is shown in Figure 11-22. The results show good correlation along a 1:1 line and high R^2 value. The ranked plot of HARD values is given in Figure 11-23. Here the results show that approximately 75% meet the HARD criteria. It should be noted that 49, or almost 10% of the samples, have paired values of 0.006, 0.01 g/t (HARD=25%) or 0.005, 0.01 g/t (HARD=33%) however, if rounding had been done these 10% of samples would have HARD values of 0. For this reason and because the scatter plot of paired values shows little bias, the results are considered acceptable.

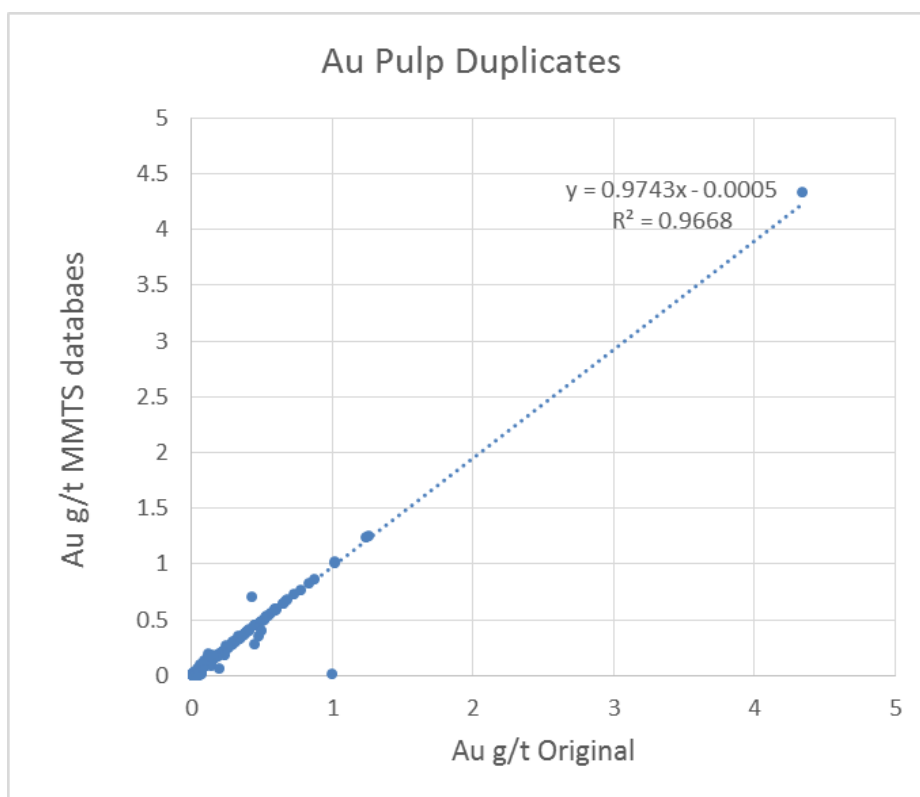


Figure 11-22 Pulp Duplicates Au (Source: MMTS, 2019)

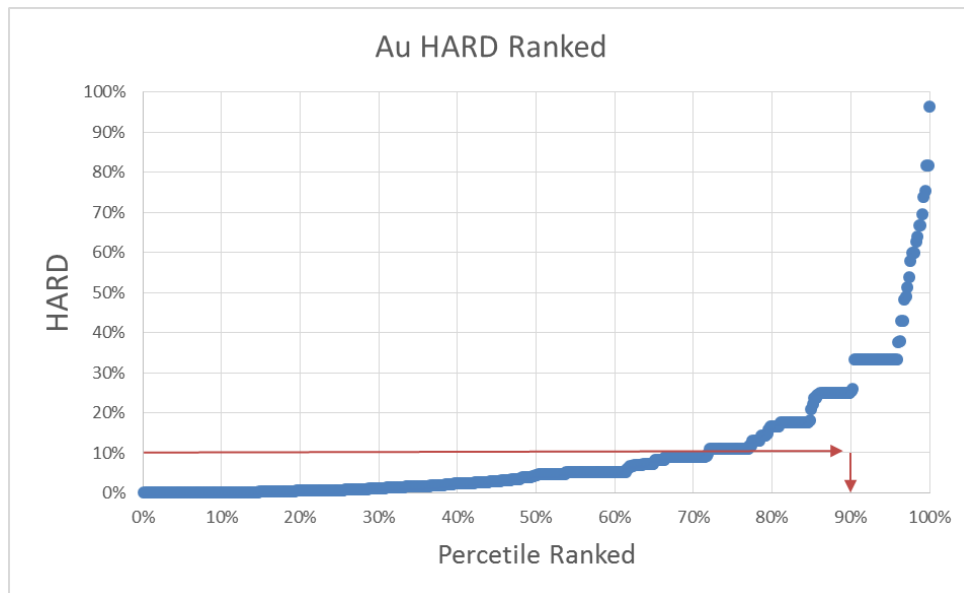


Figure 11-23 Pulp Duplicates Ranked – Au (Source: MMTS, 2019)

11.10 QAQC for 2013 Drilling

Drilling of seven holes in 2013 resulted in 156 assay samples. This set included insertion of 5 blanks, 5 standard samples and 6 pairs of field duplicates for a control sample rate of 14%. The results of these assays are presented here.

11.10.1 2013 Blanks

Of the results for the three elements, Cu, Au and Ag, only two assay values are above 5 times the detection limit. These two samples have values of 12 and 11.3 ppb, while the detection limit is 2 ppb. In both cases, the next sample processed has a lower assay value, indicating little problem with these slightly higher than expected results.

11.10.2 2013 Standards

Five different insertions of 4 different certified reference materials were inserted. Because there are so few, it does not make sense to produce process control charts, hence, the results are normalized by standard deviation and analyzed together in the following figures.

Figure 11-24 shows the results for Cu. It can be seen that the assay values for three of the samples plot within the expected range of ± 2 standard deviations from the expected value. One assay value for Standard Cu 111 falls within the warning range outside of ± 2 SD but within the fail limit of ± 3 SD. One value, the assay result for CRM Cu 164 falls more than 15 SD below the expected value.

It is seen that assay results for CRM Cu 164 for all three elements, Cu, Au and Ag give a similar result. It is suspected that this sample is mislabeled and is CRM Cu184 which was used in the previous assay runs. This needs to be investigated. If this mislabeling did occur, the results for all three elements do fall within the expected range.

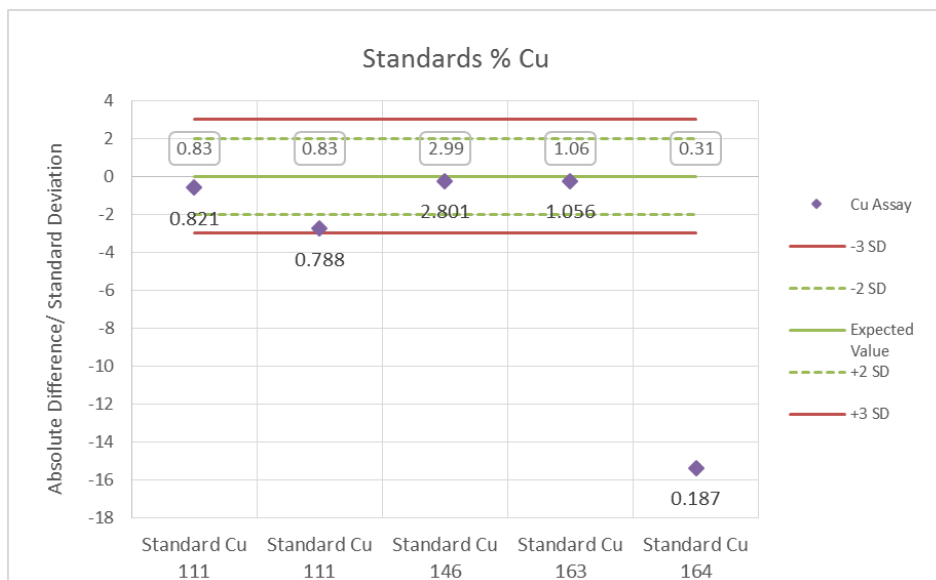


Figure 11-24 2013 Standards Cu (Source: MMTS, 2019)

The results for Au are given in Figure 11-25. Only two standards used contained certified values for Au. One result is higher than the acceptable range, but as was discussed previously for CRM 163, this Au value is well above range relevant to this deposit, so it is of little consequence. The failed value for CRM CU 164 is to be investigated but is suspected to be mislabeled as discussed previously.

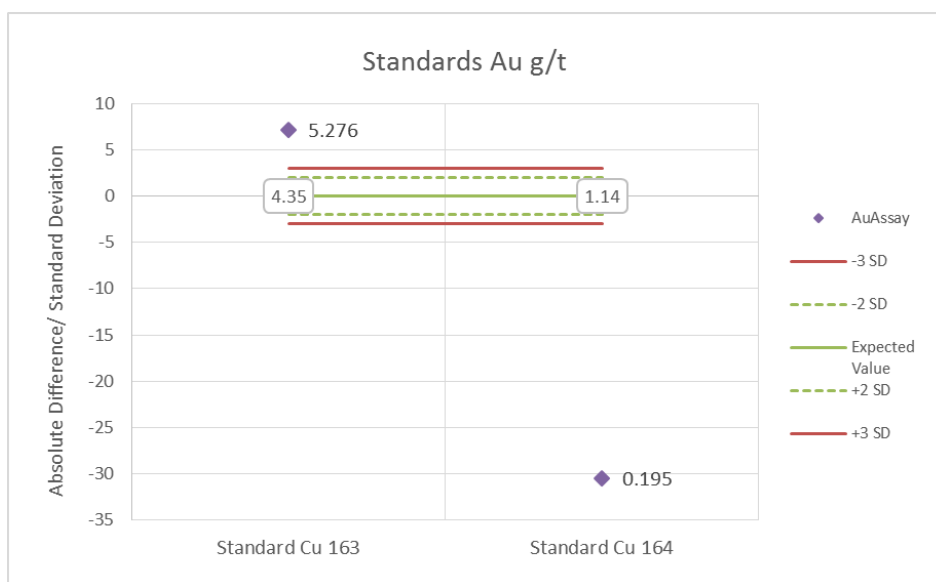


Figure 11-25 2013 Standards Au (Source: MMTS, 2019)

The results for the Ag assays of the standards are given in Figure 11-26. Only one of five values plots within the expected range. The very low value for Standard Cu 164 is again suspected of being a mislabeled Cu 184. The other three high values are not of concern, because as stated previously, they are not representative of the Ag content of the deposit.

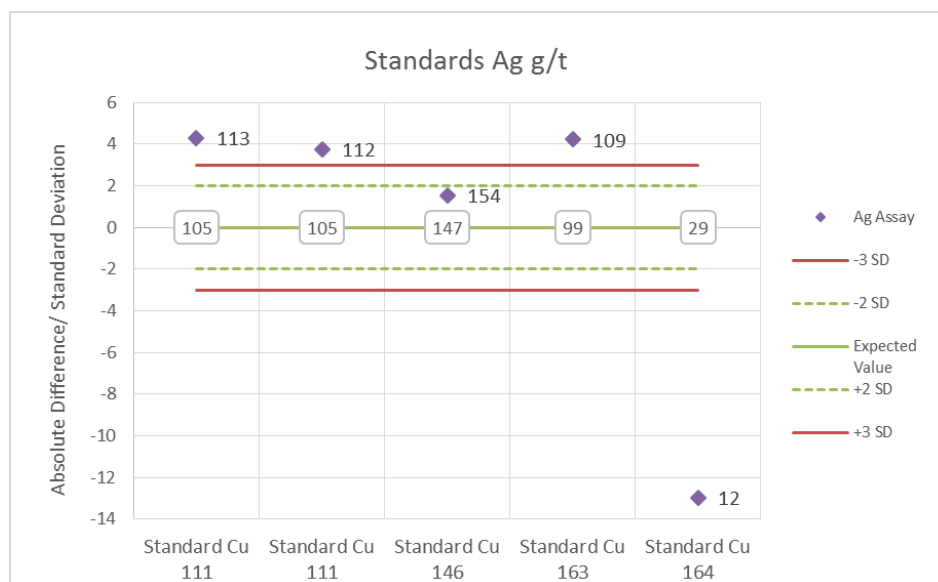


Figure 11-26 2013 Standards Ag (Source: MMTS, 2019)

11.10.3 2013 Field Duplicates

The 12 samples comprising 6 pairs of duplicates were analyzed for all three elements. The scatter plots of Cu, Au and Ag are presented in Figure 11-27, Figure 11-28 and Figure 11-29, respectively. It is seen that the Cu field duplicates match acceptably with good correlation and a nearly 1:1 slope. The Au field duplicates do not match well on a scatter plot, which indicates the deposit, is highly susceptible to the “nugget effect” for Au. Ag values also do not match particularly well on the scatter plot, but because the difference in values is quite low, this is not concerning.

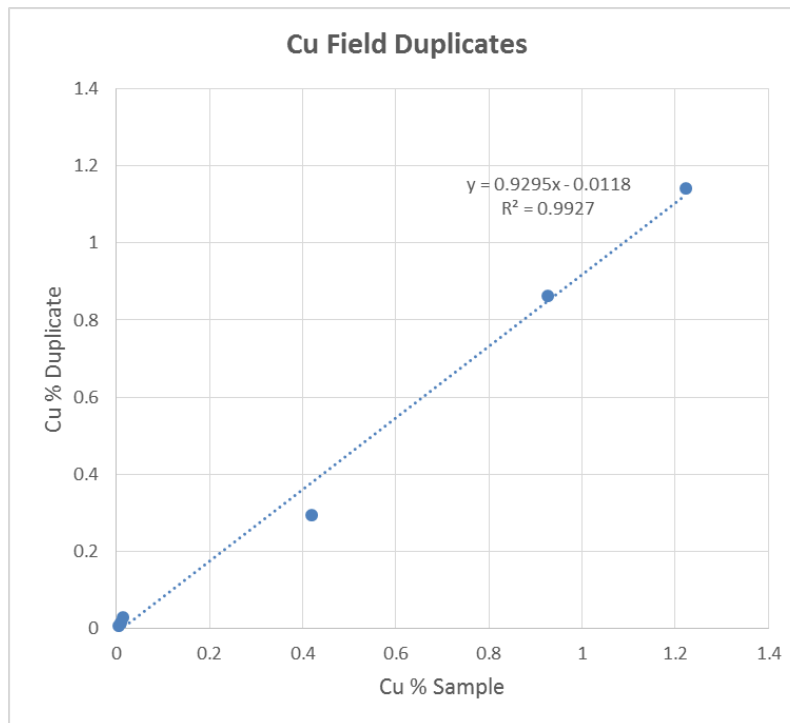


Figure 11-27 2013 Field Duplicates Cu (Source: MMTS, 2019)

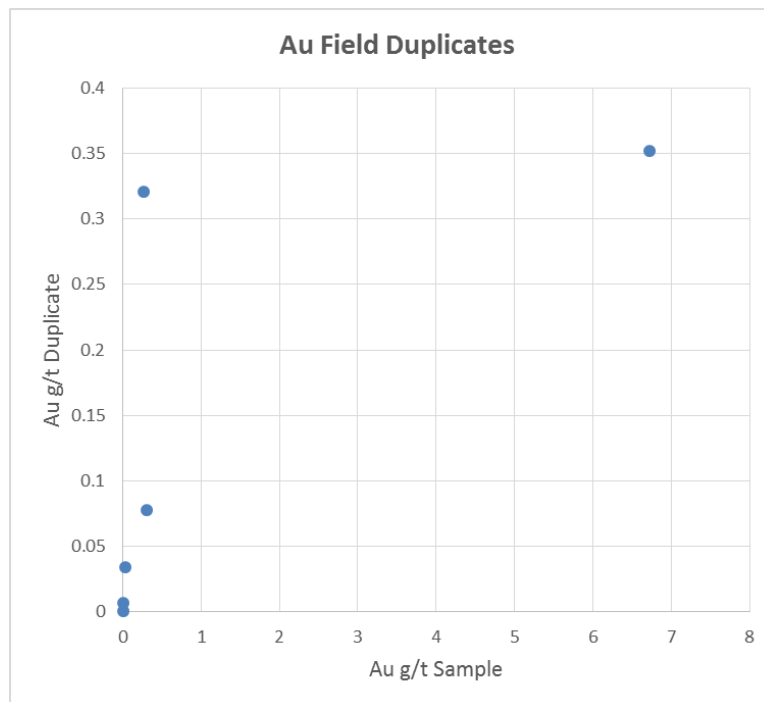


Figure 11-28 2013 Field Duplicates Au (Source: MMTS, 2019)

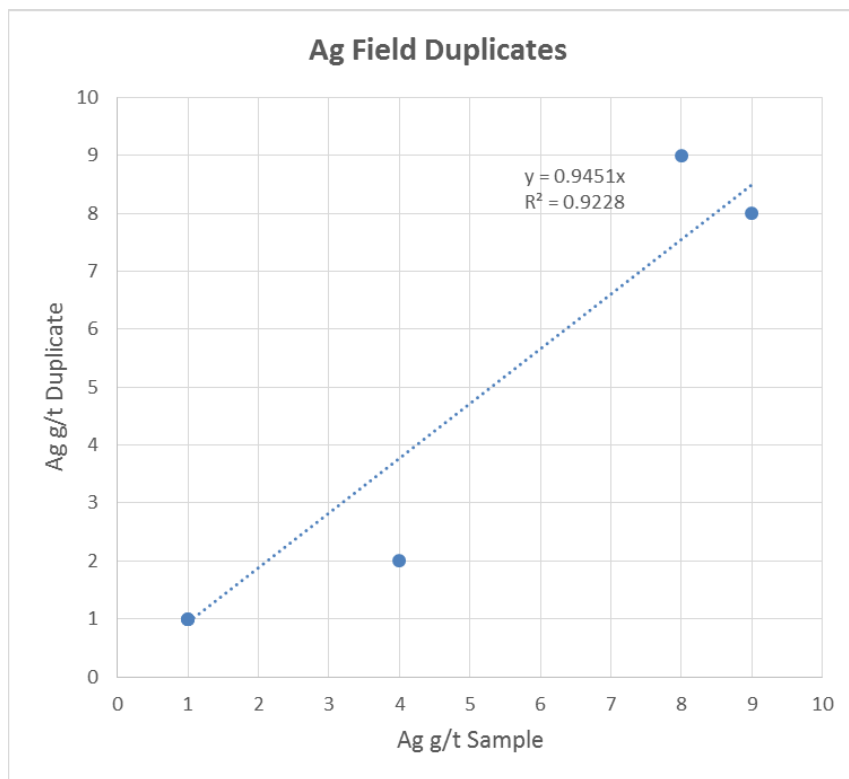


Figure 11-29 2013 Field Duplicates Ag (Source: MMTS, 2019)

The ranked HARD values are presented in Figure 11-30 with all elements on the same plot. The criteria for field duplicates are that 70% should have less than 10% HARD. Here the Ag is seen to meet the criteria and the Cu is close. The limited number of pairs limits the usefulness of this chart. The high Au HARD are consistent with the “nugget effect” as seen in the scatter plot.

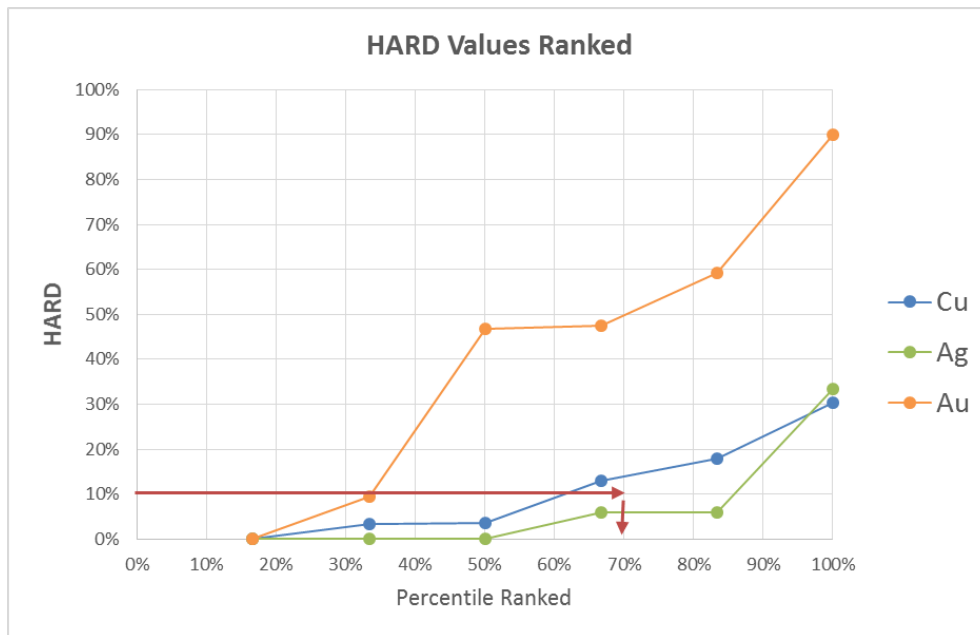


Figure 11-30 2013 Field Duplicates, HARD Rank (Source: MMTS, 2019)

11.11 QAQC for 2020-2021 Drilling

Drilling by Braveheart in 2020 and 2021 included 11 holes with a total of 138 primary samples sent for assay. The total of 20 QAQC samples consisted of 7 blanks, 11 Standards and 2 field duplicate pairs. The rate of QAQC sample inclusion is 12.7%, meeting industry standards.

11.11.1 2020-2021 Blanks

The results of the assays of the 7 blanks for copper, silver and gold showed that none were greater than five times the detection limit for the employed test method. This indicates contamination was not a significant problem at either the Bureau Veritas (BV) or SGS laboratory.

11.11.2 2020-2021 Standards

There were 11 samples of standards, or Certified Reference Material (CRM), submitted with the core samples for assay. The samples were obtained from CDN Resource Laboratories Ltd in Langley, BC. The means of the samples for each certified element along with the expected values (EV) and standard deviations (SD) are given in Table 11-3.

Table 11-3 2020-2021 Certified Reference Materials

Name	Samples	Cu (%)			Ag (ppm)			Au (ppb)		
		Mean	EV	SD	Mean	EV	SD	Mean	EV	SD
CDN-ME-1410	5	3.74	3.80	0.085	67.3	69.0	1.9	574.0	542	24
CDN-ME-1705	3	1.39	1.35	0.025	75.0	78.3	3.2	3573.7	3620	105
CDN-ME-1709	3	0.137	0.138	0.003	12.1	11.8	0.7	172.7	178	8

The total numbers and percentage of failed samples is given in Table 11-4 with four total failures and an overall failure rate of the CRMS of 12%.

Table 11-4 2020-2021 CRM Results

CRM	Samples	Cu			Ag			Au			Total % Fail
		Low Fail	High Fail	% Failed	Low Fail	High Fail	% Failed	Low Fail	High Fail	% Failed	
CDN-ME-1410	5	1	0	20%	2	0	40%	0	0	0	20%
CDN-ME-1705	3	0	1	33%	0	0	0%	0	0	0	11%
CDN-ME-1709	3	0	0	0%	0	0	0%	0	0	0	0%
Total	11	1	1	18%	2	0	18%	0	0	0	12%

The normalized results are plotted in order of processing for copper in Figure 11-31, silver in Figure 11-32, and gold in Figure 11-33. The failed samples are plotted outside the +/- 3 line indicating they are more than 3 standard deviations from the expected value. There is a noticeable difference between the years, possibly due to the change in laboratories. The Cu CRM results are more consistently near the EV in the 2020 BV results, with the two failures occurring in the SGS results. The silver CRM results trend lower in the 2021 results with again both failures occurring in the SGS results. The gold results appear to be consistently closer to the EV in the 2021 SGS results as compared to the 2020 BV results. The CRM results are considered acceptable.

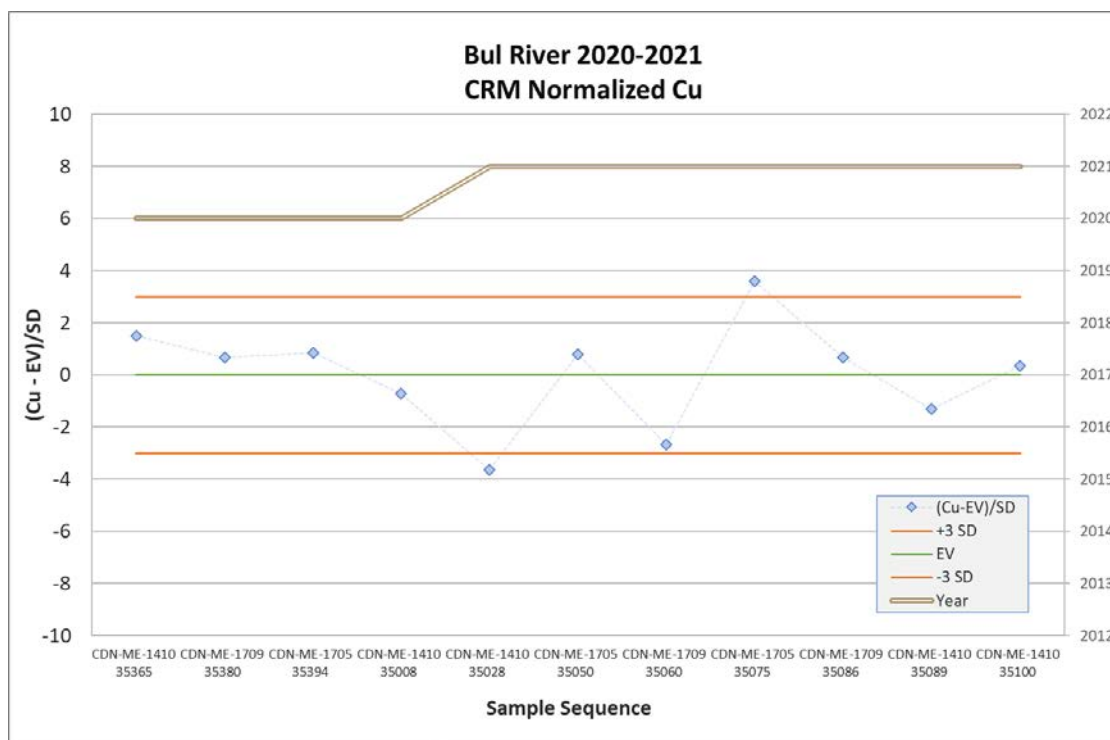


Figure 11-31 2020-2021 CRM Results Normalized, Copper (Source, MMTS, 2021)

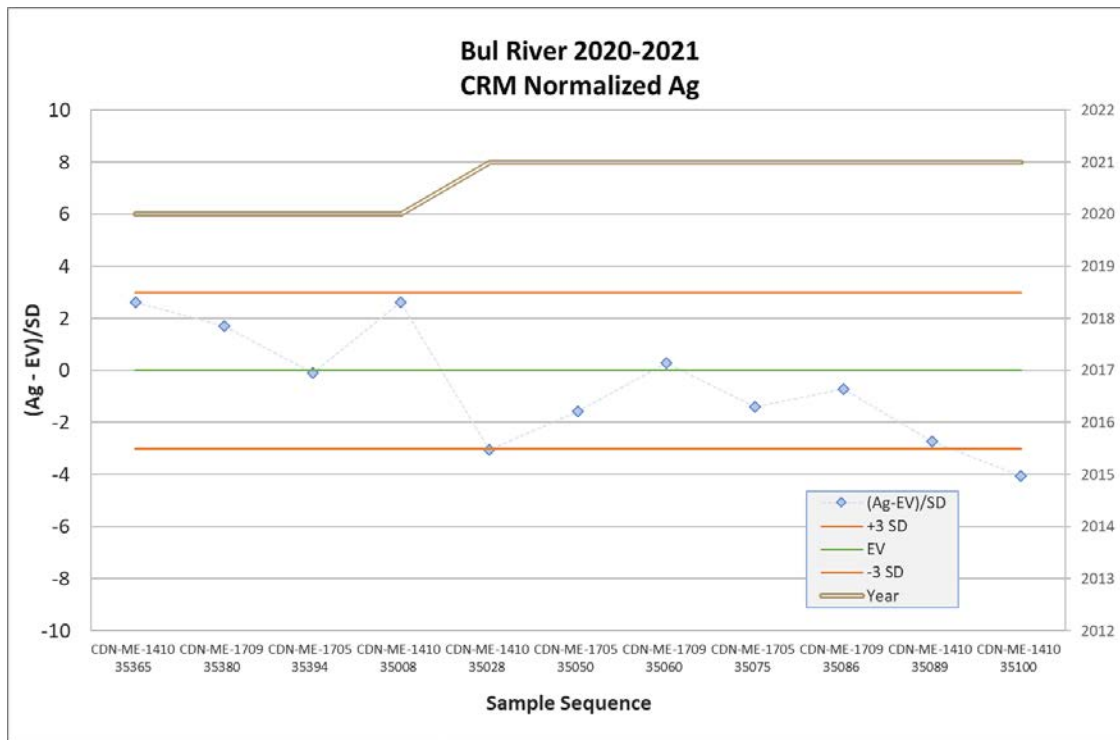


Figure 11-32 2020-2021 CRM Results Normalized, Silver (Source, MMTS, 2021)

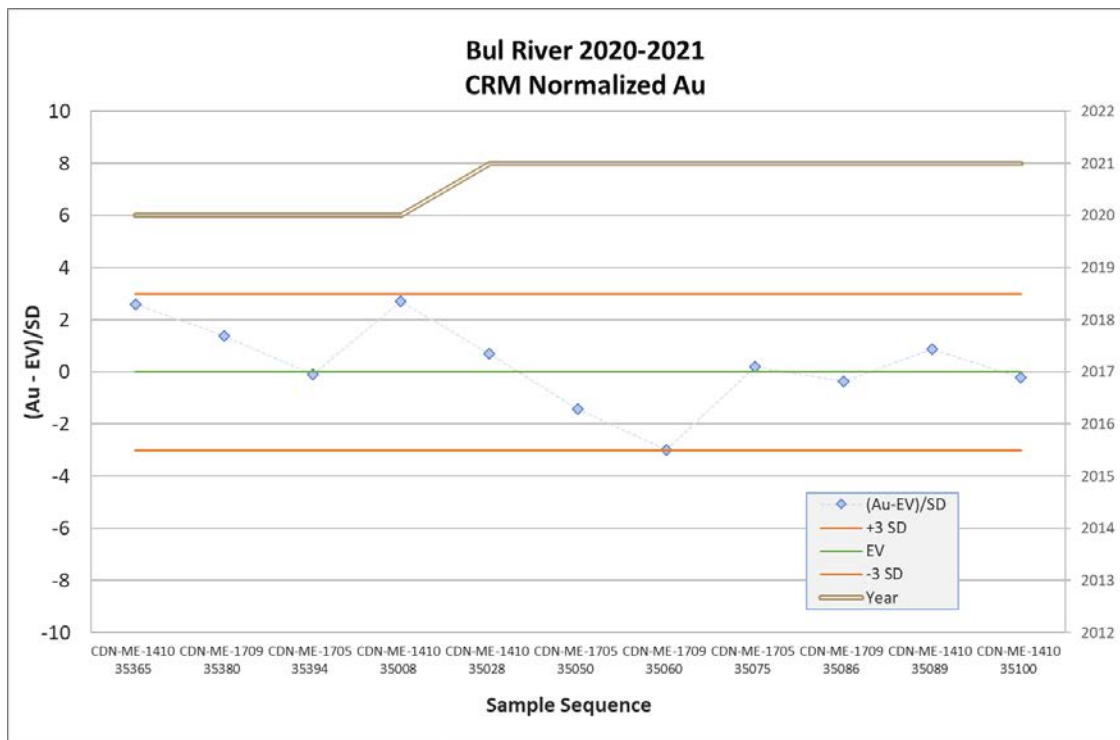


Figure 11-33 2020-2021 CRM Results Normalized, Gold (Source, MMTS, 2021)

11.11.3 2020-2021 Field Duplicates

Field duplicates were only included in two holes in the 2021 drilling, for a total of two pairs. None were included in the 2020 drilling. Results for all three elements of the field duplicate pairs are shown in the scatter plot in Figure 11-34. The results are not shown to deviate greatly from the 1:1 line shown in green.

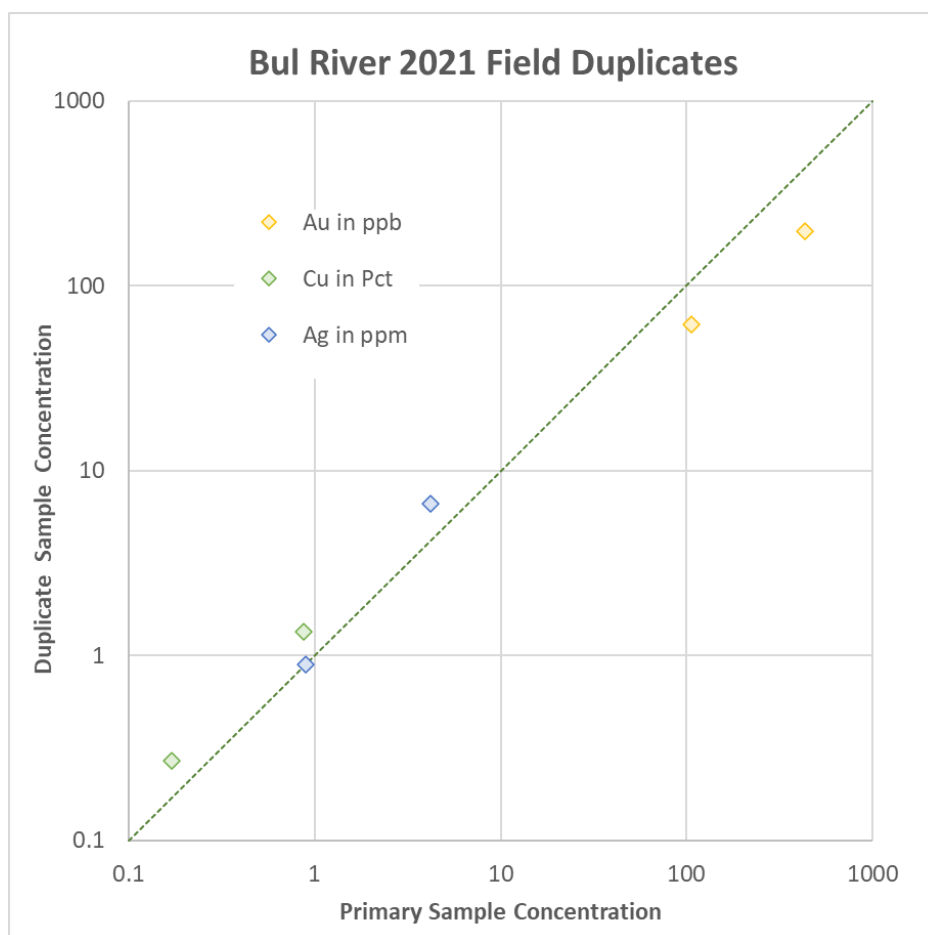


Figure 11-34 2021 Drilling Field Duplicates Scatter Plot (Source, MMTS, 2021)

Duplicate pairs are normally evaluated based on the HARD (Half Absolute Relative Difference) statistic and ranked plots, however with only two pairs it does not make sense. One silver pair has 0% relative difference, four of the six paired values have below 30% HARD, one is below 40%. The field duplicates show acceptable results and indicate the deposit is highly heterogenous.

11.12 Security

Braveheart attends the site daily and has video surveillance in-place. Mine access is controlled through a secured gatehouse. The mine buildings, including the assay laboratory, and core logging areas are routinely locked and patrolled. The underground workings themselves are also locked, as illustrated in Figure 11-35. Sample pulps are stored within a locked sea container.



Figure 11-35 Locked Entrance to the Underground Workings (Source: MMTS 2019)

The QP has determined that the core/sample storage facilities, underground workings, and environmental and assay laboratories, are secure.

The sample preparation procedures used for assays at the GBRM are appropriate for the mineralization. Security and chain-of-custody procedures appear adequate. Sample preparations and assaying were conducted under the supervision of a British Columbia Certified Assayer and supported by written protocols. These samples were subsequently re-analyzed as part of the MMTS sampling program, and the results compared favorably. In MMTS's opinion, the results from the GBRM laboratory are appropriate for supporting an estimation of Mineral Resources.

The work by MMTS in 2011 and 2012 has been done to industry standard, apart from drill core logging by sample interval. Logging of lithology, alteration, and mineralization by sample interval is unconventional but appropriate for this program given the amount of unexamined drill core and time constraints. The 2011 and 2012 MMTS logging, and sampling programs were designed and supervised by a QP, as defined by NI43-101, and followed exploration best practices as defined by CIM. In the QPs opinion, the MMTS data is verifiable and can be used in the estimation of Mineral Resource.

12 Data Verification

The database utilized for the Resource Estimate update was based on the results of the work conducted by MMTS in 2011 -2013 with the addition of the results most recent drilling from 2020 and 2021. All the re-assay and new drilling samples were submitted with blanks, duplicates, and standards.

12.1 Site Visit – November 2021

Sue Bird of MMTS visited the site on November 2, 2021 and reviewed the underground workings, the core, the site infrastructure, core storage and cutting areas as well as the core storage area at the mine camp site. The core storage was found to be in secure, dry locations at the mine site and locked inside at the camp site. Figure 12-1 is a picture of the mine site core storage facility and Figure 12-2 is the heated cutting facility at the site.



Figure 12-1 Mine Site Core Storage (Source: MMTS 2021)



Figure 12-2 Mine Site Core Cutting Shed (Source: MMTS 2021)

12.2 Certificate Checks

Assay certificates in pdf form have been provided for drilling and sampling in 2011 and later years from Acme/Bureau Veritas and SGS, as well as sampling in 2001 and 2002 assayed by Gerald McCaffrey. Checks were completed on 506 intervals, selected for high grades, comprising 10.7% of the 4,691 samples for which certificate numbers are recorded. These checks resulted in a total of 106 corrections. The corrections are listed by type and number in Table 12-1.

Table 12-1 Corrections Recorded due to Certificate Checks

Number	Correction
19	Gold value of 0 changed to one-half of detection limit or not assayed, as appropriate
66	Gold assay from aqua regia analysis was used instead of fire assay
16	Value from total metallics analysis was not used
3	Value from 4-acid digestion with ICP-ES was entered at max range, fire assay value had not been used
2	Assay intervals were removed as sample IDs were duplicated across two different hole names. Affected drillhole name is BRU00-32, which does not have sampled intervals.
106	Total Corrections

The assay database includes 5,135 assayed intervals for Cu. Of these 4,276 are supported by certificates and the vast majority of which include values for Au and Ag. Of the remainder, 610 intervals were sampled for Au only in recent times and the values from Cu and Ag are historic. The remaining 249 are historic for

all assays with no certificates available. The database was tagged with codes as described in Table 12-2 for the purpose of data validation and resource classification.

Table 12-2 Certificate Codes in Database for Classification

Certificate Code	Description	Number of Assayed Intervals
0	No named certificate (historic or not identified)	265
1	Certificate for Au only. Cu and Ag are historic	610
2	Certificate for Au, Cu and Ag	4,260
	Total Cu assays in database	5,135

12.3 Database Validation

Upon loading the database into MineSight, additional issues were discovered and corrected. These issues included minor changes to four drillhole lengths to fully include documented sample intervals, and the addition of survey points at the collar locations for eight holes.

The percentage of data with certificate values in the modeled shapes is presented in Table 12-3 below and shows that 85.6% of the length within domains is supported by certificates, and only 4.6% comes from data that has no certificate identified.

Table 12-3 Certificates Available within Model Domains

Certificate Code	Description	Number of Intervals	Length of Assayed Intervals (m)	% of Assayed Length
0	No named certificate (historic or not identified)	76	129.1	4.6%
1	Certificate for Au only. Cu and Ag are historic	214	275.9	9.8%
2	Certificate for Au, Cu and Ag	2,305	2,412.9	85.6%
	Total Cu assayed length in domains	2,594	2,817.9	

12.4 Collar Survey

12.4.1 Braveheart 2020-2021

The collar locations for the 2020 and 2021 drillholes recorded on the drill logs were determined to be erroneous per communication with Braveheart geologists. The QP observed the collar locations fanned from a location under survey station 997 (E616966.336, N548197.324, Elev.599.978), and this location was determined to be adequate for resource estimation purposes. The QP notes that a collar survey is recommended to locate these holes more precisely for future studies.

12.5 Conclusions and Recommendations on Data Verification

The QP is of the opinion that sample preparation, analyses, and security of diamond drill core samples and underground channel samples for the Bull River Mine are of industry standard and that the assay data are suitable for use in resource estimation at this level. Because not all the historic drillholes have been logged or assayed there may be some upside potential in re-logging these holes and assaying mineralized zones.

The QP recommends that the 2020-2021 collar locations be surveyed.

13 Mineral Processing and Metallurgical Testing

Metallurgical testwork on material from the Bull River deposit has been tested in various campaigns since the mine first went into production in 1971.

The information that is available covers the original production run from October 1971 to June 1974, pilot plant trials from January 2007 to December 2008, a metallurgical testwork program conducted by G&T metallurgical lab in 2015, and an ore sorting bench scale test in 2021. The testwork is described in the following sections.

13.1 Mineralogy

Mineralization at Bull River consists of pyrite, pyrrhotite, and chalcopyrite with minor local galena, sphalerite, arsenopyrite, cobaltite, and traces of tetrahedrite and native gold. Sulphides range from massive, irregular bodies within the vein system to thin discontinuous veins, veinlets, and disseminations in the host rock (Höy et al., 2000). Gangue mineralogy of the veins is variable, with the eastern parts of the deposit consisting of quartz and siderite. The western part of the vein system is dominated by siderite (Baldys, 2001).

13.2 Original Production

Placid Oil Company processed mill feed from the Bull River from October 1971 to June 1974. The process plant had a design capacity of 700 tonne/day and operated at 680 tonne/day using the flowsheet shown in Figure 13-1 below.

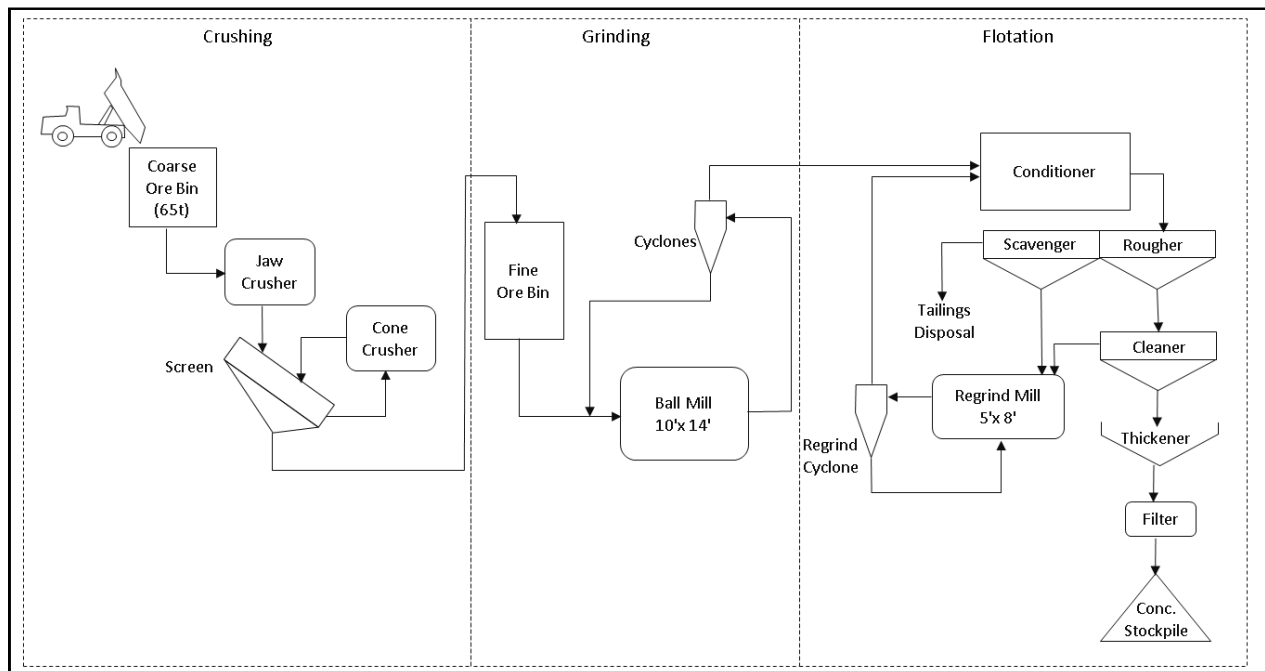


Figure 13-1 Bull River Simplified 700tpd Process Flowsheet

13.1 Pilot Plant Trials (2007 to 2008)

GBRM conducted on site pilot plant testing between January 2007 and December 2008 using mill feed extracted from underground development muck. The pilot plant flotation flowsheet is shown Figure 13-2 below.

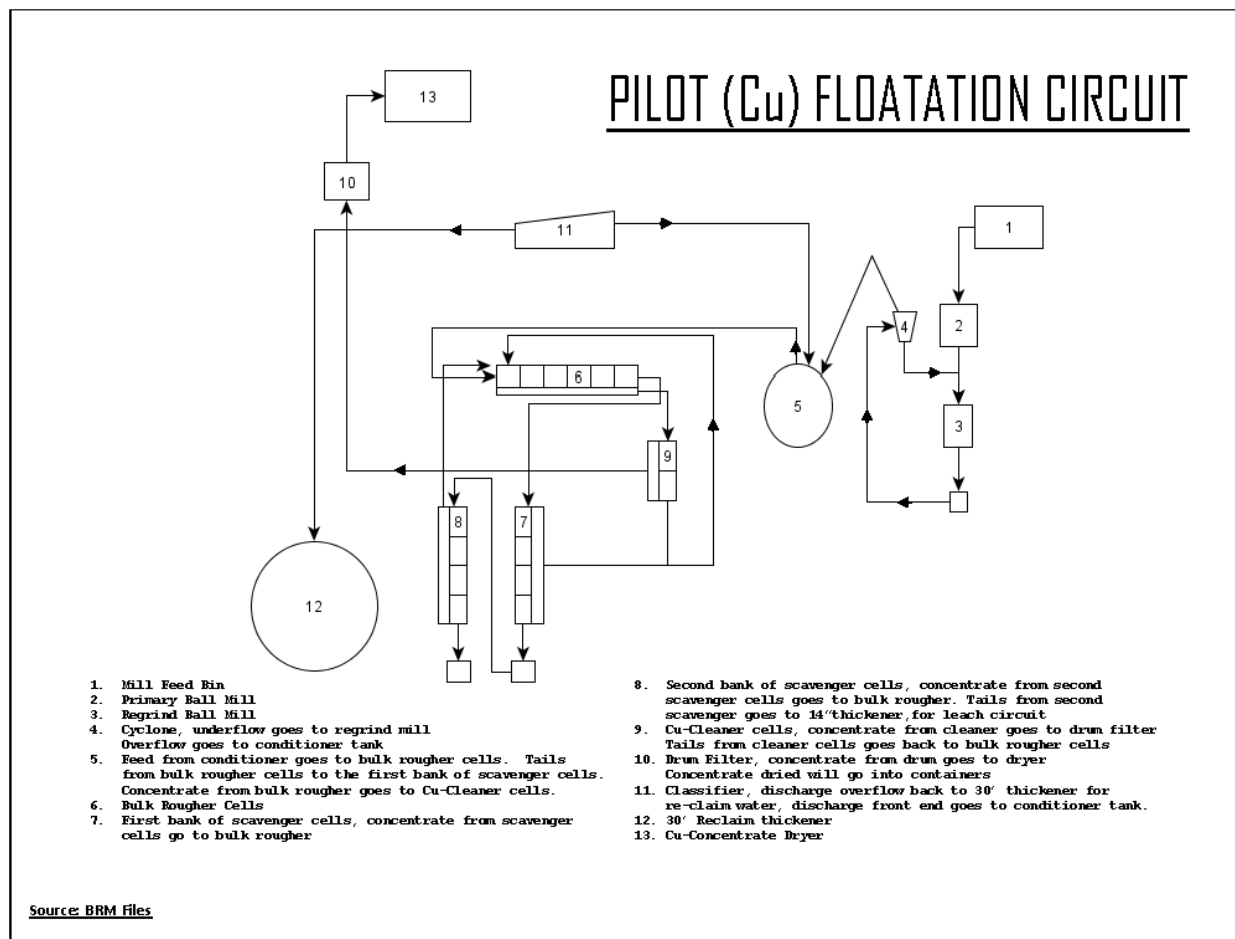


Figure 13-2 Pilot Plant Process Flowsheet

The pilot plant flotation circuit used 45g/tonne Aero3477 as a promoter and approximately 17g/tonne Dow 250 as collector.

The limited historical records show that during a period of 24 months of metallurgical testing, the pilot plant operated for 596 days, processed a total of 2.65 million pounds of material containing an average grade of 3.04% Cu, 0.35 g/ton Gold, and 23 g/ton Silver. The concentrate produced was of industry standard commercial quality, it totalled approximately 262,000 lb, with an average metal content of 27.36% Copper, 2.58 g/ton Gold, and 206 g/ton Silver. The pilot plant achieves average metal recovery of 89% Cu, 73% Au, and 88% Ag.

The source of the material tested is shown in the records as obtained from the underground mine levels 4, 5, 6, 7, and 8, and from a stockpile. The pilot plant grade variation monthly is shown in Figure 13-3 and Figure 13-4. The copper head grades ranged from 1.5% to 4.5%, gold head grade ranged from 0.12 g/ton to 0.58 g/ton, and silver head grades ranged from 11.8 g/ton to 32.6 g/ton. Figure 13-3 and Figure 13-4 also suggest that the mineralization of copper, gold and silver occurs concurrently, i.e., higher grades in one metal is accompanied with higher grades in the others, the opposite trend is also valid.

The overall copper recovery averaged 89%, but when viewed monthly, it consistently shows values above 90% during the last 16 months of testing (Figure 13-5). Silver showed a similar metallurgical performance to that observed for copper. Gold recovery deteriorated during the same period.

The pilot plant test results suggest a good response from Bull River mineralization to conventional flotation processing.

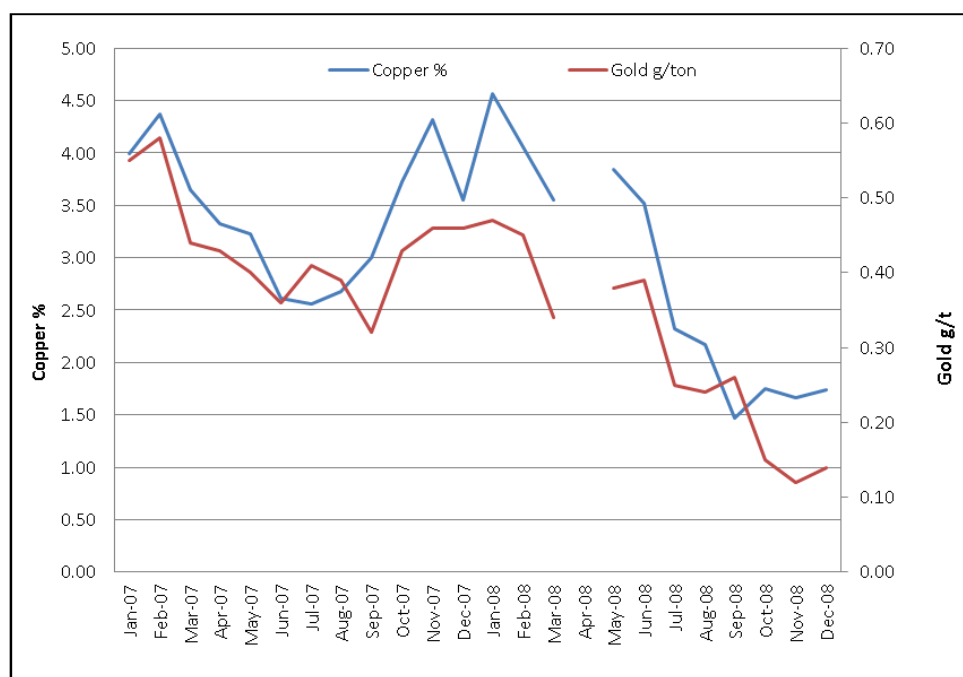


Figure 13-3 Pilot Plant Average Monthly Head Grades (Au, Cu)

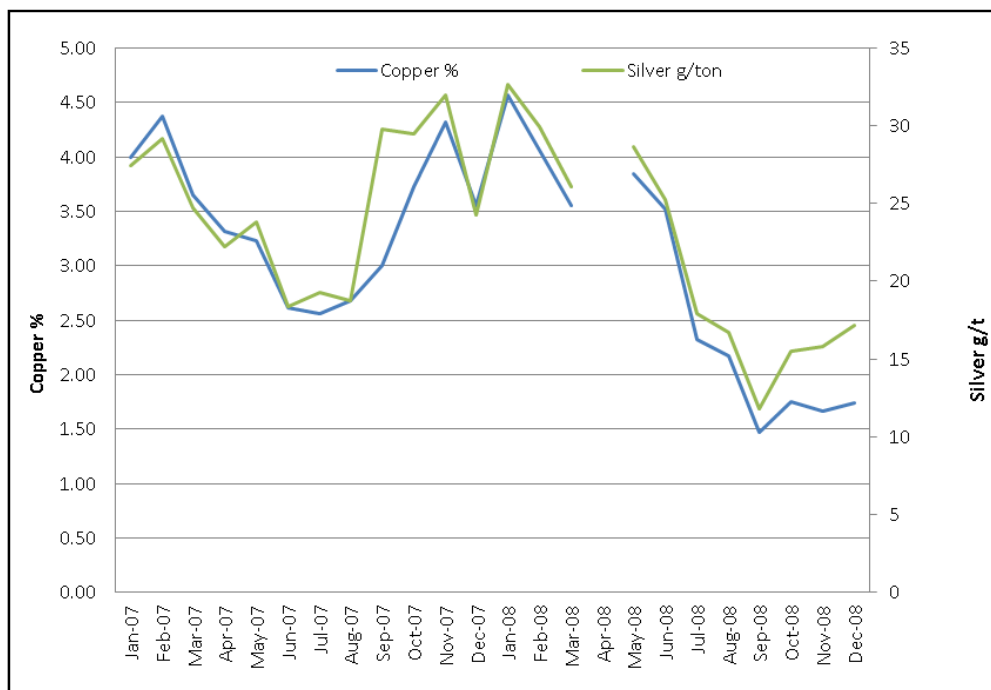


Figure 13-4 Pilot Plant Average Monthly Head Grades (Cu, Ag)

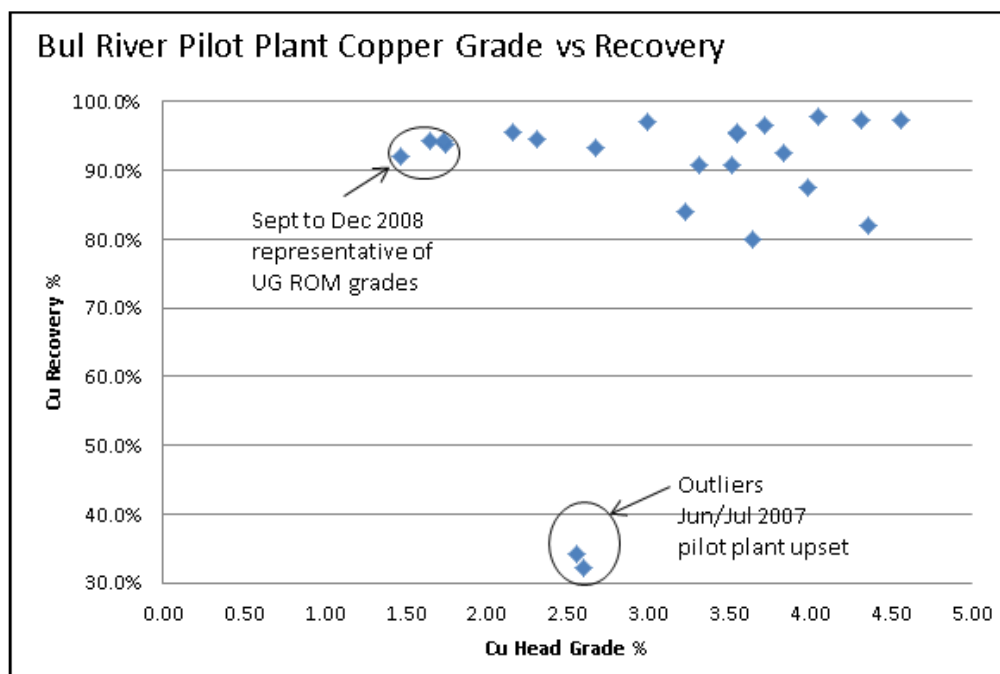


Figure 13-5 Pilot Plant Monthly Copper Recovery

13.2 Metallurgical Test work (2015)

In 2015 Metallurgical test work was carried out on composite samples representing underground and existing surface stockpile. The test work was carried out by ALS Metallurgy in Kamloops (ALS).

The test work included comminution assessment and batch flotation test work to evaluate the effect of primary grind sizing, pH, and reagent dosage on copper, gold, and silver performance.

13.2.1 Sample Origin and Grade

A 25kg underground sample was collected from 9-4 east crosscut. Any surface oxidation was scaled off the vane to insure an accurate representation of freshly blasted ore.

Surface stockpile samples included 5 random 25kg samples collected from various locations and various depths.

Composite sample head grade assay values are shown in Table 13-1. The copper content for both the Surface and Underground Composites were very similar and averaged about 1.27 percent Cu which is in the range of potential mill feed grade.

Table 13-1 Composite Sample Assay Values

	Cu (%)	Fe (%)	S (%)	Ag (g/t)	Au (g/t)
Surface Composite	1.26	5.5	2.40	8	0.48
Underground Composite	1.27	8.6	3.92	5	0.59

13.2.2 Comminution

Bond ball and Abrasion tests were conducted on the Surface Composite. A Bond ball mill work index of about 15.5 kW-hr/tonne was measured indicating medium grinding hardness.

A Bond abrasion index (Ai) of 0.20g was measured for the Surface Composite indicating moderately abrasive.

13.2.3 Flotation Test work

A series of flotation tests were completed on the Surface and Underground Composites to determine the effect of primary grind sizing, pH, and collector dosage on metallurgical performance.

13.2.3.1 Rougher Flotation

Results of rougher flotation are summarized in Figure 13-6.

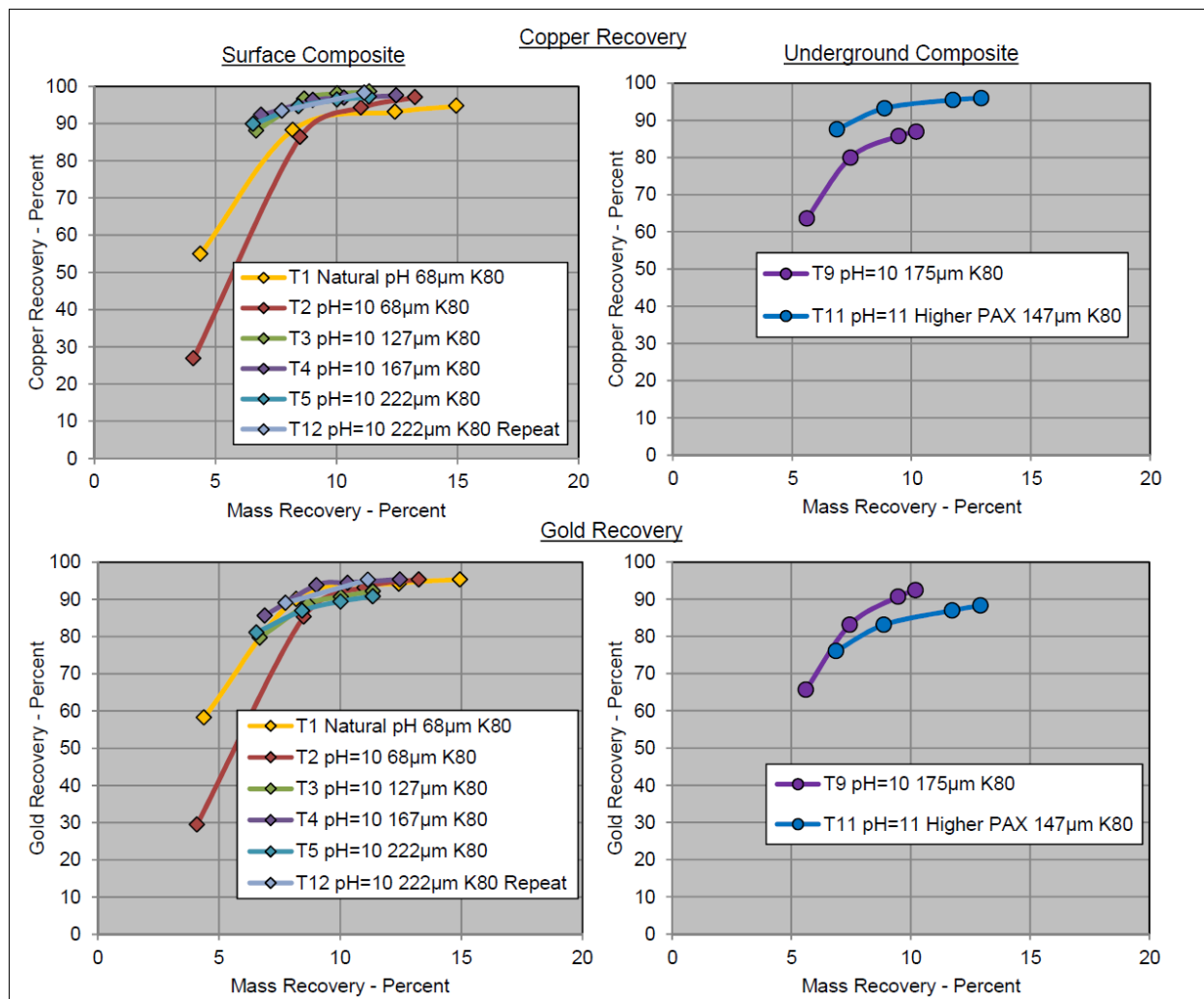


Figure 13-6 Summary of Rougher Flotation Test Work (Source: ALS)

Rougher copper recovery for the Surface Composite was relatively unaffected over the range of primary grind sizes tested at a pH of 10. The Underground Composite was more sensitive to changes in primary grind sizing, and best copper rougher recovery was measured at a primary grind size P₈₀ of about 150µm. Rougher pH was increased to 11 to improve control of iron sulphide flotation.

13.2.3.2 Cleaner Flotation

Cleaner flotation test work is summarized Figure 13-7.

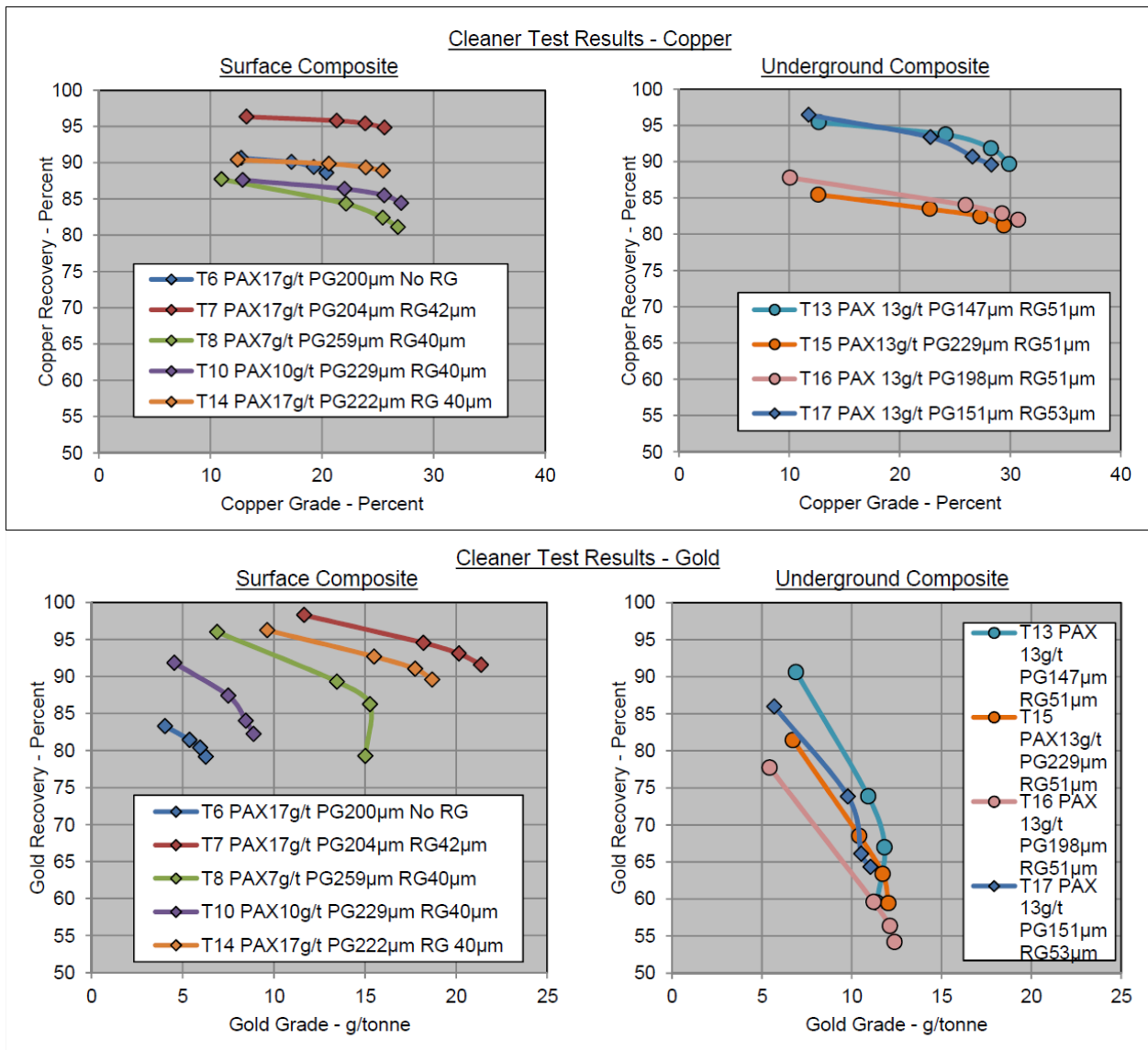


Figure 13-7 Summary of Cleaner Flotation Test Work (Source: ALS)

For the Surface Composite, approximately 95 percent of the feed copper and about 92 percent of the gold was recovered to a copper concentrate grading about 26 percent copper and 24.1 g/tonne gold using 17 g/tonne rougher PAX collector addition in a single cleaner test. Lower rougher PAX addition generally led to lower copper rougher recovery. A 5 percent lower copper rougher recovery measured between similar tests (T6 and T7) at 17 g/tonne PAX addition is unexplained. High grade copper concentrates were produced using a regrind P_{80} of 40 μ m.

For the Underground Composite, approximately 90 percent of the feed copper and about 60 percent of the gold was recovered to a concentrate grading approximately 30 percent copper and 11.4 g/tonne gold at a primary grind P_{80} of 147 μ m. A regrind discharge P_{80} of 51 μ m was sufficient to obtain high grade copper concentrates.

13.2.3.3 Concentrate Analysis

Results from a multi-element analysis of the copper concentrates summarized in Table 13-2 confirm sellable concentrates have been produced. Both the surface and underground concentrates may incur minor penalties for exceeding 0.1% arsenic. The surface concentrate could also incur additional minor penalties for lead content exceeding 0.05% and bismuth exceeding 0.03%.

Table 13-2 **Copper Concentrate Multi Element Analysis**

Element	Symbol	Unit	Surface Composite Test 7	Underground Composite Test 13
Copper	Cu	%	25.6	29.9
Gold	Au	g/t	21.4	11.4
Silver	Ag	g/t	191	147
Iron	Fe	%	32.1	30.3
Antimony	Sb	g/t	59	23
Arsenic	As	g/t	1860	1460
Bismuth	Bi	g/t	398	77
Cadmium	Cd	g/t	67	33
Calcium	Ca	%	0.23	0.72
Cobalt	Co	g/t	906	964
Lead	Pb	g/t	578	106
Magnesium	Mg	%	0.14	0.38
Manganese	Mn	g/t	240	710
Molybdenum	Mo	g/t	11	77
Phosphorus	P	g/t	<100	<100
Selenium	Se	g/t	120	100
Sulphur	S	%	35.3	33.4
Zinc	Zn	g/t	3980	1840

13.3 Ore Sorting Test work (2021)

In 2021, Braveheart Resources Inc. the results from bench scale Ore Sorting testwork, conducted by Tomra Sorting Solutions. The testwork demonstrated that the mineralized material at Bull River is amenable to upgrading using ore sorting.

The sample tested contained 206 individual pieces of rock, sized from 1 to 3 inches. The samples were shipped in 17 pails. Pails number 7 and 8 were controls and contained material that was considered product and waste respectively.

Each pail was processed separately by placing all the pieces onto a test sheet and taking an X-Ray Transmission (XRT) image of the group. The samples were then sent to an assay lab to have the grades of each piece determined. The pieces of mineralized material were processed by pail number, with pail numbers 7 and 8 used for calibration of the system. The images captured for pail #7 (product) can be seen in Figure 13-8. In this image on the far right, the high-density material is represented by blue pixels and the low-density material is represented by red pixels. The analysis then counts the amount of high-density material and low-density material and calculates a High/High + Low ratio. Each pail was measured and analyzed in the same manner.

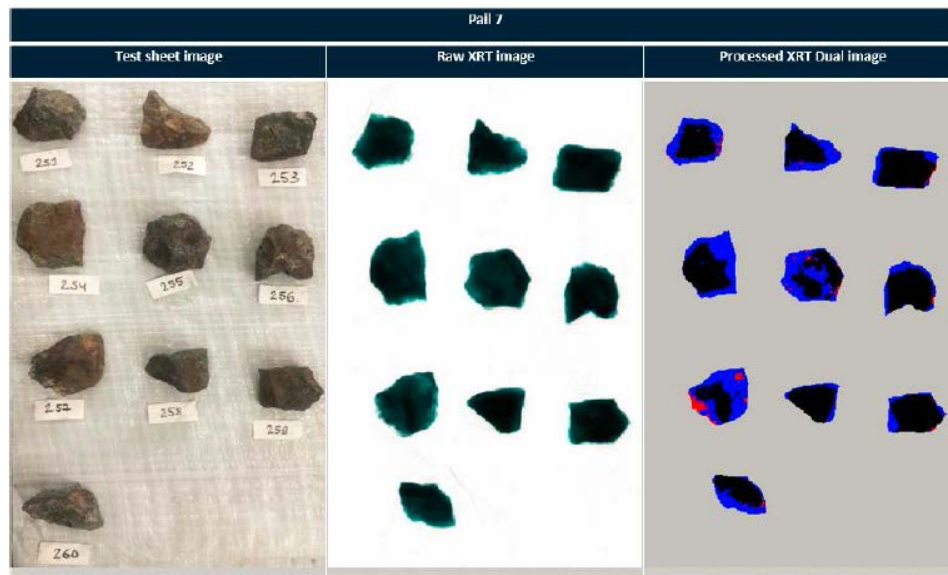


Figure 13-8 Ore Sorting Image – Pail 7

Once the samples were assayed, 3 scenarios for sorting were calculated to determine which pieces would have been considered product and waste base. Each scenario is based on the High/High + Low ratio and the determination on if the piece is considered product is based on a copper equivalent grade of 1.7%. The results for the 3 scenarios can be seen in Table 13-3.

Table 13-3 Ore Sorting Testwork Results

Sorting cut	Eq. Cu					
	15%		20%		25%	
Allocation	n	%	n	%	n	%
Product to Product	108.0	100.0	106.0	98.1	103.0	95.4
Product to Waste	0	0	2.0	1.9	5.0	4.6
Waste to Waste	71.0	72.4	77.0	78.6	79.0	80.6
Waste to Product	27.0	27.6	21.0	21.4	19.0	19.4

The results indicate that the samples collected are highly amenable to ore sorting. A trade off study has been completed by ABH Engineering with positive economic results using ore sorting, which could be included in a future PEA report.

13.4 Metallurgical Assumptions

The metallurgical recoveries used for this report are stated in Table 13-4. This assumes a flowsheet that includes crushing, grinding, and flotation as a recovery method with a product that is a minimum of 22% copper which would be considered saleable to a smelter. The process considers a throughput of 700 tonnes per day which is the capacity of the existing plant (with planned upgrades, but not including ore sorting).

Table 13-4 Expected Recoveries

Parameter	Unit	Recovery
Copper	%	93
Gold	%	75
Silver	%	90

14 Mineral Resource Estimate

Moose Mountain Technical Services (MMTS) has updated the Mineral Resource estimate at the Bull River underground deposit. This update to the 2019 MMTS Resource estimate differs from the previous estimate in that it includes:

- an additional 11 holes drilled in 2020 and 2021
- updates to the data verification
- updates to the geologic interpretation, including information from the new drillholes
- updated metal prices
- updated modelling parameters and
- application of a minimum minable thickness of 2.0m

14.1 Summary

The updated Mineral Resource for the Project is summarized in Table 14-1 for Indicated Resource and Table 14-2 for the Inferred Resource. The base case cut-off for potential underground mining of the deposit is 0.9% Cu Equivalent (CuEqv) and is highlighted in the resource tables. The effective date of the resource estimate is December 1, 2021. The in-situ resource has been constrained to true thickness values of greater than 2.0m to apply the “reasonable prospect of economic extraction” to the resource. The average thickness of the Indicated Resource is 5.15m and the Inferred Resource is 5.35m.

Table 14-1 Bull River Deposit Mineral Resource Estimate – Indicated – Base Case Cut-off of 0.9% Equivalent Cu - Effective Date: December 1, 2021

Cut-off Cu Eqv. (%)	In-situ	In-situ Grades					In-situ Metal		
	Tonnage (ktonnes)	Cu Eqv. (%)	Cu (%)	Au (gpt)	Ag (gpt)	NSR (\$CDN)	Cu (000 lbs)	Au (kOz)	Ag (kOz)
0.6	2,264	2.131	1.795	0.422	15.3	155.21	89,581	30.7	1,114
0.7	2,262	2.132	1.796	0.422	15.3	155.28	89,548	30.6	1,113
0.8	2,262	2.132	1.796	0.422	15.3	155.28	89,546	30.6	1,113
0.9	2,261	2.132	1.796	0.422	15.3	155.29	89,545	30.6	1,113
1.0	2,104	2.220	1.873	0.431	16.0	161.73	86,897	29.2	1,085
1.1	1,963	2.304	1.946	0.443	16.7	167.82	84,223	28.0	1,056
1.2	1,821	2.394	2.024	0.454	17.5	174.38	81,264	26.6	1,023
1.3	1,688	2.483	2.102	0.465	18.2	180.87	78,222	25.2	988
1.4	1,567	2.571	2.179	0.475	18.9	187.28	75,238	23.9	953

Notes:

1. The qualified person responsible for the mineral resource estimate is Sue Bird P.Eng of MMTS.
2. The base case cut-off is an NSR value of CDN\$65/tonne, based on Processing costs of CDN\$30/tonne and Underground Mining costs of CDN\$35/tonne.
3. A minimum mining width of 2.0m is assumed.
4. Mineral resources are based on a US\$1,600/oz gold price, US\$3.50/lb copper price and US\$20/oz silver price and the following smelter terms: 96.25% payable Cu, 97.5% payable Au and 90% payable Ag.
5. Forex of 0.79 US\$:CDN\$.
6. Treatment charges of US\$5/tonne for Cu, Refining charges of US\$0.005/lb Cu, US\$8/oz for Au US\$0.5/oz Ag.
7. Transportation charges of US\$100/tonne Cu concentrate.

8. Metallurgical recoveries have been estimated as 93% for Cu, 75% for Au, and 90% for Ag.
9. The mineral resource has been confined by a "reasonable prospects of eventual economic extraction" underground shape equating to an NSR cut-off of CDN\$65/tonne with all material within this shape reported as the resource.
10. The bulk density has been assigned values of 2.7 and 3.06 tonnes/m³ depending on mineralized domain.
11. Rounding as required by reporting guidelines may result in summation differences.

Table 14-2 Bull River Deposit Mineral Resource Estimate – Inferred – Base Case Cut-off of 0.9% Equivalent Cu - Effective Date December 15, 2021

Cut-off Cu Eqv. (%)	In-situ	In-situ Grades					Metal		
	Tonnage (Ktonnes)	Cu Eqv. (%)	Cu (%)	Au (gpt)	Ag (gpt)	NSR (\$CDN)	Cu (000 lbs)	Au (kOz)	Ag (kOz)
0.6	1,357	1.917	1.598	0.417	13.6	139.65	47,817	18.2	594
0.7	1,357	1.917	1.598	0.417	13.6	139.65	47,817	18.2	594
0.8	1,357	1.917	1.598	0.417	13.6	139.65	47,817	18.2	594
0.9	1,356	1.918	1.598	0.417	13.6	139.70	47,799	18.2	594
1.0	1,238	2.011	1.675	0.437	14.4	146.47	45,703	17.4	572
1.1	1,132	2.100	1.749	0.456	15.1	152.98	43,666	16.6	550
1.2	1,049	2.175	1.811	0.473	15.7	158.46	41,896	16.0	530
1.3	968	2.253	1.875	0.491	16.3	164.11	40,012	15.3	507
1.4	891	2.330	1.938	0.510	16.9	169.76	38,086	14.6	485

The cut-off grade is based on similar mining methods with similar overall grades. The cut-off is low for an underground mine because the full indicated resource has been pre-developed on seven different levels by 22 kilometres of ramps, raises and lateral developments the capital costs have been significantly reduced.

MMTS is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate for the Bull River property. Braveheart has confirmed that there is/are:

- no injunctions pending against the Project.
- the mineral and surface rights have secure title.
- no known marketing, political, or taxation issues.
- strong local community support for the project.
- no known infrastructure issues.

14.2 Main Inputs to the Resource Estimate

14.2.1 Database

The final database has been created by MMTS on December 1, 2021, based on the 2018 database used in the previous estimate with updated drilling including 11 drillholes from 2021. It includes corrections as documented in Section 12 above.

A summary of the total number of samples from drillholes and channels within the mineralized domains and used for the Resource Estimate is found in Table 14-3. Because the year of drilling does not identify the data that has been verified in the 2011-2012 verification work, samples assayed from 2011 forward are summed separately and compared to the entire dataset by year. It is seen that 95% of the data modeled within the mineralized domains comes from verification sampling and recent drilling only.

Table 14-3 Summary of Data Used in the Resource Estimate

Year	Data within Domains		Data within Domains and Assayed in 2011 or Later		
	Samples	Length (m)	Samples	Length (m)	Percent by Length Assayed 2011 or Later
Unknown (some channel samples)	441	606.3	370	545.7	90.0%
1999	308	518.87	289	498.2	96.0%
2000	705	725.08	657	669.6	92.3%
2001	164	195.68	110	129.32	66.1%
2002	37	47.2	0	0	0.0%
2004	41	36.08	40	35.01	97.0%
2005	40	50.6	40	50.6	100.0%
2006	804	963.69	780	934.77	97.0%
2007	126	118.61	126	118.61	100.0%
2008	174	196.11	169	190.91	97.3%
2009	179	193.39	176	190.25	98.4%
2012 (all channel samples)	1,863	1,880.71	1,863	1,880.71	100.0%
2013	115	116.9	115	116.9	100.0%
2020	61	51.71	61	51.71	100.0%
2021	77	43.49	77	43.49	100.0%
Total	5,135	5,744.42	4,873	5,455.78	95.0%

All zero values have been treated as “below detection” with missing values retained as missing and not used in the interpolations.

14.2.2 Block Model

The block model has been created with 4mx2mx2m blocks and uses “percent ore” modelling for grade interpolation and reporting of only the tonnage within the modelled vein solid as a percentage of the whole block. The extents of the block model are summarized in Table 14-4.



Table 14-4 Block Model Extents used in the Resource Estimate

Axis	Minimum	Maximum	Length	Block Size	# Blocks
Easting	616,050	617,550	1,500	4	375
Northing	5,484,100	5,484,950	850	2	425
Elevation	430	1,000	570	2	285

14.2.3 Specific Gravity

Specific gravity measurements were taken as part of the data validation done by MMTS in 2011-2013. There are a total of 338 measurements of sg in the modeled domains as summarized in Table 14-5. The modelling has assigned the SG based on the Domain (vein) weighted average as shown in the table.

Table 14-5 Summary of Specific Gravity Measurements

Parameter	DOMAIN										
	1	2	3	4	5	6	7	8	9	10	ALL
Num Samples	6	11	7	14	2	62	3	25	83	125	338
Num Missing	23	103	50	63	92	643	109	687	887	319	2976
Min	1.84	2.69	2.87	2.74	2.92	1.92	2.91	2.69	2.09	2.5	1.84
Max	3.31	3.02	3.13	3.61	2.92	3.67	3.14	3.22	3.75	3.78	3.78
Wtd. mean	2.697	2.889	2.975	2.949	2.92	2.889	3.051	2.897	3.06	2.982	2.976
Wtd. CV	0.2	0.04	0.038	0.076	0	0.133	0.033	0.058	0.096	0.088	0.098

14.2.4 Underground Workings, Topography and Overburden

Underground workings, topography and overburden have been provided as solids and surfaces and are the same as those used for RPA's 2012 resource estimate, Snowden's 2013 resource estimate, and the MMTS 2018 resource estimate. The underground workings consist primarily of drifting and crosscuts to follow the mineralization and provide access for exploration.

The underground workings, topography and overburden have been included in the modelling procedure by coding a "Percent Item" to the model and removing this material from the block model volume and tonnage prior to reporting the Resource. The Topography and bottom of the overburden are both above any veins considered for the resource estimate.

To the knowledge provided to the QP for the Resource Estimate and based on the tour of the main and south veins during the site visit, there has been no historic stoping of the Bull River deposit and no additional underground workings that have not been included in the shapes provided.

14.3 Geologic Model

The geologic model has been updated since the previous resource estimate. MMTS interpreted the mineralization using the geological understanding of the Bull River mineralization and the information available in the drillhole databases of November 2021.

The updated geologic model is like previous except that the zones have been extended in the areas with recent drilling and are thinner and higher grade due to the removal of dilution. The Main North domain has been split due to the removal of dilution in between two mineralized area. As a result, 10 veins have been modelled by MMTS where previously there were 9.

The geologic model has been built using the Hexagon MineSight Implicit Modeler tool which uses the radial basis function like other standard industry software such as Leap Frog. The Figure below shows a 3D plan view of the nine modelled veins.

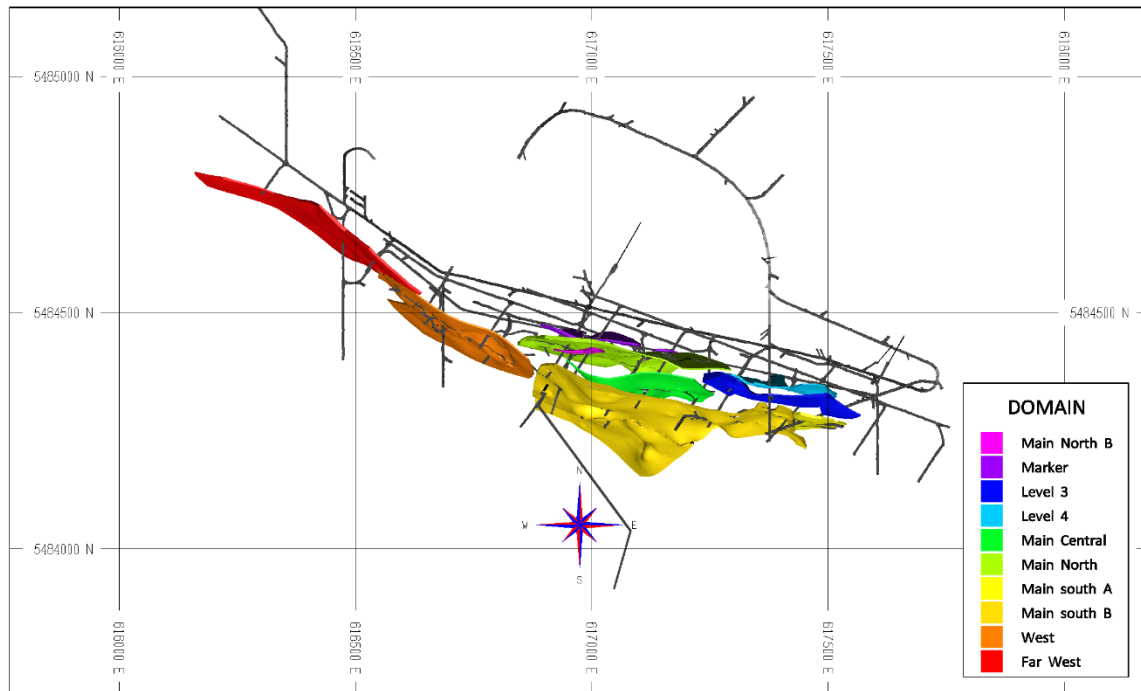


Figure 14-1 Plan View of Mineralized Solids used in Interpolations

14.4 Compositing

Compositing has been done by 1m composites, honoring the Domain (vein) boundaries. Any composites lengths less than 0.5m have been added to the composite above to reduce any remnant composite lengths within a domain. The composite statistics have been compared to the assay statistics to ensure that compositing has correctly honored the original data. Table 14-6 through Table 14-8 summarize the assay and composite statistics for Cu, Au and Ag respectively. The discrepancy in grades for Domain 9 has been investigated and is seen to be due to high grade assays in one hole that are along the solid edge and are >50% within the domain at the assay intervals, but when composited are not within the domain solid.

Table 14-6 Assay and Composite Statistics for Cu (%)

	Parameter	DOMAIN									
		1	2	3	4	5	6	7	8	9	10
ASSAYS	# Samples	33	119	66	85	103	729	121	734	983	456
	# Missing	0	0	0	0	0	0	0	0	0	0
	Min	0	0	0	0	0	0	0	0	0	0
	Max	5.87	11.84	10.95	8.63	15.93	17.21	12.27	19.79	8.3	3.18
	Wtd. mean	0.984	1.736	1.768	1.0421	1.125	1.676	1.248	1.567	0.608	0.464
	Wtd. CV	1.2994	1.271	1.373	1.364	1.349	1.299	1.625	1.351	1.090	1.028
COMPS	# Samples	28	109	72	94	97	734	97	649	707	399
	# Missing	0	0	0	0	0	0	0	0	0	0
	Min	0	0	0	0	0	0	0	0	0	0
	Max	5.87	11.84	10.95	6.46	7.71	17.21	9.34	11.9	5.35	2.76
	Wtd. mean	0.984	1.736	1.768	1.042	1.125	1.6961	1.2488	1.569	0.592	0.464
	Wtd. CV	1.280	1.266	1.272	1.2203	1.134	1.26-	1.344	1.244	0.97	0.953
DIFFERENCE (%)		0.00%	0.00%	0.03%	-0.01%	0.00%	1.17%	0.03%	0.17%	2.67%	0.00%

Table 14-7 Assay and Composite Statistics for Au (gpt)

	Parameter	DOMAIN									
		1	2	3	4	5	6	7	8	9	10
ASSAYS	# Samples	33	119	66	85	103	729	121	734	983	456
	# Missing	0	0	0	0	0	0	0	0	0	0
	Min	0	0	0	0	0	0	0	0	0	0
	Max	0.73	1.512	0.73	1.961	0.946	20.7	0.87	127	46.84	5.05
	Wtd. mean	0.176	0.160	0.0995	0.0995	0.123	0.33	0.095	0.472	0.489	0.1915
	Wtd. CV	1.19	1.44	1.9	1.962	1.28	2.7823	1.767	7.731	4.9269	1.8938
COMPS	# Samples	28	109	72	94	97	734	97	649	707	399
	# Missing	0	0	0	0	0	0	0	0	0	0
	Min	0	0	0	0	0	0	0	0	0	0
	Max	0.73	1.512	0.679	0.941	0.946	20.7	0.633	54.514	41	3.998
	Wtd. mean	0.176	0.160	0.0995	0.0995	0.1225	0.3352	0.095	0.478	0.442	0.192
	Wtd. CV	1.146	1.436	1.757	1.688	1.223	2.730	1.591	4.960	4.105	1.715
DIFFERENCE (%)		0.00%	0.00%	0.00%	0.00%	0.00%	0.48%	0.00%	1.21%	-10.7%	0.00%

Table 14-8 Assay and Composite Statistics for Ag (gpt)

	Parameter	DOMAIN									
		1	2	3	4	5	6	7	8	9	10
ASSAY S	Num Samples	33	119	66	85	103	729	121	734	983	456
	Num Missing	0	0	0	0	0	0	0	0	0	0
	Min	0	0	0	0	0	0	0	0	0	0
	Max	51	93	206	107	96	156	421	160	55	25
	Wtd. mean	8.238	15.521	18.720	11.078	7.846	14.047	20.244	11.964	3.954	3.308
	Wtd. CV	1.355	1.185	1.718	1.515	1.250	1.338	2.360	1.605	1.204	1.149
COMP S	Num Samples	28	109	72	94	97	734	97	649	707	399
	Num Missing	0	0	0	0	0	0	0	0	0	0
	Min	0	0	0	0	0	0	0	0	0	0
	Max	51	93	206	82.46	41	156	210.5	160	36	25
	Wtd. mean	8.238	15.521	18.727	11.078	7.846	14.201	20.248	12.016	3.864	3.308
	Wtd. CV	1.343	1.180	1.627	1.367	1.071	1.302	1.619	1.488	1.103	1.060
DIFFERENCE (%)		0.00%	0.00%	0.04%	0.00%	0.00%	1.08%	0.02%	0.43%	-2.34%	0.00%

14.5 Capping

Capping of outliers has been applied to Cu, Au and Ag assays prior to compositing to reduce the effects of high-grade outliers. Figures 14-2 through 14-4 show the cumulative probability plots (CPP) used to determine capping values for the assay data, with all domains plotted together and separately for each metal.

Capping values for each metal in each domain are listed in Table 14-9. The values are based on the upper portion of the CPP curve, as well as Model Validation (see sections later in this chapter) for the modelled grades to better match the original assay data.

It should further be noted that Outlier Restriction of the composites has also been implemented during interpolation. Values above 7% for Cu, 5gpt (and 3 for the final pass of interpolation) for Au and 100gpt for Ag have only been allowed to be used in the interpolation for an anisotropic distance of 10m from the sample as a maximum. This is further described in the Interpolation section of this chapter.

The capping value and number capped are summarized in Table 14-9. The relatively high number capped is due to the prevalence of the closely spaced channel samples in the database.

Table 14-9 Assay Capping Values and Number Capped

Domain	Cu		Au		Ag	
	CAP VALUE (%)	#CAPPED	CAP VALUE (PPM)	#CAPPED	CAP VALUE (PPM)	#CAPPED
1	5	1	N/A	0	50	1
2	5	9	1	1	N/A	0
3	5	12	N/A	0	200	2
4	5	4	1	3	100	2
5	5	4	N/A	0	N/A	0
6	8	17	10	1	150	1
7	8	4	N/A	0	200	1
8	8	16	30	1	100	5
9	N/A	0	20	3	50	2
10	N/A	0	4	1	N/A	0

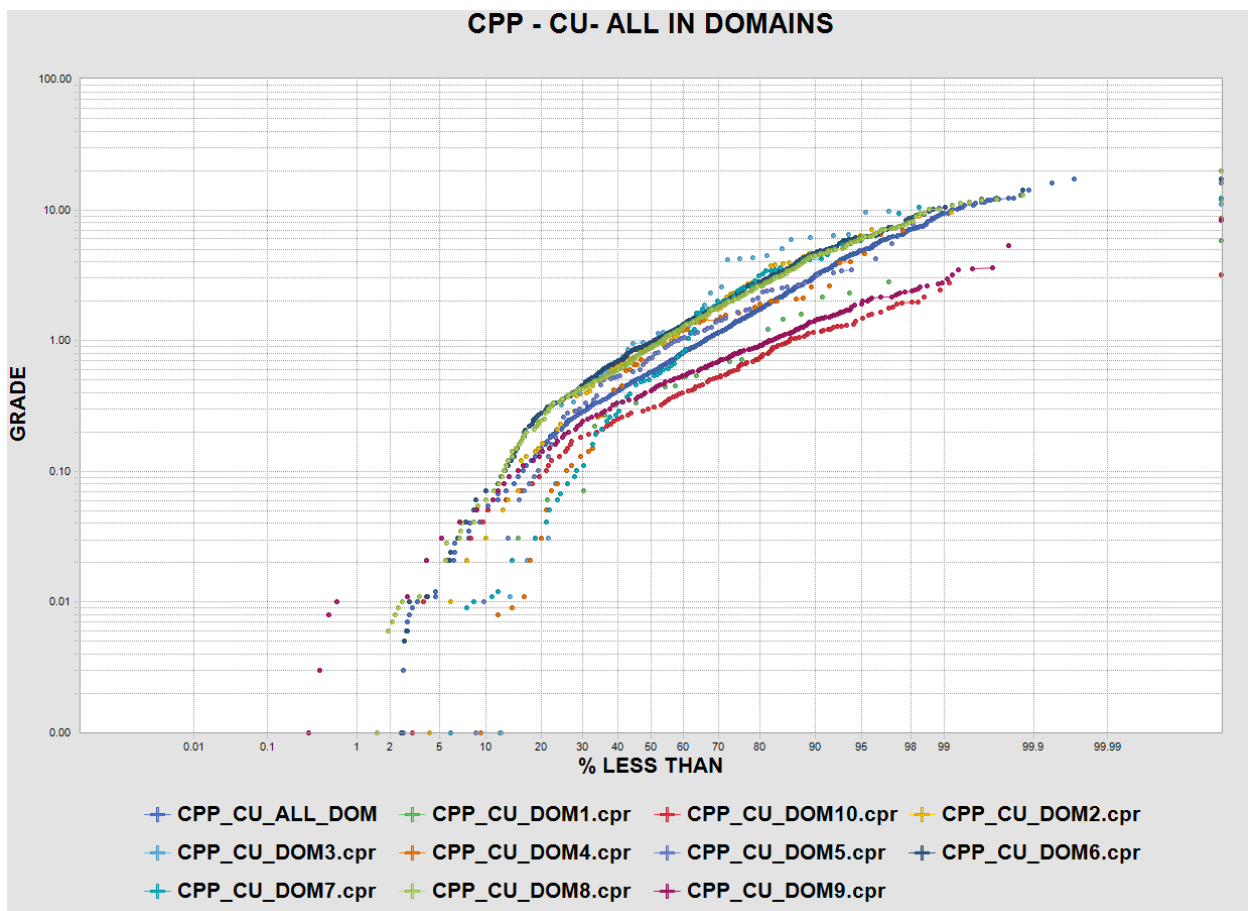


Figure 14-2 Cumulative Probability Plots for Cu

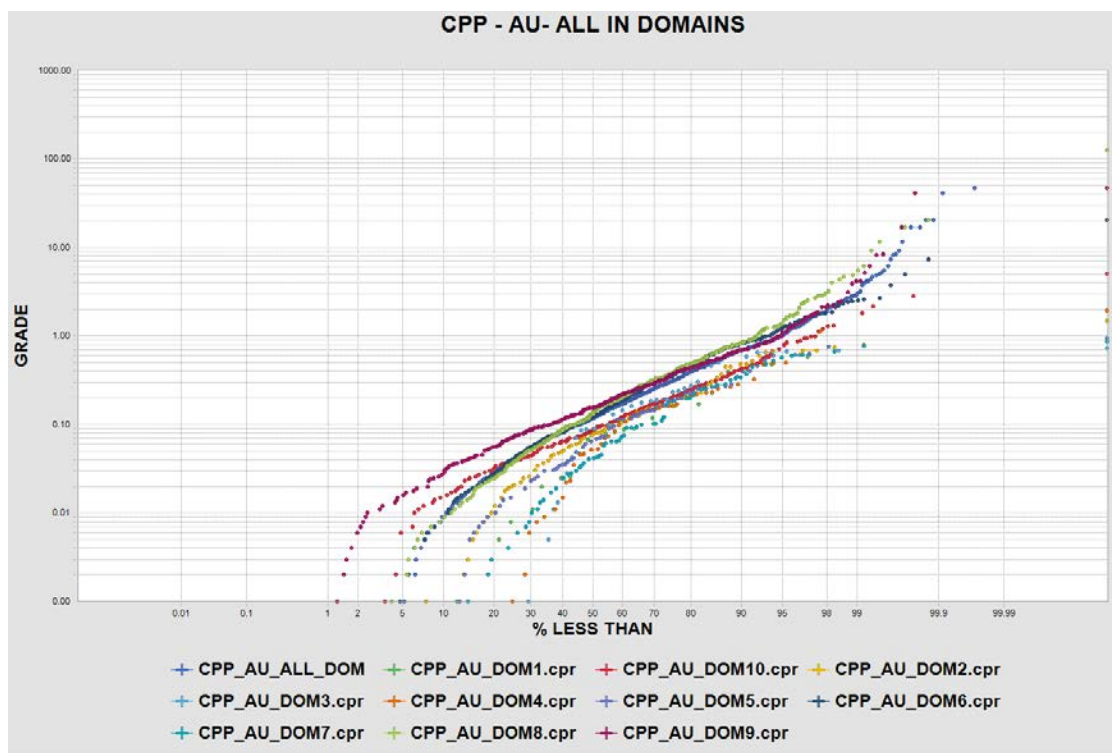


Figure 14-3 Cumulative Probability Plots for Au

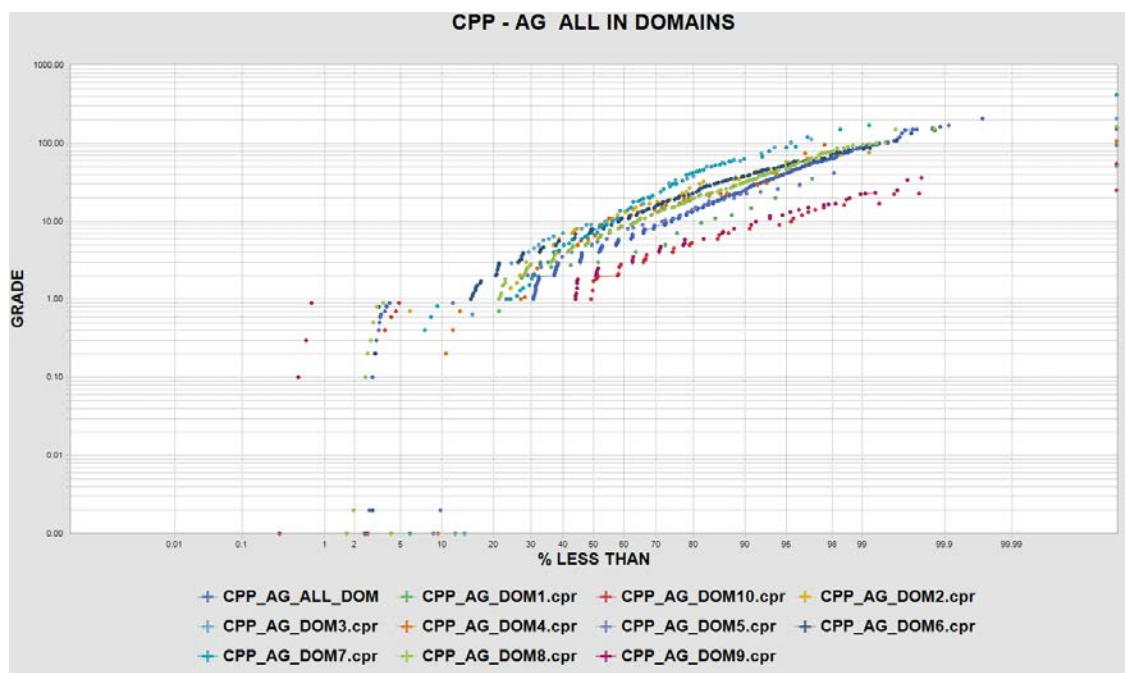


Figure 14-4 Cumulative Probability Plots for Ag

14.6 Channel Sample vs. Drillhole Comparison

The Channel sampling protocol has been described in detail in Chapter 11 and has been done in such a way to provide an un-biased data set than can be used in the resource estimate in a similar manner as that of the drillhole data. To determine that no bias is inherent in the channel sample data set, a comparison of channel sample grades to drillhole grades has been done.

The comparison is hampered by the fact that there are very few locations with both channel and drillhole data within proximity. Therefore, a direct statistical comparison is not possible. To compare the data sets, two Nearest Neighbor models for each metal have been created – one using only the channel samples and the other using only the drillhole data. The interpolation distance has also been restricted. To compare the grade distribution throughout each population cumulative probability plots (CPP) of each set of modelled blocks within the estimation domains have been created in Figure 14-5 through Figure 14-7 below. The plots illustrate that the channel sample data is not representing the lower grade end of the distribution to the same extent as the drillhole data. However, for the majority of the curve and within the grade of the resource estimate, the two distributions match fairly well, suggesting that neither data set is biased.

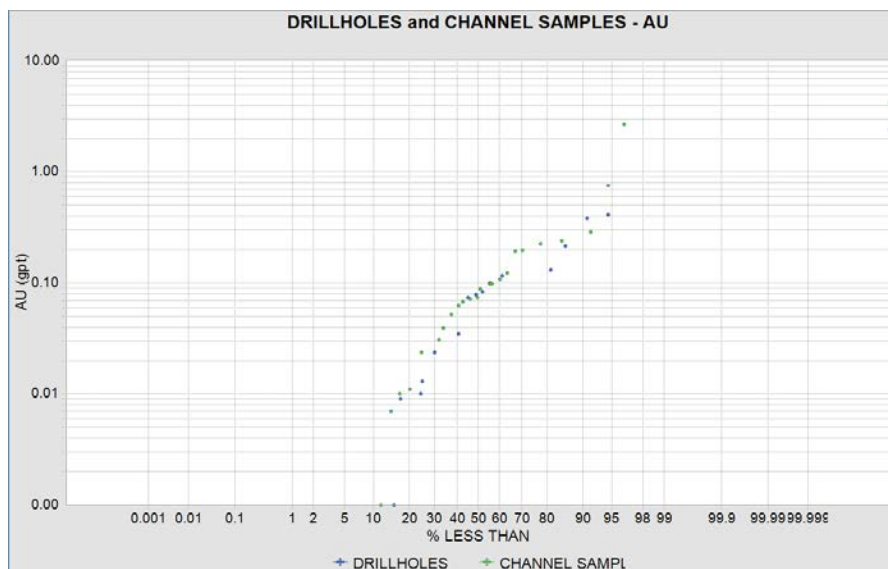


Figure 14-5 Cumulative Probability Plot Comparisons for DH and Channel Samples – Cu

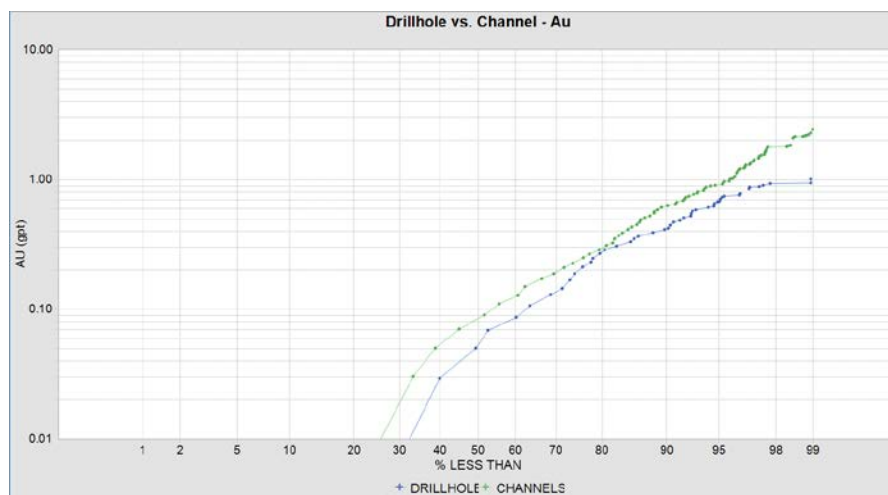


Figure 14-6 Cumulative Probability Plot Comparisons for DH and Channel Samples – Au

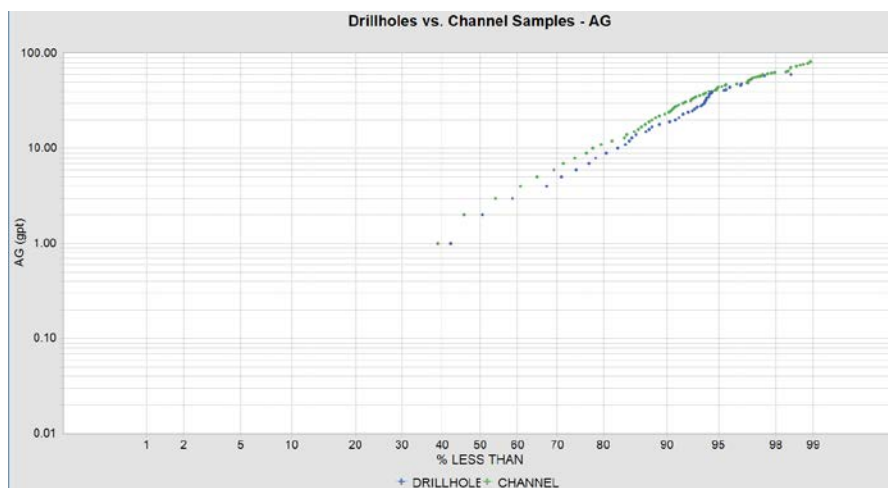


Figure 14-7 Cumulative Probability Plot Comparisons for DH and Channel Samples – Ag

14.7 Variography

The mineralized zones are defined by two areas of differing orientation to mineralization, as illustrated in Figure 14-1. The eastern domains (veins 1 through 8) have axes orientations of 110/00/-75, using GS-Lib convention. The western domains (veins 9 and 10) are rotated to the northeast and have anisotropic axes with directions of 130/00/-80. Variograms of these two domain areas are provided in Figure 14-5 and Figure 14-6 for Cu in the strike and dip directions respectively. Meaningful variograms for across the vein directions are not possible due to the limited data and extent. Copper contributes approximately 85% of the value of the deposit. Therefore, the variogram ranges for Cu have been used in the Classification to help determine an appropriate required spacing for Indicated Classification of material. The summary of variogram parameters for Cu can be found in Table 14-10.

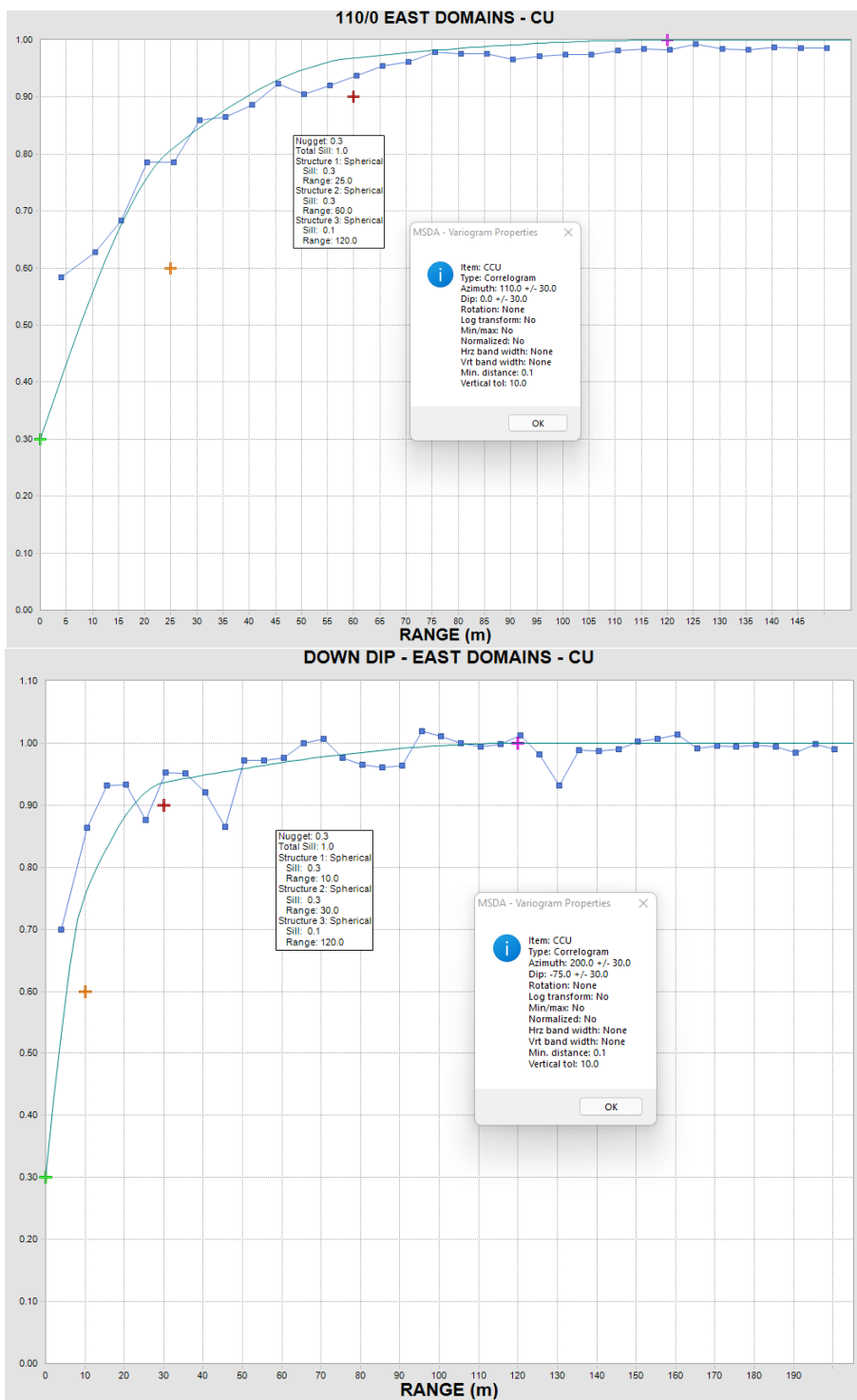


Figure 14-8 Variography – Correlograms for East Domains – Cu

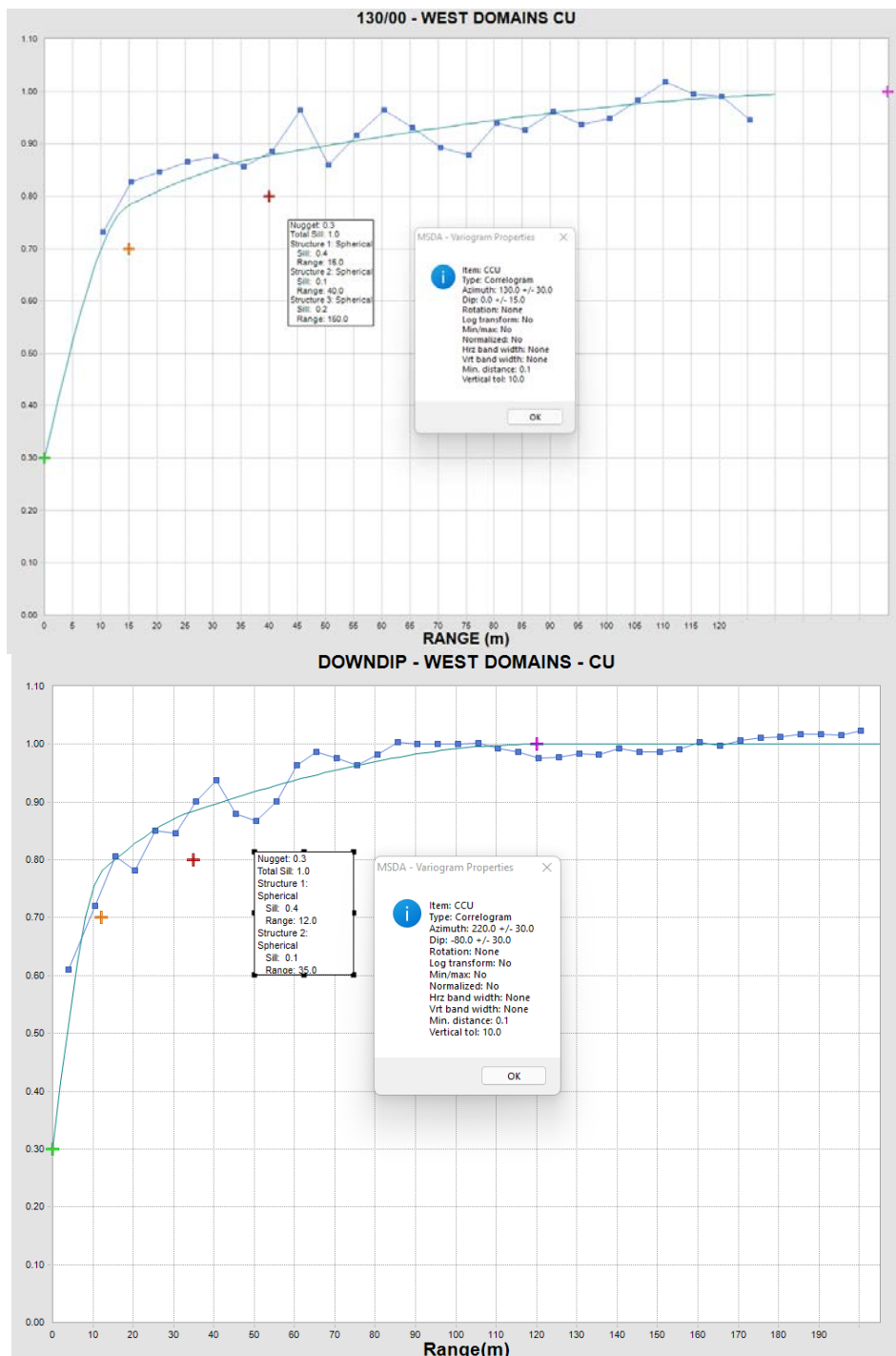


Figure 14-9 Variography – Correlograms for East Domains - Cu

Table 14-10 Summary of Variogram Parameters for Cu

Domains	Rotation (GSLIB-MS)		Axis	Total Range (m)	Nugget	Sill1	Sill2	Sill3	Range 1 (m)	Range 2 (m)	Range 3 (m)
1-8	ROT	110	Major	45					25	60	120
	DIPN	0	Minor	90	0.3	0.3	0.3	0.1	10	30	120
	DIPE	-75	Vert	0						NA	
9-10	ROT	130	Major	40					15	40	150
	DIPN	0	Minor	35	0.3	0.4	0.1	0.2	12	35	120
	DIPE	-80	Vert	0						NA	

14.8 Block Model Estimation Parameters

The grades for Cu, Ag, and Au were interpolated into the blocks using inverse distance cubed (ID3) and requiring Domain matching for each of the 10 domains. A search ellipse with axis in the same orientation as the three major directions seen in the variograms was used to select samples for interpolation into the blocks. Composite values have also been restricted at higher cut-offs to reduce the impact of high-grade samples. The distance value above the outlier restricted grade may be used in each pass of the interpolation is 10m for Cu and 4m for Au and Ag. The search parameters are summarized in Table 14-11.

Table 14-11 Summary of Search Parameters

Parameter	Axis	Interpolation Pass			
		1	2	3	4
Distance (m)	Major	12	40	80	150
	Minor	12	40	80	150
	Vert	5	10	15	20
Min. # Comps		4	4	4	4
Max. # Comps		8	8	8	8
Max/Hole		2	2	2	2
Max/Quad		2	2	4	4
Outlier Restriction Grade – Cu (%)		7	7	7	7
Outlier Restriction Grade – Au (gpt)		5	5	5	3
Outlier Restriction – Ag (gpt)		80	80	80	80

14.9 Reasonable Prospects of Eventual Economic Extraction

To address the issue of “reasonable prospect of eventual economic extraction” for underground mining, the thickness of the mineralization has been estimated and is used to remove blocks from the resource in which the mineralization is considered too thin or discontinuous to warrant underground mining.

The True Thickness is calculated in the assay file when the creating the geologic models This True Thickness value has then been interpolated into each block with mineralization. The minimum allowable mining thickness used is 2.0m True Thickness. Blocks that do not meet this criterion have been given a Classification of zero and are therefore not include in the Resource Estimate.

14.10 Classification

The Classification is based on the Variography, with the required distance to the closest three composites based on the Range at approximately 90% of the sill for Indicated. The range in the major and minor axes directions is between 20m and 50m at the 90% sill value. Using an average of 28m requires a drillhole grid spacing of 40m. Therefore, blocks are classified as Indicated if they had an average distance to the nearest 3 drillholes of less than 40m. To be included for Classification, only samples with certificates have been used for the distance interpolations. Blocks have also been classified as Indicated if they have an average distance to the nearest 2 drillholes of less than 15m. Manual shapes have also been used to ensure continuity of the Indicated and Inferred blocks.

Inferred blocks are all other blocks are within the geological interpretation, which have been interpolated, and are of sufficient thickness. The interpolations have maximum distances to the drillholes of 150m, which is between 1.00 and 1.25 the total range. All interpolations also require at least 2 drillholes or channel samples as summarized in Tables 14-10 and 14-11 above.

Figure 14-10 illustrates a perspective view of the interpolated blocks and their Classification. There are no Measured blocks in the current Resource Estimate.

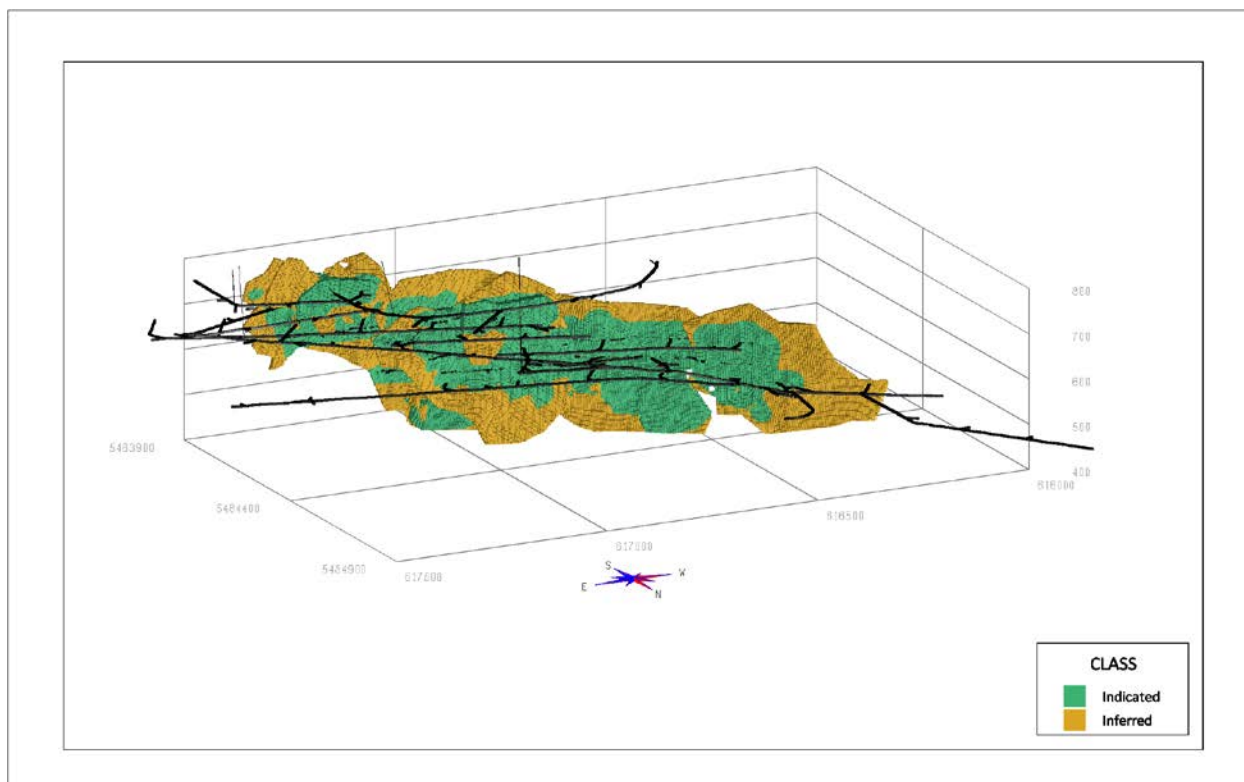


Figure 14-10 Perspective View (looking southwest) of the Classification for all Blocks and the Underground Workings

14.11 Block Model Validation

14.11.1 Comparison of Modelled Grades to De-clustered Composites

To validate the model, a Nearest Neighbor model has been created (NN) to compare the de-clustered composite data to the interpolated grades. Table 14-12 compares the mean grades in each domain, illustrating the model are not globally bias. The conservative values of the Au grade estimate are seen to be due primarily to a few areas of high Au grades were extended in the NN model and therefore considered suitable for the modelled Au grades.

Table 14-12 Block Model and De-clustered Composite Comparison

Parameter	Cu (%)		Au (gpt)		Ag (gpt)	
	Model	NN	Model	NN	Model	NN
Num Samples	136,837	136,837	136,837	136,837	136,837	136,837
Num Missing	0	0	0	0	0	0
Min	0	0	0	0	0	0
Max	7.984	13.190	16.890	54.514	182.3	200.0
Weighted mean	1.214	1.272	0.317	0.371	10.2	10.4
Weighted variance	1.10	2.25	0.18	2.39	122.72	257.08
Weighted CV	0.86	1.18	1.32	4.18	1.09	1.54
Difference (%)	-4.8%		-16.9%		-1.8%	

14.11.2 Grade-Tonnage Curves

To validate the modelled tonnage and grade throughout the grade distribution for each metal, grade-tonnage curves have been created, comparing the de-clustered composites (NN model) to the modelled grades. Figures 14-11 through 14-13 illustrated this comparison for Cu Au and Ag respectively. In each case, the tonnage is slightly higher, and the grades lower in the range of the cut-off used for the resource estimate, indicating smoothing of the interpolated model.

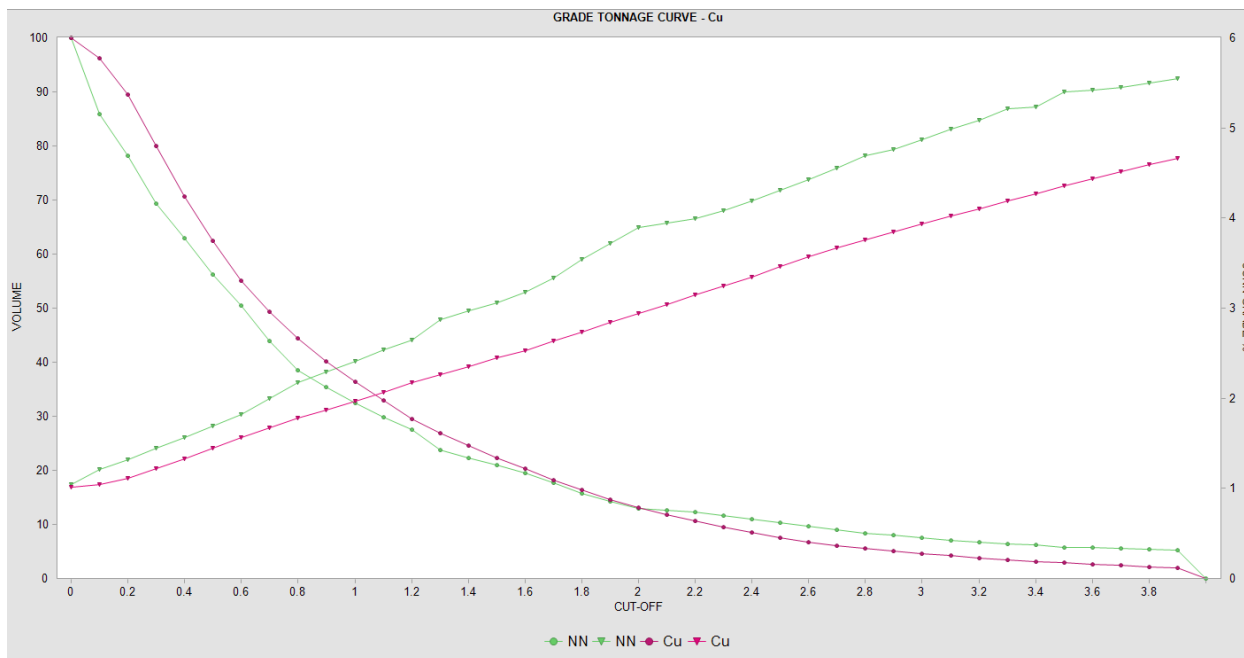


Figure 14-11 Grade-Tonnage Curve for Cu

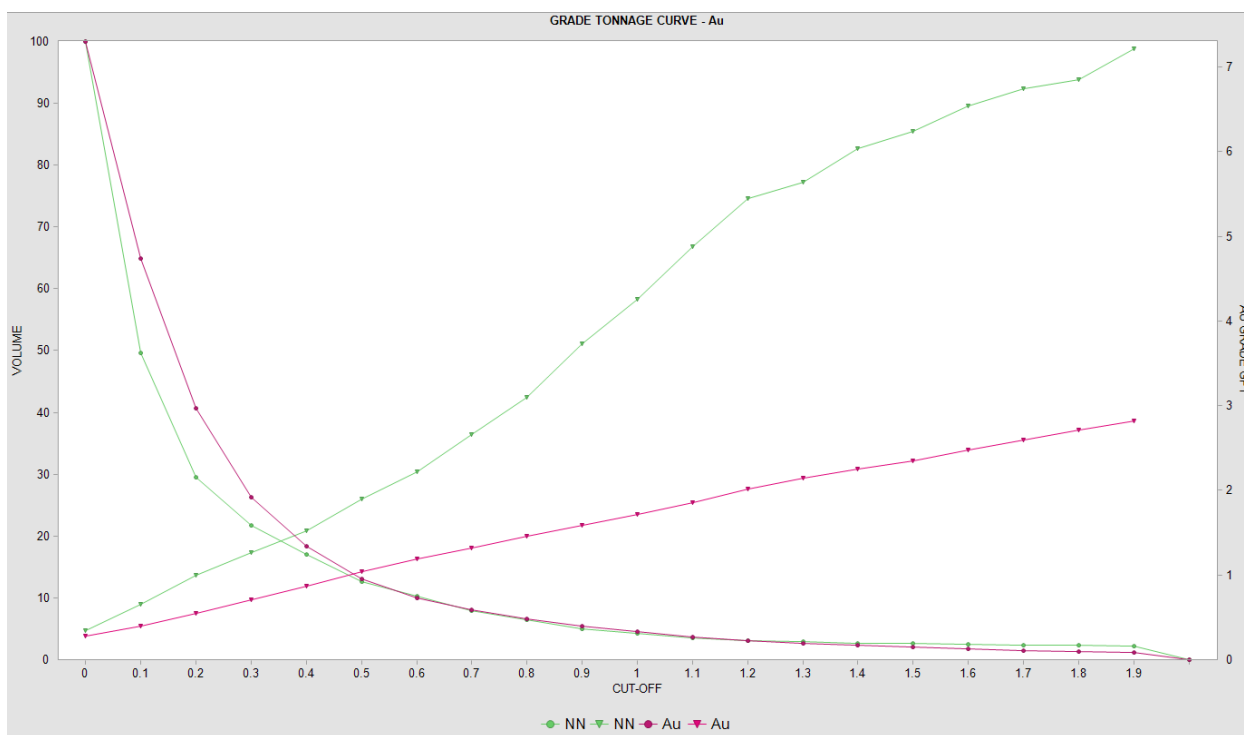


Figure 14-12 Grade-Tonnage Curve for Au

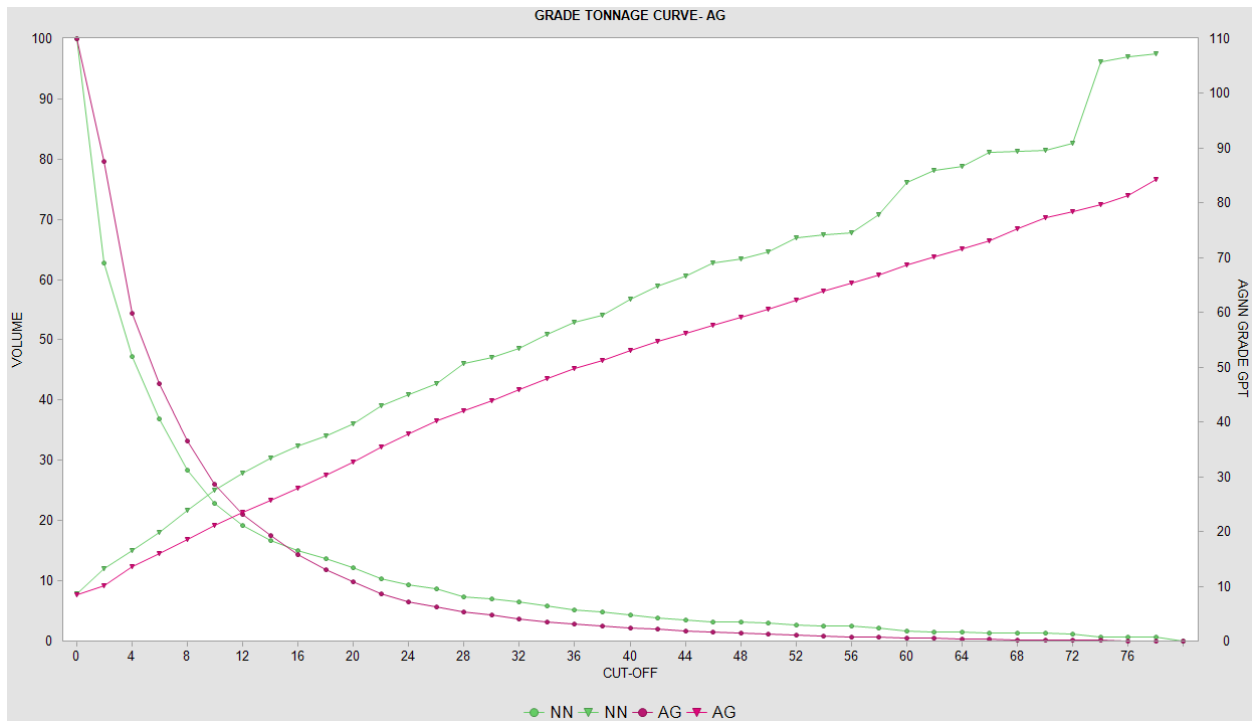


Figure 14-13 Grade-Tonnage Curve for Ag

14.11.3 Visual Validation

The block model has been examined in section and three-dimensions to ensure that modelled grades reflect the original data. It is noted that, as mentioned previously in this report, there are drillholes that have not been logged or assayed either entirely or throughout the expected vein locations. Where this is the case, the domain solids and interpolations ignore these holes. This is apparent in the section plotted below, which compare the assay grades to the modelled grades for Cu and Au. The plots illustrate that the modelled grades adhere to the data as expected (Figure 14-14 through Figure 14-18).

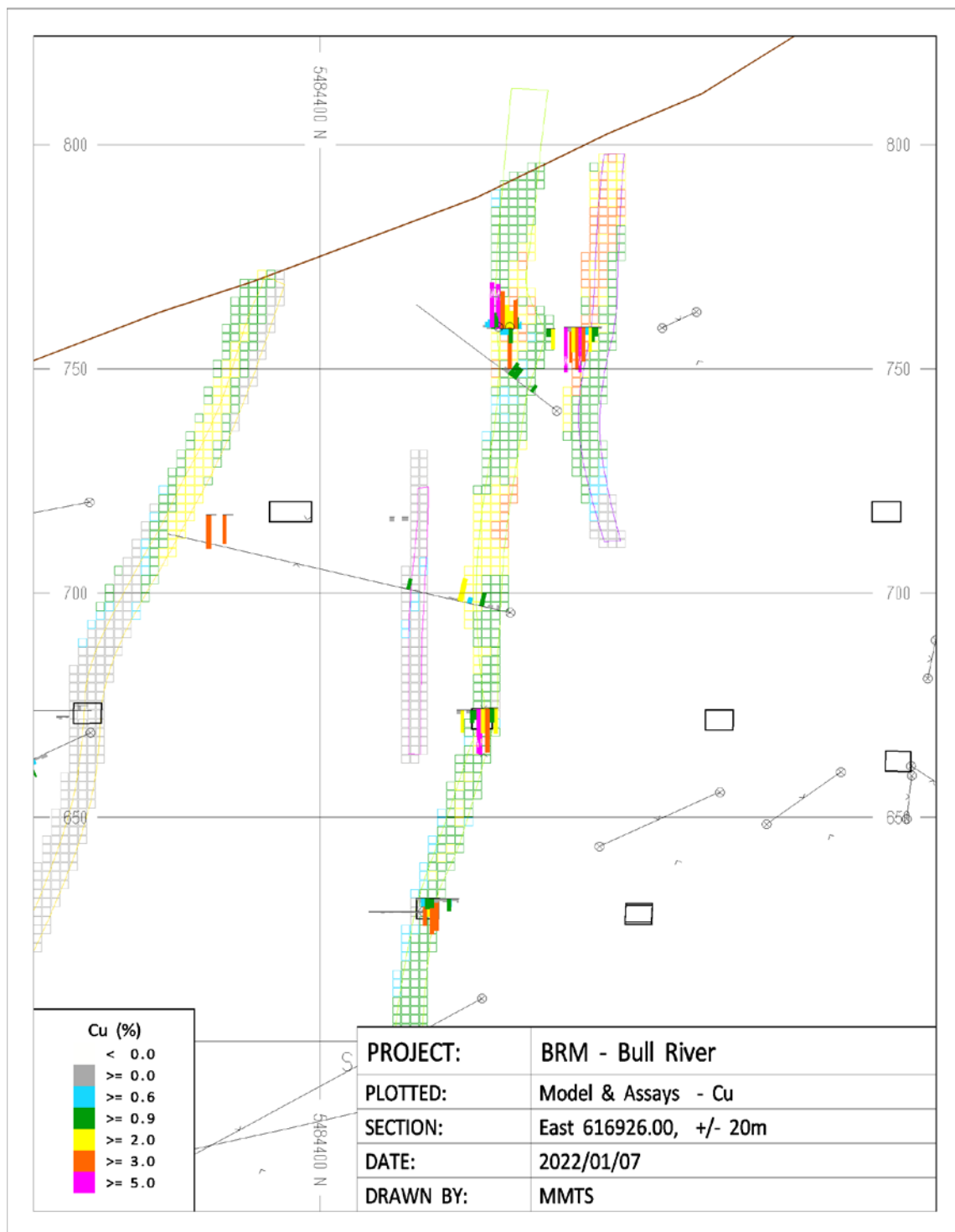


Figure 14-14 Block Grades and Assay Grades – Section 616926E – Cu

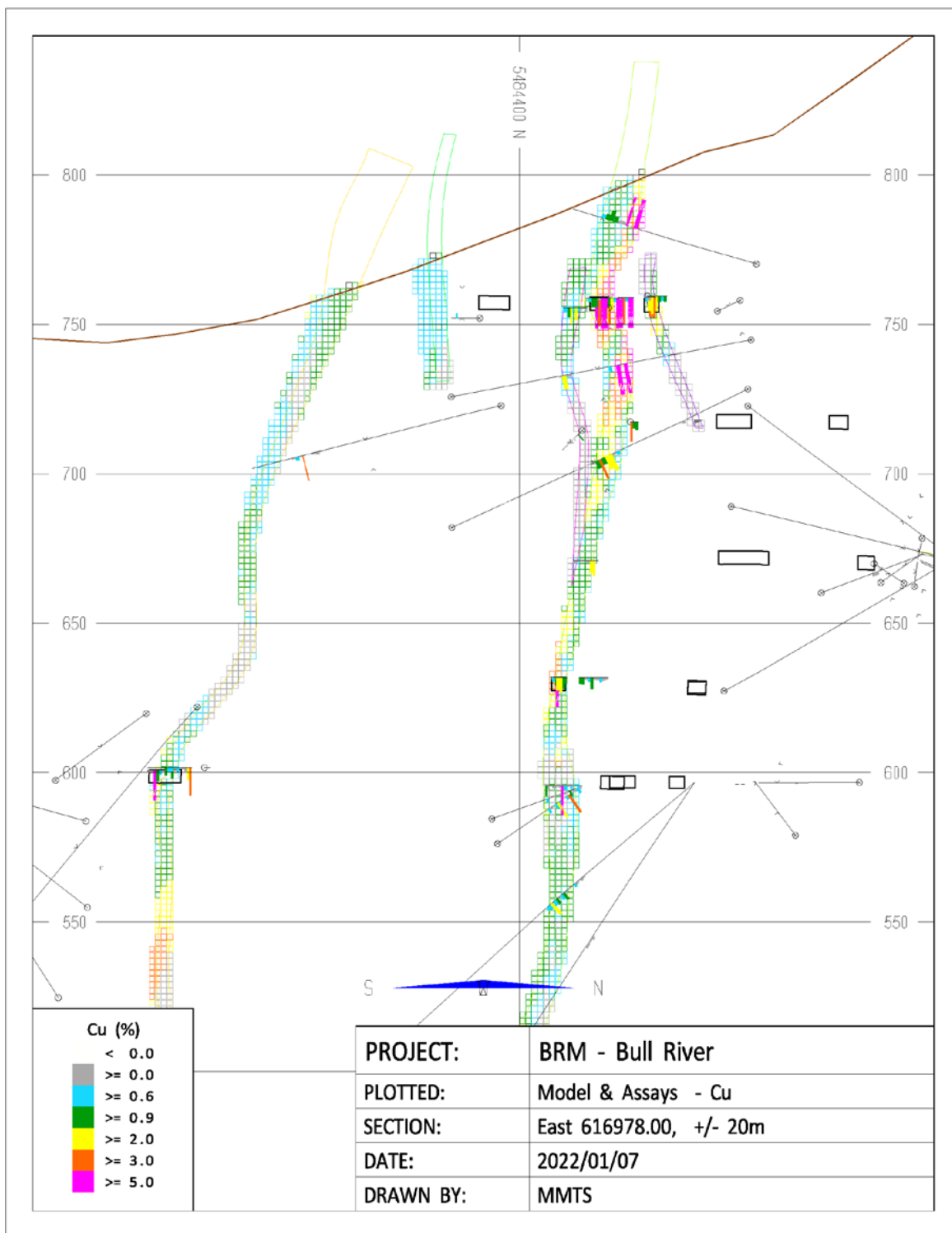


Figure 14-15 Block Grades and Assay Grades - Section 616978E – Cu

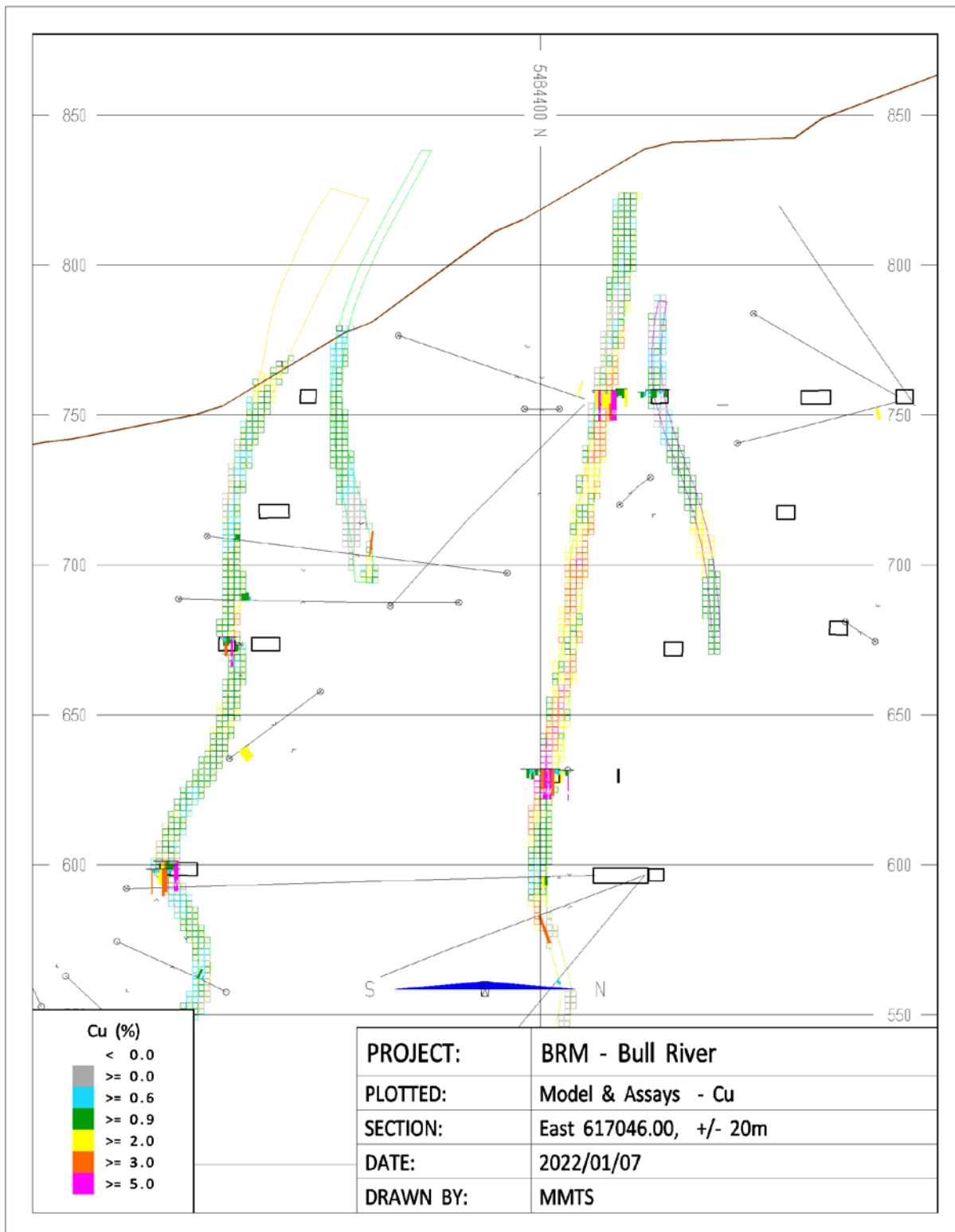


Figure 14-16 Block Grades and Assay Grades - Section 617406E – Cu

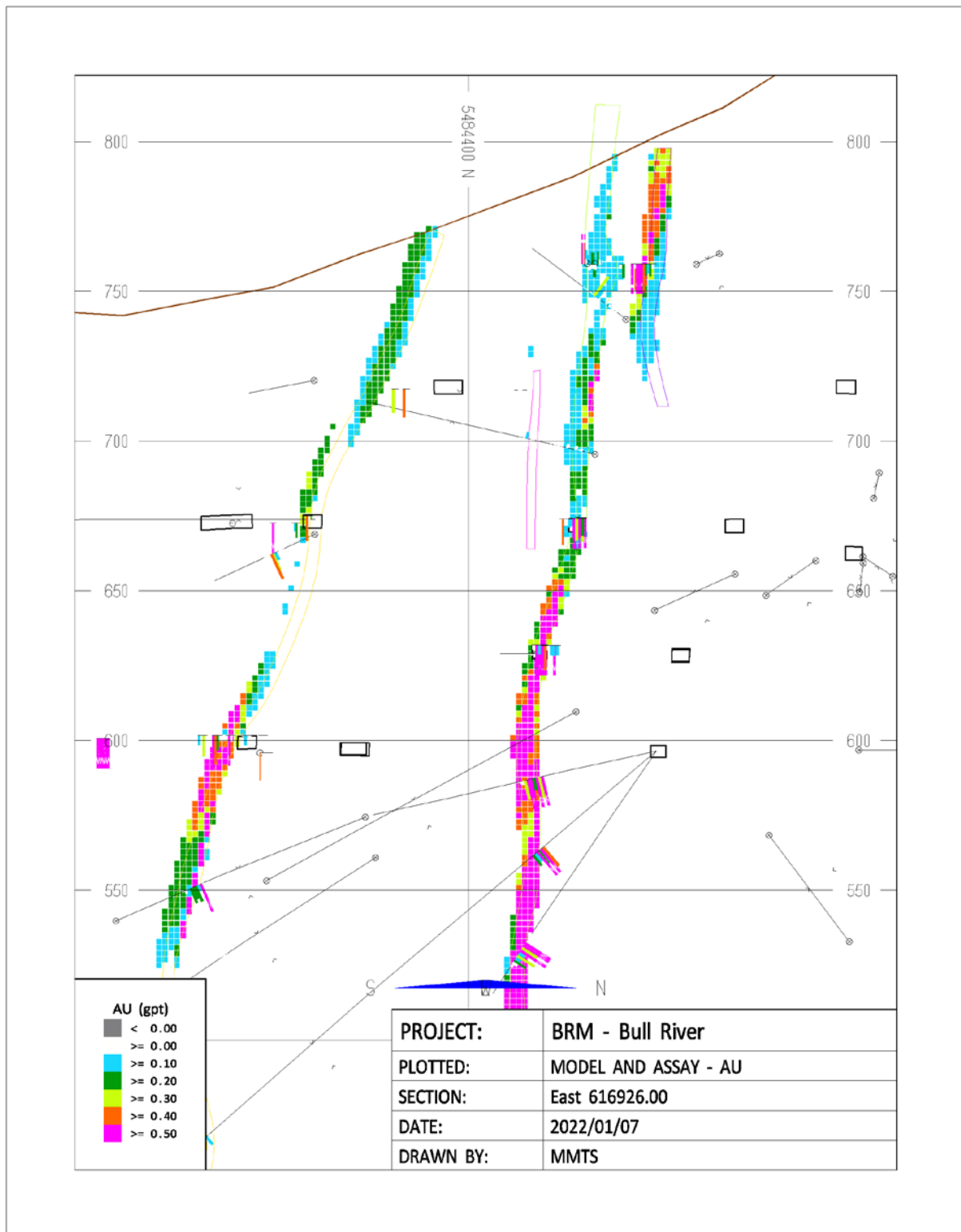


Figure 14-17 Block Grades and Assay Grades – Section 616926E – Au

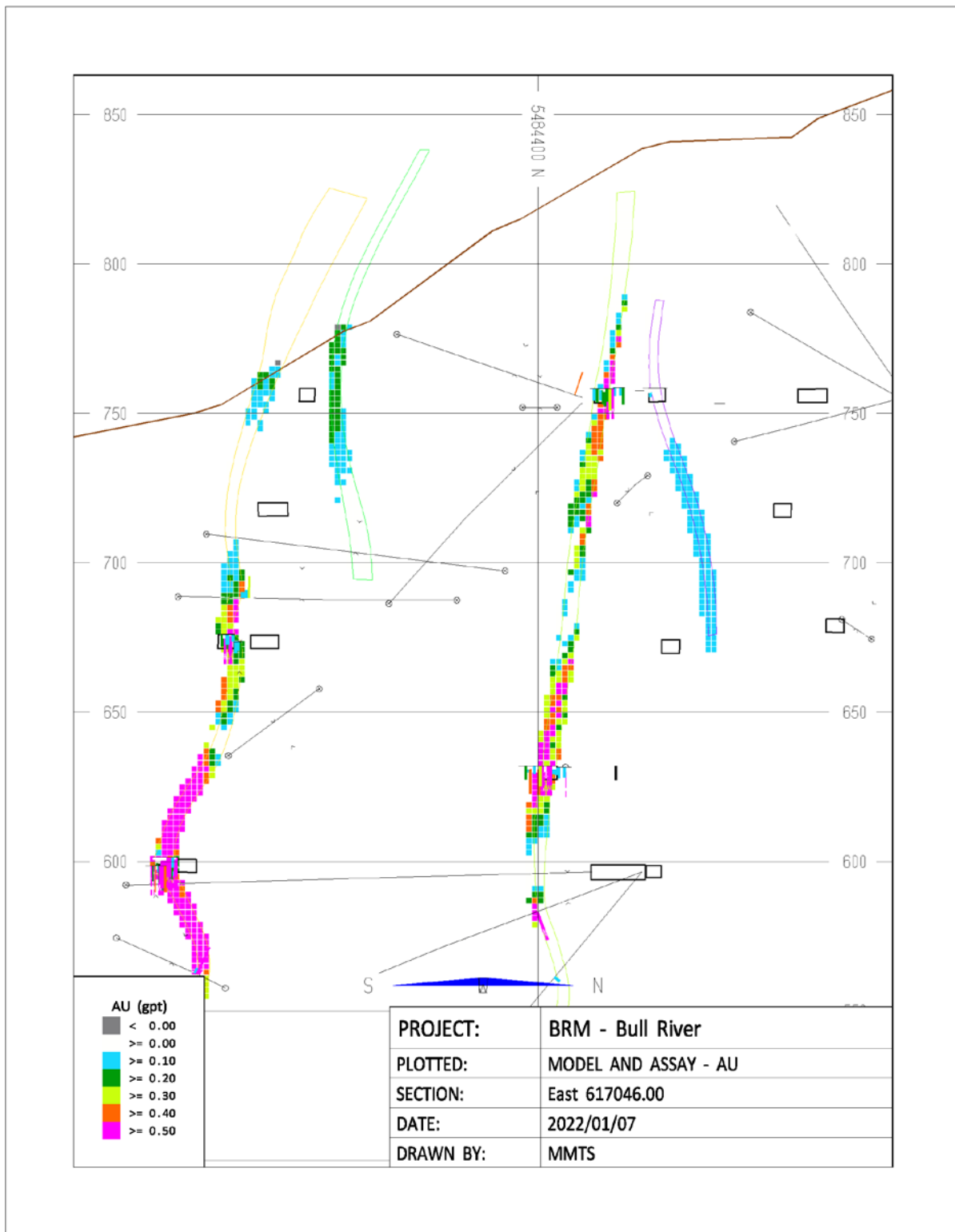


Figure 14-18 Block Grades and Assay Grades – Section 617046E – Au

14.12 Risk Assessment

A description of potential risk factors is given in Table 14-13 along with either the justification for the approach taken or mitigating factors in place to reduce any risk.

Table 14-13 List of Risks and Mitigations/Justifications

#	Description	Justification/Mitigation
1	Classification Criteria	The resource has been confined to mineralized shapes, with underground development and drilling defining the veins. Class is determined using DH spacing and deposit variability.
2	Metal Price Assumptions	Based on the 3-year trailing average (Kitco, 2021, LME, 2021)
3	High Grade Outliers	CPPs used to define outliers with capping and outlier restriction limiting influence of outliers. Grade-tonnage curves show model validates well with composite data throughout the grade distribution.
4	Processing and Mining Costs	Costs are based on comparable sized underground projects.

15 Mineral Reserve Estimates

There are no Mineral Reserves at BRM currently.

16 Mining Method

There is no relevant data for this section.

17 Recovery Methods

There is no relevant data for this section.

18 Project Infrastructure

There is no relevant data for this section.

19 Market Studies and Contracts

There is no relevant data for this section.

20 Environmental Studies, Permitting and Social or Community Impact

20.1 Regulatory Framework

The Bull River Mine was permitted under a BC Mines Act Ministry of Mines (MEM) Permit M-33, issued on August 9, 1979, which authorizes production of ore up to 75,000tpa. The last revision of the Permit was dated July 22, 2005. Under this authorization, operation of the existing Process Plant or deposition of process tailings on site is not allowed.

From November 2014 to May 2018, while the property was on care and maintenance status, Purcell was in the process of developing a Mines Act Permit Application (MAPA) with the intention of placing the property into production. This process was suspended and will need to be re-initiated with MEMPR.

20.2 Local and Regional Processes

20.2.1 Regional Land Use Planning

The Project is located on private land and adjacent to lands that have been zoned in the East Kootenay Land Use Plan for resource use and development, including mining (CORE 1994; Government British Columbia 1995). Under the Kootenay-Boundary Land Resource Management Plan Implementation Strategy (Kootenay Inter-Agency Management Committee 1997), the Project area is within the Integrated Land Use Zone designation, defined as an area where a range of land uses are accepted.

20.2.2 Local Land Use Planning

The existing Bull River Operations in the Galloway area are in a development area zoned for mining activities.

Due to the proximity to the Bull River/Kootenay River and the Canada/US border, the high wildlife and fisheries values, and the public and commercial use of the area, it is likely that impact management and communication with potentially effected stakeholders will require significant time and resources.

Other licensed land use tenures in the Project area include mineral resources, forest resources, registered trap lines, guide outfitter areas, and commercial recreation areas. All current tenure holders would require consultation and possible accommodation because of predicted impacts to their operations.

Non-tenured land use in and adjacent to the project area include hiking, camping, hunting, fishing, skiing, and motorized recreation with ATVs and snowmobiles.

20.2.3 Environment

The recommended approach to Environmental issues for the MEM and MOE applications is:

- describe the history of, and existing conditions, under the headings below,
- describe the proposed changes to the existing operations,
- indicate possible key impacts, and then
- recommend mitigation, monitoring and closure plans.

Background studies, including several conducted over the history of the operation of the Bull River mine can be utilized to support MEM and MOE permit applications. Specific studies have been initiated.



20.2.4 Water

The Bull River project is adjacent to the Bull River, which flows into the Kootenay River, then into the United States, approximately 65 kilometres to the south.

The Bull River and its tributaries have characteristically clean waters and is representative of other area streams with industrial resource extraction activities such as forest harvesting and mining.

The proposed Bull River mine disturbances are not expected to have a significant impact on water resources.

20.2.5 Air

The project area is active for resource extraction, and several roads in the area can contribute to air borne dust emissions. No permanent residents are in the immediate area, but recreational use is significant year-round.

Background air quality in the area is expected to be good.

Mitigation measures to protect air quality include mine site traffic dust control, early reclamation of disturbed areas, and management of particulate emissions from the Processing Plant.

20.2.6 Fisheries

The Bull River and its tributary streams contain several species of fish, including Bull Trout, Cutthroat Trout, and Mountain Whitefish. These species are important components of both public and commercial recreation in the project area.

Significant resources would be required to study the baseline, projected impacts and mitigation measures needed to satisfy Permit application criteria.

No significant impact to fisheries is anticipated from the proposed Bull River project with careful execution of mitigation and reclamation plans.

20.2.7 Wildlife

The Bull River project area contains habitat for several species of wildlife including Black and Grizzly bears, wolves, coyotes, wolverine, marten, lynx, bobcat, moose, mule and whitetail deer, and elk and sheep. Numerous other species of birds, amphibians and smaller mammals are also likely present during some of all their life cycles.

The project area does not propose to disturb additional areas of ungulate winter range, although reclamation of the site after mining will address this value component.

With early and well-planned mitigation and reclamation of disturbances, it is anticipated that impacts to wildlife in the project area will not be significant.



20.2.8 Hydrology

The Bull River and its tributaries near the project area are not directly affected by the Bull River project. As a result of planning and site management, it is anticipated that no significant impacts to the Bull River hydrology will occur.

20.2.9 Noise and Visuals

The Bull River Valley around the Bull River mine hosts a wide variety of visual landscapes and is likely at a low background level for noise.

Further studies on both noise and visual impacts will be required for any environmental impact assessments.

Due to the relatively small size of the mining and spoil areas, and the temporary nature of the disturbances, the overall impact of noise and visuals is expected to be minimal, with mitigation measures.

20.2.10 Land and Resource Use

The land uses as described above provide a strong framework for inclusion of identified features significant to the Bull River project.

It is anticipated that the Bull River project will be compatible with the objectives of Regional and Local Land Use Plans.

20.2.11 Archaeological and Heritage Resources

The Bull River valley has been utilized by Aboriginal peoples well before contact with Europeans and is likely to contain archaeological and heritage resources.

Detailed studies on the existing and potential resources within the project area may be required, although the project is not expected to impact areas not already disturbed by mining activities.

20.2.12 First Nations

An important component of project approval will be the requirement to consult, and accommodate, if necessary, the impact to identified First Nations Communities in the Project area. Consultation has been initiated and will be continued to inform local First Nations as Braveheart's project planning is formulated.

The Ktunaxa Nation has occupied the lands adjacent to and including the Kootenay and Columbia rivers and the Arrow Lakes of BC for more than 10,000 years. The territory of the Ktunaxa Nation is roughly 70,000km² within the Kootenay region of southeastern BC and parts of Alberta, Montana, Washington, and Idaho.

The Project lies within Ktunaxa traditional territory.

20.2.13 Consultation

The proponent's consultation should be focused on developing a full understanding of First Nation treaty rights, treaty lands, citizens, and treaty interests in the project area in order that the province will have sufficient information to evaluate the relationship between the project and the rights and interests which arise under treaty.

The Bull River Area, where the Project is located, is on private land and is not included in the Treaty negotiation process presently under way with the Ktunaxa First Nation, British Columbia, and the Federal Government.

20.2.14 Engagement

Depending upon the specifics of the consultation process, and if any accommodation of impacts to the Ktunaxa First Nation is determined, a plan for engagement will be developed and implemented.

20.2.15 Social and Economic

The major focus of social impacts of the proposed Bull River Restart will be to re-employ approximately 100 employees laid off when the mine operation was suspended in 2011.

The direct and indirect impact of wages and related tax revenue will be significant for the East Kootenay, where job losses in the Forestry sector have been significant, especially in the rural areas like those near the project area.

The Public Consultation Policy Regulation in BC sets out standards for public consultation in the Mine Permitting process. Depending upon the level of public interest and the significance of the issues, public hearings will also be required.

The project proponent will be required to have Safety and Health Policies consistent with government requirements and at a standard that is high enough to attract and maintain a skilled workforce. A commitment to sustainability governance will also be an asset to maintaining the necessary social license to operate in the area with local community support.

Benefits of the project include direct and indirect employment, local spending by the mine operation, contractors and employees, and significant contributions to local, regional, provincial, and federal taxes.

A policy of local spending and local employment practices for area residents is recommended, as is a policy to attract, train and retain First Nations employees and contractors.

20.2.16 Stakeholder Identification, Engagement, and Consultation

Stakeholders with an interest in the project need to be identified early in the permitting process, so that their input can be considered and applied where appropriate. It is recommended that engagement with identified stakeholders by project proponents be initiated as soon as possible.

Communication should begin as early as the exploration stage and should increase accordingly once a Final Project Description is generated. Meaningful dialogue with stakeholders including engagement and consultation will improve project timelines, reduce unnecessary costs, and enhance the probability of appropriate approvals.

21 Capital and Operating Costs

There is no relevant data for this section.

22 Economic Analysis

There is no relevant data for this section.

23 Adjacent Properties

There are several adjacent deposits to the BRM project. A summary of relevant adjacent property location and mineralisation styles is included Table 23-1 and shown in Figure 23-1 as described in the MINFILE database.

Table 23-1 Adjacent Properties

Name	MINFILE	Easting	Northing	Minerals	Status
Bull River Iron	082GNW044	622184	5485336	Fe	Showing
Dibble	082GNW003	612830	5495020	Ag, Cu, Au	Past Producer
Eagle Plume	082GNW025	604665	5496711	Cu, Ag, Au	Showing
Eagle Too	082GNW032	607814	5494826	Cu, Au	Showing
Midas	082GNW022	607959	5502645	Pb, Ag, Au, Cu	Past Producer
Rimrock	082GSW013	635854	5465514	Cu, Ag	Past Producer
Victor	082GNW004	611037	5496281	Pb, Ag, Zn, Au, Cu	Past Producer
Wild Horse River Placer	082GNW099	601416	5500881	Au	Past Producer

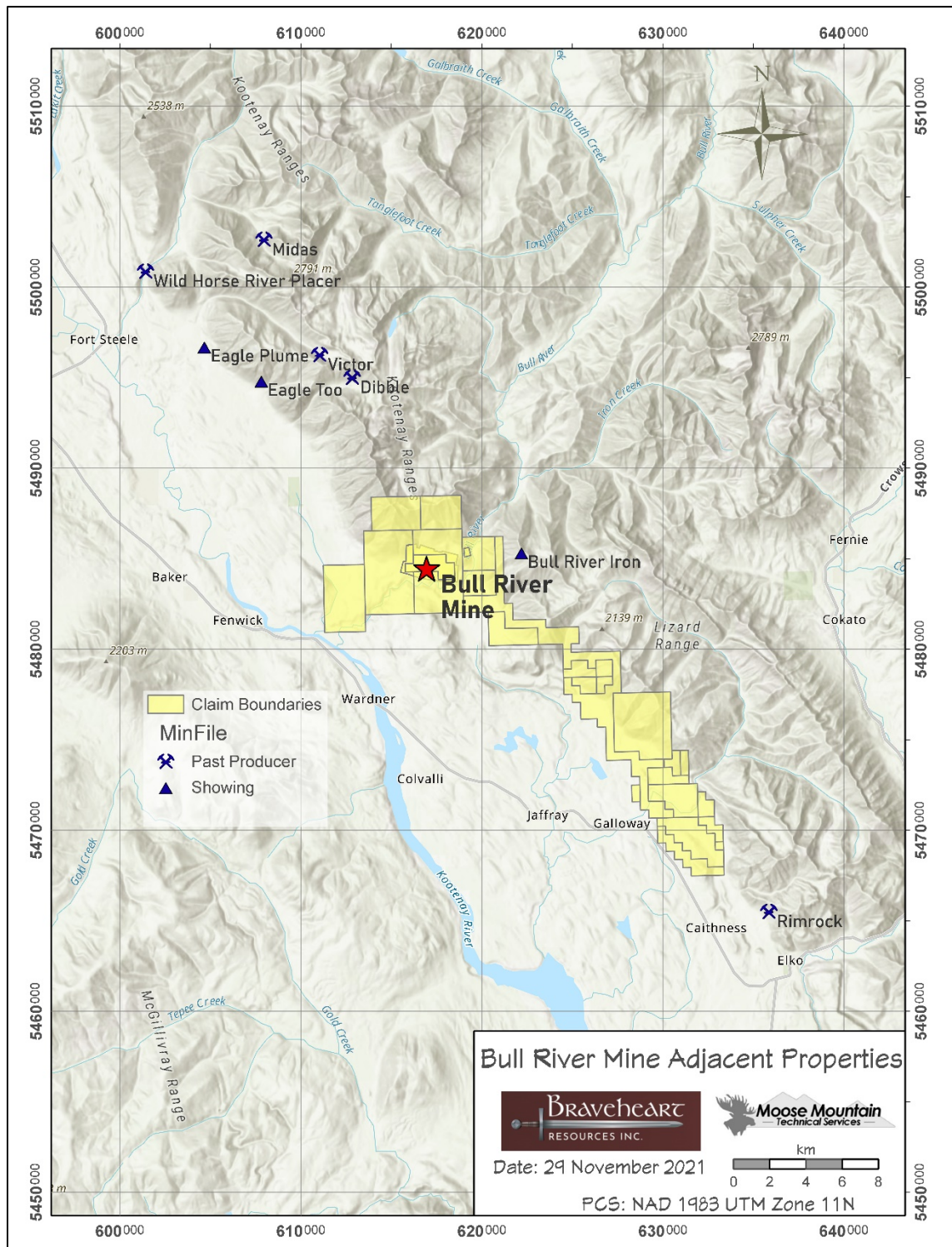


Figure 23-1 Adjacent Properties (Source, MMTS, 2021)

23.1 Dibble (MINFILE 082GNW003)

The Dibble occurrence is located on the north side of Sunken Creek, approximately 26 kilometres northeast of Cranbrook. The area is underlain by Helikian Lower Creston Formation (Purcell Supergroup) argillite, quartzite, and argillaceous quartzite. The area of mineralization lies between two splays of the east trending Dibble Creek fault.

Two types of mineralized veins are present: 1) narrow quartz stringers (1-8 centimetres) with tetrahedrite, arsenopyrite, malachite, azurite, and very minor chalcopyrite; and 2) wider quartz-pyrite veins (30-200 centimetres), breccias and replacements often in quartzite units. Alteration of wallrock from veins of the first type is slight (10-30 centimetres) whereas alteration of wallrock from the second type is more intense (30-150 centimetres). It is from veins of the first type that past production occurred. These veins strike approximately east and dip steeply north. Highest assays from these narrow veins were 4.1 per cent copper, 3822.2 grams per tonne silver, 0.01 per cent lead, 0.15 per cent zinc and 126.8 grams per tonne gold (Assessment Report 18309).

The first public record of the Dibble Property was in 1890. A high-grade sample yielded approximately 150 grams per tonne gold, 15,625 grams per tonne silver and 12 per cent copper. In 1895, 3.6 tonnes of handpicked ore were shipped to the smelter at Everett, Washington, returning 2.81 grams per tonne gold, 4125 grams per tonne silver, and 3 per cent copper (Assessment Report 26181). Work apparently was conducted annually until 1902, and it was in this period that more than 400 metres of tunnelling in six portals, plus numerous open cuts were completed. In 1969, Imperial Oil staked 40 claims and conducted geological mapping and geochemical sampling on the property. In 1972, TVI Mining and Athabasca Columbia Resources of Calgary carried out additional rock and dump sampling plus 5.4km of flagged line, and 4.8km of VLF-EM surveying.

During 1980 and 1981, consulting geologist CM. Armstrong, conducted a modest field program on the property involving prospecting, stream sediment sampling, and rock geochemical sampling for F&B Silver. In 1995, with Explore B.C. Program support, G.H. Babcock retained R. Walker, P.Geo. to carry out a programme of geological mapping and compilation, sampling, and assaying. The resulting report identified four drill targets and recommended a property wide soil survey and smaller, more focussed VLF and magnetometer surveys. The study also identified a potentially economic gypsum horizon at the base of a Devonian sequence, which should be evaluated (Explore B.C. Program 95/96 - M127 DV). In 1996-1999, Big B Resources Inc. completed a series of geophysical, geochemical, and geological surveys and a diamond drilling program.

23.2 Victor (MINFILE 082GNW004)

The Victor occurrence is located head of Mause Creek, approximately 25km north-east of Cranbrook. The area is underlain by quartzites and argillaceous quartzites of the Helikian Lower Creston Formation (Purcell Supergroup) which strike north-northwest and dip 70-75 degrees west. Two distinct rock types are present: a green-grey argillaceous quartzite with minor interbedded apple green quartzite, and a silver grey-black graphitic argillite/phyllite with local silty units.

The Victor vein strikes 020 degrees and dips from 70 degrees east to vertical. It can be traced on surface for over 600 metres. The vein has a hydrothermal alteration envelope of 10-30 metres, polyphase quartz

along its strike length with occasional siliceous zones swelling up to 4 metres, and sporadic mineralization. Mineralization consists of galena, sphalerite, and pyrite with values in silver and gold. The sulphides are in small, lenticular shoots and thin streaks along the footwall with occasional disseminations in the quartz gangue.

The first mention of the Victor Property was in 1904. A major portion of the existing tunnelling was completed in the following years. In the period 1919 to 1921, a 45.4 tonne per day mill was erected, and a 6.3 tonne "mixed carload of ore and concentrates was shipped in the fall" of 1921. No additional tunnelling has been driven since that time. In 1951, R. Sostad of Vancouver staked the 12 claim Victor group, and F.J. Hemsworth cut several samples of mineralized vein material in the upper and middle tunnels. The values ranged from 0.6 grams per tonne gold, 62.5 grams per tonne silver, 1.7 per cent lead, and 14.3 per cent zinc over 0.3 metres, to 15 grams per tonne gold, 337.5 grams per tonne silver, 3.9 per cent lead, and 23.6 per cent zinc over 0.15 metres (Assessment Report 26181). In 1969, 1970, and 1971, the Victor Mining Corporation excavated five trenches, totalling 64 metres, and carried out a limited program of surveying, mapping, sampling, and diamond drilling (two shallow holes totalling 64 metres) in the immediate mine area. In 1995, with Explore B.C. Program support, G.H. Babcock retained R. Walker, P.Geo. to carry out a programme of geological mapping and compilation, sampling, and assaying. The resulting report identified four drill targets and recommended a property-wide soil survey and smaller, more focussed VLF and magnetometer surveys. The study also identified a potentially economic gypsum horizon at the base of a Devonian sequence, which should be evaluated (Explore B.C. Program 95/96 - M127 DV).

Three tunnels have explored the Victor vein system. Underground chip samples assayed a high of 12.9 per cent lead, 7.69 per cent zinc, 198.8 grams per tonne silver, 7.0 grams per tonne gold and 0.39 per cent copper (Assessment Report 18309).

23.3 Bull River Iron (MINFILE 082GNW044)

The Bull River Iron showing at the summit of Fenwick Mountain, east of the Bull River, is hosted by limestones, shales, sandstones, and dolomites of the Helikian Kitchener Formation (Purcell Supergroup) which have a general north-northwest strike and an easterly dip of 20 to 35 degrees. This stratigraphy is cut on the northeast side of the summit by a northwesterly trending diorite dyke which is up to 15 metres thick.

The iron mineralization has three main modes of occurrence: (1) relatively pure hematite fills short and narrow fractures within and near the margins of the diorite dyke; (2) hematite impregnates and selectively replaces sedimentary beds at the margins of the intrusion and the hematite decreases in abundance away from the intrusive contact; and (3) an impure hematite that is silica-rich, occurs as fine-grained, dark grey-black pods and specks of generally ovoid shape within more siliceous stratigraphy. These first two types have values in the order of 50 to 55 per cent iron, trace phosphorus, 20 to 25 per cent silica and less than 1 per cent sulfur. The extent of the mineralization is unclear.



24 Other Relevant Data and Information

There is no other relevant data and information to disclose.

25 Interpretation and Conclusions

25.1 MMTS Conclusions

The QP makes the following conclusions.

- The mineral resource estimate for the Project conforms to industry best practices, and meets the requirements of CIM (CIM, 2014) following the updated CIM guidelines (CIM,2019).
- The estimate is based upon a geologic block model that incorporates 5,135 individual assays from 5,744m of drilling, 95% of which has been assayed or re-assayed in 2011 or later.
- The Mineral Resource Estimate is based on reasonable assumptions of eventual economic extraction and assuming underground mining. A CuEq cut-off value of 0.90% is the base case cut-off.
- Measured and Indicated Mineral Resources total 2,261kt at 2.132% CuEq (1.796%Cu, 0.422gpt Au and 15.3gpt Ag).
- Inferred Mineral Resources total 1,356kt at 1.918% CuEq (1.598%Cu, 0.417gpt Au and 3.6gpt Ag).
- The following factors could affect the Mineral Resources: commodity price and exchange rate assumptions; pit slope angles and other geotechnical factors; assumptions used in generating the LG pit shell, including metal recoveries, and mining and process cost assumptions.

25.2 JDS Conclusions

The QP makes the follow conclusions for the metallurgical characteristics of the Bull River mineralized material.

- The copper, gold, and silver recovery for the Bull River Underground was 93%, 75%, and 90% respectively.
- The mineralized material is a medium hardness for grinding.
- Ore sorting was not included in the recovery and throughput considerations for this report but could improve the project economics by rejecting waste before the processing plant which would allow for an overall higher throughput.

26 Recommendations

26.1 MMTS Recommendations

MMTS makes the following recommendations:

1. Completion of the permitting process, including engagement with the Ktunaxa First nation.
2. Completion of a Preliminary Economic Assessment (PEA).
3. Continue upgrades to the surface infrastructure in support of initial milling of the surface stockpile of mineralized material.
4. Re-survey of the 2020-2021 collar locations be surveyed.
5. Rehabilitate the current mill which has a capacity of 700tpd and process the current stockpile of approximately 180,000 tonnes.

The proposed budget for the work program is outlined in Table 26-1.

Table 26-1 Bull River Mine Proposed Work Program Budget

Work Description	CDN\$
Preliminary Economic Assessment	\$ 200,000
Complete the Permitting	\$ 600,000
Total	\$ 800,000

Based on discussion between Braveheart and MMTS the recommended work program has been reduced from the previous report. The two main priorities for Braveheart during the next 12 months will be completion of a PEA and completion of the permitting process and First Nation consultation. Braveheart estimates that this will require approximately \$400,000 in spending over the next 6 months.

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APPENDIX A Mineral Tenures

Title Number	Claim Name	Owner	Title Type	Title Sub Type	Map Number	Issue Date	Good To Date	Status	Area (ha)
212492		277035 (100%)	Mineral	Lease	082G054	1971/NOV/23	2022/NOV/23	PROTECTED	14.40
212493		277035 (100%)	Mineral	Lease	082G043	1972/FEB/21	2022/FEB/21	PROTECTED	486.03
515055		277035 (100%)	Mineral	Claim	082G	2005/JUN/23	2025/JAN/16	GOOD	1028.13
515057		277035 (100%)	Mineral	Claim	082G	2005/JUN/23	2025/JAN/16	GOOD	1238.01
515066	MINE SITE	277035 (100%)	Mineral	Claim	082G	2005/JUN/23	2025/JAN/16	GOOD	251.78
515403		277035 (100%)	Mineral	Claim	082G	2005/JUN/27	2025/JAN/16	GOOD	63.07
1045785	FELDSPAR	277035 (100%)	Mineral	Claim	082G	2016/AUG/05	2025/JAN/16	GOOD	839.55
1047428	DON CLAIM	277035 (100%)	Mineral	Claim	082G	2016/OCT/24	2025/JAN/16	GOOD	526.01
1047788	BUL 1	277035 (100%)	Mineral	Claim	082G	2016/NOV/10	2025/JAN/16	GOOD	503.30
1047789	BUL 2	277035 (100%)	Mineral	Claim	082G	2016/NOV/10	2025/JAN/16	GOOD	419.39
1048930		277035 (100%)	Mineral	Claim	082G	2005/JUN/27	2025/JAN/16	GOOD	105.03
1048932		277035 (100%)	Mineral	Claim	082G	2005/JUN/27	2025/JAN/16	GOOD	63.02
1048934		277035 (100%)	Mineral	Claim	082G	2005/JUN/27	2025/JAN/16	GOOD	84.01
1048936		277035 (100%)	Mineral	Claim	082G	2005/JUN/27	2025/JAN/16	GOOD	126.02
1048938		277035 (100%)	Mineral	Claim	082G	2005/JUN/27	2025/JAN/16	GOOD	84.10
1048940		277035 (100%)	Mineral	Claim	082G	2005/JUN/23	2025/JAN/16	GOOD	335.66
1048943		277035 (100%)	Mineral	Claim	082G	2005/JUN/24	2025/JAN/16	GOOD	251.81
1048988	BUL3	277035 (100%)	Mineral	Claim	082G	2017/JAN/06	2025/JAN/16	GOOD	1869.45
1056208		277035 (100%)	Mineral	Claim	082G	2017/NOV/10	2025/JAN/16	GOOD	1113.81
1056209		277035 (100%)	Mineral	Claim	082G	2017/NOV/10	2025/JAN/16	GOOD	335.91
1056210		277035 (100%)	Mineral	Claim	082G	2017/NOV/10	2025/JAN/16	GOOD	399.60
1061658	DON1	277035 (100%)	Mineral	Claim	082G	2018/JUL/09	2025/JAN/16	GOOD	105.19
1062075	CAMP	277035 (100%)	Mineral	Claim	082G	2018/JUL/31	2025/JAN/16	GOOD	42.06
1069583	DON WEST	277035 (100%)	Mineral	Claim	082G	2019/JUL/10	2025/JAN/16	PROTECTED	294.61
1069584		277035 (100%)	Mineral	Claim	082G	2019/JUL/10	2025/JAN/16	PROTECTED	168.22
1069585	DON EAST	277035 (100%)	Mineral	Claim	082G	2019/JUL/10	2025/JAN/16	PROTECTED	21.04
1069586	DON NORTH	277035 (100%)	Mineral	Claim	082G	2019/JUL/10	2025/JAN/16	PROTECTED	105.17