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Report Date: July 18, 2025  
Effective Date: May 30, 2025

# NI 43-101 TECHNICAL REPORT ON THE OPEMISKA PROJECT

WITH AN UPDATED MINERAL RESOURCE ESTIMATE  
FOR THE OPEMISKA DEPOSIT, QUEBEC, CANADA

## Qualified Persons:



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## Prepared for:

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## DATE AND SIGNATURE PAGE

This technical report is effective as of the 30<sup>th</sup> day of May 2025.

*Original signed and sealed*

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Pierre-Luc Richard, P.Geol.  
PLR Resources Inc.

July 18, 2025

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Date

*Original signed and sealed*

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Stephen Coates, P.Eng.  
Evomine Inc.

July 18, 2025

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Date

*Original signed and sealed*

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Christian Laroche, P.Eng.  
Synectiq Inc.

July 18, 2025

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Date

## CERTIFICATE OF QUALIFIED PERSON

**Pierre Luc Richard, P.Ge.**

This certificate applies to the technical report titled “NI 43-101 TECHNICAL REPORT ON THE OPEMISKA PROJECT WITH AN UPDATED MINERAL RESOURCE ESTIMATE FOR THE OPEMISKA DEPOSIT, QUEBEC, CANADA”, dated July 18, 2025 (the “Report”), prepared for XXIX Metal Corp.

I, Pierre-Luc Richard, P.Ge., M.Sc., as a co-author of the Report, do hereby certify that:

1. I am a professional geologist at the consulting firm PLR Resources Inc., located at 2000 McGill College Avenue, Suite 600, Montreal, Quebec, Canada H3A 3H3.
2. I am a graduate of Université du Québec à Montréal in Resource Geology (2004). I also obtained an M.Sc. from Université du Québec à Chicoutimi in Earth Sciences in 2012.
3. I am a member in good standing of the Ordre des Géologues du Québec (OGQ No. 1119), the Professional Geoscientists of Ontario (APO No. 1714), and the Northwest Territories Association of Professional Engineers and Geoscientists (NAPEG No. L2465).
4. I have worked in the mining industry for more than 20 years. My exploration and mining expertise has been acquired with numerous companies throughout my career. I managed and QP'd numerous technical reports, mineral resource estimates, and audits as a consultant with different firms and for PLR Resources since 2022.
5. I have read the definition of “qualified person” set out in *NI 43-101 – Standards of Disclosure for Mineral Projects* (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer, applying all the tests in section 1.5 of NI 43-101.
7. I am the author of and responsible for preparing chapters 1 to 12 and 14 to 27 of the Report.
8. I have visited the Project that is the subject of the Report in May 2025 as part of the current mandate.
9. I have not had prior involvement in the Project.
10. The sections of the Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Report, to the best of my knowledge, information and belief, the sections of the Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Report for which I am responsible not misleading.

**Signed and sealed this 18<sup>th</sup> day of July 2025.**

*Original signed and sealed*

---

**Pierre-Luc Richard, P.Ge., M.Sc.**  
**President**  
**PLR Resources Inc.**

## CERTIFICATE OF QUALIFIED PERSON

### Stephen Coates, P.Eng.

This certificate applies to the NI 43-101 Technical Report prepared for XXIX Metal Corp. titled "NI 43-101 Technical Report on the Opemiska Project with an updated Mineral Resource Estimate for the Opemiska Deposit, Quebec, Canada" dated July 18, 2025 (effective date of May 30, 2025).

I, Stephen Coates, P. Eng., as a co-author of the Technical Report, do hereby certify that:

1. I am a Mining Engineer and consultant for Evomine Consulting Inc. with an address of 419 rue des Hirondelles, Beloeil, Quebec, Canada, J3G 6G8.
2. I graduated from McGill University, Montreal, Quebec, Canada, with B.Eng. in Mining Engineering in 2013.
3. I am a professional engineer in good standing with the Ordre de ingénieurs du Québec (OIQ) in Canada (no. 5047905).
4. My relevant experience for the purpose of the Technical Report is over ten years of experience in mining operations, technical study delivery, due diligence, mine financing, business development, and strategic development.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I have participated in the preparation of the Technical Report and am responsible for the supervision or creation of the following sections and sub-sections of the Technical Report: 14.16.
8. I have not visited the Property that is the subject of the Technical Report, as part of this current mandate.
9. I have had no prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

**Signed and sealed on this 18th day of July, 2025.**

**Signed and sealed this 18<sup>th</sup> day of July 2025.**

*Original signed and sealed*

---

**Stephen Coates, P.Eng.,  
Evomine Inc.**



## CERTIFICATE OF QUALIFIED PERSON

**Christian Laroche, P.Eng.**

This certificate applies to the technical report titled "NI 43-101 TECHNICAL REPORT ON THE OPEMISKA PROJECT WITH AN UPDATED MINERAL ESTIMATE FOR THE OPEMISKA DEPOSIT, QUEBEC, CANADA" dated July 18, 2025 (the "Report") prepared for XXIX Metal Corp.

I, Christian Laroche, P.Eng. do hereby certify that:

1. I am the Vice-President of Metallurgy for Synectiq, with its head office located at 1010 Rue de Sérigny, Longueuil, QC, Canada, J4K 5G7
2. I graduated with a degree in Metallurgical Engineering from Université Laval, Quebec, Canada, in 1999.
3. I am a Professional Engineer (P. Eng.) registered with Ordre des Ingénieurs du Québec (OIQ) and the Northwest Territories Association of Professional Engineers and Geoscientist (NAPEG)
4. I have over 20 years of practical experience as a metallurgical engineer designing process flow diagram, leading metallurgical testwork program and process plant optimization. I am currently the Vice-President of metallurgy for Synectic. Prior to joining Synectiq, I was a Director of Metallurgy for GRC up to May 2024.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with one or more professional associations (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I never been to the Project site.
7. I am independent of the issuer, applying all the tests in section 1.5 of NI 43-101.
8. I have read NI 43-101 and Form 43-101 F1 and the sections of the Technical Report I am responsible for Sections 13, and such sections that are related to my expertise.
9. As of the aforementioned Effective Date, to the best of my knowledge, information and belief, the sections of the Technical Report I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

**Signed and sealed this 18<sup>th</sup> day of July 2025.**

*Original signed and sealed*

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**Christian Laroche, P.Eng.,  
Synectiq Inc.**



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# 1 SUMMARY

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## 1.1 INTRODUCTION

XXIX Metal Corp (“XXIX”, the “Company” or the “issuer”) requested that PLR Resources Inc. (“PLR”) lead a group of consulting firms, including Evomine Inc. (“Evomine”) and Synectiq Inc. (“Synectiq”) to compile an NI 43-101 compliant technical report on the Opemiska Project (the “Project”) and update the mineral resource estimate for the Opemiska deposit (the “2025 MRE” or the “Opemiska MRE”). The Project is in the Province of Quebec, next to the community of Chapais in Northern Quebec, approximately 480 km north of Montreal.

XXIX is a Canadian publicly traded company listed on the TSX Venture Exchange (“TSXV”) under the trading symbol XXIX, with its head office located in Toronto, Ontario.

## 1.2 TERMS OF REFERENCE

This Report supports the disclosure in XXIX’s news release dated June 3, 2025, titled “XXIX Increases Opemiska’s Copper Resource”. The effective date of the Report is May 30, 2025.

All measurement units used in this Report are metric. All costs are in United States Dollars (“USD” or “\$”) unless otherwise stated.

As of the effective date of this Report, the authors of this Report (the “Report Authors”) are not aware of any known litigation potentially affecting the Project. The QPs did not verify the legality or terms of any underlying agreement(s) that may exist concerning the Project ownership, permits, off-take agreements, license agreements, royalties or other agreement(s) between XXIX and any third parties.

The opinions contained herein are based on information collected during investigations by the QPs, which in turn reflects various technical and economic conditions at the time of writing. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results can be significantly more or less favourable.

## 1.3 CONTRIBUTORS

The qualified persons (“QPs”) and their respective areas of responsibility are presented in Table 1-1.



Table 1-1 Report contributors

<b>PLR Resources Inc.</b>	
Pierre-Luc Richard P.Geo.	Technical report lead
	QP site visit
	Description of historical work
	Description of geology
	Description of deposit types
	Description of exploration and drilling programs
	Drill hole database validation
	Updated mineral resource estimate
	Interpretation of the results and production of conclusions leading to recommendations to improve value and reduce risks
	Recommendations for additional studies and data collection to advance the Project.
<b>Evomine Inc.</b>	
Stephen Coates, P.Eng.	Value cut-off
	Open pit and underground optimization solids
<b>Synectiq Inc.</b>	
Christian Laroche, P.Eng.	Metallurgical testwork analysis
	Metallurgical recoveries forecast

## 1.4 PROPERTY DESCRIPTION, LOCATION AND OWNERSHIP

The Project is located within the northeast portion of the Abitibi Metavolcanic Belt, 480km North of Montreal . It lies adjacent to and partly within the Community of Chapais.

XXIX controls a group of 241 mining titles covering a total of 12,431 ha. This information is current as of July 13, 2025. The mining titles are recorded under XXIX and are in good standing as of the effective date of this Report. The Mineral Resource Estimate presented in Chapter 14 is found on mining titles P013681 and P014151 (registered under XXIX).

XXIX is currently in the process of acquiring 175 additional mining titles covering a total of 9,068 ha from 2736-1170 Quebec Inc. (85%), Ovalbay Geological Services Inc. (10%), and Melissa Darveau (5%), together referred to as the Cooke/Robitaille Option agreement. The Company is still in the earn-in process with approximately 900,000\$ of work obligations to complete by July 13, 2026.

## 1.5 ROYALTIES AND ENCUMBRANCES

XXIX fulfilled all its obligations under the terms of the option agreement with Ex-In on June 16, 2023 and executed the purchase agreement of 11 mining titles. As a result, these claims have now been transferred to and are 100% owned by XXIX, subject to a 2% NSR royalty, 50% of which can be purchased by XXIX for \$4.5 million.

XXIX is in an earn-in process to acquire 175 additional mining titles subject to a 2% NSR royalty, 50% of which can be purchased by XXIX before the commencement of commercial production for \$1.5 million.

## 1.6 GEOLOGY

The Opemiska Project area is located within the Superior Structural Province of the Canadian Shield, which is present in eastern Canada and the northeastern USA. The Precambrian rock units are generally covered by glacial overburden.

The Chapais-Chibougamau Mining District is located in the northeast part of the Abitibi Subprovince. The Abitibi Subprovince is one of the world's largest contiguous areas of Archean metavolcanic and metasedimentary rocks and hosts many significant mineral deposits (Leclerc et al., 2010, 2012). The general lithological distribution is characterized by oval-shaped granitoid batholiths surrounded by east-to-west trending "greenstone belts" that appear to wrap around and enclose the batholiths. Regional and local folding is common, and the dips of the rock units are generally sub-vertical. The region under study is located within the Northern Volcanic Zone of the Abitibi Subprovince (Guha et al., 1988; Dube and Guha, 1992).

The metavolcanic stratigraphy in the Chapais-Chibougamau area is representative of deep-water deposition to submarine environments. The metavolcanic-sedimentary package is cut by mafic to ultramafic intrusions (Lac Dore Complex being the best-known example), mafic sills (Cummings Sills and gabbro), and younger plutonic intrusions that range from tonalite to carbonatite in composition.

This Chapter is largely inspired by previous reports from XXIX, mainly Yassa et Puritch (2024) that summarizes internal XXIX reports.

Recent work by Leclerc et al. (2010, 2012) has refined the understanding of the complex geology and stratigraphy of the Opemiska Project area. The earlier stratigraphic interpretation has been modified, in order to take into consideration recent field observations.

The geology of the Opemiska Property is characterized by a fold affecting the Cummings Complex introduced at the lower contact of felsic volcanics of the Blondeau Formation. The Cummings Complex are comprised of three separate



differentiated sills: the Roberge Sill at the base; the Ventures Sill; and the Bourbeau Sill higher-up in the Blondeau stratigraphy.

The mineralization at Opemiska consists largely of chalcopyrite-bearing quartz veins that occupy fracture systems in the folded and faulted gabbroic portions of two conformable, regionally extensive, layered Archean ultramafic-mafic sills. The veins are generally restricted to the fracture system and in lower grade halos around the main fractures/veins. The width and frequency of the veins tend to increase toward the dilated nose of the main structure at the Springer Mine (Watkins and Riverin, 1982).

The mineralization at the Springer Mine is associated to a series of east-trending (090°), steeply (65°) north-dipping, sets of axial plane faults and fractures with right-handed (dextral) displacement that developed in areas of maximum inflexion of folds (Watkins and Riverin, 1982). Plan and cross-section views of Springer show at least three different orientations for the mineralized veins which could indicate a conjugate fault system or separate fracture systems. A disseminated halo (stockwork) surrounds most of the higher-grade zones.

Generally, mineralization of economic interest appears within more fractured/sheared sections of the host gabbro. These sections are generally strongly chloritized and variably silicified.

Although most of the mineralization historically mined at Springer and Perry was hosted in the upper part of the Ventures Sill, the regional and local structures are also important controls on mineralization at Opemiska. At Springer, the fold nose corresponding to the overturned anticline in the mafic-ultramafic sills controls significant amount of mineralization. A 6.0 m wide zone containing disseminated pyrrhotite and chalcopyrite occurs locally at the top of the Ventures Sill, where it is dilated at the nose of the fold (Watkins and Riverin, 1982).

## 1.7 DRILLING

In total, 21,918 surface and underground drill holes for 1,525,073 m are recorded as having been completed at the Opemiska Property.

XXIX completed drill hole programs in 2019 (as predecessor company, PowerOre), winter-spring 2021 (as predecessor company Qc Copper & Gold), autumn-winter 2021-2022 (as predecessor company Qc Copper & Gold), summer 2022 (as predecessor company Qc Copper & Gold), winter 2023 (as predecessor company Qc Copper & Gold), and more recently in 2024-2025 (as XXIX).

The sample preparation, analytical procedures, and security of the samples during these procedures followed industry best practices but could be improved, mainly by



inserting more blanks, more CRMs, and adding a field duplicate program. Sufficient efforts were made to identify items that were out of specification.

The QA/QC data indicate that the overall assay results of the issuer's drill program are valid and can be relied upon for the purpose of this Report.

It is the QP's opinion that the sample preparation, security and analytical procedures are adequate and follow best practices.

## 1.8 DATA VERIFICATION

The Mineral Resource Estimate ("MRE") in this report is based on 21,918 drill holes for 1,525,073 metres and 479,242 samples. The drill hole database includes recent drilling (2002 to 2025) of 73,227 metres in 382 drill holes (Ex-In, PowerOre, QC Copper & Gold, XXIX) and also incorporates historical drill holes (1930 to 1990) of 1,451,846 metres in 21,536 drill holes (Opemiska Copper Mines, Falconbridge, Minnova).

For this MRE, the QPs performed a basic validation of the entire database. XXIX provided all data in UTM NAD 83. The database close-out date for the resource estimate is May 16, 2025. estimation.

QP Pierre-Luc Richard of PLR Resources Inc. visited the Project on May 15, 2025, during the course of this mandate. The site visit included a visual inspection of core, as well as a field tour and discussions of the geological interpretations with geologists and geotechnicians employed by XXIX. The site visit also included a review of sampling and assaying procedures, the quality assurance / quality control ("QA/QC") program, downhole survey methodologies, and the descriptions (logging) of lithologies, alteration and structures.

The QP reviewed several sections of mineralized core while visiting the Project. All core boxes were labelled and properly stored inside the core shack. The QP could also access the outdoor historical core storage facility during the site visit. In the reviewed core boxes, sample tags were present, and it was possible to validate sample numbers and confirm the presence of mineralization in witness half-core samples from the mineralized zones.

Drilling was not underway during Mr. Richard's site visit, but XXIX's employees involved during the drilling programs explained the entire path of the drill core, from the drill rig to the logging and sampling facility and finally to the laboratory.

The QP is of the opinion that the drilling protocols in place are adequate. The database for the Project is of good overall quality. Minor variations have been noted during the validation process but have no material impact on the current MRE. In the QP's opinion, the database is suitable for mineral resource estimation.

## 1.9 MINERAL PROCESSING AND METALLURGICAL TESTING

Bulk sample testwork results appear to behave similarly to historical production data. The bulk sample test program, although only a single sample, brings confidence that the Opemiska mineralized rock will behave as per historical operations.

Concentrate parameters (mass pull, grade) are derived from chain sequential trendlines obtained from historical data. The concentrate parameters are dependant on head grade and are not fixed.

Due to the high degree of correlation of the bulk sample testwork results with historical plant performance, the existing metallurgical testwork is sufficient to support a future "Preliminary Economic Assessment".

## 1.10 MINERAL RESOURCE ESTIMATE

The mineral resource estimate presented in this Technical Report covers the Opemiska deposit only. Other occurrences on the Project were considered exploration targets at the time this Report was being prepared. Additional exploration work is needed before they can reach the stage of a mineral resource estimate.

Leapfrog Geo™ and Edge™ v.2024.1.3 ("Leapfrog") was used to update the geological and mineralized zones and to generate the drill hole intercepts for each solid. Leapfrog was used for compositing, 3D block modelling and interpolation. Statistical studies were conducted using Excel and Snowden Supervisor.

The methodology for the mineral resource estimation involved the following steps:

- Database verification
- 3D modelling of the geological zones
- 3D modelling update of the mineralized zones
- 3D modelling of a stockwork zones
- Drill hole intercept and composite generation
- Basic statistics
- Capping
- Geostatistical analysis including variography
- Block modelling and grade interpolation
- Block model validation
- Mineral resource classification



- Cut-off grade calculation
- Pit shell optimization
- DSO optimization
- Preparation of the mineral resource statement

The 2025 Opemiska MRE is constrained within a pit shell developed from pit optimization and DSO shapes using appropriate cut-off grades. Table 1-2 presents the results of the MRE.

*Table 1-2 Opemiska Mineral Resource Estimate*

<b>Pit Constrained</b>	<b>Tonnes</b>	<b>CuEq</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>
<b>0.15% CuEq Cut-Off</b>	<b>(k)</b>	<b>(%)</b>	<b>(%)</b>	<b>(g/t)</b>	<b>(g/t)</b>	<b>(M lbs)</b>	<b>(koz)</b>	<b>(koz)</b>
Indicated	62,706	1.04	0.76	1.71	0.31	1,047	3,450	634
Inferred	78,485	0.41	0.26	0.61	0.17	457	1,530	419

<b>Out of Pit</b>	<b>Tonnes</b>	<b>CuEq</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>
<b>1.00% CuEq Cut-Off</b>	<b>(k)</b>	<b>(%)</b>	<b>(%)</b>	<b>(g/t)</b>	<b>(g/t)</b>	<b>(M lbs)</b>	<b>(koz)</b>	<b>(koz)</b>
Indicated	6,947	1.85	1.59	2.76	0.28	243	617	64
Inferred	2,130	0.88	0.69	1.20	0.21	33	82	15

<b>Total</b>	<b>Tonnes</b>	<b>CuEq</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>
<b>0.15% &amp; 1.00% CuEq Cut-Off</b>	<b>(k)</b>	<b>(%)</b>	<b>(%)</b>	<b>(g/t)</b>	<b>(g/t)</b>	<b>(M lbs)</b>	<b>(koz)</b>	<b>(koz)</b>
Indicated	69,653	1.12	0.84	1.82	0.31	1,290	4,067	697
Inferred	80,615	0.42	0.28	0.62	0.17	490	1,613	433

Notes to Table 1-2:

1. The independent qualified persons for the MRE, as defined by National Instrument (“NI”) 43-101 guidelines, is Pierre Luc Richard, P.Geo., of PLR Resources Inc. with contributions from Stephen Coates, P.Eng., of Evomine for value cut-off, open pit and optimization solids, and Christian Laroche, P.Eng., from Synectiq, for metallurgical parameters. The effective date of the MRE is May 30, 2025.
2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in this MRE are uncertain in nature, and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to the Indicated category with continued exploration.
3. The MRE wireframe was prepared using Leapfrog Edge v.2024.1.3 and is based on 21,918 drill holes for 1,525,073 meters and 479,242 samples. The drill hole database includes recent drilling (2002 to 2025) of 73,227 metres in 382 drill holes (Ex-In, PowerOre, QC Copper & Gold, XXIX) and also incorporates historical drill holes (1930 to 1990) for 1,451,846 metres in 21,536 drill holes (Opemiska

Copper Mines, Falconbridge, Minnova). The cut-off date for the drill hole database was May 16, 2025.

4. Resources are presented as undiluted and in situ for the open-pit scenario and include internal dilution for the underground scenario and are considered to have reasonable prospects for economic extraction. The constraining pit shell was developed using overall pit slopes of 55 degrees in bedrock and 30 degrees in overburden. The pit optimization to develop the resource-constraining pit shells was done using Deswik Pseudoflow 2024.2.
5. Composites of 1.5 metres were created inside the high grade zones and 3.0 meters inside the stockwork zones. High-grade capping was done on the composited assay data; composites were capped at variable grades ranging from 1.00 to 25.00% for Cu, 0.50 to 35.00 g/t for Au, and 10.00 to 120.00 g/t for Ag.
6. Mineral Resources are reported at a cut-off grade of 0.15 % CuEq for open-pit resources and 1.00 % CuEq for underground resources. All material within the underground stopes is being reported, including internal dilution. The cut-off grades will be re-evaluated in light of future prevailing market conditions and costs.
7. Specific gravity values were estimated using data available in the drill hole database. Values assigned per zone and per host rock. Surrounding barren lithologies were assigned the average specific gravity value from all measured samples available.
8. Grade model resource estimation was calculated from drill hole data using an Ordinary Kriging interpolation method in a sub-blocked model using blocks measuring 5 m x 5 m x 5 m in size and sub-blocks down to 0.625m x 0.625m x 0.625m. Both ordinary kriging (OK) and inverse square distance (ID2) interpolation methods were tested, resulting in no material difference in the Mineral Resource Estimates.
9. The Indicated and Inferred Mineral Resource categories are constrained to areas where drill spacing is less than 50m and 120 metres respectively and show reasonable geological and grade continuity.
10. Calculations used metric units (metres, tonnes). Metal contents are presented in percent or pounds. Metric tonnages were rounded, and any discrepancies in total amounts are due to rounding errors.
11. CIM definitions and guidelines for mineral resource estimates have been followed.
12. The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues or any other relevant issues that could materially affect this MRE.

## 1.11 EXPLORATION POTENTIAL

After reviewing all pertinent information, including the MRE, the QP concluded the following:

- The potential is high for adding underground mineral resources to the Opemiska deposit by extending 3D modelling at depth and laterally.
- There is significant potential to add additional stockwork mineralization within the Opemiska Project that could further increase Opemiska's resource base.
- The potential to upgrade Inferred Mineral Resources to the Indicated category with additional drilling is high.
- The potential to upgrade Indicated Mineral Resources to the Measured category with additional work on historical voids and drilling is high.
- The exploration potential remains high at the property scale, justifying further geological compilation and continuing exploration target generation programs.
- There is potential to add an additional open-pit component at the Cooke gold project, currently being optioned by XXIX, 2.5km East of the Opemiska proposed open-pit. Compilation, modeling, and a mineral resource estimate is warranted to assess the potential.

## 1.12 RECOMMENDATIONS

The QPs recommend additional work and that the Project proceed to the next phase of project development through a preliminary economic assessment ("PEA").

The following proposed work program will help advance the Project and provide key inputs required to evaluate its economic viability.:

- Drilling and Mineral Resource Estimate on the Cooke Deposit
- Improvement to the modeled Historical underground workings
- PEA on the Opemiska Deposit (with potential contribution from Cooke)

The estimated cost for the recommended work program is approximately 3.5M\$, based on certain assumptions and current site costs. The estimate includes a 15% contingency.



## 2 INTRODUCTION

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XXIX Metal Corp (“XXIX”, the “Company” or the “issuer”) requested that PLR Resources Inc. (“PLR”) lead a group of consulting firms, including Evomine Inc. (“Evomine”) and Synectiq Inc. (“Synectiq”) to compile an NI 43-101 compliant technical report on the Opemiska Project (the “Project”) and update the mineral resource estimate for the Opemiska deposit (the “2025 MRE” or the “Opemiska MRE”). The Project is in the Province of Quebec, next to the community of Chapais in Northern Quebec, approximately 480 km north of Montreal.

XXIX is a Canadian publicly traded company listed on the TSX Venture Exchange (“TSXV”) under the trading symbol XXIX, with its head office located at:

141 Adelaide Street W, Suite 1102  
Toronto, ON, Canada, M5H 3L5

Phone: (416) 644-1567

### 2.1 SCOPE OF STUDY

The following technical report (the “Report”) presents the results of the updated mineral resource estimate for the Opemiska deposit.

The Report was prepared by qualified persons (“QPs”) following the guidelines of National Instrument 43-101 (“NI 43 101”) and the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Definition Standards on Mineral Resources and Reserves.

### 2.2 REPORT RESPONSIBILITY AND QUALIFIED PERSONS

Table 2-1 summarizes QP responsibilities for this Technical Report. The following individuals, by virtue of their education, experience and professional association, are considered QPs as defined in the NI 43-101 and are members in good standing of appropriate professional institutions:

- Pierre-Luc Richard, P.Geo.                      PLR Resources Inc.
- Stephen Coates, P.Eng.                        Evomine Consulting Inc.
- Christian Laroche, P.Eng.                      Synectiq Inc.

Table 2-1 Qualified persons and areas of report responsibility

Chapter	Description	Qualified Person	Company	Chapter and Section Responsibilities
1.	Executive Summary	All QPs	ALL	The contribution of each Report Author reflects their respective scope of work and the chapter(s)/section(s) under their responsibility.
2.	Introduction	P.L. Richard	PLR	All Chapter 2
3.	Reliance on Other Experts	All QPs	ALL	The contribution of each Report Author reflects their respective scope of work and the chapter(s)/section(s) under their responsibility.
4.	Project Property Description and Location	P.L. Richard	PLR	All Chapter 4
5.	Accessibility, Climate, Local Resources, Infrastructure and Physiography	P.L. Richard	PLR	All Chapter 5
6.	History	P.L. Richard	PLR	All Chapter 6
7.	Geological Setting and Mineralization	P.L. Richard	PLR	All Chapter 7
8.	Deposit Types	P.L. Richard	PLR	All Chapter 8
9.	Exploration	P.L. Richard	PLR	All Chapter 9
10.	Drilling	P.L. Richard	PLR	All Chapter 10
11.	Sample Preparation, Analyses and Security	P.L. Richard	PLR	All Chapter 11
12.	Data Verification	P.L. Richard	PLR	All Chapter 12
13.	Mineral Processing and Metallurgical Testing	C. Laroche	Synectiq	All Chapter 13
14.	Mineral Resource Estimate	P.L. Richard	PLR	All Chapter 14 except Section 14.16
		S. Coates	Evomine	Section 14.16
15.	Mineral Reserve Estimate	P.L. Richard	PLR	Not applicable to this Technical Report.
16.	Mining Methods	P.L. Richard	PLR	Not applicable to this Technical Report.
17.	Recovery Methods	P.L. Richard	PLR	Not applicable to this Technical Report.
18.	Project Infrastructure	P.L. Richard	PLR	Not applicable to this Technical Report.
19.	Market Studies and Contracts	P.L. Richard	PLR	Not applicable to this Technical Report.



Chapter	Description	Qualified Person	Company	Chapter and Section Responsibilities
20.	Environmental Studies, Permitting, and Social or Community Impact	P.L. Richard	PLR	Not applicable to this Technical Report.
21.	Capital and Operating Costs	P.L. Richard	PLR	Not applicable to this Technical Report.
22.	Economic Analysis	P.L. Richard	PLR	Not applicable to this Technical Report.
23.	Adjacent Properties	P.L. Richard	PLR	All Chapter 23
24.	Other Relevant Data and Information	All QPs	ALL	The contribution of each Report Author reflects their respective scope of work and the chapter(s)/section(s) under their responsibility.
25.	Interpretation and Conclusions	All QPs	ALL	The contribution of each Report Author reflects their respective scope of work and the chapter(s)/section(s) under their responsibility.
26.	Recommendations	All QPs	ALL	The contribution of each Report Author reflects their respective scope of work and the chapter(s)/section(s) under their responsibility.
27.	References	All QPs	ALL	The contribution of each Report Author reflects their respective scope of work and the chapter(s)/section(s) under their responsibility.

## 2.3 EFFECTIVE DATES AND DECLARATION

This Report supports the XXIX press release of May 30, 2025, titled “XXIX Increases Opemiska's Copper Resource”.

The effective date of the Report is May 30, 2025.

The effective date of the MRE is May 30, 2025.

The drill hole database close-out date is May 16, 2025.

The quality of the information, conclusions and estimates contained in this Report is consistent with the level of effort involved in the Report Authors’ services based on: i) the information available at the time of preparation; ii) the data supplied by outside sources; and iii) the assumptions, conditions, and qualifications set forth in this Report. This Report is intended for use by XXIX subject to the terms and conditions of its respective contracts with the Report Authors. Except for the purposes legislated



under Canadian, provincial, and territorial securities law, any other use of this Report by any third party is at that party's sole risk.

As of the effective date of this Report, the QPs are not aware of any known litigation potentially affecting the Project. The QPs did not verify the legality or terms of any underlying agreement(s) that may exist concerning the Project ownership, permits, off-take agreements, license agreements, royalties or other agreement(s) between XXIX and any third parties.

The opinions contained herein are based on information collected during the investigations by the QPs, which in turn reflects various technical and economic conditions at the time of writing. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results can be significantly more or less favourable.

## **2.4 SOURCES OF INFORMATION**

### **2.4.1 GENERAL**

This Report is based in part on internal company reports, maps, published government reports, company letters and memoranda, and public information, as listed in Chapter 27 (References). Sections from reports authored by others may have been directly quoted or summarized in the report and are so indicated where appropriate.

This updated MRE has been completed using available information contained in, but not limited to, the following reports, documents and discussions:

- Technical discussions with the issuer's management and representatives;
- The QPs' personal inspections of the Project site, including the drill core and facilities;
- The drill hole database provided by the issuer's representatives;
- A review of exploration data collected by the issuer;
- Agreements, technical data and internal technical documents supplied by the issuer;
- Internal unpublished reports from the issuer;
- Additional information from public domain sources (SEDAR, etc.).

The QPs believe that the basic assumptions contained in the information above are factual and accurate and that the interpretations are reasonable. The QPs have relied on this data and have no reason to believe that any material facts have been

withheld or doubt the reliability of the information used to evaluate the mineral resources presented herein. The authors have sourced the information for this Report from the collection of documents listed in Chapter 27 (References).

#### **2.4.2 SPECIALIST INPUT – PLR**

The following individuals/groups provided specialist input to QP Pierre-Luc Richard, P.Geol.:

- The issuer provided the drill hole database, the high grade zones, property boundary data, topographic surfaces, option agreements, and information on historical workings.

#### **2.4.3 SPECIALIST INPUT – EVOMINE**

The following individuals/groups provided specialist input to QP Stephen Coates, P.Eng.:

- The issuer provided the topographic surface.
- PLR provide the Block model and overburden surface.

These specialists are not considered QPs for the purposes of this NI 43-101 Report.

### **2.5 SITE VISIT**

The following list describes the QP visits to the Project site, including the date and general objective of the visit:

- Pierre-Luc Richard of PLR visited the Project on May 15, 2025, during the course of this mandate. The site visit included a visual inspection of historical core drilled by past owners and recent core drilled by the issuer, as well as a field tour and discussions of geological interpretations with the issuer's geologists and management. The site visit also included a review of sampling and assaying procedures, the quality assurance / quality control ("QA/QC") program, downhole survey methodologies, and the descriptions (logging) of lithologies, alteration and structures. Selected drill collars were also validated in the field using a handheld GPS.



## 2.6 CURRENCY, UNITS OF MEASURE, AND CALCULATIONS

Unless otherwise specified or noted, the units used in this Report are metric.

- All costs are in United States Dollars ("USD" or "\$") unless otherwise stated;
- All metal prices are expressed in US dollars;
- Maps and grid coordinates for the block model are given in the UTM NAD 83 system;
- All cost estimates have a base date of the first quarter of 2025.

This Report may include technical information that required subsequent calculations to derive subtotals, totals and weighted averages. Such calculations inherently involve a degree of rounding and, consequently, introduce a margin of error. Where these occur, the QPs consider them immaterial.

## 2.7 PREVIOUS TECHNICAL REPORTS

This Report supersedes all previous technical reports issued for the Project. XXIX (previously Qc Copper and Gold Inc.) previously filed the following technical report:

- Puritch, E., 2024: "Technical Report and Updated Mineral Estimate of the Opemiska Copper-Gold Property, Levy Township, Chapais-Chibougamau Mining District, Québec, Canada", prepared by P&E Mining Consultants Inc., effective date of January 8, 2024.
- Puritch, E., 2022: "Mineral Resource Estimate and Technical Report on the Opemiska Copper-Gold Property, Levy Township, Chapais-Chibougamau Mining District, Québec, Canada", prepared by P&E Mining Consultants Inc., effective date of September 20, 2021.

These mineral resource estimate are referred to herein as the 2024 MRE and the 2021 MRE.



## 2.8 ACKNOWLEDGMENTS

The Report Authors would like to acknowledge the support they received from the issuer's employees and other collaborators during this assignment. Their collaboration is greatly appreciated. The Report benefitted from the input of the following individuals:

- Guy Le Bel, CEO - XXIX;
- Denis McNichols, Vice-President Exploration - XXIX;
- Ahcene Gaoui, Exploration Geologist – XXIX;
- Antoine Schwartzmann, Geologist – XXIX;
- Christina Thouvenot, Geological Engineer in Mineral Resources – PLR.

## 3 RELIANCE ON OTHER EXPERTS

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The QPs have relied upon reports, information sources, and opinions provided by the issuer and outside experts regarding the Project's mineral rights, surface rights, property agreements, royalties, taxes, and commodity markets.

The issuer has indicated that there are no known litigations potentially affecting the Project.

The issuer has reviewed a draft copy of the Report for factual errors. Any changes made as a result of these reviews did not involve any alteration to the conclusions made. Hence, the statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are neither false nor misleading at the date of this Report.

### 3.1 MINERAL TENURE AND SURFACE RIGHTS

The issuer supplied information on mining titles, options agreements, royalty agreements, environmental liabilities and permits. The QPs consulted the Government of Quebec's online claim management system at <https://gestim.mines.gouv.qc.ca> for the latest ownership and mining title status. Although the QPs have reviewed the option agreements and claim status, QPs are not qualified to express any legal opinion concerning the property titles, current ownership or possible litigations. A description of such agreements and the property and ownership thereof is provided for general information only. In this regard, the QPs have relied on information supplied by the issuer and the work of experts they understand to be appropriately qualified.

This information supports Chapter 4 (Property Description and Location).

## 4 PROPERTY DESCRIPTION AND LOCATION

The Project is located within the northeast portion of the Abitibi Metavolcanic Belt, 480km North of Montreal (Figure 4-1). It lies adjacent to and partly within the Community of Chapais.

The Property lies on NTS map sheets 32G15.

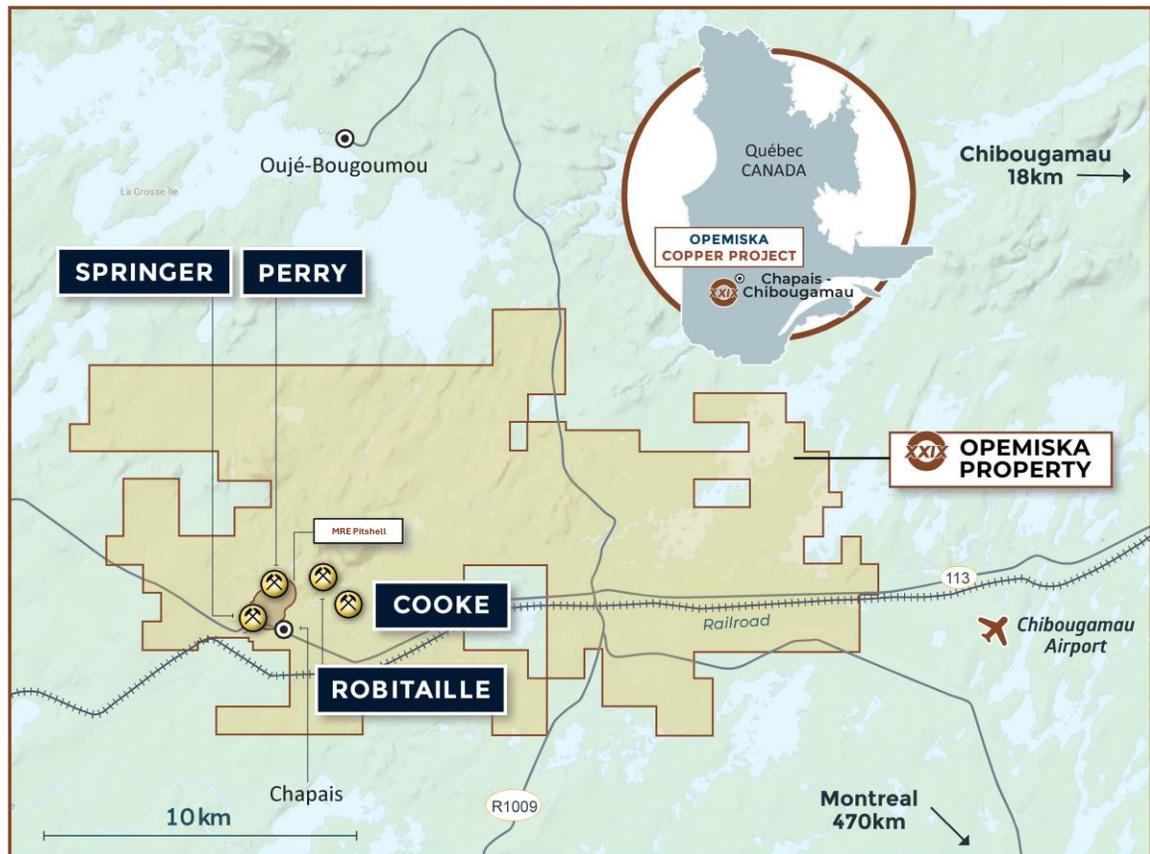


Figure 4-1 Project location

### 4.1 MINERAL TENURE

XXIX controls a group of 241 mining titles covering a total of 12,431 ha (Figure 4-2). This information is current as of July 13, 2025. Detailed lists of the mining titles are shown in Table 4-1. The mining titles are recorded under XXIX and are in good standing as of the effective date of this Report. The Mineral Resource Estimate

presented in Chapter 14 is found on mining titles P013681 and P014151 (registered under XXIX).

XXIX is currently in the process of acquiring 175 additional mining titles covering a total of 9,068 ha (Figure 4-2) from 2736-1170 Quebec Inc. (85%), Ovalbay Geological Services Inc. (10%), and Melissa Darveau (5%), together referred to as the Cooke/Robitaille Option agreement. The Company is still in the earn-in process with approximately 900,000\$ of work obligations to complete by July 13, 2026.

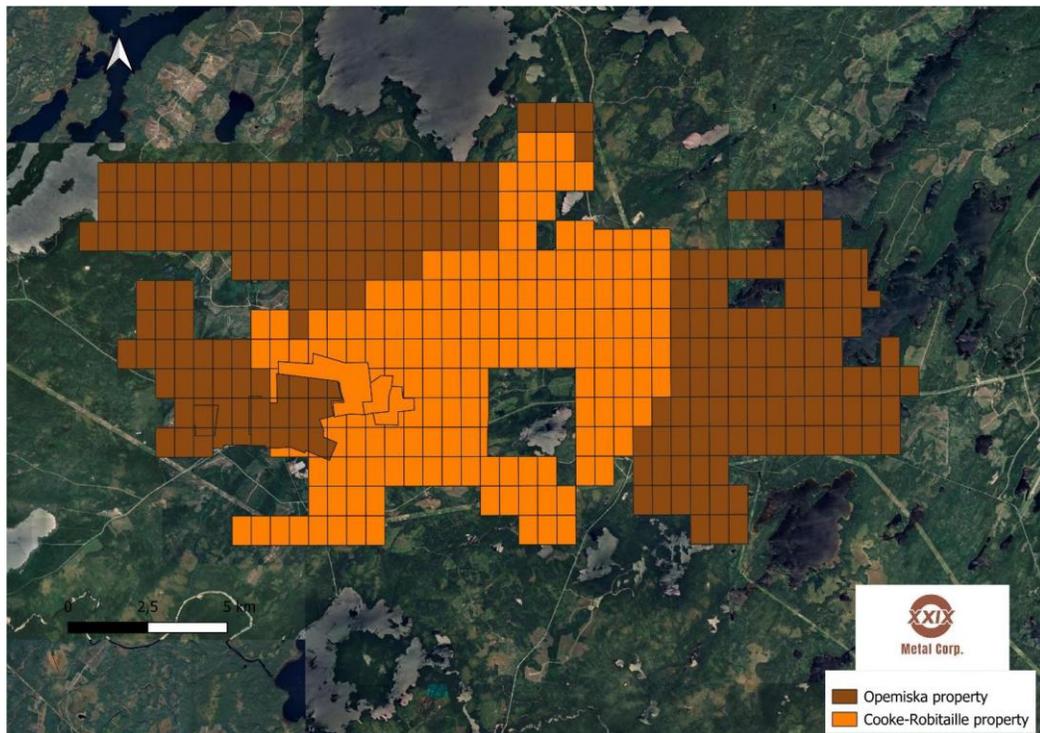


Figure 4-2 Mining Titles











Table 4-1 (cont'd) - Details of mining titles (as of July 13, 2025)

Title	Ownership	Area (Ha)	Expiry Date	Renewal Work Required	Registration	Royalties
2438500	Cooke/Robitaille Option	55.57	2026-03-20		1800 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2438501	Cooke/Robitaille Option	55.57	2026-03-20		1800 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2438502	Cooke/Robitaille Option	55.57	2026-03-20		1800 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2438503	Cooke/Robitaille Option	55.56	2026-03-20		1800 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2438504	Cooke/Robitaille Option	55.56	2026-03-20		1800 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2438505	Cooke/Robitaille Option	55.55	2026-03-20		1800 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2438506	Cooke/Robitaille Option	55.55	2026-03-20		1800 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2465830	Cooke/Robitaille Option	55.56	2026-10-12		1800 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2517114	Cooke/Robitaille Option	55.50	2026-04-29		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2517115	Cooke/Robitaille Option	55.50	2026-04-29		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2517116	Cooke/Robitaille Option	55.49	2026-04-29		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2517117	Cooke/Robitaille Option	55.49	2026-04-29		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2517118	Cooke/Robitaille Option	55.49	2026-04-29		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2542424	Cooke/Robitaille Option	55.61	2026-08-21		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2542425	Cooke/Robitaille Option	55.61	2026-08-21		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2542426	Cooke/Robitaille Option	55.61	2026-08-21		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2542427	Cooke/Robitaille Option	55.61	2026-08-21		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2542428	Cooke/Robitaille Option	55.61	2026-08-21		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2542429	Cooke/Robitaille Option	55.61	2026-08-21		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2542430	Cooke/Robitaille Option	55.60	2026-08-21		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)
2542431	Cooke/Robitaille Option	55.60	2026-08-21		1200 2736-1179 Québec inc.	2% NSR (50% Buyback option)

## 4.2 ROYALTIES AND ENCUMBRANCES

XXIX fulfilled all its obligations under the terms of the option agreement with Ex-In on June 16, 2023 and executed the purchase agreement of 11 mining titles. As a result, these claims have now been transferred to and are 100% owned by XXIX, subject to a 2% NSR royalty, 50% of which can be purchased by XXIX for \$4.5 million. These mining titles are referred to as the XXIX mining titles in Figure 4-2.

XXIX is in an earn-in process to acquire 175 additional mining titles subject to a 2% NSR royalty, 50% of which can be purchased by XXIX before the commencement of commercial production for \$1.5 million. These mining titles are referred to as the Cooke-Robitaille Option in Figure 4-2.

## 4.3 ENVIRONMENTAL LIABILITIES

The Project is located on a previously disturbed mine site.

The mine included the historical underground workings, waste rock stockpiles, tailings disposal areas, the process plant site, and haulage and service roads. The Project will occupy a portion of these previously disturbed areas.

All the historical mining and processing infrastructure has been dismantled and the mining operation decommissioned since 1991. Currently, XXIX does not have any responsibility for environmental matters arising from the historical mining and processing operations.



To the extent known, and apart from the encumbrances noted above, the Authors are not aware of any other significant factors or risks that may affect access, title or right or ability to perform work on the Opemiska Property.

## 5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGGRAPHY

### 5.1 ACCESSIBILITY

#### 5.1.1 ACCESS

The Opemiska Project is located immediately adjacent to the municipality of Chapais and is road accessible with paved Québec Highway 113 crossing the Property (Figure 5-1). The Project is located 40 km west of the Town of Chibougamau, which straddles Highway 167. Highway 113 connects Chapais to the Abitibi area and Highway 167 heads south to the Saguenay - Lac St-Jean area. These all-weather paved highways are maintained year-round. The Project itself is readily accessed via forestry roads and historical mine access roads.

The Chapais-Chibougamau area is serviced by the Chibougamau-Chapais Airport, located 20 km southwest of Chibougamau (along Highway 113). Regularly scheduled direct flights depart from the airport three times per week to Montreal, Québec.

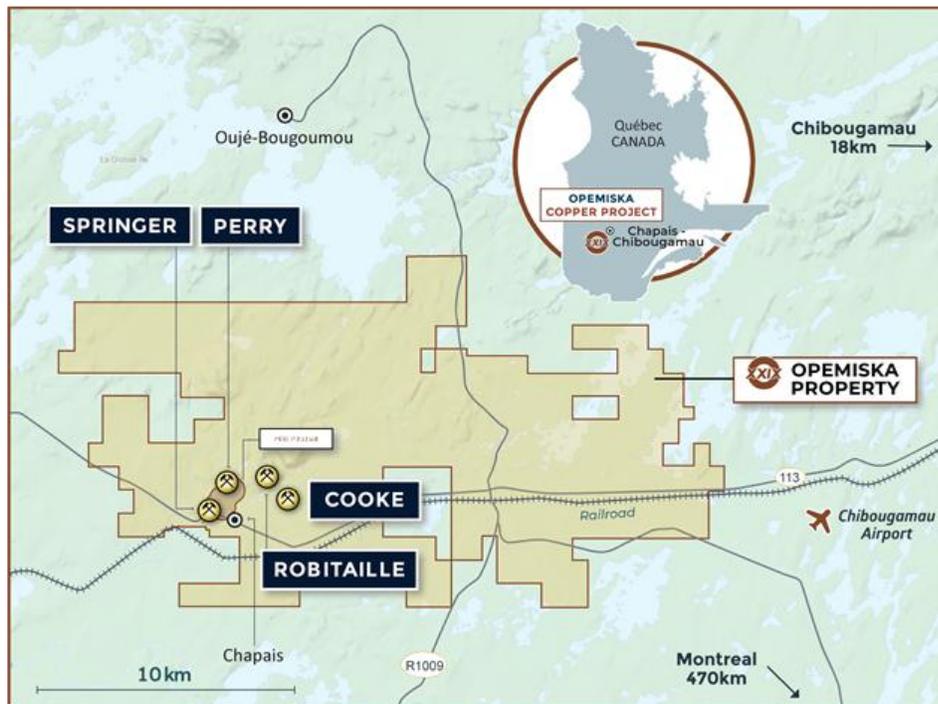


Figure 5-1 Access to the Opemiska Project

### **5.1.2 CLIMATE**

The area has a humid sub-arctic continental climate with cool summers and cold winters. Climate conditions are fairly typical of the Canadian Shield. The temperature varies from an average minimum of -26°C in winter (January and February) to an average maximum of 22°C in the summer (July and August). Extreme temperatures below -36°C or above 27°C can be expected. Rainfall is generally common in the summer, such that there is no dry season. Snowfall is common in the winter, particularly in the early and latter part of the season. The “warm” season generally is from mid-May to mid-September. The “cold” season is from early December to early March. Exploration work can be carried out year-round.

The climatic conditions do not significantly impede the Project as they do not hinder exploration or mining activities.

## **5.2 LOCAL RESOURCES AND INFRASTRUCTURE**

### **5.2.1 HISTORICAL MINE INFRASTRUCTURE**

In addition to paved highway access, the Project includes other infrastructure such as roads, buildings, transmission lines and a past-producing underground mine.

Some infrastructure for exploration and mining operations are readily available in the Project area.

### **5.2.2 LOCAL WORKFORCE**

A highly specialized work force resides in the region and within the Abitibi Region. The successful mining history of Chapais–Chibougamau over the past 60 years resulted in the establishment of very experienced mining workforce and the full range of associated secondary tradesmen.

The Chapais–Chibougamau area is an active mining and forestry centre with a total population of approximately 10,000 residents (Census Canada, 2016).

### **5.2.3 ADDITIONAL SERVICES**

Chapais has a post office, school, CLSC health centre and tourist office. Basic commercial infrastructure includes a motel, grocery store, hardware store, restaurant and gas station.



The nearest full-service hospital is located in the town of Chibougamau.

Power and water are available at the mine site, and local housing is available in the town.

### **5.3 PHYSIOGRAPHY**

The physiography of the general area is one of rolling hills and abundant lakes and rivers. Forest cover is variable, in part because selected areas having been harvested. Some areas are still forested with tall spruce, jack pine, birch and poplar.

The overburden cover generally consists of sand, clay and boulders varying in thickness from 1 m to locally more than 80 m along major regional faults. There are few bedrock exposures and widespread swampy areas are found within moderately to locally densely-forested sectors.

The elevation of the lakes in the general area is approximately 390 m above sea level. The general elevation averages approximately 400 m above sea level, except for Mount Springer located a few km to the northeast of the Project, which reaches elevation 540 m.

Drainage in the Project area is westward through the Waswanipi and Nottaway Rivers and ultimately into James Bay.

## 6 HISTORY

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There have been three main periods of historical exploration and mining activities on the Opemiska Property and surrounding area:

- Discovery and early exploration (1929 to 1953)
- Mine Production (1953 to 1991)
- Recent exploration (1993 to 2016)

The activities undertaken in each of the three periods are summarized below. This Chapter is largely inspired by previous reports from XXIX, mainly Yassa et Puritch (2024) that summarizes internal XXIX reports.

The information in this sub-section is summarized mainly from the documents listed in Table 6.1. The documents prefixed with “GM” refer to numbers in the Québec SIGEOM geoscientific archive of historical assessment work. They can be searched online and downloaded free of charge, and are all georeferenced on government compilation maps.

### 6.1 DISCOVERY AND EARLY EXPLORATION (1929 TO 1953)

Initial exploration between 1929 and 1953 predated mining operations. Within the area, a preliminary phase of surface exploration and discoveries occurred on the Opemiska Property and surrounding area following the discovery by Leo Springer in 1929 at what would become the Springer Mine.

The discovery by Mr. Leo Springer of the Springer Syndicate, was assisted by Lloyd Rochester, a pilot of Prospectors Airways. The showing lies on high outcrops that were visible as the area was burned over by forest fires at the time. The chalcopyrite discovery was hosted in a gabbro dyke. The dimensions of the mineralized area were 1,200 ft (360 m) long and 800 ft (240 m) wide in a north-south direction.

The first development work on the Project was completed in 1935 (GM 02098) and consisted of trenching and diamond drilling. Underground development was undertaken in 1936. A three-compartment shaft was sunk to 168 m (550 ft) and extensive lateral work and underground drilling was carried out on the 46, 84 and 152 m (150, 275 and 500 ft) levels. Work was suspended in 1937 due to low metal prices.

In 1951, a decision was made to re-open the mine and place it in production at an initial processing rate of 400 tons per day. This decision was facilitated by the completion of the new highway connecting Chibougamau to St-Felicien, which allowed the development of the mining industry in the Chapais–Chibougamau District to proceed. Along with new construction, the old buildings were rehabilitated, including a new concrete shaft collar. A total of 6,100 m (20,000 ft) of exploratory surface drilling was completed in 1952.

Table 6-1 summarizes historical reports available.

*Table 6-1 Historical Reports for the 1929-1953 period*

Assessment Report ID (Year)	Work Performed By	Work Summary
GM-03556 (1929)	Retty, J.A.	Geological Report by the MRN Claims Springer. The report describes the “Lake Opemiska Copper showing” which was visited in 1929.
GM-03558 (1933)	Opemiska Copper Mines Ltd. Huston, M.B. Energy Mines and Resources Canada.	Geological Report with Technical Evaluation, Map showing original drilling (+ composites) and also trenches with assays.
GM-03559 (1935)	Opemiska Copper Mines Ltd. Taschereau, R.H.	Information Report.
GM-01833 (1952)	Opemiska Copper Mines Ltd. Derry D.R.	Interim Report on Geology and Diamond Drilling Results.
GM-02005 (1951)	Graham R.B. Evaluation Technique.	Summary of Exploration and Development Activities.
GM-02098 (1952)	Thompson J.M. for OPEMISKA COPPER MINES (QUE).	Report on Opemiska Copper Mines.

## 6.2 MINE PRODUCTION (1953-1991)

The Chapais–Chibougamau Mining District is the second largest of its kind in the Québec part of the Abitibi Greenstone Belt. From 1953 to 2008, the District produced approximately 86 Mt of mineralized material, including 1.57 Mt Cu, 176.1 t Au, 108.8 t Ag, and 72,066 t Zn (Leclerc et al., 2012).

Opemiska Copper Mines were in production from December 1953 until June 1991. Total production from the Springer and Perry Mines was 22.0 Mt grading 2.40% Cu, 0.29 g/t Au, and 0.21 g/t Ag containing 527 kt Cu, 6,400 kg Au, and 4,600 kg Ag (Salmon, 2013 and Salmon, 2014).

Production came from seven easterly-trending mineralized zones; specifically, the No. 1, 2, 3 (or Main Zone), 4, 5 and No. 6 Zones. The mineralized zones were described as being sharp-walled, except for No 3 or “Main Zone”, which is hosted by a shear or fault zone that contains a breccia-type mineralization with altered gabbro remnants set in a sulphide (mainly chalcopyrite) matrix.

Detailed drilling in the spring of 1956 outlined an important deposit in the Perry Zone area. The outlined deposit strikes 330° and dips 56° to the north. A fault that strikes 130° and dips to the southwest lies from 15 to 120 m southwest of the Perry Zone.

The mineralization in the Perry Zone is described as heavy impregnation of sulphides in the host rocks with some massive sulphides. The alteration is partial chloritization. The sulphides present are mainly chalcopyrite and pyrite with some pyrrhotite and arsenopyrite. Quartz vein sections containing sulphides are common in the mineralized horizon.

In 1980, Falconbridge Copper Limited (“Falconbridge”), the original developer of the mining claims, changed its name to Corporation Falconbridge Copper (“Falconbridge”), and again in 1987, to Minnova Inc. (“Minnova”). In October 1986, an agreement between Minnova and Québec Ministry of Energy and Resources led to an exploration program at the Springer and Perry Mines, which were part of the Minnova Opemiska Division.

In 1987, low copper price meant that the secondary products gold and silver became metals of interest for exploration. Between the discovery of Springer in 1932 and closure of that Mine in 1991, a total of 612 surface and 15,287 underground diamond drill holes, totalling 82,767 and 861,542 m, respectively, were completed on the Opemiska Property by Falconbridge and Minnova.

Table 6-2 summarizes historical reports available.

*Table 6-2 Historical Reports for the 1953-1991 period*

Assessment File ID (Year)	Summary
GM-2700 (1954)	Information Report. Cornwall, F.W. for the MRN. OPEMISKA COPPER MINES LTD.
GM-04273 (1956)	Information Report. Opemiska Copper Mines Ltd. Assad, J.R. MRN Sketch Map with “Campbell Lake Fault”.
GM-46158 (1987)	Rapport Géologique de la Partie Nord Ouest de la Propriété Bourbeau West. Cormier J.M. MINNOVA INC.
MM 87-03 (1989)	Etude métallogénique (aurifère) du Filon Couche de Bourbeau (région de Chibougamau). MRN. Dubé B., Guha J.
GM-049654 (1990)	Rapport des travaux d’exploration effectués entre le 1er Septembre 1986 et le 31 Mars 1987 sur les propriétés minières de Minnova Inc., Division Opemiska, canton Levy. Doiron G., géologue de projet. 30 Avril 1987 (numerous maps are appended to the report: sections, level plans, drifts, and longitudinal sections detailing Veine 10-2S, No. 4, No. 5, No. 6 at SPRINGER and Vein A at PERRY beside work carried at adjacent Cooke Mine).

### 6.3 RECENT EXPLORATION (1993-2016)

Ex-In acquired the Springer and Perry Mines in 1995.

Table 6-3 summarizes historical reports available.

Table 6-3 Historical Reports for the 1953-1991 period

Assessment File ID (Year)	Summary
GM-55059 (1994)	Géologie et Levé au BEEP MAT effectué sur la Propriété OPEMISKA. E. Gaucher. GEOSIG Inc.
MM 91-02 (1994)	Géologie et compilation géologique de la région de Chapais. Morin R., Ressources Naturelles du Canada & Ministère des Ressources Naturelles du Québec.
DV 98-03 (1998)	Géologie et Metallogénie du District Minier de Chapais-Chibougamau. Ministère Richesses Naturelles (MRN). Nouvelle Vision du Potential de Découverte. Editeur: Pierre Pilote.
MB 98-06 (1998)	Compilation et Répartition des Gisements Polymétalliques à Tonnage évalué dans la Sous-Province de l'Abitibi. Lacroix, S. Gouvernement du Québec, Ministère des Ressources Naturelles. Secteur Mines.
GM-60142 (2001)	Atlas des Gisements Abitibi, Fiche No 182. Springer. CONSOREM. Faure S., Gaboury D.
GM-60258 (2001)	Rentabilité de l'exploitation des piliers de surface, Projet Mine Opemiska. E. Gaucher.
GM-60259 (2001)	Métallurgie des rejets du moulin, projet Mine Opemiska. E. Gaucher, A. Laplante.
GM-60262 (2001)	Plan d'affaire d'Ex-In Inc. sur Opemiska. Gaucher E., Gaucher P.
GM-60257 (2002)	Évaluation des Ressources en Cuivre et en Or exploitables a partir de la surface. Localisation des sites prioritaires a investiguer, Projet EX-07C, Mine Opemiska. Gaucher E.
GM-60260 (2002)	Digitalisation des forages, Mine Opemiska
GM-60261 (2002)	Validation des Ressources de Minerais exploitables à ciel ouvert, phase 2 révisée, Mine Opemiska. Gaucher E.
GM-63383 (2007)	Campagne de forage, secteur de la Mine Opemiska, Projet EX-07C. hiver 2005-2006, St-Pierre R. & Gaucher E.
GM-64969 (2009)	Rapport d'un levé de Polarisation Provoquée effectué sur la propriété Opemiska. Hubert, J.M. Explorateurs-Innovateurs de Québec Inc.
GM-64968 (2010)	Campagne d'Exploration 2009, Propriété Opemiska. Explorateurs-Innovateurs de Québec Inc. (Ex-In). Gaucher, E. & Pearson, N.
GM-65209 (2010)	Travaux de terrain 2009, Propriété Opemiska. EX-IN. Gaucher E., Pearson N.
GM-65737 (2010)	Levé de Polarisation Provoquée, propriété Opemiska (EX-07C) Block Nord. GEOSIG.
GM-65965 (2011)	Campagne d'Exploration 2010, Propriété Opemiska. Explorateurs-Innovateurs de Québec Inc. Drilling, Gaucher E., Pearson N., and Kongo J.B.
RP-2010-09A (2011)	Geology of the Chapais area (32G15-200-0101). Compilation, Geological Survey. MRNF. Leclerc F., Houle P., Rogers R.
RP-2013-02A (2014)	Geology of the Lac Simon Region (32G15-200-0102). Compilation, Geological Survey. MRNF. Leclerc F., Houle P.
GM-69674 (2016)	Campagne d'exploration 2015, Propriété Opemiska. Gaucher, F. & Gaucher P. Explorateurs-Innovateurs de Québec Inc.
GM-70399 (2016)	Report on the limited core drilling campaign completed December 2016 on the Opemiska mining property. Larouche, C. for Explorateurs-Innovateurs de Québec Inc.



### 6.3.1 SURFACE WORK

Exploration work was carried out in the southwest quadrant of the Opemiska Project. Compilation, line-cutting (4.5 km), stripping, sampling, metallurgical testing, and Induced Polarization (“IP”) surveys were completed.

An Ex-In report also records that, in 1995, a sample weighing 15.5 t was extracted from a surface vein at Opemiska, in order to test the recovery of surface pillars. Results were reported as being disappointing.

In 1998, Ex-In also carried out an experimental gravimetric survey.

In 2000, Ex-In started a Prefeasibility Study to test the possibility of mining lower grade material left behind at the closure of the Mines.

In 2003, Beep-Mat prospecting was completed, along with stripping and trenching.

In 2004, a line grid was cut to guide a Max-Min survey. Additional sampling was conducted.

In 2005, magnetic separation tests were completed.

In 2006, a second core drilling program of 1,000 m was initiated on five separate veins to test for the presence of mineralization close to surface.

In 2009, Ex-In discovered a boulder carrying high-grade gold south of the Property. The Company went back to old surface and underground maps, in order to find a possible source for the high-grade boulder. It is reported that at levels 200 m and 400 m two zones drilled systematically at 15 m, have been previously investigated for gold. One zone is located north of Springer No. 1 Shaft and the other one is south of that shaft. The report also notes that certain drill holes confirm the presence of 150 m wide sections grading >0.5% Cu and 0.3 g/t Au.

A trench 200 m long by 3.0 m wide oriented north–south, perpendicular to the mineralized structures, was completed in 2009. The overburden thickness ranged from 0.5 m to 5.0 m locally. Sampling was completed by blasting every 2.5 m along the trench. The trench exposed three separate mineralized zones. The most northerly zone corresponds to the No. 3 Vein, just east of the Glory Hole, an average value of 2.15% Cu and 0.53 g/t Au was calculated over a width of 14.55 m. This zone is in an area of previous surface drilling by Falconbridge with drill holes S-140, S-141, S-148, S-149 and S-150. The second zone of interest graded 2.99% Cu and 1.06 g/t Au over a width of 12.55 m. On the sketch provided by Ex-In (2002), this second zone of mineralization appears to be located approximately 60 m southwest of Vein No. 3 and would correspond to the “Vein 3 South” projected at surface (previous drilling is also located in this area). The third zone intersected lies due south of the previously noted zone, approximately 100 m south of No. 3 Vein South, and returned values of 0.65% Cu and 0.83 g/t Au over a width of 21.5 m on top of a recently



located IP anomaly. This third zone would fall in the western extension of the No. 13, 4 and 5 Zones. Drill hole S-853 was also completed in this area. A map accompanying Ex-In (2002) shows the location of two ventilation raises. Note that the samples were collected after blasting and, therefore, that such sampling is equivalent to grab samples.

Channel sampling was also completed on Vein No. 2, south-southeast of Springer Shaft No. 1. Good results were returned from the sampling, a length of 75 m was sampled every 5.0 m. A Table in Ex-In (2002) summarized the results for 29 samples. The copper values are up to 26.0% Cu and the gold values are up to 11.11 g/t Au. Individual widths were not given within, except a note that the vein sampled averages 0.45 m, locally 1.0 m wide. This stripping and sampling location was the site of the 2006 surface drilling by Ex-In. A rapid survey of the data acquired on this vein does not show a direct correlation between the higher values in copper and gold.

### **6.3.2 DRILLING**

Exploration diamond drilling campaigns were completed by Ex-In in 2006 (46 holes; 970m), 2010 (19 holes; 1,748m), 2015 (4 holes; 537m) and 2016 (9 holes; 708m). The drill core size varies from BQ (earlier drilling) to NQ (recent drilling). The drill core was logged with the sampling focused on the main mineralized veins, whereas most of the remaining drill core was assayed in 3.0 to 6.0 m sections. The assaying was carried out systematically for copper (with few duplicate samples). Assaying for gold, silver and zinc has not been carried out systematically.

A report also states that in 2002, a 100 m core drilling program was completed, to test a surface vein.



This Chapter is largely inspired by previous reports from XXIX, mainly Yassa et Puritch (2024) that summarizes internal XXIX reports.

Recent work by Leclerc et al. (2010, 2012) has refined the understanding of the complex geology and stratigraphy of the Opemiska Project area. The earlier stratigraphic interpretation has been modified, in order to take into consideration recent field observations.

The geology of the Opemiska Property is characterized by a fold affecting the Cummings Complex introduced at the lower contact of felsic volcanics of the Blondeau Formation (Figure 7-2). The Cummings Complex are comprised of three separate differentiated sills: the Roberge Sill at the base; the Ventures Sill; and the Bourbeau Sill higher-up in the Blondeau stratigraphy.

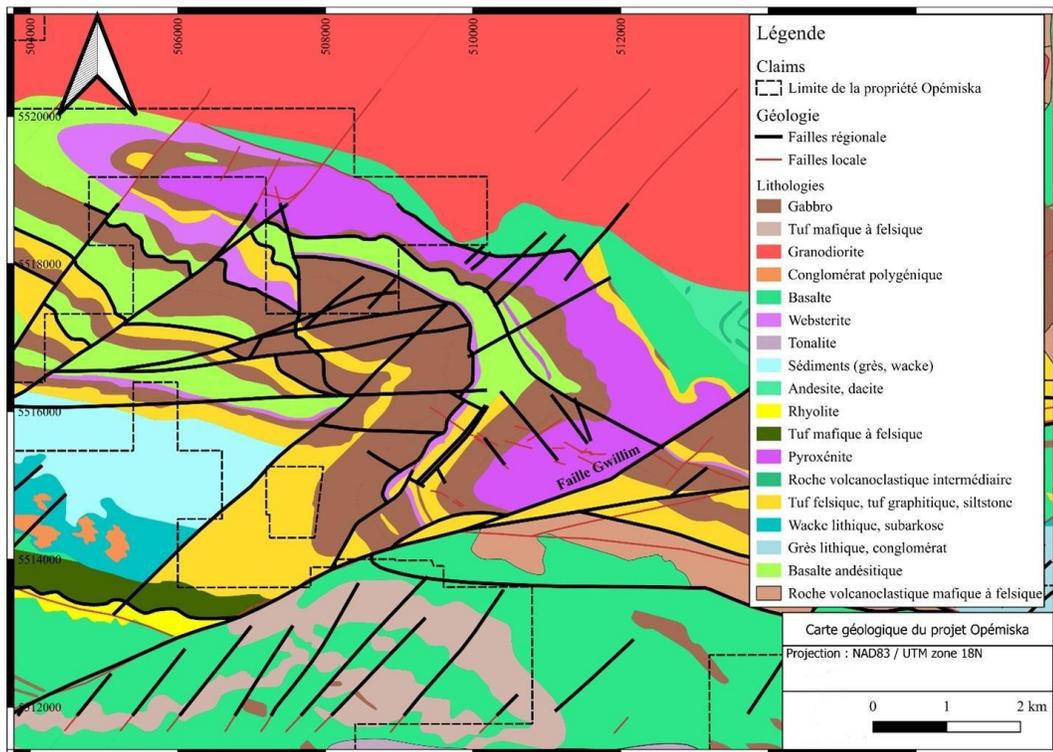


Figure 7-2 Local Geology (XXIX)

The Ventures Sill, which is approximately 1,000 m thick, is the most common host unit of the mineralization on the Opemiska Property. The Ventures Sill has been divided from bottom to top into five laterally-persistent units:

1. Lower Green Pyroxenite: The lower green pyroxenite (~60 m thick) represents the basal layer of the Sill. It is medium-grained, dark green to black in colour and

- strongly magnetic, with abundant serpentinized fractures. The upper contact is commonly sharp with no evidence of “chilling”;
2. Black Pyroxenite with Peridotite Sills: This unit is 350 m thick, medium grained and dark grey to black colour. Layers of serpentine–talc–magnetite (after cumulate olivine) are present. Layers containing primary chromite and magnetite are also recognized (Watkins and Riverin, 1982);
  3. Upper Green Pyroxenite: The Upper Green Pyroxenite is ~60 m thick and locally quite similar to the underlying pyroxenite. The rock is somewhat coarser-grained and interstitial feldspar is present. Contact with overlying unit is sharp, marked by cumulus plagioclase and titaniferous magnetite (McMillan, 1972);
  4. Foliated Gabbro: The Foliated Gabbro averages 150 m in thickness, its base is commonly marked by a 15 to 30 cm thick layer of clinopyroxene containing 30 to 40% magnetite, and layering is well developed throughout. Strong foliation is defined by alignment of pyroxenes and feldspars and the unit has a sharp upper contact marked by abrupt change in texture and grain size; and
  5. Ventures Gabbro: The Ventures Gabbro hosts the bulk of the mineralization at the Springer and Perry Mines. The unit is 350 m thick and represents the top of the Ventures Sill. Its composition is similar to the underlying Foliated Gabbro, but locally carries up to 5% free quartz. It is generally coarse grained with ophitic texture (association of lath-shaped euhedral crystals of plagioclase grouped radially or in an irregular mesh with surrounding or interstitial large anhedral crystals of pyroxene).

The distribution of these units is shown in Figure 7-3.

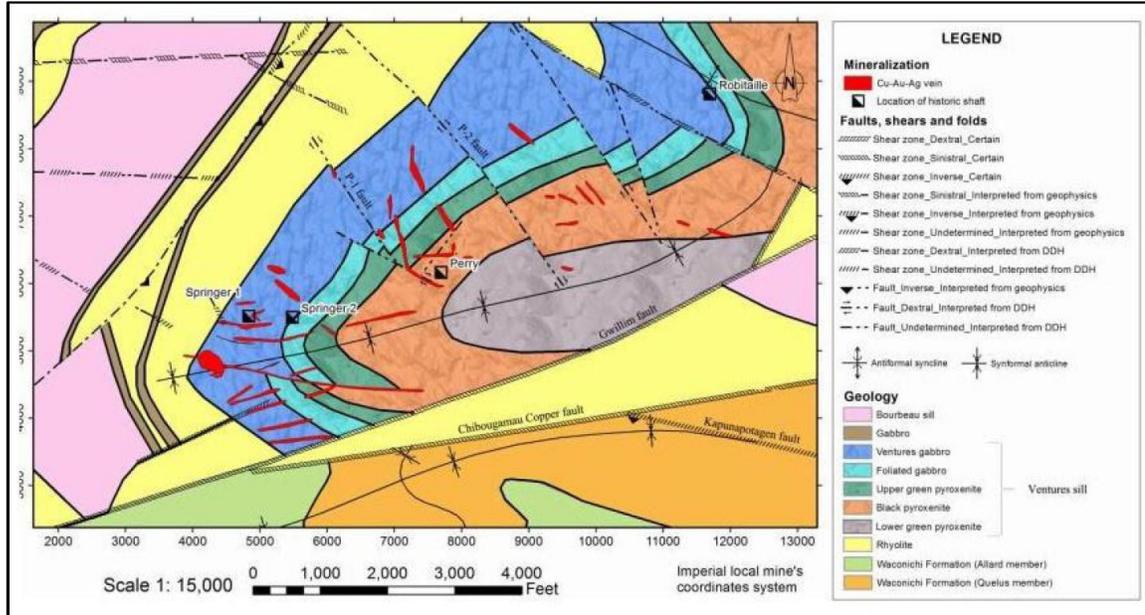


Figure 7-3 Deposit scale Geology (Larouche, 2019)

## 7.2.1 STRUCTURE

Within the Chapais-Chibougamau region, a combination of several deformational events created structural interference patterns in certain sectors. The Opemiska Property is located just south of the east-west trending Chibougamau Anticline, which is cored by the Opemiska and Chibougamau Plutons. This fold structure is related to the second major phase of regional deformation.

At Opemiska, the mineralization occurs within the large composite Ventures Sill that intrudes felsic volcanics (rhyolite) of the Blondeau Formation. The Ventures Sill and the volcanic units have been overturned, folded and truncated by the Gwillim Fault/Shear Zone (Figures 7-2 and 7-3). The fold plunges 45° to 65° to the east and postdates the second phase of regional deformation, but predates a third deformation phase (Leclerc et al., 2012).

The Gwillim Fault (referred to originally as the Campbell Lake Fault) traverses the main block of claims in the Project area. An apparent “sinistral” horizontal displacement of 3,300 m along this structure has been determined (Watkins and Riverin, 1982). This fault was active during several tectonic events (Dimroth et al., 1984), but its principal movement predates the third phase of deformation (Brown, 1970).

Six distinct directions of orientation were recognized by Falconbridge in the mineralized zones (GM-46158, Table 6.2):



- N-100° represented by the main structure at Springer, Vein No. 3 and western section of Vein No. 1;
- N-080° represented at Springer by Vein No. 2, Vein No. 0, North portion of Vein No. 11, East part of Vein No. 1, Vein No. 4, Vein No. 7, and Vein C, at Perry;
- N-070° represented south of Springer Shaft by Veins 34, 13, 5, 6 and 7 South;
- N-130° represented at Springer by south part of Vein No. 11, Vein No. 22 and at Perry Vein D South and Gap Zone;
- N-160° to 170° represented at Perry by Veins A, B, B-North, J North and K; and
- The gold-bearing "Arsenopyrite Fault" is oriented at N-150° parallel to the P-1 Fault.

There are cross-cutting relationships between these different sets of fractures/shears, as exemplified by the Arsenopyrite Shear at surface. The relative ages of these structures remain to be determined.

### 7.2.2 MINERALIZATION

The mineralization at Opemiska consists largely of chalcopyrite-bearing quartz veins that occupy fracture systems in the folded and faulted gabbroic portions of two conformable, regionally extensive, layered Archean ultramafic-mafic sills. The veins are generally restricted to the fracture system and in lower grade halos around the main fractures/veins. The width and frequency of the veins tend to increase toward the dilated nose of the main structure at the Springer Mine (Watkins and Riverin, 1982).

The mineralization at the Springer Mine is associated to a series of east-trending (090°), steeply (65°) north-dipping, sets of axial plane faults and fractures with right-handed (dextral) displacement that developed in areas of maximum inflexion of folds (Watkins and Riverin, 1982). Plan and cross-section views of Springer show at least three different orientations for the mineralized veins which could indicate a conjugate fault system or separate fracture systems. A disseminated halo (stockwork) surrounds most of the higher-grade zones (Figure 7-4).

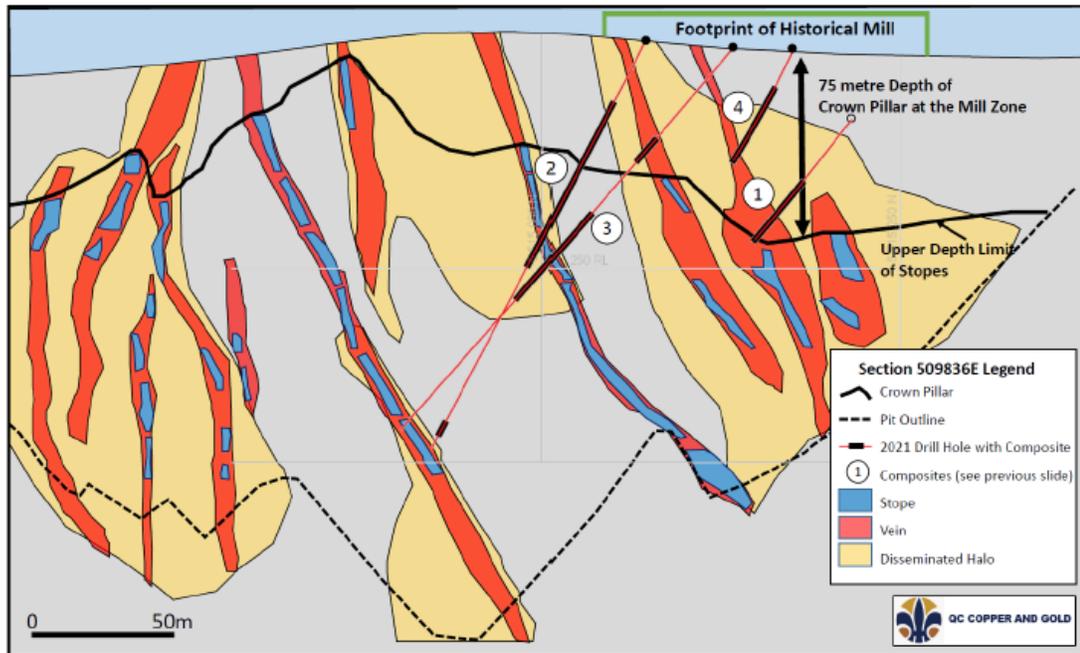


Figure 7-4 Illustration of a disseminated halo (stockwork) surrounding the higher grade zones (XXIX, 2021)

In the limb of the fold at Perry Mine, the mineralization is associated to northwest-trending faults and fractures, developed perpendicular to stratigraphy.

Generally, mineralization of economic interest appears within more fractured/sheared sections of the host gabbro. These sections are generally strongly chloritized and variably silicified.

A detailed description of the mineralization intersected in the 2016 drilling further classified the veins as follows:

- Massive pyrite veinlets (cut by magnetite?);
- Magnetite veins (minor associated disseminated chalcopyrite);
- Sulphide veins (massive chalcopyrite) with magnetite-rich margins, also with disseminated fragments of massive magnetite within chalcopyrite;
- High-sulphide veins with 30 to 50% quartz with massive chalcopyrite and some magnetite. Anomalous W values are sometimes found associated to these veins;
- Quartz veins within gabbro with higher gold values and low copper;
- Quartz veining within felsic tuffs with associated gold and minor copper and minor arsenopyrite;
- Gold-rich quartz-arsenopyrite veins north of Veins No. 1 and No. 2 that cross-cut the copper-rich veins; and



Although most of the mineralization historically mined at Springer and Perry was hosted in the upper part of the Ventures Sill, the regional and local structures are also important controls on mineralization at Opemiska. At Springer, the fold nose corresponding to the overturned anticline in the mafic-ultramafic sills controls significant amount of mineralization. A 6.0 m wide zone containing disseminated pyrrhotite and chalcopyrite occurs locally at the top of the Ventures Sill, where it is dilated at the nose of the fold (Watkins and Riverin, 1982).

The mineralized veins at Springer were described as restricted to fractures hosted in gabbro at the stratigraphic top of the Ventures Sills. The mineralization is generally massive, but locally disseminated. The main fractures trend 090° and dip 70° north. The main veins are up to 1,200 m long, average 6.0 m thick, and have been followed to >1,000 m depth. Vein No. 3 is the most important one, along with Vein No. 7 farther to the south. Additional, less important veins (six additional veins) have also been exploited. The mineralization consists mainly of chalcopyrite, pyrite, and pyrrhotite with smaller amounts of sphalerite, magnetite, galena, molybdenite, arsenopyrite, and gersdorffite (NiAsS). Native gold occurs in association with chalcopyrite and pyrite. The non-metallic gangue minerals are quartz, calcite and chlorite and minor amounts of biotite, stilpnomelane and actinolite. Locally significant amounts of scheelite and molybdenite are present. Later cross-cutting veins carry pitchblende-uraninite and molybdenite (DV 98-03). The alteration surrounding the veins is described as chlorite and carbonate.

At the time of the start of operations at Springer (1952), five major copper-gold bearing veins or zones had been explored in the shaft area, either underground or by surface drilling. The veins consisted of chalcopyrite accompanied by quartz and magnetite. These veins generally strike east to west and dip steeply to the north. Some silver is present and locally important cobalt values have been obtained (e.g., surface drill hole S-57). In addition to the five veins, there are many other important drill intersections that are as yet uncorrelated. Included in these intersections are some carrying important zinc, lead and gold values, but in some cases with little copper present (GM-02098).

When mapping the area in 2009, the Ministère des Ressources naturelles et de la Faune ("MRNF") sampled a mineralized quartz vein in gabbro outcrop (Sigeom à la Carte, 32G15 sample No. 2009050061). This vein is likely the same one intersected in drill hole OP-16-08. The sample graded >5.0 g/t Au, 740 ppm Co, 60 ppm Mo, 260 ppm Ni, 0.14% Zn, 20.49% Cu, 35.65% Fe and 0.29% W. This result confirms the multi-element association in some of the veins at Springer.



## 8 DEPOSIT TYPES

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The mineral deposit type on the Opemiska Project is structurally controlled copper-gold veins. The veins occur in east-west trending axial planar faults and northwest-trending radial structures within the folded mafic-ultramafic Ventures Sill and Bourbeau Sill. The folds postdate the main east-west trending regional isoclinal folds (D2a), but predate the third phase of deformation (D3), and are interpreted to represent drag folding during sinistral movement (D2b) along the Gwillim Fault (Figure 8-1) (Leclerc et al., 2012). Progressive deformation of the Ventures Sill caused rupturing of the unit, which produced axial planar and radial fractures and faults, some of which were subsequently mineralized when the regional compression rotated from north-south to northwest-southeast, opening up the existing structures and providing pathways for circulation of mineralizing hydrothermal fluids.

In the Chibougamau Mining Camp, structurally-controlled copper-gold mineralization occurs in west-northwest trending dextral shear zones (Merril, Copper Rand Mines) related to the second deformation event (D2) and in cross-cutting, northeast-trending dextral shear zones (Henderson, Portage Mines).

Similitudes are interesting when comparing the veins systems at the Springer and Perry Mine Deposits on the Opemiska Property to the Chibougamau Mine Deposits farther east. At the Springer Mine, the veins proximal to the Gwillim Fault also contain significantly higher gold grades than the more distal veins (Salmon et al., 1984). At Chibougamau, the main copper veins are oriented northeast-southwest at Henderson-Portage Mines, but the later-formed "Mines Shears" oriented at 110° appear to carry more gold.

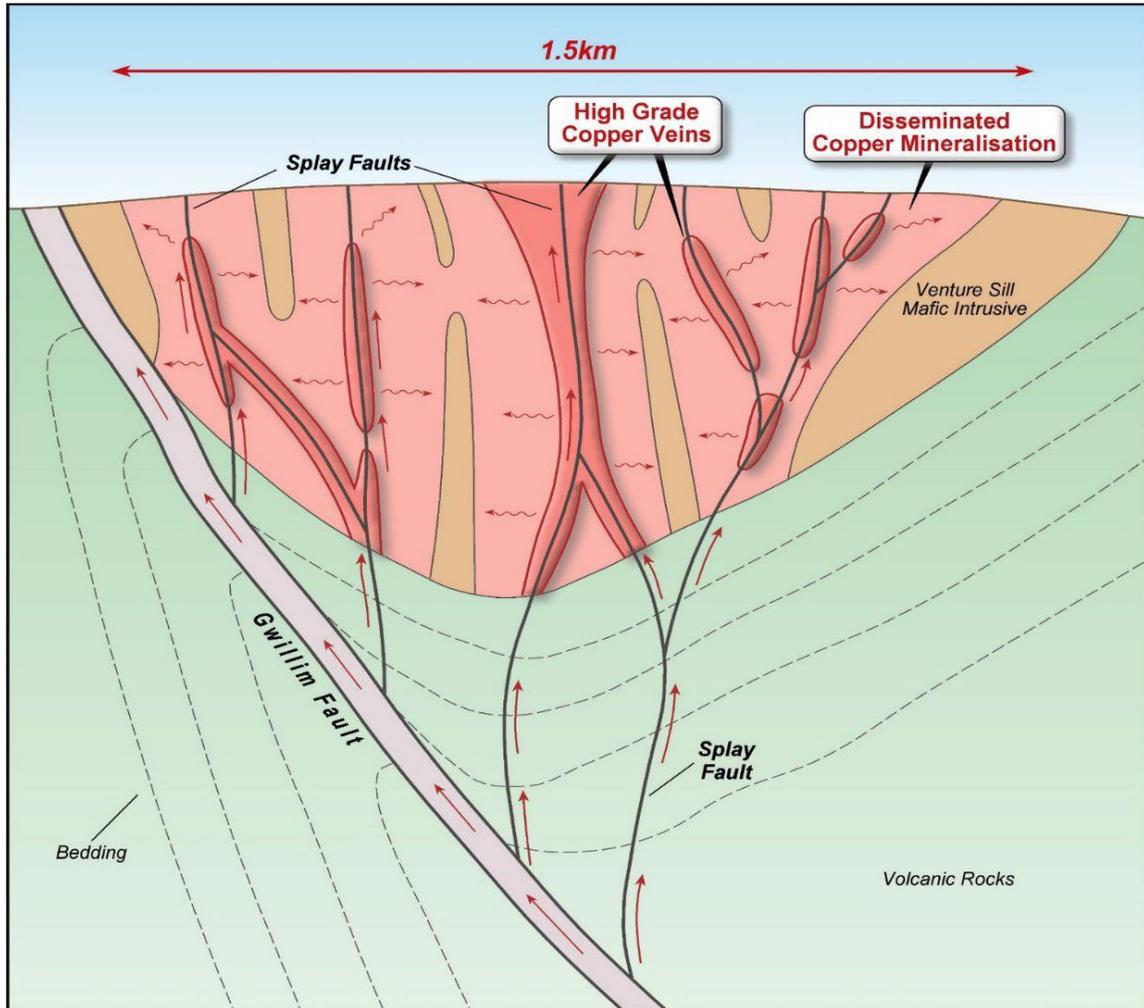


Figure 8-1 Opemiska Deposit Model (XXIX, 2021)



## 9 EXPLORATION

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Exploration work by XXIX (previously QC Copper & Gold) has been focused on diamond drilling and geological compilation and re-interpretation work. In addition, a geophysical 3-D IP survey, a drill hole televiewer survey and a structural geology study were completed. The compilation, geophysics, drill hole televiewer and structural geology work is summarized below.

Drilling work is described in Chapter 10 of this Report.

### 9.1 RE-INTERPRETATION OF GEOLOGICAL MODEL

The Company carried on with the extensive compilation work started by Ex-In on the historical Springer and Perry Mines. During operation of the Mines, all drill holes were logged on paper and no digital records were compiled. QC Copper & Gold built a digital database that includes drill hole collar locations, deviation tests, geology, sampling, and assay results. The compilation included all the historical surface and underground drill holes for a total of 19,471 drill holes (1,074,735 m) and 375,931 samples.

None of the drill core from the historical surface and underground drilling during the mining period was preserved and there is no means of directly validating historical assays. Assay certificates were not preserved and the samples were assayed at the on-site mine laboratory. No information is available as to the sample preparation or analytical methods used by the Mine. The assay validation issue is addressed later in Section 12 of this Report. In summary, some of the historical surface drill holes were twinned in the 2019 and 2021 diamond drilling programs. The assay results and logs were compared in detail with the historical drilling, with the ultimate objective of validating all the historical mining results.

Level plans, sections and longitudinal projections were scanned and georeferenced to confirm the location of all the drill holes and digitize all the underground mine openings. All underground drifts, veins and stopes were digitized from the available scanned maps and combined into 3-D wireframe models using various software and ultimately integrated into GEOVIA GEMS™ modelling software and later converted to Micromine format. Geological contacts and faults were also digitized from level plans and the linework combined into 3-D surfaces to aid interpretation. Several hundred individual 3-D wireframes of the veins and stopes were constructed to approximately the -150 m elevation (approximate depth of 550 m below surface) and subsequently down to the bottom of the historical Springer Mine around 650 m depth and to the bottom of the historical Perry Mine around 1,000 m depth. Many stopes were intersected during the 2019 and 2021 drill programs typically within one or two

metres of the projected downhole locations from the drill hole collars as projected in 3-D.

All the work described above was performed in the original local mine grid coordinates. All the drill holes and the 3-D wireframe models were subsequently converted to UTM coordinates and elevations above sea level, in order to better integrate with GPS and surface data, such as the Chapais town site and surrounding road network, using the transformation equations in listed below:

- Mine to UTM NAD83, Zone 18 Co-ordinate Transformation Equations:
  - o  $X_{UTM} = (0.3048 * X_{Mine}) + 508,249.09$
  - o  $Y_{UTM} = (0.3048 * Y_{Mine}) + 5,513,407.36$
  - o  $Z_{UTM} = (Z_{Mine} - 3,676.91) * 0.3048$

These equations were generated by a qualified land surveyor in Chibougamau, based on regression analysis of a large number of mine-era surface drill collar casings that were re-surveyed using a differential GPS unit. They were validated and confirmed when new found surface drill casings were located and georeferenced. In addition, QC Copper & Gold's drilling located buried drill casings within 1 or 2 m accuracy, when bulldozing new drill setups and projected stopes were typically encountered within a few of metres of anticipated down hole depth locations.

## 9.2 GEOPHYSICS

In 2022, QC Copper & Gold completed a high resolution, 75-m line spacing airborne magnetic survey that covered the Opemiska Property and QC Copper & Gold's adjacent properties (Figure 9-1). The survey data were micro-levelled to provide the maximum resolution and interpretability. Previous magnetic susceptibility measurements on drill core were used to constrain the 3-D inversions of the airborne survey data. This study was expected to define distinct geological domains for improved Mineral Resource modelling. The geophysical data reprocessing and 3-D inversions results indicate that the Ventures Sill is variably magnetic with the most magnetic portion corresponding to the Ventures Gabbro and Green Pyroxenite units. The magnetic response within these units, where cut by northwest-trending mineralized faults is diminished, which suggests that the mineralizing fluids were magnetite destructive. Magnetite is a ubiquitous vein mineral, which suggests that either the magnetite was chemically remobilized into the veins or that the veins formed in the late stages of the hydrothermal system, when the fluid composition evolved from magnetite destructive to magnetite formative.

During the fall 2022, Géophysique TMC was commissioned by QC Copper & Gold to complete a mise-à-la-masse survey in the vicinity of the Saddle Zone. The purpose of the survey was to confirm the connection between the mineralized zones and aid

interpretation of the geological model in the area. Beforehand, a field grid consisting of 13 lines ranging from 275 to 600 m long was cut to lay the wires to guide the survey.

The mise-à-la-masse survey consisted of two types of readings. The first is a surface survey, which consisted of putting an electrode down the drill hole to the level of a mineralized zone and reading along the surface lines. For this, a total of 14 different readings were made, using 6 different drill holes. The second type of reading was drill hole-to-drill hole reading, which consisted of placing one transmitting electrode in one drill hole, at a mineralized interval and the receiving electrode at the same interpreted interval in an adjacent drill hole, and reading along one line to confirm the connection of the two zones.

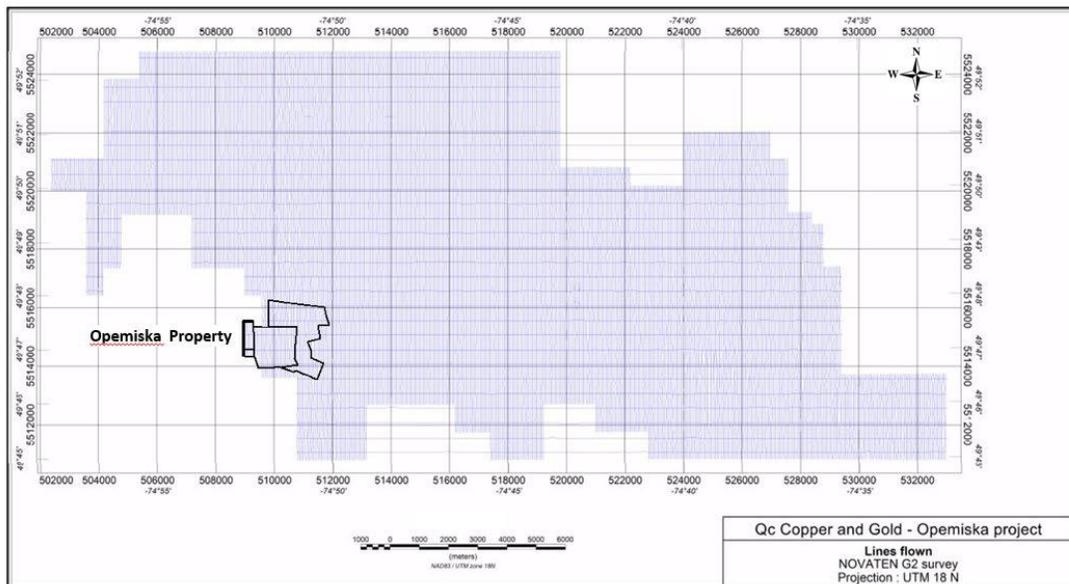


Figure 9-1 Flight Lines for the 2022 Airborne Magnetic Survey (modified from Expert Geophysics, 2022)

### 9.3 DRILL HOLE TELEVIEWER

A focused optical and acoustic drill hole televiewer surveying program was planned at the end of the 2021 drill program to obtain oriented structural measurements. A total of 16 drill holes were scanned (optic, some also with acoustic) with a Semm Logging Televiewer. Three of those drill holes were on the Bouchard Zone, four on Springer Zone, and nine on the Saddle Zone. The interpretation was completed in-house using Wellcad, in order to help understand the orientation and the relationships of the structures to the mineralization.



## **9.4 STRUCTURAL GEOLOGY STUDY**

The Company engaged SRK Consulting to complete a structural geological study to better understand the relationships between the different veins and mineralized faults of this structurally-hosted Cu-Au-Ag deposit. The purpose of the study was to integrate all the available observations, including surface stripping, drill core, underground geology level plans, longitudinal projections and cross-sections, 3-D shapes of the existing stopes, and constrained inversions of the airborne magnetic data, into a comprehensive structural model for the Opemiska Deposit.



## 10 DRILLING

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In total, 21,918 surface and underground drill holes for 1,525,074 m are recorded as having been completed at the Opemiska Project.

Section 10.1 presents the drill programs completed by XXIX and Section 10.2 presents the parameters used during these drill programs.

### 10.1 DRILL HOLE PROGRAMS

XXIX completed drill hole programs in 2019 (as predecessor company, PowerOre), winter-spring 2021 (as predecessor company Qc Copper & Gold), autumn-winter 2021-2022 (as predecessor company Qc Copper & Gold), summer 2022 (as predecessor company Qc Copper & Gold), winter 2023 (as predecessor company Qc Copper & Gold), and more recently in 2024-2025 (as XXIX).

#### 10.1.1 2019 PROGRAM

In 2019 an initial 23 hole, 3,364 metre diamond drilling program was carried out on the Springer Zones with the primary objective of verifying that significant disseminated mineralization exists between the veins that were mined underground. Drilling focused on crown pillars and interior pillars, where these could be targeted, and results confirmed the expectations that the Project could be re-evaluated as an open pit to mine pillars and the low-grade material that was left in the underground due to prevailing economics.

A series of drill holes were also completed to duplicate some of Falconbridge's drill holes, to test favorable sections for disseminated copper mineralization adjacent to largely mined out "high-grade copper zones", and finally investigate the metavolcanic/gabbro contact for disseminated copper mineralization within both the Ventures gabbro and felsic metavolcanic rocks.

The 2019 diamond drilling program objective was to confirm the presence of wide, near-surface mineralization on the periphery of existing mined out veins. This objective was confirmed, and significant intervals were also identified in areas previously considered to be barren. In addition, some "un-named" veins were intersected in the drilling; these were not mined underground. Moreover, drilling in the vicinity of the historical process plant indicates that the mine left a thick crown pillar in this area, presumably to protect the mill infrastructure.



The drill program, logging and sampling were carried out under the supervision of Claude Larouche, P.Eng., Ing. Samples of drill core were cut longitudinally along a line marked by the logging geologist and cut in half using a diamond drill core saw. Samples were assembled in batches with pulps of certified reference materials and blanks. Approximately 10% of the samples submitted for analyses were either certified reference materials or blanks. In addition, a suite of drill core duplicates was submitted for analysis.

### 10.1.2 WINTER-SPRING 2021 PROGRAM

From January 22 to May 16, 2021, QC Copper & Gold undertook a drilling campaign on its Opémiska Project. The work was carried out by Forage Miikan, a subsidiary of Forage Chibougamau.

A total of 78 drill holes were completed for a total of 16,411 m. The work was carried out under the supervision of Denis McNichols, P.Geo., then Project Manager for QC Copper & Gold. The drill collars were set-up by a professional land surveyor, who returned to the field after the campaign to record the final position of the drill holes. All the drill hole collars were aligned using an "Azimuth Aligner" from Minnovare. The deviation tests were completed using a Reflex magnetic device, starting at 30 m and subsequently at 50 m intervals. Outlier azimuths and dips were removed from the dataset before plotting.

The mineralized intersections encountered in the 2021 drilling program are very similar to those in the previous drilling. Mineralization occurs in the form of shear veins (mainly Springer) or quartz-rich veins (mainly Perry), with mineralization consisting primarily of chalcopyrite with accompanying pyrite and minor pyrrhotite with magnetic, chlorite, quartz and calcite as gangue minerals. Locally, sphalerite-rich veins are encountered that have only modest concentrations of copper, but may have high gold values. Arsenopyrite is also present locally, but it has not been possible to relate the different vein mineralogy to different vein generations.

It was also observed that the numerous mined veins in Springer and Perry Mines are surrounded by low-grade stockwork halos of weakly and variably altered Ventures Sill rock with minor chalcopyrite veins a few cm to a few tens of cm thick separated by barren rock. The low-grade copper typically forms stockwork halos up to three to five times the thickness of the veins. In the core of the Springer Mine, the veins are sufficiently numerous to create a continuous halo of mineralization over several hundreds of metres, centred on Vein No. 3, the most important vein historically mined by Falconbridge.



### **10.1.3 LATE-2021, 2022, AND 2023 PROGRAMS**

Subsequent to the publication of the Initial Mineral Resource Estimate for the Opemiska Project, from October 26, 2021, to February 12, 2023, QC Copper & Gold undertook three drilling programs on its Opémiska Property:

- 1- Fall-winter 2021-2022
- 2- Summer 2022
- 3- Winter 2023.

A total of 180 drill holes totalling 47,192.2 m were completed during those programs. The diamond drilling programs were carried out on the Springer, Saddle (located between Springer and Perry), Perry, Bouchard and McNichols Zones, with the objective of verifying the presence of significant disseminated mineralization. The work was carried out under the supervision of Denis McNichols, P.Geo., then Exploration Manager for QC Copper & Gold. The drill core processing and the operation of drill core sawing equipment were carried out under the supervision of André Bouchard, employed by QC Copper & Gold.

The drill collar sites were located initially by QC Copper & Gold personnel using a handheld GPS. Prior to the start of drilling, all the drill hole collar alignments were determined with an "Azimuth Aligner" from Minnovare. The deviation tests were completed at every 50 m using an Axis Mining Technology gyro. Suspicious azimuths and dips were removed from the dataset before plotting. At the completion of each drill program, a professional land surveyor returned to the field to measure and record the final UTM coordinates of each collar using a differential GPS unit.

Drill core samples were cut in half using a diamond saw along a longitudinal line drawn by the logging geologist. Samples were collected in batches with insertion of certified reference material sachets and blanks. One certified reference material and one blank were sent with every 50 samples. In addition, quartered drill core duplicate samples were submitted for analysis. A total of 29,914 samples were sent to an independent commercial laboratory for analysis.

The mineralized intersections in the 2021, 2022 and 2023 drilling programs are very similar to those in the previous drilling.

### **10.1.4 2024-2025 PROGRAM**

From November 16, 2024 to March 22, 2025, XXIX undertook a drilling campaign on its Opémiska Project. The work was carried out by Forage RJLL.

A total of 18 drill holes were completed for a total of 2,530 m. The work was carried out under the supervision of Ahcene Gaoui, P.Geo., Exploration Geologist for XXIX. The drill collars were set-up by geologists. All the drill hole collars were aligned using a TN14 instrument from Reflex. The deviation tests were completed using a Gyro from Reflex, starting close after the end of the casing and subsequently at 51 m intervals. Outlier azimuths and dips were removed from the dataset before plotting.

The drilling campaign conducted between fall 2024 and spring 2025 was intended to:

- 1- Test certain areas of the zone identified as part of the open pit in order to increase resources;
- 2- Verify XXIX's new interpretation of mineralization in the Saddle Zone;
- 3- Use all the drilling data obtained during this campaign to prepare an updated resource estimate.

The mineralized intersections encountered in the 2024-2025 drilling program are very similar to those in the previous drilling, with mineralization consisting primarily of chalcopyrite with accompanying pyrite and minor pyrrhotite with magnetic, chlorite, quartz and calcite as gangue minerals. Arsenopyrite is also present locally, but it has not been possible to relate the different vein mineralogy to different vein generations.

## **10.2 DRILL PROGRAM PARAMETERS**

### **10.2.1 HOLE SELECTION**

Drill holes were designed to target previously drilled mineralization, using the extensive historical database and concentrating on the Opemiska deposit.

### **10.2.2 DRILL HOLE LOCATION AND SET-UP**

On the Project, drill collar locations are pre-surveyed by XXIX using a hand-held GPS.

A wooden stake or picket is hammered into the ground to mark the collar location. The stake is then inscribed with the predetermined drill hole identification, the intended azimuth, and the anticipated depth of the hole. In the case of inclined drill holes, a separate set of clearly marked wooden pickets mark the foresight and backsight for the alignment of the drill rig. These pickets are placed a sufficient distance from the collar location so as not to be disturbed by the Drilling Contractor



during equipment installation and drill set-up. Foresight and backsight pickets are accurately surveyed and installed by the issuer.

The collar location is subsequently prepared to allow easy access to the drilling equipment. In some instances, this involves brushing and some tree removal.

At the completion of each drill program, a professional land surveyor returned to the field to measure and record the final UTM coordinates of each collar using a differential GPS unit.

### **10.2.3 DRILL HOLE ORIENTATION AT START-UP**

Prior to the start of drilling, all the drill hole collar alignments are determined with an "Azimuth Aligner" from Minnovare. This method is not affected by the high magnetic susceptibility of the rocks in the Ventures Sill. The device was checked regularly to ensure proper calibration.

### **10.2.4 DRILL HOLE ORIENTATION DURING OPERATION**

Deviation tests were completed at every 50 m using an Axis Mining Technology gyro. Suspicious azimuths and dips were removed from the dataset before plotting.

### **10.2.5 DRILL HOLE CORING**

Drill cores are provided by the Drilling Contractor in NQ (46 mm diameter) size except for some drill holes that crossed underground stopes or mine drifts and were drilled telescopically in HQ-NQ-BQ size, in order to pass through those openings.

The core is collected in a standard drilling tube, and the drillers place the core into wooden core boxes or trays specially manufactured for this process. The driller marks the depth in metres after each run, usually every 3 m, sometimes at shorter intervals when appropriate.

The drill hole is terminated by the XXIX site geologist once the target depth is reached. Once the drill hole is terminated and the final downhole survey reading is collected, the drill crew pulls the rods for mobilization to the next drill site.

The casing may be left in the hole and cut slightly above the surface level. It is marked with the drill hole identification number inscribed on a metal tag.



### **10.2.6 CORE HANDLING AT THE DRILL RIG**

Diamond drill cores are collected in lengths up to 3 m in an NQ core barrel. The NQ core trays hold a nominal 4.5 m of cohesive core in three 1.5-m rows. After each drill run, the driller's helper loads the core into the wooden core trays at the drill rig under the driller's supervision. The driller's helper identifies the core trays with a permanent marker, indicating the drill hole number and the sequential box number, beginning with box 1 after collaring the casing into bedrock. Drill hole numbering and box numbering are also inscribed on the end piece of the core tray next to the first core placed in the row.

The driller's helper inserts a meterage tag (wooden block) at the downhole end of the last piece of core taken from the core tube. The block identifies the exact depth at the end of each drill run. Although the drill barrel is designed to take a 3-m run, rock conditions or mechanical failures often dictate a run length.

The wooden depth markers are clearly marked in metres in clean and legible writing. Additional notations can be provided on additional wooden blocks indicating if bad ground, cavities in the bedrock, or changing water conditions were encountered that resulted in core loss. Once the core tray is filled, it is secured shut using a second core box. It is then carefully stacked for transport to the core logging facility.

### **10.2.7 RECEIVING CORE AT THE CORE LOGGING FACILITY**

The drill core is transported daily to the core logging facility. Care is exercised to ensure the lids are securely attached to minimize core disturbance, breakage and loss during transport from the drill site.

All core trays are verified in the logging facility, and the wooden marker blocks are checked before logging is initiated. If blocks do not correspond with the observed core, the shift driller and/or drill supervisor are consulted at the first opportunity.

### **10.2.8 GEOLOGICAL LOGGING PROCEDURE**

Detailed core logging has several components: geological (lithologies, structures, alteration and mineralization), sampling, and photography. These components are described below.

All geological characteristics are described, including lithologies, structures, alteration, sulphide mineralization, assay sample numbers and intervals, density sample numbers and intervals, etc.

### 10.2.9 ASSAY SAMPLE SELECTION

Assay samples are broken at major lithology contacts to represent homogeneous units. The minimum assay sample interval in the hole will be not less than 50 cm, except in unique circumstances (e.g. lithological units which are mineralized and less than 50 cm long). The maximum sample interval will not exceed 1.5 m. Procedures state that no sample will cross a major rock boundary, alteration boundary or mineralization boundary.

The geologist determines sampling intervals during logging and marks them on the core boxes or the core itself using coloured lumber pencils. Samples are numbered in consecutive order using two-way sample tag books that the laboratories provide. The sample sequence includes QC samples inserted into the sample stream using sample numbers that are in sequence with the core samples.

Sample intervals, sample numbers, and QC samples are noted in the Assay tab of the Descriptions section in software.

### 10.2.10 CORE SAMPLING

A geotechnician trained in core cutting procedures cuts the core at the core sampling facility. The logging geologist has already clearly marked out all pertinent cores for cutting and sampling. The geologist also places a paper sample tag containing a two-part sample number corresponding with the required sample interval at the beginning of the sample interval. One part will be stapled into the core box as a permanent sample reference, which will remain on the wooden core tray, and the geotechnician will remove the other part of the paper sample tag and place it inside the plastic bag.

The core is sawn with a diamond saw; one half of the core sample is placed in a sample bag, and the remaining half is returned to the core box. The cut core will be returned to the core box in the same position as it was removed so as not to rotate the core or reverse the downhole direction of the core. If the above procedure is carefully followed, the core remaining in the tray will retain its “fitted” appearance.

The bag will then be closed using a zip tie and stored in sequence before sample dispatch preparation.

A “standard” sample consisting of material of known metal content is included in the sample sequence by the trained core sampler. XXIX includes a standard after every 50 samples. Standard QC samples are selected and placed in sequence by a geologist. Standards are used to test the laboratory’s reporting for select key elements.



Similarly, a “blank” is included in the sequence as part of the QA/QC process. Blank material is technically devoid of any metals of interest.

#### **10.2.11 SAMPLE SHIPMENT PREPARATION**

Assay sample bags are packed in large “rice” bags.

The rice bags are piled onto a pallet for transport. A waterproof bag containing the Laboratory Sample Submission Form and a hard copy of the sample dispatch sheet are included with the sample shipment.

The palletized rice bags are stored onsite until shipped to the laboratory.

The laboratory is notified by email that the samples are en-route. A digital copy of the sample submission form and the sample dispatch list is emailed to the laboratory manager once the samples have left the site. Any additional instructions for processing (such as expedited service) are communicated to the laboratory manager at this time.

#### **10.2.12 CORE STORAGE**

Following sampling, the ends of the core trays are labelled using an inscribed metal tag, which is durable and will survive weathering far longer than the permanent marker. The core tray metal tags are marked with the hole number, the tray number, and the “from-to” meterage.

The core trays are stored in metal racks on site.

## 11 SAMPLE PREPARATION, ANALYSES AND SECURITY

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Core has been sampled to create a representative and homogenous database. Sampling honours lithological contacts, alteration boundaries and mineralization boundaries.

The sample length for the intervals collected varies from 0.50 m to 1.5 m. The core was sawn in half with a diamond saw along its length. One half was put into a plastic sample bag, and the other half was retained and kept in the core box for later reference. A sample assay tag was placed in the plastic sample bag, and the bag was tied off.

### 11.1 CORE HANDLING, SAMPLING, AND SECURITY

Individual cut samples were placed in poly bags with a unique bar-coded assay tag, and poly bags were placed in rice bags. They were then loaded on pallets for transport. Results were received by email in secure PDF files and Excel spreadsheets.

### 11.2 LABORATORIES ACCREDITATION AND CERTIFICATION

The 2019 drill program, samples were shipped to Laboratoire Expert in Rouyn-Noranda. Samples from the 2021-2023 drill programs were sent to ALS laboratories in Val-d'Or. Samples from the 2024-2025 drill program were sent to AGAT Laboratories in Val-d'Or. ALS and AGAT facilities are ISO 17025 compliant.

### 11.3 LABORATORY PREPARATION AND ASSAYS

#### 11.3.1 SAMPLE ANALYSIS PROCEDURE (LABORATOIRE EXPERT)

Samples received at Expert Lab are logged into the tracking system, weighed, dried (if necessary), crushed to 80% passing minus 10 mesh, riffle split to 250 g, then pulverized to 90% passing minus 200 mesh.

Samples are analysed for gold by lead FA on 30 g aliquots with AA finish. Samples returning results >5,000 ppb gold are then re-assayed by FA with gravimetric finish.

Copper, silver, cobalt and zinc samples are analysed by partial digestion AA, with samples assaying >10,000 ppm re-assayed by total digestion AA.



Expert Lab is a non-accredited facility that routinely performs assaying for junior mining companies. Blanks, CRMs and duplicates are inserted into the sample sequence at all sample preparation stages, as part of the lab's internal QA/QC protocol.

### **11.3.2 SAMPLE ANALYSIS PROCEDURE (ALS)**

Sample preparation at ALS was divided between the full-service laboratory in Val d'Or and a preparation laboratory in Lebel-sur-Quevillon. Since the laboratory has uniform protocols throughout, it is very common for the prepared pulps to be sent to more than one of their major laboratories for analysis. Gold analyses by fire-assay however, were mainly performed in Val d'Or.

Rock packages CRU-QC and PUL-QC were used for crushing and pulverizing all samples. The entire sample was crushed to 90% passing <2 mm, then 500 g was split off and pulverized to better than 85% passing 75 microns.

A sample from the pulp was digested in an aqua regia leach and analyzed by ICP-MS under ALS procedure codes ME-ICP41 (for Cu, Zn, Co, Ag) and Cu-OG46 (for Cu when above 10,000 ppm). Fire Assay was used for gold under ALS procedure code Au-AA23.

ALS maintains ISO registrations and accreditations and all ALS geochemical hub laboratories are accredited to ISO/IEC 17025:2017 for specific analytical procedures.

### **11.3.3 SAMPLE ANALYSIS PROCEDURE (AGAT)**

The entire sample was crushed to 75% passing <2 mm, then 250 g was split off and pulverized to better than 85% passing 75 microns.

A sample from the pulp was digested in an aqua regia leach and analyzed by ICP-OES for 14 elements and with ICP-MS finish for Cu when above 10,000 ppm. Fire Assay with AAS finish was used for gold.

## **11.4 QUALITY ASSURANCE AND QUALITY CONTROL**

NI 43-101 requires mining companies reporting results in Canada to follow CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines ("CIM Best Practice Guidelines"). The guidelines describe which items are required to be in

the reports but do not provide guidance for quality assurance and quality control (“QA/QC”) programs.

QA/QC programs have two components. Quality assurance deals with preventing problems using established procedures, while quality control aims to detect and assess problems and take corrective actions. QA/QC programs are implemented, overseen and reported on by a QP as defined by NI 43-101.

QA programs should be rigorous, applied to all types and stages of data acquisition, and include written protocols for sample location, logging and core handling, sampling procedures, laboratories and analysis, and data management and reporting.

QC programs are designed to assess the quality of analytical results for accuracy, precision and bias. This is accomplished through the regular submission of standards, blanks and duplicates with regular batches of samples submitted to the laboratory and the submission of batches of samples to a second laboratory for check assays.

The materials conventionally used in mineral exploration QC programs include standards, blanks, duplicates, and check assays. The definitions of these materials are presented below:

- Standards are samples of known composition inserted into sample batches to independently test the accuracy of an analytical procedure. They are acquired from a known and trusted commercial source. Standards are selected to fit the grade distribution identified in the mineralization.
- Blanks consist of material that is predetermined to be free of elements of economic interest to monitor for potential sample contamination during analytical procedures at the laboratory.
- Duplicate samples are submitted to assess assay precision (repeatability) and mineralization homogeneity. Duplicates can be submitted from all stages of sample preparation with the expectation that better precision is demonstrated by duplicates further along in the preparation process.

QC samples were inserted into the sample batches sent to the laboratory. Inserts included blank samples and standards.

#### **11.4.1 BLANKS**

Tested blank material, selected due to its depleted base metal geochemical signature, is used by XXIX. The blank reference material was garden rocks purchased at a local store.

One blank sample was inserted for every 50 samples.



All blank samples during the latest drill program returned values of <0.005% for Cu, <0.005 g/t for Au, and <0.2 g/t for Ag. These values are judged acceptable.

#### **11.4.2 STANDARDS**

Certified material is used by XXIX. The certified standards are purchased from OREAS, a well-known provider of such material. Certified materials used were 166, 502c, 504c, and 505.

One certified sample was inserted for every 50 samples.

All samples during the latest drill program returned values within 3SD for Cu. All samples for Au and Ag also returned values within 3SD, with the exception of two samples for Au and six for Ag. Samples that returned values outside of the 3SD range were close to 3SD. These values are judged acceptable.

#### **11.4.3 DUPLICATES**

Duplicate samples are submitted to assess both assay precision (repeatability) and to assess the homogeneity of mineralization.

Several duplicates are used in the mineral industry, these being core duplicates ( $\frac{1}{2}$  core or  $\frac{1}{4}$  core), coarse duplicates (rejects and preparation duplicates), pulp duplicates (2<sup>nd</sup> split of final pulp prior to analysis) and field duplicates (double samples collected in the field, where applicable).

XXIX did not include core duplicates in their QAQC program. The QP recommends adding core duplicates in future drilling programs and sending 5% of the 2024-2025 samples for check assay.

### **11.5 CONCLUSION**

The sample preparation, analytical procedures, and security of the samples during these procedures followed industry best practices but could be improved, mainly by inserting more blanks, more CRMs, and adding a field duplicate program. Sufficient efforts were made to identify items that were out of specification.

The QA/QC data indicate that the overall assay results of the issuer's drill program are valid and can be relied upon for the purpose of this Report.

It is the QP's opinion that the sample preparation, security and analytical procedures are adequate and follow best practices.



## 12 DATA VERIFICATION

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The Mineral Resource Estimate (“MRE”) in this report is based on 21,918 drill holes for 1,525,073 metres and 479,242 samples. The drill hole database includes recent drilling (2002 to 2025) of 73,227 metres in 382 drill holes (Ex-In, PowerOre, QC Copper & Gold, XXIX) and also incorporates historical drill holes (1930 to 1990) for 1,451,846 metres in 21,536 drill holes (Opemiska Copper Mines, Falconbridge, Minnova).

For this MRE, the QPs performed a basic validation of the entire database. XXIX provided all data in UTM NAD 83. The database close-out date for the resource estimate is May 16, 2025.

### 12.1 HISTORICAL DRILL HOLE DATABASE

The historical information used in this report was taken mainly from reports produced before the implementation of NI 43-101. In most cases, little or no information about sample preparation, analytical or security procedures is available. However, the QP assumes that exploration activities conducted by previous companies satisfied prevailing industry standards at the time. The QP consulted previous independent validation reports of the historical database and performed a series of additional validations over the course of the current mineral resource estimation.

### 12.2 RECENT DATABASE

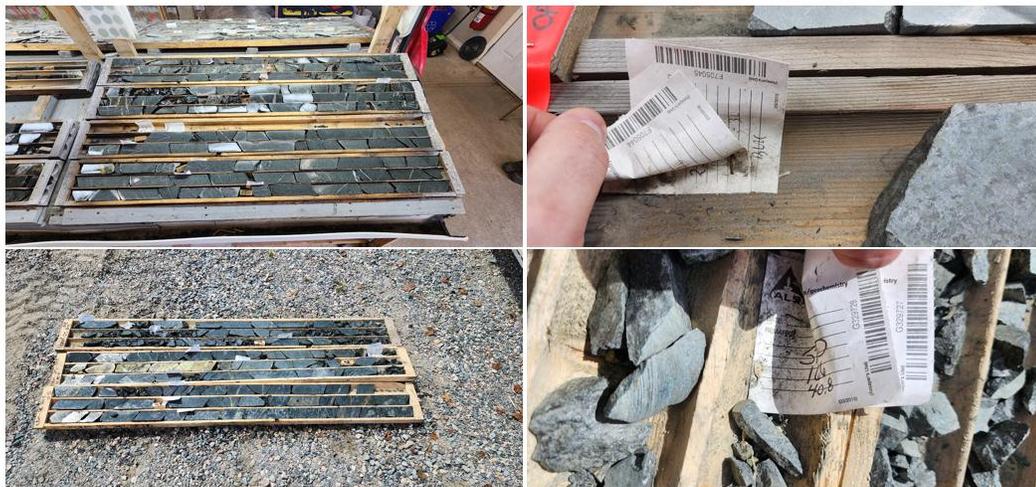
#### 12.2.1 SITE VISIT

QP Pierre-Luc Richard of PLR Resources Inc. visited the Project on May 15, 2025, during the course of this mandate. The site visit included a visual inspection of core, as well as a field tour (Figure 12-1) and discussions of the geological interpretations with geologists and geotechnicians employed by XXIX.



*Figure 12-1 Photos taken by the QP during the site visit (mineralization on surface and historical tailings)*

The site visit also included a review of sampling and assaying procedures, the quality assurance / quality control (“QA/QC”) program, downhole survey methodologies, and the descriptions (logging) of lithologies, alteration and structures (Figure 12-2). Selected drill collars in the field were also validated using a handheld GPS (Figure 12-3).



*Figure 12-2 Core review in the core logging facility and exterior core storage facility*



*Figure 12-3 Drill collar validation during the site visit*

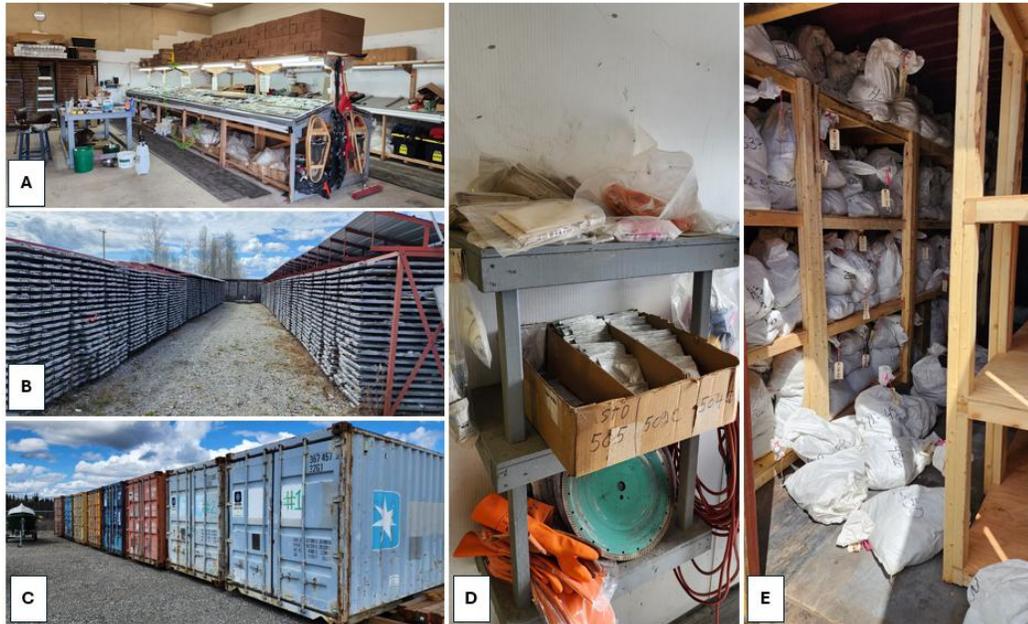
## 12.2.2 DRILLING AND SAMPLING PROCEDURES

XXIX procedures are described in Chapter 10 (Drilling) and Chapter 11 (Sample Preparation, Analyses and Security). Discussions with on-site geologists confirmed that said procedures were adequately applied.

The QP reviewed several sections of mineralized core while visiting the Project. All core boxes were labelled and properly stored inside the core shack. The QP could also access the outdoor historical core storage facility during the site visit. In the reviewed core boxes, sample tags were present, and it was possible to validate sample numbers and confirm the presence of mineralization in witness half-core samples from the mineralized zones (Figure 12-2).

Drilling was not underway during Mr. Richard's site visit, but XXIX's employees involved during the drilling programs explained the entire path of the drill core, from

the drill rig to the logging and sampling facility and finally to the laboratory (Figure 12-4).



*Figure 12-4 Core logging facility (A), Exterior core storage facility (B), Rejects and Pulps Storage (C), Sample preparation room (D), and atored pulps and rejects (E)*

### 12.2.3 ASSAY VALIDATION

The issuer's procedures are described in Chapter 10 (Drilling) and Chapter 11 (Sample Preparation, Analyses and Security). Discussions held with on-site geologists confirmed that said procedures were adequately applied.

### 12.2.4 QA/QC VALIDATION

The QP reviewed the QA/QC reports and found no issues.

## 12.3 CONCLUSION

The QP is of the opinion that the drilling protocols in place are adequate. The database for the Project is of good overall quality. Minor variations have been noted during the validation process but have no material impact on the current MRE. In the QP's opinion, the database is suitable for mineral resource estimation.

## 13 MINERAL PROCESSING AND METALLURGICAL TESTING

The technical content presented in the following chapter is largely taken from Chapter 13 of the 2024 Mineral Resource Estimate (MRE report reference, 2024) with minor modifications to language and presentation. The current chapter takes a different approach to estimate metallurgical recovery as compared to the previous report ('Anticipated Metallurgical Performance Of The Opemiska Resource'). The current analysis establishes flotation concentrate parameters in relation to the head grade.

### 13.1 GENERAL

Information related to process metallurgy relies on available historical production records from Falconbridge Copper and a recent (2023) mineralogical study and concentration testing on a composite sample prepared by QC Copper & Gold. Falconbridge Copper's Opemiska Mine operated from 1954 to 1991 and produced a high-grade copper concentrate with payable gold and silver.

Metallurgical testing was completed in recent years (after mine closure) by COREM, EX-IN and McGill University on mineralized material from the Opemiska mineralized zones and from historical tailings. The processing techniques that were applied were basic gravity-based concentration techniques and magnetic separation. Economic potential of the application of these basic-gravity and "mag-sep" concentration technologies was not demonstrated by the test results.

A flotation metallurgical test program was completed at SGS (Quebec City) on a single composite sample in June-July 2023. The sample contained 0.81% Cu and 1.23 g/t Au (Table 13.1).

*Table 13-1 2023 Bulk Sample*

Sample ID	Cu (%)	Au (g/t)	Ag (g/t)	Fe (%)	As (%)	S (%)
Composite 1	0.81	1.23	5.00	12.7	0.021	1.82

A flotation metallurgical test program was completed at SGS (Quebec City) on a single composite sample in June-July 2023. The sample contained 0.81% Cu and 1.23 g/t Au (Table 13.1).



## 13.2 OPEMISKA PRODUCTION RECORD

Summaries of historical LOM production and of the final 10-years of production are shown in Table 13-2. High recovery was achieved for copper, with moderately high recovery for gold and silver, over the 37 years of operations.

*Table 13-2 Opemiska Mine Production Records*

Year	kt Processed (avg tpd)	Plant Feed Grade			Concentrate				Average Process Recoveries (%)		
		Cu (%)	Au (g/t)	Ag (g/t)	kt	Cu (%)	Au (g/t)	Ag (g/t)	Cu	Au	Ag
1954 to 1991	24,228 (1,870)	2.24	1.06	11.2	2,158.3	23.4	11.3	118	95.4	86.2	85.3
1982 to 1991	5,247 (1,500)	1.56	2.28	11.7	384.5	20.9	30.9	137	96.0	88.1	82.0

In the final 10-years of operations, the copper head grade was significantly lower and gold grade higher, but recoveries remained relatively high. The copper grade in the concentrate was slightly lower than possibly desirable at the time, but the gold grade in the process plant feed doubled and the concentrate grade approached 1 troy ounce per tonne (31.1 g/t Au).

The historical annual performance record (% process recoveries) is shown in Figure 13-1. It is understood by the Author that gravity concentration of gold was introduced by Falconbridge during the later years of operation.

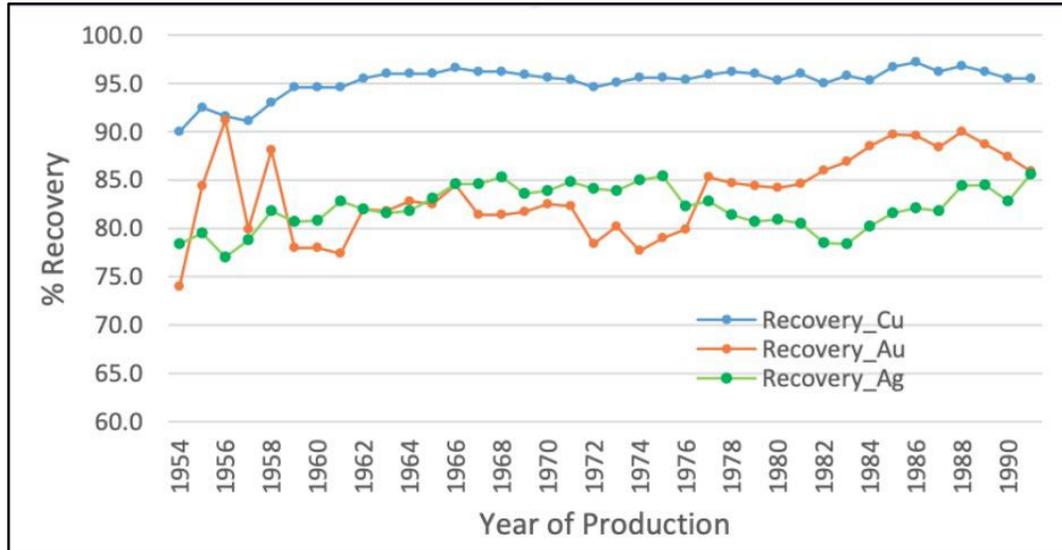


Figure 13-1 Annual Historical Process Recovery (Qc Copper & Gold Investor Presentation dated 4<sup>th</sup> Quarter 2023)

### 13.3 MINERALOGY

Production information on copper and gold mineralogy was not available for review, other than reports that the host minerals were silica and calcite, and the copper mineralogy was essentially chalcopyrite. Additional sulphides were reported to be mainly pyrite with some pyrrhotite.

Bulk mineralogical identification (QEMSCAN and X-ray diffraction (“XRD”)) was performed by SGS -, on the July 2023 Composite No. 1 sample. Gold deportment was examined by heavy liquid separation (S.G. = 2.85), and tabling and microscopic gold grain identification/association.

#### 13.3.1 MINERAL IDENTIFICATION

The main minerals in the 2023 composite sample were identified (in order of decreasing abundance) to be feldspars, amphibole, pyroxene, stilpnomelane (a soft potassium-iron silicate mineral), quartz, iron oxides, chlorite, micas and calcite. Minerals of economic interest are chalcopyrite (2.5%), pyrite (1.8%), iron-oxides (4.6%), and arsenopyrite (0.06%), all of which may host gold. Pyrrhotite was not observed.



### 13.3.2 MINERAL ASSOCIATION

At a laboratory grind of 80% -140 Mesh, the chalcopyrite grains were 60% liberated, 23% partially (30 -80%) exposed, and 16% minorly (<30%) exposed. The amount of completely locked chalcopyrite was very low at 0.8%. The copper mineralogy results suggest an optimum concentration approach could include modest grinding and rougher flotation, followed by a regrind and cleaner flotation.

Most of the gold present in the composite sample was identified as electrum (76 wt%), with 21 wt% as native gold. Electrum is 50 to 75% gold and 25 to 50% silver. A small proportion was identified as kustelite. Kustelite contains 25 to 50% gold, with the balance being silver.

The gold mineralization was characterized by SGS as being over 70% pure, free and liberated. The non-liberated gold occurred in complex association with pyrite (8%), arsenopyrite (6%), and chalcopyrite (2%). These associations suggest that depending on grind size, up to 14% of the gold would be challenging to physically recover from the mineral assemblage.

The gold grain ranged in size from <3 to >75  $\mu\text{m}$ . The +75  $\mu\text{m}$  fraction represented 40% of the gold mass. This result suggests that a modern gravity concentration circuit upstream of flotation could be beneficial in maximizing gold recovery.

## 13.4 REVIEW OF HISTORICAL OPEMISKA PLANT OPERATIONS

The Opemiska process included multi-stage crushing, ball mill grinding and a conventional flotation circuit using Sub-A (Denver sub-aeration) cells. As noted above, in later years of operation, a gravity circuit recovered free coarse-grained gold in advance of flotation of copper-gold. Scavenger flotation concentrates and cleaner tailings were subject to regrinding. Automatic sampling and on-line X-ray sensors assisted in process control. The copper-gold concentrate was dewatered by disc filters and shipped in covered rail cars to the Noranda Smelter in the City of Rouyn-Noranda.

The flotation reagent mix was also conventional with the use of lime, xanthates and frothers with sodium sulphide supplemented to depress non-copper sulphides. The sand portion of the flotation tailings was separated by cyclones and used for mine backfill.

A modern processing circuit could include SAG-ball mill grinding, high-intensity gravity concentrators, high-efficiency flotation cells, attrition regrinding units, and pressure filtration of the final concentrate. High-pressure grinding rolls (HPGR) are an optional component of grinding. However, this technology is more applicable



where leaching is performed and electricity costs are high – neither of which are applicable to Opemiska.

### **13.5 2023 METALLURGICAL TESTING RESULTS ON AN OPEMISKA COMPOSITE**

The SGS laboratory in Quebec City performed basic grinding and flotation tests on the No. 1 Composite sample (Table 13-1).

Six rougher flotation tests indicated that a modest grind of P80 105  $\mu\text{m}$  (140 Mesh) was better than a coarser grind of 150  $\mu\text{m}$  (100 Mesh). Rougher copper and gold recoveries were 98% and 93%, respectively. The copper, gold and silver grades were 4.6%, 8.3 g/t and 21.5 g/t, respectively, with a 17.8% mass pull.

An optimized cleaner test yielded a final copper recovery of 90% (94% recovery to 1st cleaner +scavenger concentrate) with a grade of 26.5% Cu and a final gold recovery of 73% (81% recovery to 1st cleaner + scavenger concentrates), with a grade of 27.1 g/t Au. The regrind target (P80) on intermediate concentrates was moderate at 25  $\mu\text{m}$  to 30  $\mu\text{m}$ .

SGS suggested, and the Author agrees, that in closed cycle testing, good grades and recoveries could be expected – those comparable to historical production results.

### **13.6 ANTICIPATED METALLURGICAL PERFORMANCE OF THE OPEMISKA RESOURCE**

Historical metallurgical performance relationships have been highlighted and compared to the bulk sample test results (Figure 13-2). The red dot shows the bulk testwork result and blue dots are historical production data.

Almost linear relationship have been found for the copper head grade and final concentrate mass pull. Bulk sample mass pull is behaving the same as the historical production data.

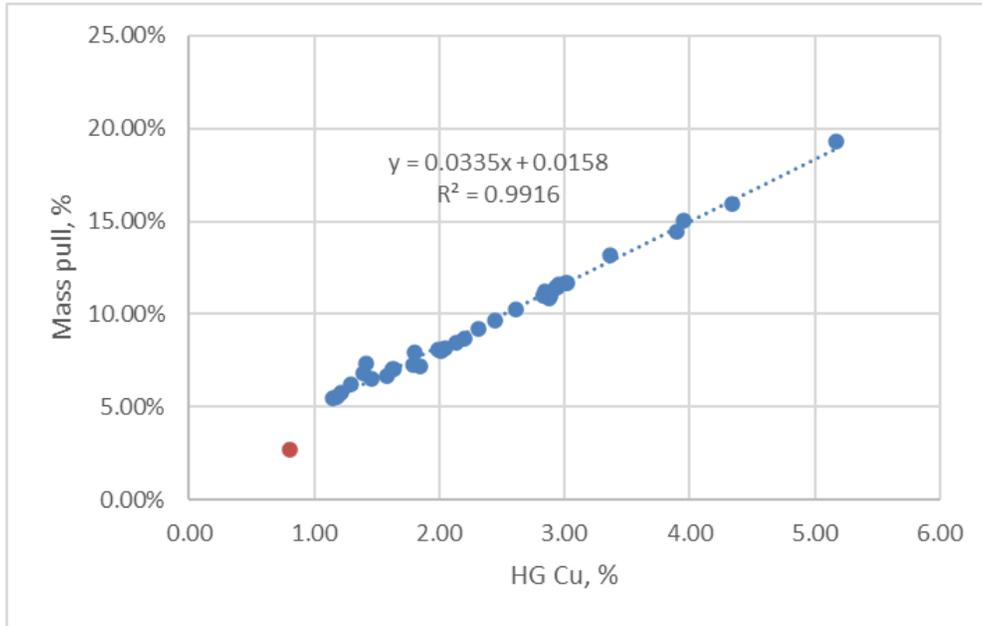


Figure 13-2 Copper head grade vs concentrate mass pull

Figure 13-3 shows the trendline of the head grade ratio of copper and gold in relation to the copper concentrate gold grade. The trendline also shows the bulk sample test results are in line with historical plant production data.

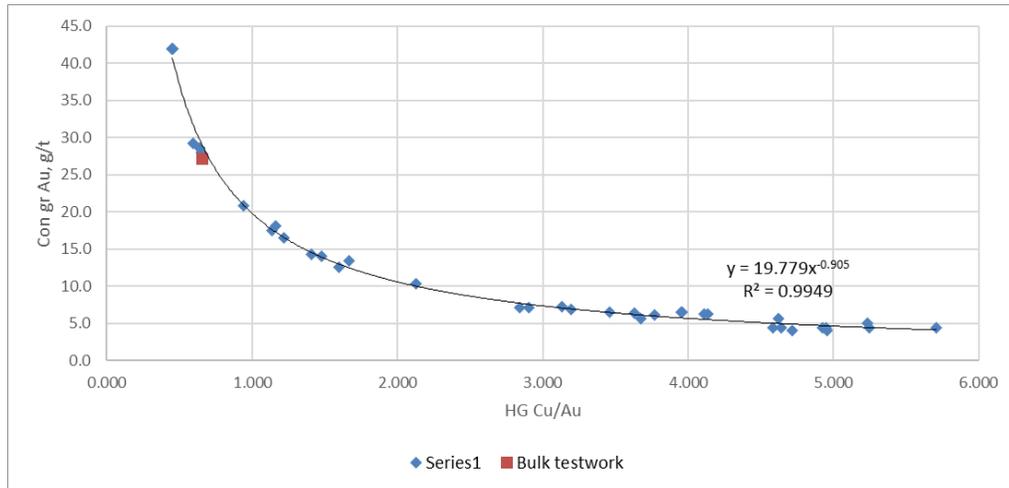


Figure 13-3 Head grade ration of copper/gold vs copper concentrate gold grade

Figure 13-4 shows that the gold/silver head grade ratio is linear to gold/silver ratio of the concentrate. Again, bulk sample testwork results are similar to historical production.

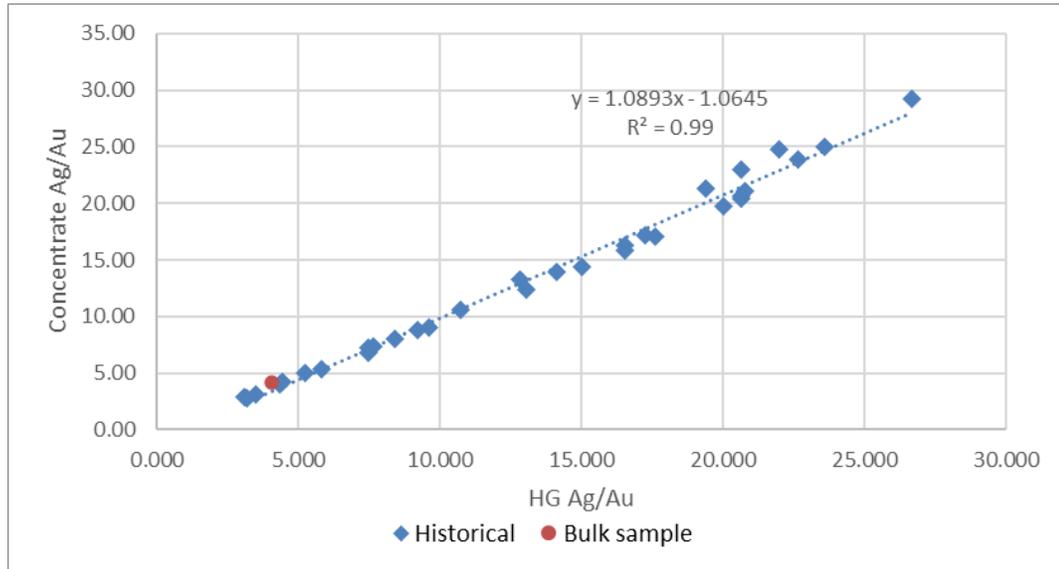
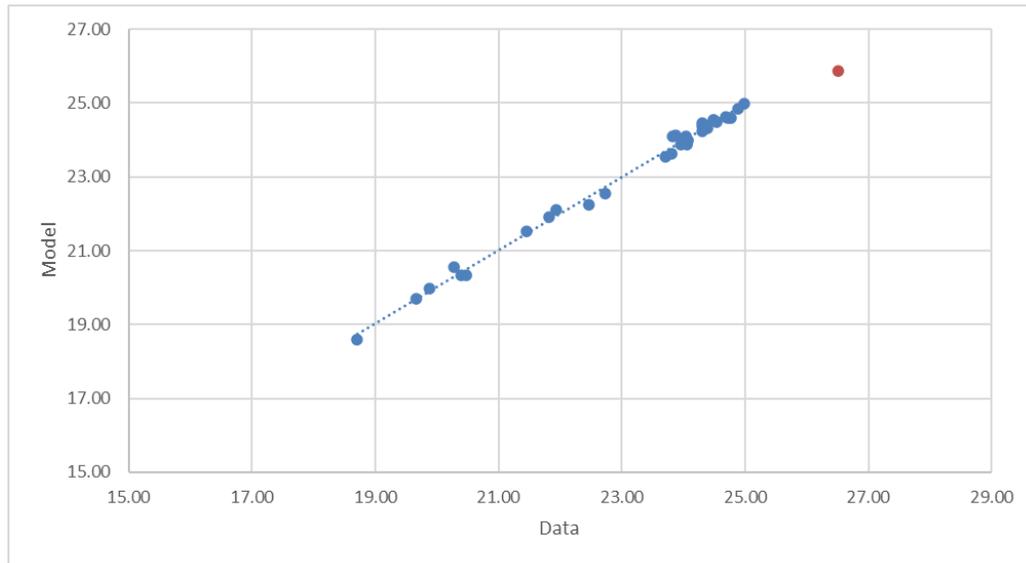


Figure 13-4 Head grade Ag/Au ratio vs concentrate Ag/Au ratio

Finally the copper concentrate copper grade was modeled using multi regression analysis (Figure 13-5). Bulk sample copper concentrate grade is responding similarly to the historical production data.



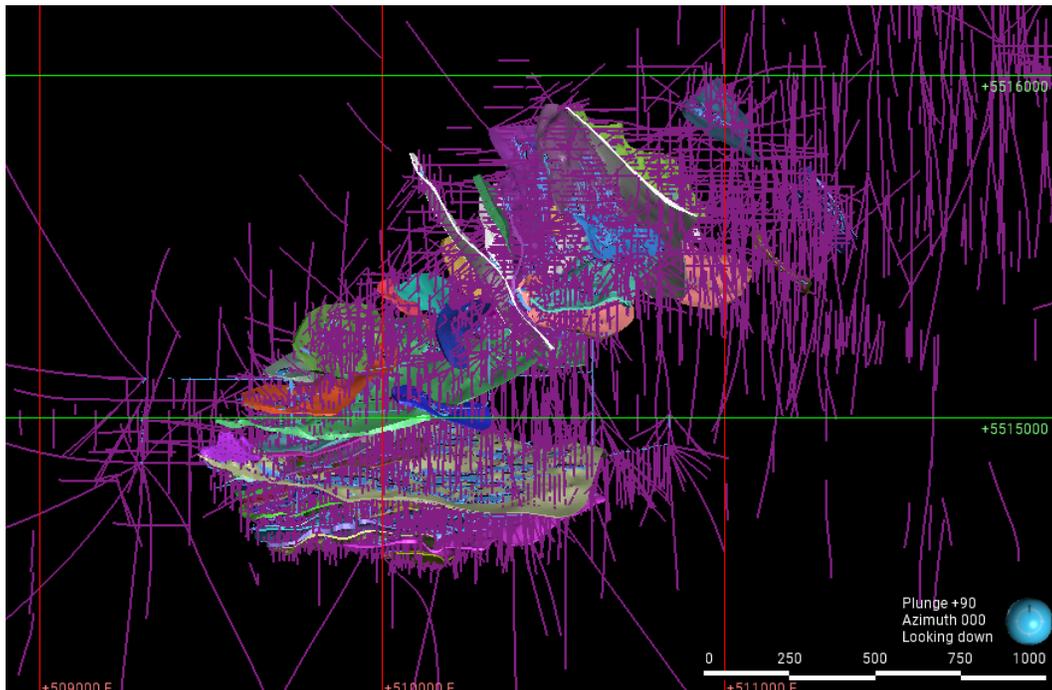
*Figure 13-5 Model vs Data of the historical production and bulk sample*

The bulk sample results were similar to historical plant data, as such, the historical trendline can be used to forecast the metallurgical performance of the Opemiska Project.

Concentrate mass pull, concentrate copper grade, concentrate gold grade and concentrate silver grade are dependent of the head grade and may be interdependent.

## 14 MINERAL RESOURCE ESTIMATE

The mineral resource estimate herein (the “2025 MRE” or the “MRE”) covers the Opemiska deposit only. Other occurrences on the Project were considered exploration targets at the time this Report was being prepared. Additional exploration work is needed before they can reach the stage of a mineral resource estimate. Figure 14-1 shows the Opemiska deposit in plan view.



*Figure 14-1 Overall 3D view looking down showing the high-grade zones and the drillholes*

### 14.1 METHODOLOGY

Leapfrog Geo™ and Edge™ v.2024.1.3 (“Leapfrog”) was used to update the geological and mineralized zones and to generate the drill hole intercepts for each solid. Leapfrog was used for compositing, 3D block modelling and interpolation. Statistical studies were conducted using Excel and Snowden Supervisor.

The methodology for the mineral resource estimation involved the following steps:

- Database verification
- 3D modelling of the geological zones

- 3D modelling update of the mineralized zones
- 3D modelling of a stockwork zones
- Drill hole intercept and composite generation
- Basic statistics
- Capping
- Geostatistical analysis including variography
- Block modelling and grade interpolation
- Block model validation
- Mineral resource classification
- Cut-off grade calculation
- Pit shell optimization
- DSO optimization
- Preparation of the mineral resource statement

## 14.2 RESOURCE DATABASE

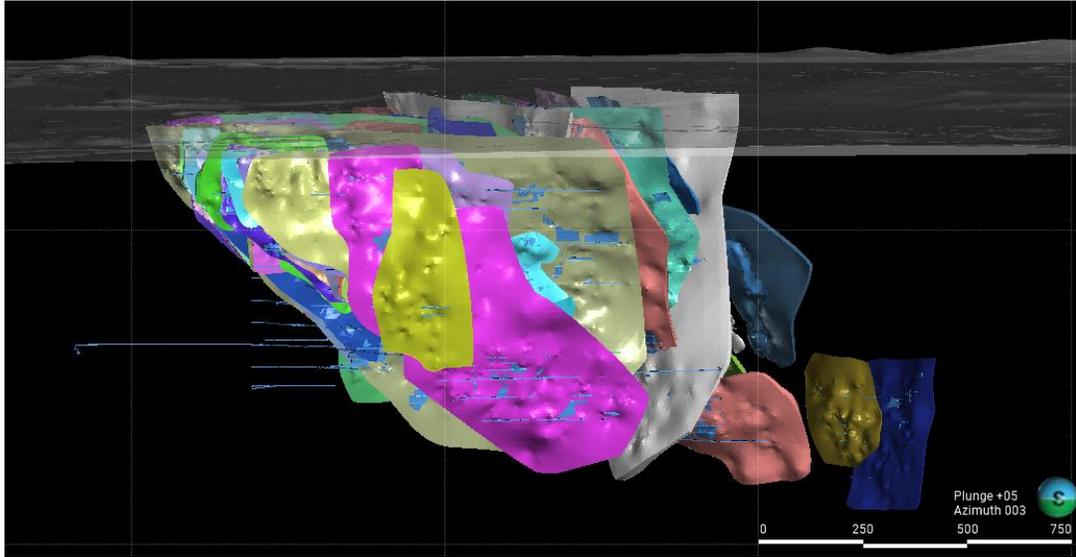
The MRE wireframes are based on 21,918 drill holes for 1,525,073 metres and 479,242 samples. The drill hole database includes recent drilling (2002 to 2025) for 73,227 metres in 382 drill holes (Ex-In, PowerOre, QC Copper & Gold, XXIX) and also incorporates historical drill holes (1930 to 1990) of 1,451,846 metres in 21,536 drill holes (Opemiska Copper Mines, Falconbridge, Minnova). The cut-off date for the drill hole database was May 16, 2025. The QP validated the database.

## 14.3 GEOLOGICAL MODEL

Geological and high-grade zone wireframes were provided by XXIX. The QP concentrated his efforts in updating the 3D model mainly by adding the Stockwork zones surrounding the high-grade zones.

In total, 19 high-grade zones in the Perry sector, 50 in the Springer sector, five (5) in the Saddle sector, and six (6) lithologies were modelled, as were the overburden, the historical underground voids and the topography. The geological model, the mineralized zone and the dilution envelope were clipped to the overburden/bedrock interface when necessary.

Figure 14-2 shows a 3D view of the geological model.



*Figure 14-2 3D Geological model of the Opemiska deposit (looking North)*

## 14.4 VOIDS MODEL

The Opemiska deposit has seen significant underground mining activity. Blocks affected by historical underground workings were sterilized.

The QP and XXIX are aware that the currently modeled voids lack precision. There are well representative of the volume of material historically mined-out, but galleries were modeled perfectly horizontal and did not take into consideration the fact that they were built with a small slope towards the shafts. Therefore drifts, stopes, and underground drill hole collars are likely off by up to a few meters. This is part of why the QP did not declare any Measured Resources despite openings and very tight drill spacing.

## 14.5 HISTORICAL DATABASE VALIDATION

Basic statistics have shown that multiple historical drill holes had significantly high lower detection limits for Au of 0.0857g/t (0.0025 oz/t) and 0.1714g/t (0.005 oz/t).

The QP therefore geostatistically reviewed the data by creating 3D grade-distance paired plots with the following two populations: historical holes with high lower-detection limits and recent holes with low lower-detection limits. This method allows to compare every composite from a database (historical holes) to every

composite from a second database (recent holes) by comparing grades, but also the distance between each individual samples.

The purpose of creating these charts was to identify any bias and understand the impacts of using the historical database “as-is” versus applying a conservative approach such as forcing all samples at the lower detection limit to 0.00g/t or at any arbitrary values in-between. Comparing two non-biased databases would show similar average grade in the center of the graph where biased databases would show a disconnect in the center of the graph.

After running numerous tests, it was demonstrated that using gold value as per presented in the historical database does not bias the database. Lowering these values would in fact negatively bias the database and therefore the block model. The 3D pair-distance plots supporting these actions are presented in Figure 14-3 (for the high-grade zones) and Figure 14-4 (Stockwork zones).

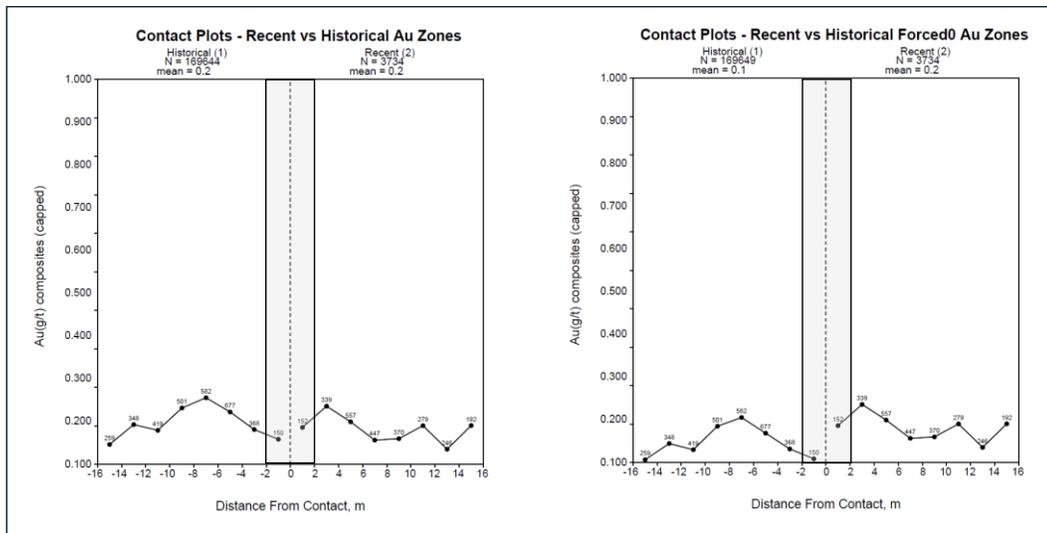


Figure 14-3 3D grade-distance paired plots for gold in the High-grade zones

The graph on the left shows the historical database as-is being geostatistically compared to the recent database. The graph on the right shows all samples where the lower detection limit is either 0.0025 or 0.005 oz/t being forced to 0.00g/t. These graphs clearly shows that altering the database is introducing a negative bias not supported by recent drillholes.

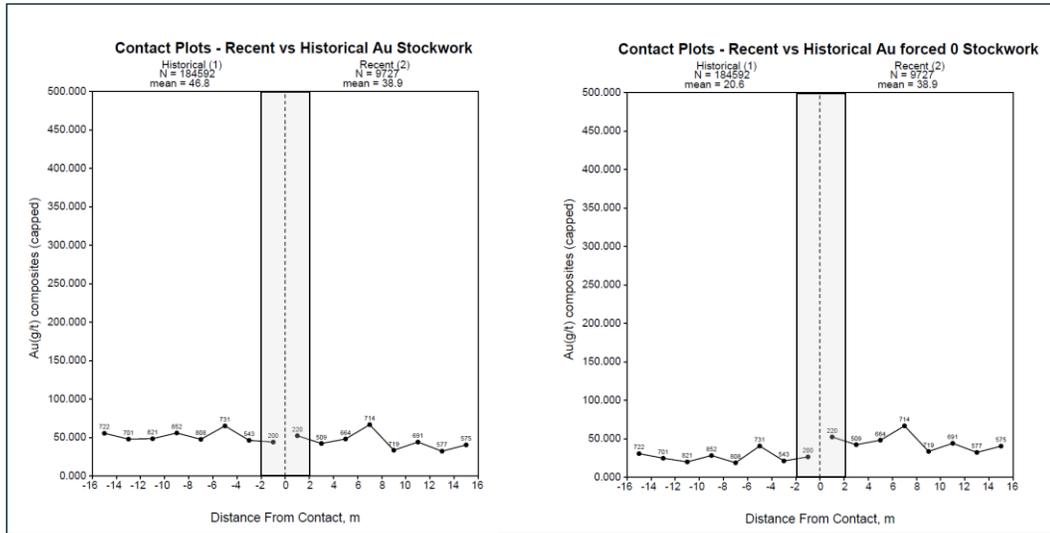


Figure 14-4 3D grade-distance paired plots for gold in the Stockwork zones

The graph on the left shows the historical database as-is being geostatistically compared to the recent database. The graph on the right shows all samples where the lower detection limit is either 0.0025 or 0.005 oz/t being forced to 0.00g/t. These graphs clearly shows that altering the database is introducing a negative bias not supported by recent drillholes.

As part of the historical database validation, the QP also looked for any bias in Ag and Cu.

Both graphs in Figure 14-5 show the historical silver database as-is being geostatistically compared to the recent database. Both graphs show that the historical database is negatively biased for silver grades at the Opemiska deposit. This represents an upside for the Project.

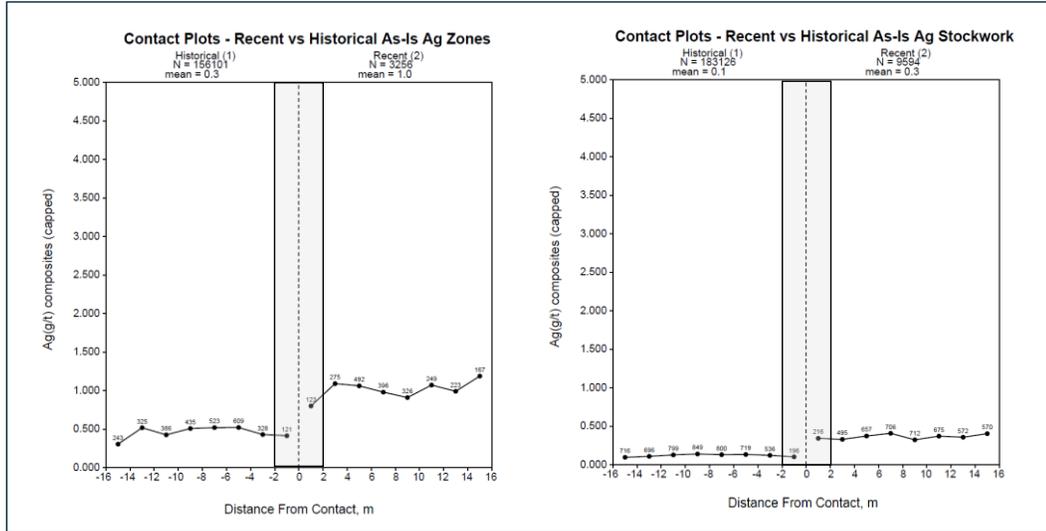


Figure 14-5 3D grade-distance paired plots for silver in the high-grade zones (left) and Stockwork zones (right)

Both graphs show the historical database as-is being geostatistically compared to the recent database. Both graphs show that the historical database is negatively biased for silver grades at the Opemiska deposit. This represents an upside for the Project.

Copper is presented in Figure 14-6. Both graphs show the historical database as-is being geostatistically compared to the recent database. The graph on the left (high-grade zones) shows that the historical database is positively biased for copper grades. This is what one could expect from an historical mine that saw significant mining depletion. Recent drilling did not crosscut the higher-grade material that was depleted, and therefore explain the disconnect shown in the graph. The graph on the right (Stockwork Zones; outside historical mine depletion) shows no bias.

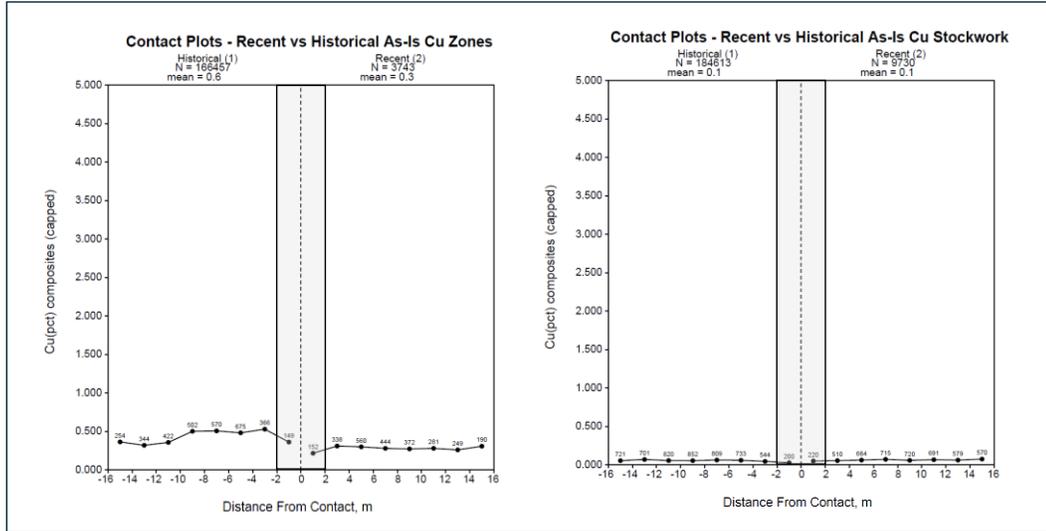


Figure 14-6 3D grade-distance paired plots for copper in the high-grade zones (left) and Stockwork zones (right)

Both graphs show the historical database as-is being geostatistically compared to the recent database. The graph on the left (high-grade zones) shows that the historical database is positively biased for copper grades. This is what one could expect from an historical mine that saw significant mining depletion. The graph on the right (Stockwork Zones; outside historical mine depletion) shows no bias.

## 14.6 COMPOSITING

All raw assay data intersecting the mineralized zone, the Stockworks, and the various lithological units were assigned individual rock codes. These coded intercepts were used to produce basic statistics on sample lengths and grades. A total of 201,805 assays are included in the high-grade mineralized zones and 224,095 in the Stockwork zones.

Compositing drill hole samples aimed to homogenize the database for statistical analysis and remove any bias associated with sample lengths that may exist in the original database. The composite length was determined using original sample length statistics and the thickness of the mineralized zones.

In the mineralized zones, 86% of the samples are less than 1.53 m long with the average sample length being 1.26 m. In the Stockwork zones, 88% of the samples are less than 3.05 m long with the average sample length being 2.50 m. Based on these statistics and geological considerations, 363,902 composites were generated with an average length of 1.5 m in the high-grade zones and 3m in the Stockwork zones, after redistributing the tails.



## 14.7 CAPPING

It is common practice to statistically examine the higher grades within a population and to trim them to a lower grade value based on the results of a statistical study. Capping is performed on high-grade values considered to be outliers. An outlier is an observation that appears inconsistent with most of the data. High-grade capping was done on the composited assay.

The capping values were defined by checking for abnormal breaks or changes in the slope on the grade distribution probability plot while making sure that the coefficient of variation of the capped data was ideally lower than 2.00 and no more than 10% of the total contained metal was enclosed within the first 1% of the highest-grade samples. The use of various statistical methods allows for a selection of the capping threshold in a more objective and justified manner.

Basic statistics for Cu, Au, and Ag composites and capped composites are summarized in Tables 14-1 to 14-3 respectively. Figure 14-7 to Figure 14-9 show graphs supporting the capping threshold decisions for one of the high grade zones. Capping was defined on all 76 zones (high grade and Stockwork) individually for Cu and Au and on sectors for Ag.



Table 14-1 Basic statistics on composites and high-grade capping values for Cu

Zones		Raw (uncap)						Capping	Restricted Search (RS)	Capped						
		Count	Min	Max	Mean	Median	COV			Min	Max	Mean	Median	COV	COV (with RS)	
Perry	PERRY-FLT_B	2,757	0.00	26.17	1.19	0.34	1.76	17.50	Nil	0.00	17.50	1.19	0.34	1.72	1.72	
	PERRY-FLT_J	1,133	0.00	16.54	1.53	0.67	1.50	15.00	Nil	0.00	15.00	1.53	0.67	1.49	1.49	
	PERRY-FLT_P-1	1,667	0.00	21.07	0.69	0.11	2.37	15.00	Nil	0.00	15.00	0.68	0.11	2.32	2.32	
	PERRY-FLT_P-2	3,505	0.00	15.61	0.98	0.13	2.23	15.00	Nil	0.00	15.00	0.98	0.13	2.23	2.23	
	PERRY-FLT_P-3	1,682	0.00	11.89	0.93	0.34	1.42	7.50	Nil	0.00	7.50	0.92	0.34	1.39	1.39	
	PERRY-VA	4,322	0.00	18.59	0.59	0.20	1.90	15.00	Nil	0.00	15.00	0.59	0.20	1.88	1.88	
	PERRY-VA-1	1,553	0.00	9.27	0.33	0.10	1.86	4.00	Nil	0.00	4.00	0.32	0.10	1.72	1.72	
	PERRY-VA-2	903	0.00	13.73	0.74	0.20	2.14	12.50	Nil	0.00	12.50	0.74	0.20	2.13	2.13	
	PERRY-VB	18,099	0.00	27.63	1.18	0.35	1.98	25.00	Nil	0.00	25.00	1.18	0.35	1.98	1.98	
	PERRY-VB-2	217	0.00	26.45	0.89	0.15	2.59	6.00	Nil	0.00	6.00	0.76	0.15	1.80	1.80	
	PERRY-VC	5,948	0.00	20.05	0.87	0.21	2.03	17.50	Nil	0.00	17.50	0.86	0.21	2.02	2.02	
	PERRY-VD	11,750	0.00	21.36	0.84	0.27	1.91	17.50	Nil	0.00	17.50	0.84	0.27	1.90	1.90	
	PERRY-VE	4,322	0.00	18.67	0.59	0.15	2.13	12.50	Nil	0.00	12.50	0.58	0.15	2.10	2.10	
	PERRY-VJ	3,353	0.00	15.07	0.87	0.31	1.68	15.00	Nil	0.00	15.00	0.87	0.31	1.68	1.68	
	PERRY-VJ-2	1,592	0.00	15.74	0.84	0.29	1.87	10.00	Nil	0.00	10.00	0.83	0.29	1.79	1.79	
	PERRY-VJ3	2,426	0.00	28.23	0.99	0.34	2.01	20.00	Nil	0.00	20.00	0.99	0.34	1.94	1.94	
	PERRY-VJ4	4,065	0.00	16.00	0.87	0.35	1.50	12.50	Nil	0.00	12.50	0.87	0.35	1.48	1.48	
	PERRY-VJ5	252	0.00	3.84	0.47	0.19	1.53	3.00	Nil	0.00	3.00	0.46	0.19	1.49	1.49	
	PERRY-VK	870	0.00	17.99	0.55	0.13	2.81	12.50	Nil	0.00	12.50	0.54	0.13	2.64	2.64	
	PERRY-STKW	30,821	0.00	23.97	0.21	0.04	3.24	15.00	1.50	0.00	15.00	0.21	0.04	3.16	2.02	
	Springer	SPRINGER-V02	14,515	0.00	27.05	0.99	0.18	2.18	25.00	Nil	0.00	25.00	0.99	0.18	2.18	2.18
		SPRINGER-V00	1,026	0.00	15.41	0.51	0.26	1.79	7.50	Nil	0.00	7.50	0.50	0.26	1.63	1.63
		SPRINGER-V01	2,305	0.00	24.77	0.78	0.24	2.17	17.50	Nil	0.00	17.50	0.77	0.24	2.13	2.13
		SPRINGER-V03	21,122	0.00	22.61	1.12	0.50	1.57	20.00	Nil	0.00	20.00	1.12	0.50	1.57	1.57
		SPRINGER-V03_Ext	1,374	0.00	16.22	0.73	0.24	1.96	12.50	Nil	0.00	12.50	0.72	0.24	1.90	1.90
		SPRINGER-V04	2,340	0.00	19.43	0.89	0.22	2.09	17.50	Nil	0.00	17.50	0.89	0.22	2.08	2.08
		SPRINGER-V05	2,359	0.00	8.70	0.53	0.19	1.57	7.50	Nil	0.00	7.50	0.52	0.19	1.56	1.56
		SPRINGER-V05_B	2,065	0.00	18.00	0.59	0.15	2.34	12.50	Nil	0.00	12.50	0.59	0.15	2.26	2.26
		SPRINGER-V06	3,754	0.00	15.57	0.51	0.12	2.11	10.00	Nil	0.00	10.00	0.51	0.12	2.06	2.06
		SPRINGER-V06_S	1,213	0.00	5.69	0.23	0.04	2.03	4.00	Nil	0.00	4.00	0.23	0.04	1.94	1.94
SPRINGER-V07		6,580	0.00	16.14	0.51	0.23	1.55	10.00	Nil	0.00	10.00	0.50	0.23	1.53	1.53	
SPRINGER-V07_S		3,830	0.00	9.34	0.31	0.09	1.95	6.00	Nil	0.00	6.00	0.30	0.09	1.87	1.87	
SPRINGER-V08		861	0.00	24.38	0.96	0.29	1.98	15.00	Nil	0.00	15.00	0.95	0.29	1.88	1.88	
SPRINGER-V09		4,562	0.00	14.63	0.59	0.22	1.76	12.50	Nil	0.00	12.50	0.59	0.22	1.76	1.76	
SPRINGER-V10		1,067	0.00	10.29	0.35	0.01	2.21	4.00	Nil	0.00	4.00	0.34	0.01	1.97	1.97	
SPRINGER-V11-1		855	0.00	10.13	0.50	0.21	1.59	5.00	Nil	0.00	5.00	0.49	0.21	1.48	1.48	
SPRINGER-V11-2		973	0.00	8.24	0.43	0.14	1.92	7.50	Nil	0.00	7.50	0.43	0.14	1.91	1.91	
SPRINGER-V13		891	0.00	22.55	0.55	0.01	2.91	8.00	Nil	0.00	8.00	0.51	0.01	2.39	2.39	
SPRINGER-V20		689	0.00	12.46	0.64	0.41	1.33	4.00	Nil	0.00	4.00	0.62	0.41	1.06	1.06	
SPRINGER-V21		866	0.00	12.52	0.90	0.27	1.80	10.00	Nil	0.00	10.00	0.89	0.27	1.77	1.77	
SPRINGER-V22		327	0.00	11.90	0.64	0.17	2.15	7.50	Nil	0.00	7.50	0.62	0.17	1.94	1.94	
SPRINGER-V23		6,791	0.00	19.72	0.75	0.28	1.90	17.50	Nil	0.00	17.50	0.75	0.28	1.90	1.90	
SPRINGER-V28		41	0.01	12.10	0.86	0.23	2.29	3.50	Nil	0.01	3.50	0.65	0.23	1.48	1.48	
SPRINGER-V29		281	0.00	9.29	0.53	0.20	1.90	5.00	Nil	0.00	5.00	0.51	0.20	1.72	1.72	
SPRINGER-V30		659	0.00	9.42	0.75	0.27	1.80	8.00	Nil	0.00	8.00	0.75	0.27	1.77	1.77	
SPRINGER-V31		989	0.00	18.64	0.64	0.24	2.03	8.00	Nil	0.00	8.00	0.63	0.24	1.81	1.81	
SPRINGER-V31A		34	0.00	0.98	0.28	0.22	0.77	1.00	Nil	0.00	0.98	0.28	0.22	0.77	0.77	
SPRINGER-V32		1,808	0.00	18.06	0.76	0.31	1.88	12.50	Nil	0.00	12.50	0.75	0.31	1.82	1.82	
SPRINGER-V32_B		188	0.00	14.64	0.69	0.30	1.99	7.50	Nil	0.00	7.50	0.66	0.30	1.61	1.61	
SPRINGER-V33		1,254	0.00	11.26	0.56	0.21	1.92	10.00	Nil	0.00	10.00	0.56	0.21	1.91	1.91	
SPRINGER-V33_B		1,406	0.00	15.05	0.63	0.33	1.59	7.50	Nil	0.00	7.50	0.62	0.33	1.49	1.49	
SPRINGER-V34		1,043	0.00	22.01	0.96	0.25	2.31	15.00	Nil	0.00	15.00	0.94	0.25	2.21	2.21	
SPRINGER-V34_B		278	0.00	5.06	0.27	0.09	2.03	3.00	Nil	0.00	3.00	0.25	0.09	1.76	1.76	
SPRINGER-V34_C		111	0.00	4.92	0.39	0.16	1.81	3.00	Nil	0.00	3.00	0.37	0.16	1.63	1.63	
SPRINGER-V34_D		101	0.00	2.12	0.29	0.19	1.26	2.50	Nil	0.00	2.12	0.29	0.19	1.26	1.26	
SPRINGER-V34_E		277	0.00	16.44	0.79	0.16	2.85	15.00	Nil	0.00	15.00	0.79	0.16	2.82	2.82	
SPRINGER-V34_F		28	0.00	1.86	0.23	0.10	1.68	2.50	Nil	0.00	1.86	0.23	0.10	1.68	1.68	
SPRINGER-V34_North		382	0.00	12.90	0.57	0.24	2.07	6.00	Nil	0.00	6.00	0.55	0.24	1.82	1.82	
SPRINGER-V39-40		2,745	0.00	16.22	0.59	0.25	1.78	10.00	Nil	0.00	10.00	0.59	0.25	1.73	1.73	
SPRINGER-V41		1,725	0.00	17.02	0.65	0.24	1.85	12.50	Nil	0.00	12.50	0.64	0.24	1.80	1.80	
SPRINGER-V41_B		2,297	0.00	21.40	0.81	0.23	2.18	17.50	Nil	0.00	17.50	0.81	0.23	2.15	2.15	
SPRINGER-V42		1,833	0.00	13.77	0.75	0.25	1.85	12.50	Nil	0.00	12.50	0.74	0.25	1.84	1.84	
SPRINGER-V42_A		586	0.00	9.56	0.46	0.13	2.30	7.50	Nil	0.00	7.50	0.45	0.13	2.26	2.26	
SPRINGER-V43		450	0.00	15.28	0.52	0.15	2.70	6.00	Nil	0.00	6.00	0.47	0.15	2.18	2.18	
SPRINGER-V60		1,396	0.00	10.95	0.34	0.16	1.86	5.00	Nil	0.00	5.00	0.33	0.16	1.66	1.66	
SPRINGER-V61		663	0.00	15.87	0.45	0.20	2.45	6.00	Nil	0.00	6.00	0.41	0.20	1.76	1.76	
SPRINGER-V62		1,099	0.00	12.30	0.39	0.17	1.93	3.50	Nil	0.00	3.50	0.37	0.17	1.52	1.52	
SPRINGER-V63	561	0.00	8.85	0.40	0.14	2.01	6.00	Nil	0.00	6.00	0.39	0.14	1.91	1.91		
SPRINGER-V64-65	619	0.00	17.09	0.36	0.10	2.76	7.50	Nil	0.00	7.50	0.34	0.10	2.28	2.28		
SPRINGER-V72	552	0.00	7.13	0.35	0.16	1.65	3.00	Nil	0.00	3.00	0.34	0.16	1.46	1.46		
SPRINGER-STKW	62,514	0.00	13.34	0.12	0.02	3.28	1.00	0.25	0.00	1.00	0.09	0.02	2.12	1.43		
Saddle	SADDLE_00	449	0.00	24.27	0.89	0.11	2.71	12.50	Nil	0.00	12.50	0.84	0.11	2.43	2.43	
	SADDLE_01	90	0.00	7.40	0.50	0.01	2.15	3.00	Nil	0.00	3.00	0.42	0.01	1.60	1.60	
	SADDLE_02	111	0.00	12.38	0.79	0.72	1.65	4.00	Nil	0.00	4.00	0.71	0.72	1.06	1.06	
	SADDLE_03	59	0.00	8.25	0.79	0.47	1.61	2.50	Nil	0.00	2.50	0.66	0.47	1.08	1.08	
	SADDLE_05	38	0.00	6.05	1.36	1.00	0.99	3.50	Nil	0.00	3.50	1.29	1.00	0.89	0.89	
SADDLE_STKW	2,712	0.00	3.10	0.08	0.01	2.47	1.00	Nil	0.00	1.00	0.07	0.01	2.05	2.05		



Table 14-2 Basic statistics on composites and high-grade capping values for Au

Zones		Raw (uncap)						Capping	Restricted Search (RS)	Capped						
		Count	Min	Max	Mean	Median	COV			Min	Max	Mean	Median	COV	COV (with RS)	
Perry	PERRY-FLT_B	2,757	0.00	18.51	0.14	0.01	3.94	3.50	Nil	0.00	3.50	0.12	0.01	2.76	2.76	
	PERRY-FLT_J	1,133	0.00	4.82	0.15	0.09	2.02	5.00	Nil	0.00	4.82	0.15	0.09	2.02	2.02	
	PERRY-FLT_P-1	1,667	0.00	14.78	0.16	0.09	3.26	3.50	Nil	0.00	3.50	0.15	0.09	2.05	2.05	
	PERRY-FLT_P-2	3,505	0.00	21.35	0.08	0.01	6.35	3.00	1.50	0.00	3.00	0.07	0.01	3.53	2.71	
	PERRY-FLT_P-3	1,682	0.00	4.66	0.08	0.06	1.94	5.00	Nil	0.00	4.66	0.08	0.06	1.94	1.94	
	PERRY-VA	4,322	0.00	41.93	0.15	0.09	5.93	3.00	Nil	0.00	3.00	0.13	0.09	2.10	2.10	
	PERRY-VA-1	1,553	0.00	2.87	0.04	0.01	3.27	1.00	Nil	0.00	1.00	0.04	0.01	2.33	2.33	
	PERRY-VA-2	903	0.00	11.65	0.23	0.09	2.81	3.00	Nil	0.00	3.00	0.21	0.09	1.96	1.96	
	PERRY-VB	18,099	0.00	92.50	0.14	0.01	6.32	3.50	Nil	0.00	3.50	0.12	0.01	2.58	2.58	
	PERRY-VB-2	217	0.00	5.49	0.11	0.01	3.90	1.00	Nil	0.00	1.00	0.08	0.01	2.17	2.17	
	PERRY-VC	5,948	0.00	8.87	0.08	0.01	3.25	3.50	Nil	0.00	3.50	0.08	0.01	2.80	2.80	
	PERRY-VD	11,750	0.00	15.71	0.10	0.01	4.03	5.00	Nil	0.00	5.00	0.09	0.01	2.77	2.77	
	PERRY-VE	4,322	0.00	12.52	0.14	0.09	3.26	5.00	Nil	0.00	5.00	0.13	0.09	2.73	2.73	
	PERRY-VJ	3,353	0.01	1.71	0.03	0.01	3.29	1.50	Nil	0.01	1.50	0.03	0.01	3.25	3.25	
	PERRY-VJ-2	1,592	0.00	7.09	0.11	0.09	2.92	2.50	Nil	0.00	2.50	0.10	0.09	2.34	2.34	
	PERRY-VJ3	2,426	0.00	0.91	0.02	0.01	2.59	0.50	Nil	0.00	0.50	0.02	0.01	2.50	2.50	
	PERRY-VJ4	4,065	0.00	1.57	0.03	0.01	3.40	1.00	0.35	0.00	1.00	0.02	0.01	3.21	2.64	
	PERRY-VJ5	252	0.01	1.04	0.05	0.01	2.47	0.50	Nil	0.01	0.50	0.04	0.01	1.95	1.95	
	PERRY-VK	870	0.00	3.14	0.05	0.01	3.27	1.00	Nil	0.00	1.00	0.05	0.01	2.42	2.42	
	PERRY-STKW	19,514	0.00	16.49	0.10	0.09	2.07	3.50	Nil	0.00	3.50	0.09	0.09	1.46	1.46	
	Springer	SPRINGER-V02	14,515	0.00	50.03	0.13	0.01	6.21	12.50	1.00	0.00	12.50	0.13	0.01	4.91	2.61
		SPRINGER-V00	1,026	0.00	11.83	0.30	0.09	2.79	4.00	Nil	0.00	4.00	0.27	0.09	2.11	2.11
		SPRINGER-V01	2,305	0.00	43.22	0.41	0.07	4.28	7.50	Nil	0.00	7.50	0.35	0.07	2.90	2.90
		SPRINGER-V03	21,122	0.00	55.54	0.29	0.17	3.92	10.00	Nil	0.00	10.00	0.27	0.17	2.76	2.76
		SPRINGER-V03_Ext	1,374	0.00	13.44	0.28	0.17	2.51	7.50	Nil	0.00	7.50	0.28	0.17	2.28	2.28
SPRINGER-V04		2,340	0.00	30.47	0.38	0.01	3.70	7.50	Nil	0.00	7.50	0.34	0.01	2.74	2.74	
SPRINGER-V05		2,359	0.00	14.09	0.35	0.09	2.50	9.00	Nil	0.00	9.00	0.35	0.09	2.41	2.41	
SPRINGER-V05_B		2,065	0.00	96.35	0.78	0.09	5.29	35.00	7.50	0.00	35.00	0.69	0.09	3.96	2.47	
SPRINGER-V06		3,754	0.00	232.42	1.32	0.09	5.70	35.00	12.50	0.00	35.00	1.08	0.09	3.51	2.66	
SPRINGER-V06_S		1,213	0.00	33.53	0.46	0.09	4.20	10.00	5.00	0.00	10.00	0.39	0.09	3.09	2.56	
SPRINGER-V07		6,580	0.00	94.67	0.94	0.14	3.29	25.00	Nil	0.00	25.00	0.90	0.14	2.79	2.79	
SPRINGER-V07_S		3,830	0.00	69.80	0.70	0.09	4.41	35.00	7.50	0.00	35.00	0.68	0.09	4.03	2.68	
SPRINGER-V08		861	0.00	23.53	0.16	0.01	5.38	2.50	Nil	0.00	2.50	0.13	0.01	2.55	2.55	
SPRINGER-V09		4,562	0.00	28.14	0.32	0.09	3.04	12.50	Nil	0.00	12.50	0.32	0.09	2.77	2.77	
SPRINGER-V10		1,067	0.00	10.35	0.17	0.09	2.70	5.00	Nil	0.00	5.00	0.17	0.09	2.26	2.26	
SPRINGER-V11-1		855	0.00	11.66	0.22	0.09	2.66	4.00	Nil	0.00	4.00	0.21	0.09	2.14	2.14	
SPRINGER-V11-2		973	0.00	5.45	0.15	0.01	2.51	3.50	Nil	0.00	3.50	0.15	0.01	2.35	2.35	
SPRINGER-V13		891	0.00	24.70	0.33	0.01	4.48	10.00	3.50	0.00	10.00	0.29	0.01	3.73	2.84	
SPRINGER-V20		689	0.00	20.79	0.40	0.10	3.17	10.00	Nil	0.00	10.00	0.37	0.10	2.59	2.59	
SPRINGER-V21		866	0.00	11.05	0.22	0.09	3.35	6.00	Nil	0.00	6.00	0.21	0.09	2.83	2.83	
SPRINGER-V22		327	0.00	16.49	0.13	0.01	7.42	1.00	Nil	0.00	1.00	0.07	0.01	2.56	2.56	
SPRINGER-V23		6,791	0.00	38.68	0.35	0.09	3.76	20.00	7.50	0.00	20.00	0.35	0.09	3.31	2.56	
SPRINGER-V28		41	0.01	1.03	0.12	0.01	2.03	1.50	Nil	0.01	1.03	0.12	0.01	2.03	2.03	
SPRINGER-V29		281	0.01	3.37	0.17	0.09	2.52	2.50	Nil	0.01	2.50	0.17	0.09	2.40	2.40	
SPRINGER-V30		659	0.00	9.58	0.30	0.09	2.64	7.50	Nil	0.00	7.50	0.30	0.09	2.54	2.54	
SPRINGER-V31		989	0.00	20.03	0.25	0.09	4.03	3.50	Nil	0.00	3.50	0.20	0.09	2.55	2.55	
SPRINGER-V31A		34	0.07	2.34	0.25	0.09	2.03	2.50	Nil	0.07	2.34	0.25	0.09	2.03	2.03	
SPRINGER-V32		1,808	0.00	17.18	0.28	0.09	3.55	5.00	Nil	0.00	5.00	0.25	0.09	2.54	2.54	
SPRINGER-V32_B		188	0.00	25.12	0.50	0.09	4.21	6.00	3.00	0.00	6.00	0.38	0.09	2.78	2.25	
SPRINGER-V33		1,254	0.00	15.64	0.30	0.09	3.14	12.00	4.00	0.00	12.00	0.30	0.09	3.03	2.27	
SPRINGER-V33_B		1,406	0.00	48.65	0.43	0.09	4.00	15.00	6.00	0.00	15.00	0.41	0.09	2.97	2.36	
SPRINGER-V34		1,043	0.00	12.27	0.29	0.09	2.99	9.00	3.00	0.00	9.00	0.28	0.09	2.89	2.16	
SPRINGER-V34_B		278	0.00	2.06	0.15	0.09	1.76	2.50	Nil	0.00	2.06	0.15	0.09	1.76	1.76	
SPRINGER-V34_C		111	0.01	12.32	0.56	0.09	3.06	3.50	Nil	0.01	3.50	0.38	0.09	2.00	2.00	
SPRINGER-V34_D		101	0.00	1.68	0.18	0.09	1.61	2.00	Nil	0.00	1.68	0.18	0.09	1.61	1.61	
SPRINGER-V34_E		277	0.00	16.21	0.66	0.09	3.14	15.00	4.00	0.00	15.00	0.65	0.09	3.11	2.12	
SPRINGER-V34_F		28	0.01	1.92	0.18	0.09	2.03	2.00	Nil	0.01	1.92	0.18	0.09	2.03	2.03	
SPRINGER-V34_North		382	0.00	13.65	0.43	0.09	2.76	7.00	Nil	0.00	7.00	0.39	0.09	2.26	2.26	
SPRINGER-V39-40		2,745	0.00	43.89	0.37	0.09	4.59	20.00	4.50	0.00	20.00	0.35	0.09	3.80	2.34	
SPRINGER-V41		1,725	0.00	31.51	0.34	0.09	3.90	6.00	Nil	0.00	6.00	0.30	0.09	2.49	2.49	
SPRINGER-V41_B		2,297	0.00	51.04	0.41	0.09	3.97	7.50	Nil	0.00	7.50	0.36	0.09	2.59	2.59	
SPRINGER-V42		1,833	0.00	46.42	0.36	0.09	4.03	17.00	5.00	0.00	17.00	0.35	0.09	3.08	2.35	
SPRINGER-V42_A		586	0.00	52.25	0.41	0.09	7.11	4.50	Nil	0.00	4.50	0.23	0.09	2.61	2.61	
SPRINGER-V43		450	0.00	26.60	0.29	0.09	5.34	15.00	2.00	0.00	15.00	0.26	0.09	4.34	2.16	
SPRINGER-V60		1,396	0.00	49.88	0.77	0.09	3.77	30.00	7.50	0.00	30.00	0.76	0.09	3.58	2.35	
SPRINGER-V61		663	0.00	44.47	0.82	0.09	3.60	20.00	7.00	0.00	20.00	0.76	0.09	2.97	2.16	
SPRINGER-V62		1,099	0.00	59.90	1.02	0.12	3.53	35.00	10.00	0.00	35.00	0.97	0.12	3.07	2.18	
SPRINGER-V63	561	0.00	61.10	1.19	0.09	3.40	25.00	10.00	0.00	25.00	1.11	0.09	2.84	2.32		
SPRINGER-V64-65	619	0.00	124.98	1.61	0.09	4.40	30.00	6.00	0.00	30.00	1.37	0.09	3.34	2.14		
SPRINGER-V72	552	0.00	53.31	0.69	0.09	4.37	12.00	6.50	0.00	12.00	0.57	0.09	2.45	2.15		
SPRINGER-STKW	55,762	0.00	85.18	0.17	0.09	6.38	12.50	2.50	0.00	12.50	0.16	0.09	3.91	2.18		
Saddle	SADDLE_00	449	0.00	16.87	0.32	0.02	4.65	3.50	Nil	0.00	3.50	0.21	0.02	2.88	2.88	
	SADDLE_01	90	0.00	2.61	0.11	0.01	2.59	0.50	Nil	0.00	0.50	0.09	0.01	1.28	1.28	
	SADDLE_02	111	0.00	3.24	0.26	0.10	1.73	3.00	Nil	0.00	3.00	0.26	0.10	1.69	1.69	
	SADDLE_03	59	0.01	4.34	0.46	0.17	1.53	4.50	Nil	0.01	4.34	0.46	0.17	1.53	1.53	
	SADDLE_05	38	0.00	1.47	0.28	0.17	1.15	1.50	Nil	0.00	1.47	0.28	0.17	1.15	1.15	
SADDLE_STKW	2,584	0.00	3.06	0.05	0.01	2.95	1.00	Nil	0.00	1.00	0.05	0.01	2.18	2.18		

Table 14-3 Basic statistics on composites and high-grade capping values for Ag

Zones	Raw (uncap)						Capping	Restricted Search (RS)	Capped				
	Count	Min	Max	Mean	Median	COV			Min	Max	Mean	Median	COV (with RS)
PERRY High-grade Zones	19,222	0.00	18.11	2.69	0.59	1.47	17.50	NII	0.00	17.50	2.69	0.59	0.59
PERRY Stockwork Zones	1,875	0.00	44.61	0.71	0.16	2.75	12.50	NII	0.00	12.50	0.68	0.16	0.16
SPRINGER High-grade Zones	46,643	0.00	243.54	3.76	1.04	2.12	120.00	NII	0.00	120.00	3.75	1.04	1.04
SPRINGER Stockwork Zones	47,442	0.00	128.65	0.61	0.10	3.74	10.00	NII	0.00	10.00	0.54	0.10	0.10
SADDLE High-grade Zones	537	0.00	77.46	6.20	2.47	1.67	40.00	NII	0.00	40.00	5.82	2.47	2.47
SADDLE Stockwork Zones	1,875	0.00	44.61	0.71	0.16	2.75	12.50	NII	0.00	12.50	0.68	0.16	0.16

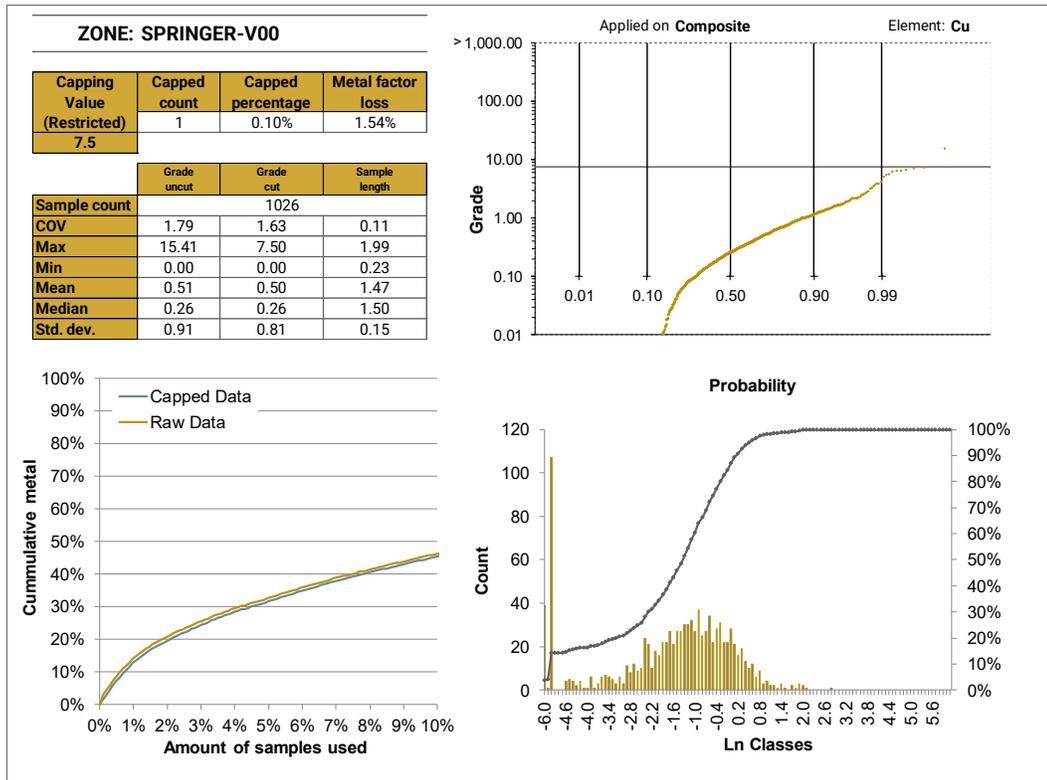


Figure 14-7 Graphs supporting Cu capping on composites in the high-grade zone Springer-V00

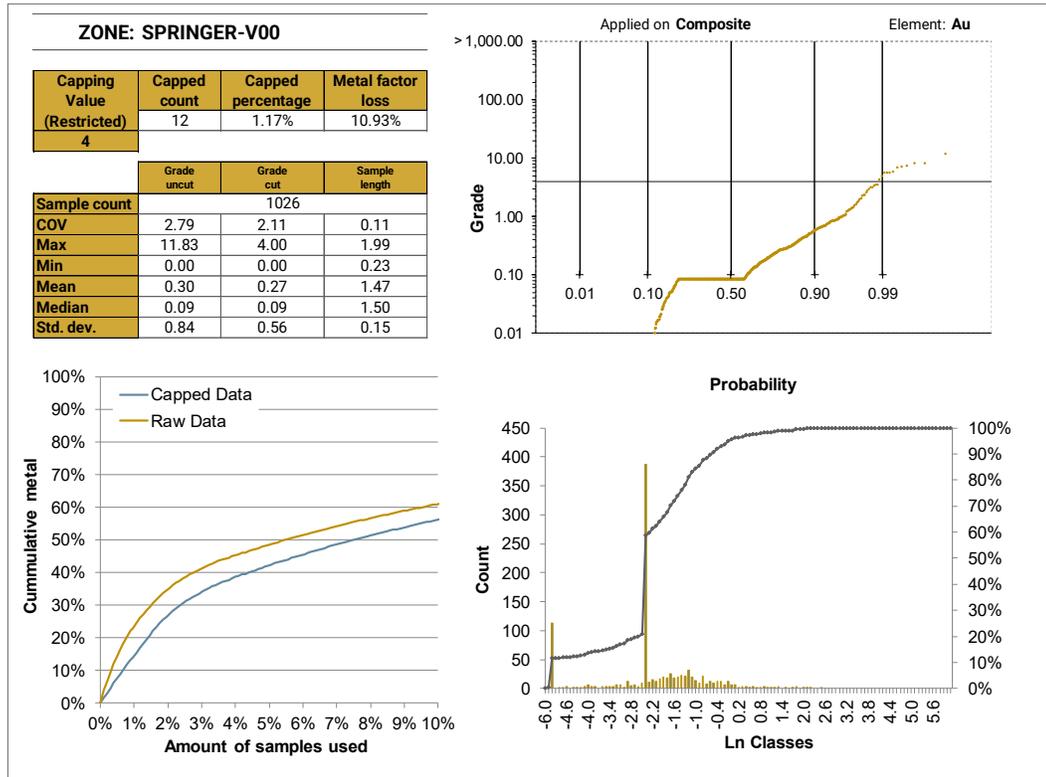


Figure 14-8 Graphs supporting Au capping on composites in the high-grade zone Springer-V00

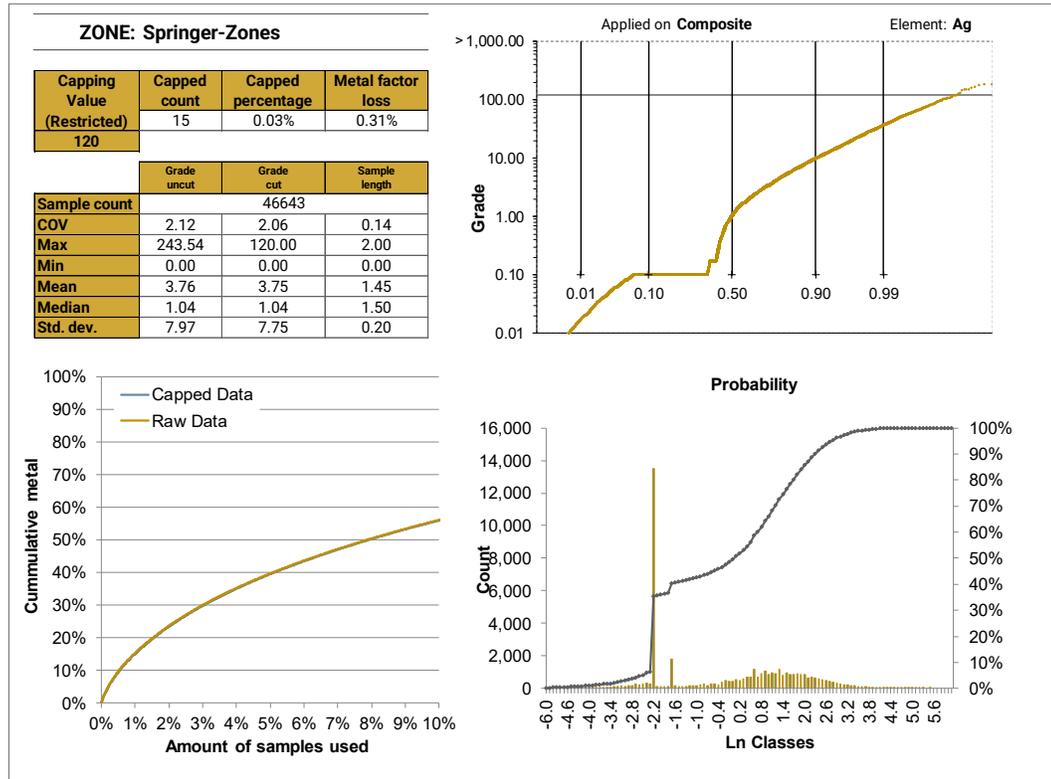


Figure 14-9 Graphs supporting Ag capping on composites in the Springer high-grade zones

## 14.8 DENSITY

Bulk density is an important parameter to calculate tonnages for the estimated volumes derived from the block model.

Density measurements were collected on the Project by previous operators and, more recently, by XXIX. A total of 1,149 measurements are within the geological model used for the current MRE. The samples span all the different lithologies and mineralized domains, although some domains contain very few data.

The number and distribution of density measures made available are not sufficient for density to be interpolated. Therefore, fixed density values were assigned to lithological units and mineralized domains, corresponding to the average density of each unit when data was statistically sufficient and corresponding to a similar domain when data was statistically insufficient.

Table 14-4 shows the basic statistics for the density database. The method of assigning densities to the block model is identified in the last column of this table.

Table 14-4 Density basic statistics

Lithology	Mineralized Domain	Blockcode	Count	Min	Max	Average	Standard Deviation	Coefficient of Variation	Assigned	Comment
Gabbro	Country Rock	0	180	2.59	4.56	3.00	0.17	0.06	3.00	
	Perry Zone	100	1	2.88	2.88	2.88	0.00	0.00	2.99	Same as Gabbro - Stockwork Perry (not enough measures in Gabbro - Saddle Zone)
	SaddleZone	300	4	2.89	3.11	2.98	0.08	0.03	3.01	Same as Gabbro - Stockwork Saddle (not enough measures in Gabbro - Saddle Zone)
	Springer Zone	200	105	2.71	4.05	2.97	0.19	0.06	2.97	
	Stockwork Perry	1100	18	2.79	3.17	2.99	0.11	0.04	2.99	
	Stockwork Saddle	1300	7	2.79	3.19	3.01	0.13	0.04	3.01	
	Stockwork Springer	1200	440	2.65	4.12	2.94	0.11	0.04	2.94	
Foliated Gabbro	Country Rock	0	1	3.11	3.11	3.11	0.00	0.00	3.00	Same as Gabbro (not enough measures in Foliated Gabbro - Country Rock)
	Springer Zone	200	8	2.93	3.13	3.02	0.07	0.02	3.02	
	Stockwork Springer	1200	68	2.77	3.22	3.01	0.09	0.03	3.01	
Peridotite	Country Rock	0	23	2.78	4.01	2.91	0.25	0.08	2.91	
	Springer Zone	200	1	3.17	3.17	3.17	0.00	0.00	3.05	Same as Peridotite - Stockwork Springer (not enough measures in Peridotite - Springer Zone)
	Stockwork Perry	0	2	2.82	3.18	3.00	0.18	0.06	3.05	Same as Peridotite - Stockwork Springer (not enough measures in Stockwork Perry)
Pyroxenite	Country Rock	1200	9	2.82	3.20	3.05	0.16	0.05	3.05	
	Country Rock	0	109	2.81	4.12	3.15	0.15	0.05	3.15	
	Perry Zone	100	3	3.14	4.01	3.44	0.40	0.12	3.14	Same as Pyroxenite - Stockwork Perry (not enough measures in Pyroxenite - Perry Zone)
	Springer Zone	200	3	2.87	3.32	3.03	0.21	0.07	2.98	Same as Pyroxenite - Stockwork Springer (not enough measures in Pyroxenite - Springer Zone)
	Stockwork Perry	1100	10	3.04	3.22	3.14	0.07	0.02	3.14	
Rhyolite	Country Rock	1200	45	2.75	3.36	2.98	0.16	0.05	2.98	
	Country Rock	0	28	2.64	2.93	2.71	0.07	0.03	2.71	
	Springer Zone	200	3	2.68	2.80	2.74	0.05	0.02	2.70	Same as Rhyolite - Stockwork Springer (not enough measures in Rhyolite - Springer Zone)
	Stockwork Saddle	1300	1	2.81	2.81	2.81	0.00	0.00	2.70	Same as Rhyolite - Stockwork Springer (not enough measures in Rhyolite - Stockwork Saddle)
Basalt	Country Rock	1200	75	2.63	2.93	2.70	0.06	0.02	2.70	
	Country Rock	0	5	3.13	3.21	3.17	0.03	0.01		None in the Model

A fixed density of 2.00 g/cm<sup>3</sup> was assigned to the overburden. A fixed density of 0.00 g/cm<sup>3</sup> was assigned to the underground voids.

## 14.9 VARIOGRAM ANALYSIS AND SEARCH ELLIPSOIDS

A semi-variogram is a common tool used to measure the spatial variability within a zone. Typically, samples taken far apart will vary more than samples taken close to each other. A variogram gives a measure of how much two samples taken from the same mineralized zone will vary in grade depending on the distance between those samples, allowing search ellipsoids to be built for interpolation purposes.

Three-dimensional directional variography was carried out on the composites using the Snowden Supervisor software. Variograms were modelled in the three orthogonal directions to define a 3D ellipsoid for the mineralized zone. The three directions of ellipsoid axes were set by using the variogram fans and visually confirmed using the geological knowledge of the deposit.

Then, a mathematical model was interpreted to best fit the shape of the calculated variogram for each direction. Three components were defined for the mathematical model: the nugget effect, the sill, and the range. In all cases where a Normal Score Transformation was used, the results were back-transformed before using them to define the ellipsoids and interpolation parameters,

Table 14-5 presents the chosen variogram model parameters, and Figure 14-10 to Figure 14-12 illustrate the variograms for Cu, Au and Ag, respectively, for high-grade zone Perry-VB, one of the zones containing a significant number of composites.



Table 14-5 Variogram model parameters

Zones	Element	units	Nugget	First structure			Second structure			Leapfrog orientation		
				Sill	Range X (m)	Range Y (m)	Range Z (m)	Sill	Range X (m)	Range Y (m)	Range Z (m)	Dip
Perry High-grades	Cu	%	0.100	0.500	20	15	5	0.400	120	80	10	Variable Orientation
	Au	g/t	0.300	0.300	20	15	5	0.400	110	90	10	Variable Orientation
	Ag	g/t	0.100	0.500	20	20	5	0.400	90	90	10	Variable Orientation
Springer High-grades	Cu	%	0.300	0.360	15	10	5	0.340	60	45	10	Variable Orientation
	Au	g/t	0.410	0.250	15	10	10	0.340	60	45	30	Variable Orientation
	Ag	g/t	0.100	0.280	15	10	5	0.620	60	45	10	Variable Orientation
Saddle High-grades	Cu	%	0.300	0.150	40	20	5	0.550	90	35	10	Variable Orientation
	Au	g/t	0.100	0.350	40	20	5	0.550	80	35	10	Variable Orientation
	Ag	g/t	0.310	0.140	40	20	5	0.550	90	35	10	Variable Orientation
Perry Stockwork	Cu	%	0.200	0.500	15	15	15	0.300	60	60	70	Variable Orientation
	Au	g/t	0.200	0.480	30	15	75	0.320	80	80	180	Variable Orientation
	Ag	g/t	0.250	0.450	30	50	15	0.300	100	120	50	Variable Orientation
Springer Stockwork	Cu	%	0.350	0.470	15	15	15	0.180	65	50	70	Variable Orientation
	Au	g/t	0.400	0.420	15	15	20	0.180	60	40	80	Variable Orientation
	Ag	g/t	0.350	0.470	15	15	15	0.180	60	40	70	Variable Orientation
Saddle Stockwork	Cu	%	0.200	0.230	25	75	40	0.570	130	180	105	Variable Orientation
	Au	g/t	0.300	0.130	50	75	40	0.570	150	190	60	Variable Orientation
	Ag	g/t	0.200	0.230	25	75	40	0.570	130	210	80	Variable Orientation

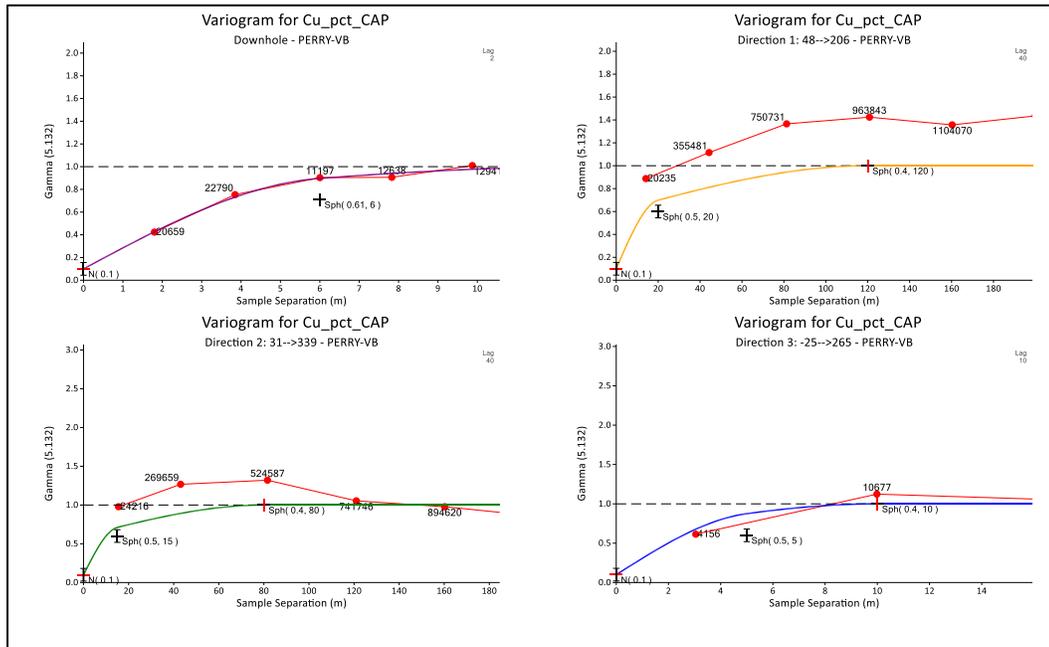


Figure 14-10 Variography study for copper within the Perry-VB high-grade zone

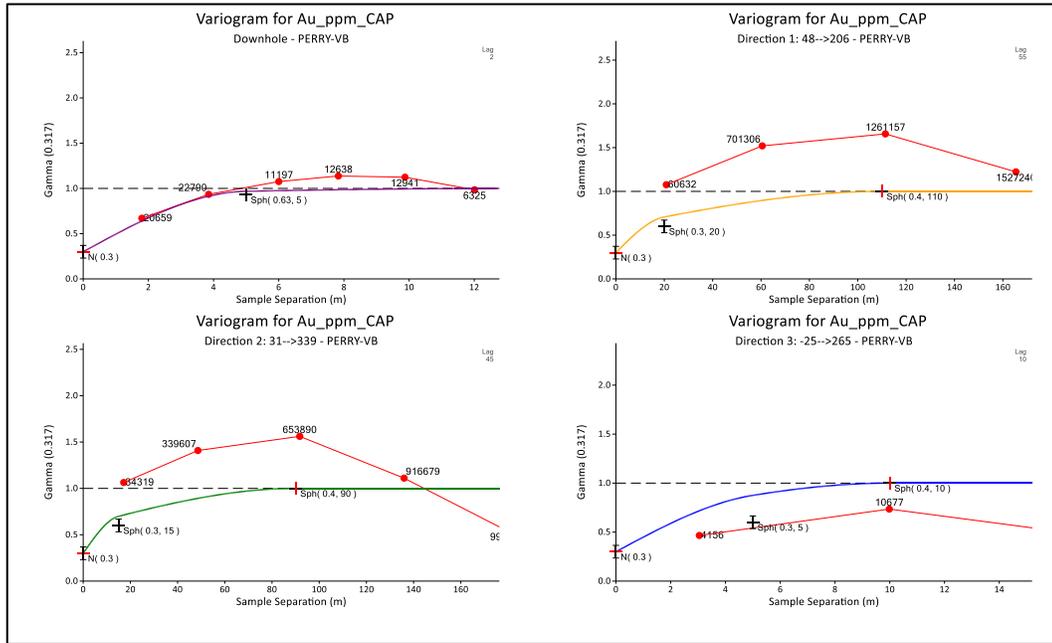


Figure 14-11 Variography study for gold within the Perry-VB high-grade zone

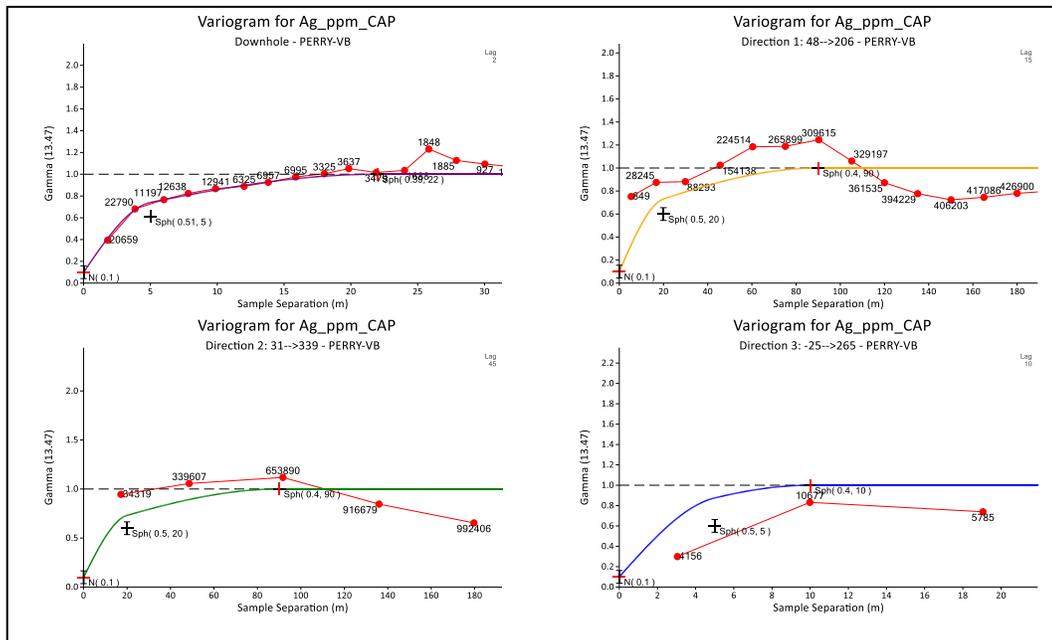


Figure 14-12 Variography study for silver within the Perry-VB high-grade zone

## 14.10 BLOCK MODEL

The block model was constructed in Leapfrog for the current mineral resource estimate using the block model parameters provided in Table 14-6. Individual block cells have dimensions of 5 m long (X-axis) by 5 m wide (Y-axis) by 5 m vertical (Z-axis). The size of the blocks was chosen to best match the drilling pattern, the thickness of the zones, the complexity of the geological model, and plausible future mining methods. The block size was discussed with engineers working on the Project.

The block model was coded using the octree sub-block method, down to 0.625 m, reflecting the proportion of each solid inside every block. All blocks falling within a solid were assigned the corresponding solid block code. Table 14-7 shows the various attributes in the block model.

*Table 14-6 Block model parameters*

Properties	X (column)	Y (row)	Z (level)
Origin coordinates	509,250	5,514,200	450
Number of blocks	459	394	227
Block size (m)	5	5	5
Sub-block size (down to)	0.625	0.625	0.625
Rotation	0		

*Table 14-7 Block model coding*

Attribute	Description
Blockcode	Code attributed to individual lithological units, mineralized zones, historical underground voids, and overburden.
CuEq	CuEq calculated using the CuEq formula
Classification	Classification (3 = Measured; 4 = Indicated; 5 = Inferred; 6 = Potential)
Cu	Cu interpolated with OK
Au	Au interpolated with OK
Ag	Ag interpolated with OK
Density	Density (fixed)

## 14.11 SEARCH ELLIPSOID STRATEGY

The range and orientation of the ellipsoids used for interpolation were established using the variography study. Other interpolation parameters are derived from combining kriging neighbourhood analyses and the QP's professional experience.

Based on geostatistical analysis and general geological knowledge of the Project, the following parameter was chosen for this mandate:



- The ranges of the ellipsoids correspond to the range of the variogram for the first pass and twice the range of the variogram for the second pass (Table 14-8).

It should be mentioned that the classification was mostly based on geological confidence, grade continuity, the presence of recent drill holes, and drill hole spacing. For this reason, some interpolated blocks could not be classified as either Inferred or Indicated. Refer to the *Mineral Resource Classification* section further below for more details.

Table 14-8 Search ellipsoids range and orientation by interpolation passes

Zones	Element	units	Leapfrog orientation			First Pass			Second Pass		
			Dip	Azimuth	Pitch	Range X (m)	Range Y (m)	Range Z (m)	Range X (m)	Range Y (m)	Range Z (m)
Perry High-grades	Cu	%	Variable Orientation			120	80	20	240	160	40
	Au	g/t	Variable Orientation			110	90	20	220	180	40
	Ag	g/t	Variable Orientation			90	90	20	180	180	40
Springer High-grades	Cu	%	Variable Orientation			120	80	20	240	160	40
	Au	g/t	Variable Orientation			60	45	30	120	90	60
	Ag	g/t	Variable Orientation			75	90	20	150	180	40
Saddle High-grades	Cu	%	Variable Orientation			120	80	20	240	160	40
	Au	g/t	Variable Orientation			90	35	20	180	70	40
	Ag	g/t	Variable Orientation			90	35	20	180	70	40
Perry Stockwork	Cu	%	Variable Orientation			60	60	70	120	120	140
	Au	g/t	Variable Orientation			80	80	180	160	160	360
	Ag	g/t	Variable Orientation			100	120	50	200	240	100
Springer Stockwork	Cu	%	Variable Orientation			65	50	70	130	100	140
	Au	g/t	Variable Orientation			60	40	80	120	80	160
	Ag	g/t	Variable Orientation			60	40	70	120	80	140
Saddle Stockwork	Cu	%	Variable Orientation			130	180	105	260	360	210
	Au	g/t	Variable Orientation			150	190	60	300	380	120
	Ag	g/t	Variable Orientation			130	210	80	260	420	160

## 14.12 INTERPOLATION METHOD

The interpolation was run on a set of points extracted from the capped composited data. The block model grades were estimated using the ordinary kriging (“OK”) method. Hard boundaries were applied between the mineralized zones and surrounding country rocks to prevent grades from adjacent lithologies from being used during interpolation. As a block was estimated, it was tagged with the corresponding pass number, slope of regression, kriging efficiency, number of composites used, number of drill holes used, and drill spacing.

For comparison purposes, an additional grade model was generated (Table 14-9) using ID2.

Table 14-9 Interpolation methods

Interpolation Method	Comments	Discretisation
Ordinary Kriging (OK)	Negative weights set to zero	3 x 3 x 3
Inverse Distance (ID2)	Anisotropic using variography ellipsoids	3 x 3 x 3

## 14.13 INTERPOLATION PARAMETERS

A kriging neighbourhood analysis (“KNA”) was conducted on one of the mineralized zones with Snowden Supervisor software. KNA provides a quantitative method of testing different estimation parameters (i.e., block size, discretization and min/max of composites used for the interpolation) by evaluating their impact on the quality of the results. This analysis helps select the optimal value for each parameter.

Following this study, the parameters provided in Table 14-10 were chosen for the interpolation of the block model. Although the interpolation parameters are largely inspired by the KNA study, they may differ slightly to accommodate certain interpolation needs, such as having a minimum number of drill holes or avoiding smearing effects. Multiple tests were made using different interpolation parameters.

Table 14-10 Interpolation parameters

Zones	Element	units	First Pass				Second Pass			
			Min Composite	Max Composite	Max Composite per DDH	Variography ratio	Min Composite	Max Composite	Max Composite per DDH	Variography ratio
Perry High-grades	Cu	%	4	8	3	1.00	2	8	Not Limited	2.00
	Au	g/t	4	8	3	1.00	2	8	Not Limited	2.00
	Ag	g/t	4	8	3	1.00	2	8	Not Limited	2.00
Springer High-grades	Cu	%	4	8	3	1.00	2	8	Not Limited	2.00
	Au	g/t	4	8	3	1.00	2	8	Not Limited	2.00
	Ag	g/t	4	8	3	1.00	2	8	Not Limited	2.00
Saddle High-grades	Cu	%	4	8	3	1.00	2	8	Not Limited	2.00
	Au	g/t	4	8	3	1.00	2	8	Not Limited	2.00
	Ag	g/t	4	8	3	1.00	2	8	Not Limited	2.00
Perry Stockwork	Cu	%	4	8	3	1.00	2	8	Not Limited	2.00
	Au	g/t	4	8	3	1.00	2	8	Not Limited	2.00
	Ag	g/t	4	8	3	1.00	2	8	Not Limited	2.00
Springer Stockwork	Cu	%	4	8	3	1.00	2	8	Not Limited	2.00
	Au	g/t	4	8	3	1.00	2	8	Not Limited	2.00
	Ag	g/t	4	8	3	1.00	2	8	Not Limited	2.00
Saddle Stockwork	Cu	%	4	8	3	1.00	2	8	Not Limited	2.00
	Au	g/t	4	8	3	1.00	2	8	Not Limited	2.00
	Ag	g/t	4	8	3	1.00	2	8	Not Limited	2.00

## 14.14 BLOCK MODEL VALIDATION

The block model was validated using several methods, including statistical analyses and a visual review of the grades in the associated drill hole. Based on these visual and statistical reviews, it is the QP’s opinion that the Opemiska block model provides a reasonable estimate of in situ mineral resources.



#### 14.14.1 VISUAL VALIDATION

Block model grades were visually compared against drill hole composite grades and raw assays in cross-section, plan, longitudinal, and 3D views. This visual validation process also confirmed that the proper coding was done within the various domains. The visual comparison shows a good correlation between the values without excessive smoothing. Visual comparisons were also conducted between OK and ID2 interpolation scenarios. The OK scenario used for the mineral resource estimate produced a grade distribution honouring drill hole data and the style of mineralization observed at the Opemiska deposit.

### 14.15 MINERAL RESOURCE CLASSIFICATION

The mineral resources were classified according to the *CIM Definition Standards for Mineral Resources & Mineral Reserves* published by the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM Definition Standards”).

#### 14.15.1 MINERAL RESOURCE DEFINITION

The CIM Definition Standards clarify the following:

Inferred Mineral Resource:

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Indicated Mineral Resource:

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Measured Mineral Resource:

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

#### **14.15.2 OPEMISKA MINERAL RESOURCE CLASSIFICATION**

The mineral resources were classified according to CIM Definition Standards. The estimated block grades were classified as either Inferred or Indicated using the drill spacing, geological continuity of mineralization, grade continuity, presence of recent drilling, and overall confidence level. Although a significant portion of the Block Model shows tight drill spacing, no Measured Mineral Resources were defined for this phase of the Project due, in part, to the modeled historical voids needing additional work.

Inferred Mineral Resources were defined for blocks within the mineralized zones within 60 m of a drill hole (120 m of drill spacing)

Indicated Mineral Resources were defined where the following criteria were met:

- Drill spacing of 50 m or less
- Demonstrated geological continuity
- Grade continuity at the reported cut-off grade
- Recent drill holes confirming the model (geologically and grade-wise)



All remaining estimated but unclassified blocks were not reported.

The QP validated that no clipping boundaries were needed to either upgrade or downgrade classification to avoid issues caused by automatically generated classification.

## 14.16 PIT OPTIMIZATION PARAMETERS AND CUT-OFF GRADES

Resourced were constrained by both economic parameters represented by a value cut-off and geometrical parameters represented by pit shells for the open pit resource or stopes shapes for the underground resource. Table 14-11 presents the economic and geometrical optimization parameters used to constrain the resource.

*Table 14-11 Optimization parameters*

Optimization parameters			
Parameter	Unit	Open Pit	Underground
<b>Revenue</b>			
Royalty	%	1.00	1.00
<b>Operating costs</b>			
Mining cost	USD/t mined	3.00	70.00
Process cost	USD/t milled	9.00	9.00
General & administration cost	USD/t milled	2.25	2.25
Mineralization based costs	USD/t milled	11.25	81.25
<b>Mining</b>			
Block size	m	5x5x5	Sub-blocked
Slope angle - rock	°	55	-
Slope angle - overburden	°	30	-
Minimum mining width	m	-	2.0
Stope height	m	-	25.0
<b>Cut-off grade</b>			
NSR cut-off	USD/t milled	11.36	82.07
CuEq cut-off	%	0.15	1.00

Resources are presented as undiluted and in situ for the open pit scenario and include internal dilution for the underground scenario. The pit optimization to develop the resource-constraining pit shells was done using Deswik Pseudoflow. The stope

optimization to develop the resource-constraining stope shapes was done using Deswik SO.

Revenue calculations were done on a block-by-block basis and were based on a metallurgical recovery model developed for the project and on customary smelter contract provisions that consider current market conditions. Parameters used for revenue calculation are presented in Table 14-12. Based on the revenue assumptions, the equation used to calculate CuEq % equals  $Cu \% + 0.8531 Au \text{ g/t} + 0.0083 Ag \text{ g/t}$ .

Table 14-12 Revenue calculation

Revenue calculation		
Parameter	Unit	Value
<b>Price Assumptions</b>		
Copper	USD/lb	4.25
Gold	USD/oz	2500.00
Silver	USD/oz	27.00
<b>Concentrate specifications</b>		
Mass pull	Decimal	$0.0335*HG_{Cu}+0.0158$
Copper concentrate grade	%	$IF(Cu \text{ Head Grade} < 2.89, 23.205+23.32*HG_{Cu}-576.7*MP-3.276*HG_{Cu}*H_{Gcu}+2070*MP*MP, 24.5)$
Gold concentrate grade	g/t	$IF(HG_{Cu}/H_{Gau} < 2, \text{Con gr Cu}/(1.0643*HG_{Cu}/H_{Gau}+0.0542), 19.779(HG_{Cu}/H_{Gau})^{-0.905})$
Silver concentrate grade	g/t	$(1.0893*(HG_{Ag}/H_{Gau}) - 1.0645) * \text{Con gr Au}$
<b>Recovery calculation</b>		
Copper	%	$mp * \text{conc gr} / HG$ , capped at 0.95
Gold	%	$mp * \text{conc gr} / HG$ , capped at 0.88
Silver	%	$mp * \text{conc gr} / HG$ , capped at 0.86
<b>Concentrate considerations</b>		
Copper deduction	%	1.0
Gold Payable	%	96.0
Silver Payable	%	90.0
Moisture	%	8.0
Treatment Charges	USD/dt	40.00
Transportation	USD/wt	125.00
Copper Refining	USD/lb	0.04
Gold Refining	USD/oz	5.00
Silver Refining	USD/oz	0.50

MP = Mass pull in fraction

HG<sub>Cu</sub> = Copper head grade in percentage points

HG<sub>Au</sub> = Gold head grade in g/t

HG<sub>Ag</sub> = Silver head grade in g/t

Con gr Cu = Copper head grade in percentage points

Con gr Au = Gold concentrate grade in g/t

## 14.17 OPEMISKA MINERAL RESOURCE ESTIMATE

The 2025 Opemiska MRE is constrained within a pit shell developed from the above mentioned pit optimization and DSO shapes using appropriate cut-off grades. Table 14-13 presents the results of the MRE.

*Table 14-13 Opemiska Mineral Resource Estimate*

<b>Pit Constrained</b>	<b>Tonnes</b>	<b>CuEq</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>
<b>0.15% CuEq Cut-Off</b>	<b>(k)</b>	<b>(%)</b>	<b>(%)</b>	<b>(g/t)</b>	<b>(g/t)</b>	<b>(M lbs)</b>	<b>(koz)</b>	<b>(koz)</b>
Indicated	62,706	1.04	0.76	1.71	0.31	1,047	3,450	634
Inferred	78,485	0.41	0.26	0.61	0.17	457	1,530	419

<b>Out of Pit</b>	<b>Tonnes</b>	<b>CuEq</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>
<b>1.00% CuEq Cut-Off</b>	<b>(k)</b>	<b>(%)</b>	<b>(%)</b>	<b>(g/t)</b>	<b>(g/t)</b>	<b>(M lbs)</b>	<b>(koz)</b>	<b>(koz)</b>
Indicated	6,947	1.85	1.59	2.76	0.28	243	617	64
Inferred	2,130	0.88	0.69	1.20	0.21	33	82	15

<b>Total</b>	<b>Tonnes</b>	<b>CuEq</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>
<b>0.15% &amp; 1.00% CuEq Cut-Off</b>	<b>(k)</b>	<b>(%)</b>	<b>(%)</b>	<b>(g/t)</b>	<b>(g/t)</b>	<b>(M lbs)</b>	<b>(koz)</b>	<b>(koz)</b>
Indicated	69,653	1.12	0.84	1.82	0.31	1,290	4,067	697
Inferred	80,615	0.42	0.28	0.62	0.17	490	1,613	433

Notes to Table 14-13:

1. The independent qualified persons for the MRE, as defined by National Instrument (“NI”) 43-101 guidelines, is Pierre Luc Richard, P.Geo., of PLR Resources Inc. with contributions from Stephen Coates, P.Eng., of Evomine for value cut-off, open pit and optimization solids, and Christian Laroche, P.Eng., from Synectiq, for metallurgical parameters. The effective date of the MRE is May 30, 2025.
2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The quantity and grade of reported Inferred Resources in this MRE are uncertain in nature, and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to the Indicated category with continued exploration.
3. The MRE wireframe was prepared using Leapfrog Edge v.2024.1.3 and is based on 21,918 drill holes for 1,525,073 meters and 479,242 samples. The drill hole database includes recent drilling (2002 to 2025) of 73,227 metres in 382 drill holes (Ex-In, PowerOre, QC Copper & Gold, XXIX) and also incorporates historical drill holes (1930 to 1990) for 1,451,846 metres in 21,536 drill holes (Opemiska Copper Mines, Falconbridge, Minnova). The cut-off date for the drill hole database was May 16, 2025.
4. Resources are presented as undiluted and in situ for the open-pit scenario and include internal dilution for the underground scenario and are considered to have reasonable prospects for economic extraction. The constraining pit shell was



developed using overall pit slopes of 55 degrees in bedrock and 30 degrees in overburden. The pit optimization to develop the resource-constraining pit shells was done using Deswik Pseudoflow 2024.2.

5. Composites of 1.5 metres were created inside the high grade zones and 3.0 meters inside the stockwork zones. High-grade capping was done on the composited assay data; composites were capped at variable grades ranging from 1.00 to 25.00% for Cu, 0.50 to 35.00 g/t for Au, and 10.00 to 120.00 g/t for Ag.
6. Mineral Resources are reported at a cut-off grade of 0.15 % CuEq for open-pit resources and 1.00 % CuEq for underground resources. All material within the underground stopes is being reported, including internal dilution. The cut-off grades will be re-evaluated in light of future prevailing market conditions and costs.
7. Specific gravity values were estimated using data available in the drill hole database. Values assigned per zone and per host rock. Surrounding barren lithologies were assigned the average specific gravity value from all measured samples available.
8. Grade model resource estimation was calculated from drill hole data using an Ordinary Kriging interpolation method in a sub-blocked model using blocks measuring 5 m x 5 m x 5 m in size and sub-blocks down to 0.625m x 0.625m x 0.625m. Both ordinary kriging (OK) and inverse square distance (ID2) interpolation methods were tested, resulting in no material difference in the Mineral Resource Estimates.
9. The Indicated and Inferred Mineral Resource categories are constrained to areas where drill spacing is less than 50m and 120 metres respectively and show reasonable geological and grade continuity.
10. Calculations used metric units (metres, tonnes). Metal contents are presented in percent or pounds. Metric tonnages were rounded, and any discrepancies in total amounts are due to rounding errors.
11. CIM definitions and guidelines for mineral resource estimates have been followed.
12. The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues or any other relevant issues that could materially affect this MRE.

Table 14-13 shows the sensitivity of the block model to grade cut-off for the Indicated in-pit Mineral Resource Estimate. Table 14-14 shows the sensitivity of the block model to grade cut-off for the Inferred in-pit Mineral Resource Estimate. Higher cut-



off grades significantly increase the average grade of the deposit, as expected, with a complementary drop in tonnage.

The reader is cautioned that the numbers in the following table should not be misconstrued with a mineral resource statement.

Figure 14-13 shows a 3D view of the mineralized zones within the MRE pit shell. Figure 14-14 shows a cross section of the mineralized zones and block model within the MRE pit shell.

*Table 14-14 Pit-constrained Indicated Resources at various cut-off grades*

<b>Pit Constrained</b>	<b>Tonnes</b>	<b>CuEq</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>
<b>Indicated Resources</b>	<b>(k)</b>	<b>(%)</b>	<b>(%)</b>	<b>(g/t)</b>	<b>(g/t)</b>	<b>(M lbs)</b>	<b>(koz)</b>	<b>(koz)</b>
0.10% CuEq Cut-Off	66,028	0.99	0.72	1.64	0.30	1,053	3,481	639
0.15% CuEq Cut-Off	62,706	1.04	0.76	1.71	0.31	1,047	3,450	634
0.20% CuEq Cut-Off	59,350	1.09	0.79	1.79	0.33	1,038	3,411	627
0.25% CuEq Cut-Off	56,098	1.14	0.83	1.86	0.34	1,027	3,361	619
0.30% CuEq Cut-Off	52,875	1.19	0.87	1.94	0.36	1,013	3,300	611

*Table 14-15 Pit-constrained Inferred Resources at various cut-off grades*

<b>Pit Constrained</b>	<b>Tonnes</b>	<b>CuEq</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>	<b>Cu</b>	<b>Ag</b>	<b>Au</b>
<b>Inferred Resources</b>	<b>(k)</b>	<b>(%)</b>	<b>(%)</b>	<b>(g/t)</b>	<b>(g/t)</b>	<b>(M lbs)</b>	<b>(koz)</b>	<b>(koz)</b>
0.10% CuEq Cut-Off	115,913	0.32	0.20	0.50	0.13	512	1,849	494
0.15% CuEq Cut-Off	78,485	0.41	0.26	0.61	0.17	457	1,530	419
0.20% CuEq Cut-Off	57,452	0.50	0.32	0.70	0.20	408	1,289	367
0.25% CuEq Cut-Off	44,126	0.58	0.38	0.77	0.23	367	1,097	328
0.30% CuEq Cut-Off	35,006	0.66	0.43	0.84	0.26	331	945	296

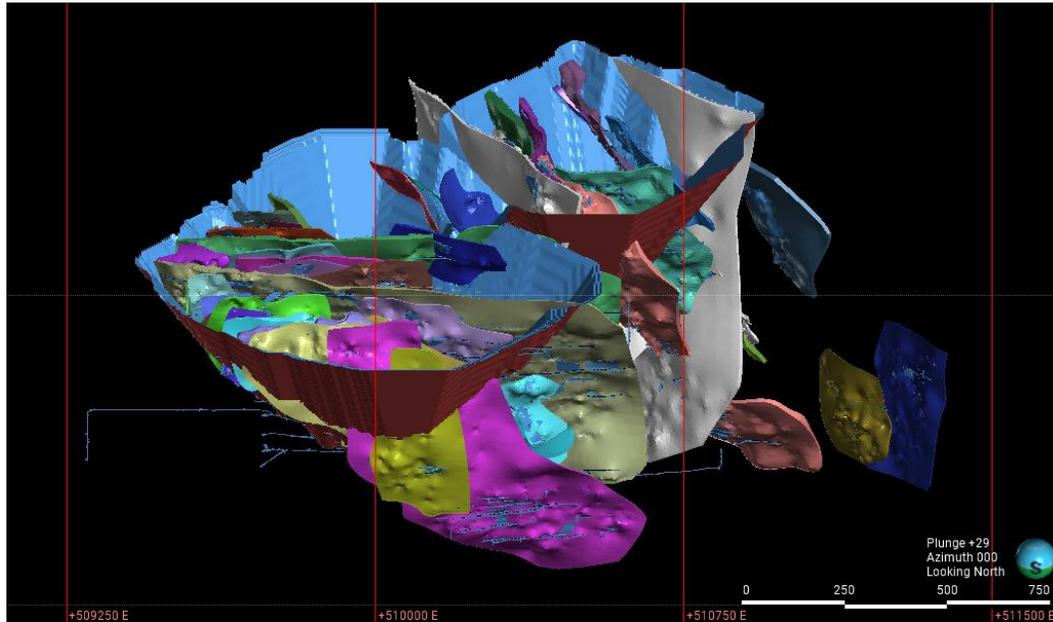


Figure 14-13 3D View of the mineralized zones and the pit shell (down plunge looking North)

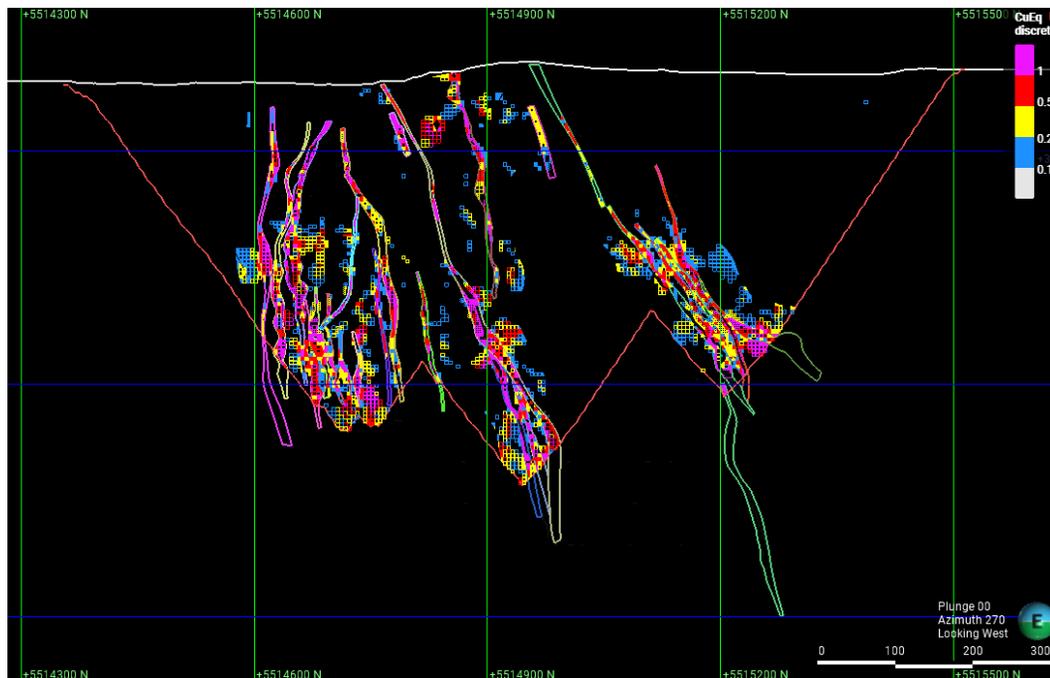


Figure 14-14 Cross-section view of the CuEq grade within the pit shell

Only blocks within the pit shell are shown



## 15 MINERAL RESERVE ESTIMATE

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This chapter is not required for a mineral resource estimate technical report.



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## 16 MINING METHODS

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This chapter is not required for a mineral resource estimate technical report.



## 17 RECOVERY METHODS

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This chapter is not required for a mineral resource estimate technical report.



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## 18 PROJECT INFRASTRUCTURE

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This chapter is not required for a mineral resource estimate technical report.



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## 19 MARKET STUDIES AND CONTRACTS

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This chapter is not required for a mineral resource estimate technical report.



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## **20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT**

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This chapter is not required for a mineral resource estimate technical report.



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## 21 CAPITAL AND OPERATING COSTS

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This chapter is not required for a mineral resource estimate technical report.



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## 22 ECONOMIC ANALYSIS

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This chapter is not required for a mineral resource estimate technical report.



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## 23 ADJACENT PROPERTIES

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There are no significant projects in the close vicinity of the Opemiska Project.

Occurrences at an early exploration stage are also found in the region.



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## 24 OTHER RELEVANT DATA AND INFORMATION

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All relevant data and information regarding the Project have been disclosed under the relevant sections of this Report.

There is no other relevant data or information available that is necessary to make the current Report understandable and not misleading.

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## 25 INTERPRETATION AND CONCLUSIONS

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### 25.1 OVERVIEW

PLR Resources Inc. (“PLR”) was mandated by XXIX (the “issuer”) to update the mineral resource estimate for the Opemiska deposit (the “2025 MRE” or the “Opemiska MRE”). Evomine Inc. (“Evomine”) provided the pit shell optimization and cut-off grade parameters, and Synectiq Inc. (“Synectiq”) provided the metallurgical parameters. This NI 43-101 compliant technical report summarizes the results and findings.

The Opemiska Project is located immediately adjacent to the municipality of Chapais and is road accessible with paved Québec Highway 113 crossing the Property. The Project is located 40 km west of the Town of Chibougamau, which straddles Highway 167. Highway 113 connects Chapais to the Abitibi area and Highway 167 heads south to the Saguenay - Lac St-Jean area. These all-weather paved highways are maintained year-round. The Project itself is readily accessed via forestry roads and historical mine access roads.

This Report was prepared by experienced and competent independent consultants. The QPs are not aware of any fatal flaws. In Chapter 26, potential opportunities are summarized, and recommendations are proposed to mitigate the potential risks associated with the Project. In conclusion, the QPs recommend additional work and that XXIX proceed to the next phase for the Opemiska deposit by initiating a preliminary economic assessment (“PEA”).

### 25.2 GEOLOGY AND MINERALIZATION

The understanding of the regional geology, lithological and structural controls of the mineralization at Opemiska are sufficient to support the 2025 MRE.

### 25.3 METALLURGY

Bulk sample testwork results appear to behave similarly to historical production data. The bulk sample test program, although only a single sample, brings confidence that the Opemiska mineralized rock will behave as per historical operations.

Concentrate parameters (mass pull, grade) are derived from chain sequential trendlines obtained from historical data. The concentrate parameters are dependant on head grade and are not fixed.

Due to the high degree of correlation of the bulk sample testwork results with historical plant performance, the existing metallurgical testwork is sufficient to support a future "Preliminary Economic Assessment". However, additional flotation testwork might improve the metallurgical recovery specially at lower grade by optimizing flotation parameters.

## 25.4 DATA VERIFICATION

The QP is of the opinion that the drilling protocols in place are adequate, and that the Project database is of good overall quality and suitable for mineral resource estimation.

## 25.5 MINERAL RESOURCES

The Opemiska MRE was prepared by Pierre-Luc Richard (P.Geo.) of PLR, with contributions from Stephen Coates, P.Eng., of Evomine for value cut-off, open pit and optimization solids, and Christian Laroche, P.Eng., from Synectiq, for metallurgical parameters.

Mineral resources are not mineral reserves as they do not have demonstrated economic viability. The estimate is categorized as Inferred and Indicated Mineral Resources based on data density, search ellipse criteria, drill hole density, specific interpolation parameters, geological continuity and grade continuity above the cut-off grade. The effective date of the estimate is May 30, 2025, based on the compilation status and cut-off grade parameters.

The QP considers the MRE reliable and based on quality data, reasonable hypotheses and parameters that follow CIM Definition Standards. After completing the MRE and performing a detailed review of all pertinent information, the QP reached the following conclusions:

- Using a cut-off grade of 0.15% CuEq, the Indicated Mineral Resources amount to 69.7 Mt grading 1.12% CuEq (0.84% Cu, 0.31g/t Au, and 1.82 g/t Ag).
- Using a cut-off grade of 0.15% CuEq, the Inferred Mineral Resources amount to 80.6 Mt grading 0.42% CuEq (0.28% Cu, 0.17g/t Au, and 0.62 g/t Ag).

## 25.1 EXPLORATION POTENTIAL

After reviewing all pertinent information, including the MRE, the QP concluded the following:



- The potential is high for adding underground mineral resources to the Opemiska deposit by extending 3D modelling at depth and laterally.
- There is significant potential to add additional stockwork mineralization within the Opemiska Project that could further increase Opemiska's resource base.
- The potential to upgrade Inferred Mineral Resources to the Indicated category with additional drilling is high.
- The potential to upgrade Indicated Mineral Resources to the Measured category with additional work on historical voids and drilling is high.
- The exploration potential remains high at the property scale, justifying further geological compilation and continuing exploration target generation programs.
- There is potential to add an additional open-pit component at the Cooke gold project, currently being optioned by XXIX, 2.5km East of the Opemiska proposed open-pit. Compilation, modeling, and a mineral resource estimate is warranted to assess the potential.

## 25.2 PROJECT RISKS AND OPPORTUNITIES

Neither PLR, Evomine, nor Synectiq are aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or relevant issues that could be expected to affect the reliability or confidence in the information discussed herein or the right or ability to perform future work on the Project. Nonetheless, as with most mining projects, some inherent risks could affect the project's economic viability. Many of these are due to a lack of information and can be managed as more sampling, testing, modelling, design and engineering are conducted. There are also significant opportunities that could mitigate some of the risks and potentially improve the project economics, schedule, and environmental and social impacts.

It is possible that some grade smearing occurs in the current stockwork model near localized higher-grade intervals. Capping is currently significantly low and also mitigate high grade smearing in the Stockwork zones. An improved 3D model would also help mitigate such risk.

The underground historical workings need additional work to improve its accuracy.



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## 26 RECOMMENDATIONS

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The QPs recommend additional work and that the Project proceed to the next phase of project development through a preliminary economic assessment (“PEA”).

The following proposed work program will help advance the Project and provide key inputs required to evaluate its economic viability.

### 26.1 PROPOSED WORK

#### 26.1.1 DRILLING AND MINERAL RESOURCE ESTIMATE ON THE COOKE DEPOSIT

Drilling is warranted on the Cooke deposit. Following a drilling program, a Mineral Resource Estimate is recommended to evaluate its potential.

A 5,000 m drilling program is recommended.

#### 26.1.2 IMPROVEMENT TO THE MODELED HISTORICAL UNDERGROUND WORKINGS

Issues with the historical underground workings were noted. Modeling work is warranted to improve its accuracy.

#### 26.1.3 PEA ON THE OPEMISKA DEPOSIT

Based on the results of the MRE presented in this Report, the next logical step for the Opemiska deposit is a PEA.

### 26.2 PROPOSED BUDGET

The estimated cost for the recommended work program is approximately 3.5M\$, based on certain assumptions and current site costs. The estimate includes a 15% contingency. Table 26-1 summarizes the estimated cost for the required fieldwork and studies to support the next phases of project development.



Table 26-1 Proposed Work Program Budget

Activities	Estimated Cost (\$)
Drilling and Mineral Resource Estimate on Cooke (5,000m)	1,875,000
Improvement to the modeled historical underground workings	25,000
Mineral Resource Estimate update on the Opemiska Deposit	125,000
PEA on the Opemiska Deposit	1,000,000
<b>Subtotal</b>	<b>3,025,000</b>
Contingency (15%)	453,750
<b>Total</b>	<b>3,478,750</b>

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