NI 43-101

TECHNICAL REPORT ON THE CHEECHOO PROJECT

WITH AN UPDATED MINERAL RESOURCE ESTIMATE FOR THE CHEECHOO GOLD DEPOSIT, EEYOU ISTCHEE JAMES BAY, QUEBEC, CANADA

Prepared for:
Sirios Resources Inc.
1400 Marie-Victorin, #210
Saint-Bruno-de-Montarville
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Qualified Persons:

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

Stephen Coates, P.Eng.
Evomine Consulting Inc.

Christian Laroche, P.Eng.
Synectiq Inc.

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DATE AND SIGNATURE PAGE

This technical report is effective as of the 1st day of July 2025.

Original signed and sealed	August 22, 2025
Pierre-Luc Richard, P.Geo. PLR Resources Inc.	Date
Original signed and sealed	August 22, 2025
Stephen Coates, P.Eng. Evomine Consulting Inc.	Date
Original signed and sealed	August 22, 2025
Christian Laroche, P.Eng. Synectiq Inc.	Date

CERTIFICATE OF QUALIFIED PERSON

Pierre Luc Richard, P.Geo.

This certificate applies to the technical report titled “NI 43-101 TECHNICAL REPORT ON THE CHEECHOO PROJECT WITH AN UPDATED MINERAL RESOURCE ESTIMATE FOR THE CHEECHOO GOLD PROJECT, EEYOU ISTCHEE JAMES BAY, QUEBEC, CANADA”, dated August 22, 2025 (the “Report”), prepared for Sirios Resources Inc.

I, Pierre-Luc Richard, P.Geo., 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 July 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 22nd day of August 2025.

Original signed and sealed

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

CERTIFICATE OF QUALIFIED PERSON

Stephen Coates, P.Eng.

This certificate applies to the technical report titled "NI 43-101 TECHNICAL REPORT ON THE CHEECHOO PROJECT WITH AN UPDATED MINERAL RESOURCE ESTIMATE FOR THE CHEECHOO GOLD PROJECT, EEYOU ISTCHEE JAMES BAY, QUEBEC, CANADA", dated August 22, 2025 (the "Report"), prepared for Sirios Resources Inc.

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 Project that is the subject of the Technical Report, as part of this current mandate.
9. I have had no prior involvement with the Project 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 this 22nd day of August 2025.

Original signed and sealed

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

CERTIFICATE OF QUALIFIED PERSON

Christian Laroche, P.Eng.

This certificate applies to the technical report titled "NI 43-101 TECHNICAL REPORT ON THE CHEECHOO PROJECT WITH AN UPDATED MINERAL RESOURCE ESTIMATE FOR THE CHEECHOO GOLD PROJECT, EEYOU ISTCHEE JAMES BAY, QUEBEC, CANADA", dated August 22, 2025 (the "Report"), prepared for Sirios Resources Inc.

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 22nd day of August 2025.

Original signed and sealed

Christian Laroche, P.Eng.,
Synectiq Inc.

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1 SUMMARY

1.1 INTRODUCTION

Sirios Resources Inc. ("Sirios", the "Company" or the "issuer") requested that PLR Resources Inc. ("PLR") lead a group of consulting firms, including Evomine Consulting ("Evomine") and Synectiq Inc. ("Synectiq") to compile an NI 43-101 compliant technical report on the Cheechoo gold Project (the "Project") and update the mineral resource estimate for the Cheechoo deposit (the "2025 MRE" or the "Cheechoo MRE"). The Project is located in the Eeyou Istchee James Bay territory of Quebec, close to the Éléonore gold mine, approximately 350 km north of Matagami.

Sirios is a Canadian publicly traded company listed on the TSX Venture Exchange ("TSXV") under the trading symbol SOI, with its head office located Saint-Bruno-de-Montarville, Québec.

1.2 TERMS OF REFERENCE

This Report supports the disclosure in Sirios' news release dated July 10, 2025, titled "Sirios announces significant increase in Cheechoo open-pit gold resources and introduces underground resources". The effective date of the Report is July 1st, 2025.

All measurement units used in this Report are metric. Currency is expressed in Canadian dollars ("CAD" or "$") unless otherwise noted.

As of the effective date of this Report, the 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 Sirios 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

PLR Resources Inc.	
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.
Evomine Consulting Inc.	
Stephen Coates, P.Eng.	Value cut-off
	Open pit and underground optimization solids
Synectiq Inc.	
Christian Laroche, P.Eng.	Metallurgical testwork analysis
	Metallurgical recoveries forecast

1.4 PROPERTY DESCRIPTION, LOCATION AND OWNERSHIP

The Cheechoo Project (Main Block) is located 9 km east of the Éléonore gold mine whereas the Cheechoo deposit is approximately 15 km southeast of the Éléonore gold mine, in the Opinaca Reservoir area of the Eeyou Istchee James Bay region, in the Province of Québec, Canada. The Project is located approximately 200 km east of the Cree community of Wemindji, 330 km north of the towns of Matagami and Chibougamau, and 815 km north of Montreal.

The coordinates for the approximate centre of the Project are latitude 52°38' N and longitude 75°54' W (438920E and 5833483N: NAD 83 / UTM Zone 18N) on NTS map sheets 33B12 and 33C09.

Sirios controls three non-contiguous groups of 303 mining titles covering a total of 15,836 ha. The mining titles are distributed as follow: 228 mining titles for the Cheechoo main block, 35 mining titles for the west block and 40 mining titles for the south block. This information is current as of July 25, 2025. The mining titles are recorded under Sirios and are in good standing as of the effective date of this Report.

24 mining titles in the West block as well as 121 mining titles in the Main block are subject to a gold royalty to Gold Royalty Corp., which varies between 2.5% and 4% ("Net returns") for gold depending on the price of gold and which is 4% net return for all other substances extracted from these mining titles.

In March 2024, the Company signed an option agreement on the South and West blocks of the Cheechoo project with Electric Elements Mining Corp. ("EEM"). Pursuant to the agreement, Sirios granted EEM the option to acquire up to a 100% interest in each of the South and West blocks

1.5 GEOLOGY

The Cheechoo Project is located towards the eastern margin of the Opinaca basin, along a sheared NW-SE trending segment of the boundary that separates rocks of the Eastmain domain of the La Grande Subprovince to the southwest from those associated the Opinaca Subprovince to the northeast.

Here, rocks of the Eastmain domain mostly consist of strongly deformed metavolcanic assemblages, displaying evidence of multiple phases of deformation. Other surrounding lithologies include leucogranitic dykes and veins, banded iron formations, amphibolites and conglomerates from the Low Formation.

The Cheechoo Project is also host of a significant portion of the Cheechoo intrusion, host of most of the known gold occurrences in the area. The Cheechoo intrusion is entirely hosted within the Eastmain domain, within the strain influence of NW-SE sheared contact. The 10 km2 Cheechoo intrusion has homogeneous, very low magnetic susceptibilities, with local high magnetic domains at its margins, potentially associated with the presence of iron-rich formation with skarn-like assemblages in the metasedimentary package.

The Cheechoo intrusion is strongly recrystallized with saccharoidal texture, and progressively foliated towards its margins. The foliation within the intrusion is generally subparallel to the contact with biotite-rich paragneissic rocks. The high variability of mineral assemblages and proportions, enrichment in volatile elements (e.g. boron, and phosphorus) and the presence of miarolitic cavities suggest that these complex pegmatites are possibly at the magmatic-hydrothermal transition (exsolution of magmatic volatile phases from silicate melt).

The Main Zone gold occurrence is localized in the south part of the Cheechoo Project. It includes the eastern extremity of the Cheechoo granodiorite intrusion and the adjacent paragneissic rock. The intrusive-metasediment contact is generally sharp but can show presence of granodiorite apophyses and/or dykes, pegmatites, and a NNE-trending pegmatitic V2 vein network. The Main zone consists of a network of various generations of deformed and auriferous quartz to quartz ± K-feldspar veins and veinlets (mm to cm) hosted by the granodiorite intrusion, particularly developed along the margins. The mineralization is defined essentially by free gold associated with stockwork of quartz and quartz-amphibolite breccia and veinlets with arsenopyrite grains.

Veins are typically composed of sheeted quartz and feldspar with diverse shape (extension, en-echelon, pegmatite) and size (micrometer to centimeter). The mineralized veins are generally associated with a Na-K-Mg alteration envelope. The metallic signature is defined by bismuth, arsenic and tungsten, and more rarely by tellurium, selenium and lead. Sulphides associated with the mineralization account for a maximum of 1% of vein material and occur in the centre, on the margin, and disseminated throughout the veins network. The most common sulphide minerals are arsenopyrite, pyrrhotite and pyrite and their size varies from micrometer to millimeter. They are disseminated and are automorph. The gold grains are relatively coarse, from ten micrometers to a few millimeters. Those grains are isolated, locally in cluster or in fractures.

1.6 DRILLING

Diamond drillholes (DDH) for the 2023 program were focused on the metasediment zone exposed during the 2022 overburden stripping program. Diamond drillholes (DDH) for the 2024 winter program were focused on the Eclipse zone and diamond drillholes (DDH) for the 2024-2025 program were focused on infill drilling in the Main area.

Since the latest Technical Report, and as of May 13 2025 (close-out date of the current MRE database), Sirios has completed a total of 35 new DDH between 2023 and 2025 on the Project, totalling 7,740.7 m. Most of these holes were infill drilling aimed at converting a portion of the Inferred resources to Indicated resources.

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.

1.7 DATA VERIFICATION

The Mineral Resource Estimate (MRE) in this Report is based on drillholes completed between 2012 and 2025. Therefore, numerical data and quality control on assaying has been implemented from the beginning.

For the purpose of this MRE, PLR performed a basic verification on the entire Project database. All data was provided by Sirios in UTM coordinates. The database close-out date for the resource estimate is May 13, 2025; data from 345 diamond drillholes (82,717 m) and 56,337 assays is part of the database.

Pierre-Luc Richard of PLR visited the Project in July 2025, during the course of this mandate. The QP also visited the Project in October 2019, and in August 2022. Mr. Richard also visited the core cutting and storage facility in September 2019, November 2020, and November 2022. The purpose of the visits was to review the Project with the Sirios team. The visits included an overview of the general geological conditions, a tour of the core storage facility, visual inspections of selected mineralized drill core samples, survey of numerous drillhole casings, and a visit of various mechanically stripped outcrops. A review of assaying, QA/QC and drillhole procedures was also completed.

Mr. Richard also visited the Sirios office in the city of Saint-Bruno-de-Montarville, on several occasions, to exchange ideas with the geologists.

Pierre-Luc Richard reviewed sections of mineralized core while visiting the Project. All core boxes were labelled and properly stored either in roofed core storage or palleted. Sample tags were present in the boxes, and it was possible to validate sample numbers and confirm the presence of mineralization in witness half-core samples from the mineralized zones. Rejects and pulps are securely kept in maritime containers.

All the data used in this MRE was taken after the implementation of the NI 43-101. Information about sample preparation, analytical, QA/QC or security procedures is mostly available and conducted in accordance with the industry standards.

The QP is of the opinion that the drilling protocols in place are adequate. The database for the Cheechoo Project is of good overall quality. Minor issues have been noted during the validation process but have no material impact on the MRE. In the QP's opinion, the Cheechoo database is appropriate to be used for the estimation of Mineral Resources.

1.8 MINERAL PROCESSING AND METALLURGICAL TESTING

A preliminary assessment of the response of metallurgical samples from the Cheechoo Gold Project was conducted at ALS Metallurgy (Sloan and Mehrfert, March and October 2015). A second program designed to explore the heap leach performance of metallurgical samples was conducted at Actlabs (Steyn, 2017). The third testwork program was conducted at COREM as follows: Mineralogy (Perez, 2019); and Comminution and Metallurgical (Tremblay-Bouliane et al., 2019). This was followed by a testwork program conducted at Kappes, Cassiday & Associates (KCA) laboratories in Reno, Nevada (February 2021).

Sirios selected and prepared the samples used for all testwork programs.

1.9 MINERAL RESOURCE ESTIMATE

The mineral resource estimate presented in this Technical Report covers the Cheechoo 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 Leapfrog Geo.

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 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 Cheechoo Mineral Resource Estimate

Pit constrained *0.3 g/t Au Cut-off grade*	*Tonnes* *(t)*	*Au* *(g/t)*	*Au* *(koz)*
Indicated	34,993,000	1.12	**1,262**
Inferred	38,222,000	1.01	**1,242**
Stope constrained *1.5 g/t Au Cut-off grade*	*Tonnes* *(t)*	*Au* *(g/t)*	*Au* *(koz)*
Inferred	4,493,000	3.09	**446**
TOTAL *0.3 & 1.5 g/t Au Cut-off grade*	*Tonnes* *(t)*	*Au* *(g/t)*	*Au* *(koz)*
Total Indicated	**34,993,000**	**1.12**	**1,262**
Total Inferred	**42,715,000**	**1.23**	**1,688**

Notes to Table 1-2:

1. The independent qualified person 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 cut-off values, open pit optimization solids and underground optimization solids, and Christian Laroche, P.Eng., from Synectiq, for metallurgical parameters. The effective date of the MRE is July 01, 2025.
2. These Mineral Resources are not mineral reserves as they have no demonstrated economic viability. No economic evaluation of these Mineral Resource has been produced. The quantity and grade of reported Inferred Resources in this MRE are uncertain in nature and there has been insufficient drilling to define these Inferred Resources as Indicated. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated category with continued drilling.
3. The Qualified Persons are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially affect the Mineral Resource Estimate.
4. Calculations used metric units (meters (m), tonnes (t), and g/t). Metal contents in the above table are presented in troy ounces (metric tonne x grade / 31.103475). Values were rounded, and any discrepancies in total amounts are due to rounding errors.

5. The Cheechoo Mineral Resource estimate follows the November 29, 2019, CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.
6. 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 50 degrees in bedrock and 25 degrees in overburden. The pit optimization to develop the mineral resource-constraining pit shells was done using the pseudoflow algorithm in Deswik software. The stope optimization to develop the underground mineral resource was done using Deswik.SO software.
7. The MRE wireframe was prepared using Leapfrog Edge v.2024.1.3 and is based on 345 drill holes, totalling 82,717 meters drilled and 56,337 assays. The cut-off date for the drill hole database was May 13, 2025.
8. Composites of 1.5 meters were created inside the mineralization domains. High-grade capping was done on the composited assay data. Based on individual statistical study for each zone, composites were capped at 25.0 g/t Au for the HG zones, 2.0 g/t Au for the corridors and 1.0 g/t for the tonalite intrusion. A three-pass capping strategy defined by capping values decreasing as interpolation search distances increase was used in the grade estimation for the HG zones.
9. Pit constrained Mineral Resources for the base case are reported at a cut-off grade of 0.3 g/t Au; DSO-constrained Mineral Resources for the base case are reported at a cut-off grade of 1.5 g/t Au and include internal dilution (must-take). The cut-off grades will be re-evaluated in light of future prevailing market conditions and costs.
10. Specific gravity values were estimated using data available in the drill hole database. Density values between 2.64 and 2.76 were applied to the host rocks.
11. 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.
12. The Indicated and Inferred Mineral Resource categories are constrained to areas where drill spacing is less than 50m and 100 meters respectively and show reasonable geological and grade continuity.

1.10 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 Cheechoo deposit by extending 3D modelling at depth and laterally.
- The potential to upgrade Inferred Mineral Resources to the Indicated category with additional drilling is high.
- The exploration potential remains high at the Project scale, justifying further geological compilation and continuing exploration target generation programs.

A Conceptual Exploration Target, with both open-pit and underground potential, was identified during the preparation of the MRE. This conceptual Exploration Target is integrated into the litho-structural model used for the MRE, with the aim of facilitating future targeting and drill hole planning.

The assessment of the target for further exploration was completed by PLR Resources Inc. The estimation of the potential quantity and grade of the exploration target was based on the same drill hole database used for the Mineral Resource Estimate. With the available drilling information, PLR developed conceptual gold mineralization volumes, constrained by interpreted lithological and structural models. The original core samples were composited, and the composited gold assays were capped (similarly to the Mineral Resource Estimate) after evaluating the statistical distributions on probability plots. The gold values were interpolated into a three-dimensional block model using Ordinary Kriging. To estimate a tonnage, PLR used the same specific gravity values used for the Mineral Resource Estimate.

An open-pit scenario limited by the Project's boundary as well as DSO stopes were run to constrain the Exploration Target.

The Conceptual Exploration Target is estimated to be of 31 to 40 million tonnes of mineralization grading between 1.27 to 1.45 g/t Au, including an open-pit component of 25 to 32 million tonnes of mineralization grading between 0.90 to 1.05 g/t Au and an underground component of 6 to 8 million tonnes of mineralization grading between 2.80 to 3.05 g/t Au.

Please note the following disclosure warnings in respect to this exploration target:

- An Exploration Target is not a National Instrument 43-101 compliant resource or reserve.
- The Exploration Target is confirmed only as a target for further exploration.
- Potential quantity and grades are conceptual in nature only.

- There has not been sufficient drilling to define any mineral resource on this Exploration Target; drilling intercepts crosscut the Exploration Target but drill spacing is too scarce to classify these blocks as Inferred Mineral Resources.
- There is no certainty that further drilling will result in the target being delineated as a mineral resource.

1.11 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.:

- Phase 1:
    - PEA on the Cheechoo Deposit
- Phase 2:
    - Drilling to expand the Mineral Resource Estimate
    - Drilling to identify new exploration targets
    - Metallurgical Testwork

The estimated cost for the recommended work program is approximately 11.0M$, based on certain assumptions and current site costs. The estimate includes a 15% contingency.

2 INTRODUCTION

Sirios Resources Inc. ("Sirios", the "Company" or the "issuer") requested that PLR Resources Inc. ("PLR") lead a group of consulting firms, including Evomine Consulting ("Evomine") and Synectiq Inc. ("Synectiq") to compile an NI 43-101 compliant technical report on the Cheechoo gold Project (the "Project") and update the mineral resource estimate for the Cheechoo deposit (the "2025 MRE" or the "Cheechoo MRE"). The Project is located in the Eeyou Istchee James Bay territory, Quebec, close to the Éléonore gold mine, approximately 350 km north of Matagami.

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

1400 Marie-Victorin, #210
Saint-Bruno-de-Montarville
Québec, Canada, J3V 6B9

2.1 SCOPE OF STUDY

The following technical report (the "Report") presents the results of the updated mineral resource estimate for the Cheechoo 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.	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 Sirios' press release of July 10, 2025, titled "Sirios announces significant increase in Cheechoo open-pit gold resources and introduces underground resources".

The effective date of the Report is August 22, 2025.

The effective date of the MRE is July 01, 2025.

The drill hole database close-out date is May 13, 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 Sirios 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 Sirios 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.Geo.:

- The issuer provided the drill hole database, the high grade zones, Project boundary data, topographic surfaces and option agreements.

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 in July 2025, during the course of this mandate. The QP also visited the Project in October 2019, and in August 2022. Mr. Richard also visited the core cutting and storage facility in September 2019, November 2020, and November 2022. The site visits 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 visist 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 Canadian Dollars ("CAD" 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. Sirios previously filed the following technical reports:

- Richard, P.-L., 2022: "NI 43-101 Technical Report, Mineral Resource Estimate Update for the Cheechoo Project, Eeyou Istchee James Bay, Québec", prepared by BBA, effective date of July 20, 2022.
- Richard, P.-L., 2020: "NI 43-101 Technical Report, MINERAL RESOURCE ESTIMATE UPDATE FOR THE CHEECHOO PROJECT, Eeyou Istchee James Bay, Québec, Canada", prepared by BBA, effective date of October 31, 2020.
- Richard, P.-L., 2019: "NI 43-101 Technical Report , MINERAL RESOURCE ESTIMATE FOR THE CHEECHOO PROJECT, Eeyou Istchee James Bay, Québec, Canada" prepared by BBA, effective date of December 6, 2019.

These mineral resource estimate are referred to herein as the 2022 MRE, the 2020 MRE and the 2019 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:

- Dominique Doucet, CEO - Sirios
- Alexandra Blanchette, Geologist - Sirios
- Roger Moar, Senior Geologist - Sirios
- Jordi Turcotte, Senior Geologist – Sirios
- Christina Thouvenot, Geological Engineer in Mineral Resources - PLR
- Kenneth Williamson, Consultant - 3D GeoSolutions
- Guillaume Doucet, Consultant - Focus Geosolutions

3 RELIANCE ON OTHER EXPERTS

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, 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 titles, current ownership or possible litigations. A description of such agreements and the Project 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).

3.2 ENVIRONMENTAL STUDIES, PERMITS, AND SOCIAL OR COMMUNITY IMPACT

The QP relied on information with respect to the Project's environmental status, permits, and Social and Community Impact as provided by Jordi Turcotte, P. Geo., of Sirios. This information is used in Chapter 4 of the Report.

4 PROPERTY DESCRIPTION AND LOCATION

The Cheechoo Project (Main Block) is located 9 km east of the Éléonore gold mine, whereas the Cheechoo deposit is approximately 15 km southeast of the Éléonore gold mine, in the Opinaca Reservoir area of the Eeyou Istchee James Bay region, in the ProvInce of Québec, Canada. The Project is located approximately 200 km east of the Cree community of Wemindji, 330 km north of the towns of Matagami and Chibougamau, and 815 km north of Montreal (Figure 4-1).

The coordinates for the approximate centre of the Project are latitude 52°38' N and longitude 75°54' W (438920E and 5833483N: NAD 83 / UTM Zone 18N) on NTS map sheets 33B12 and 33C09.

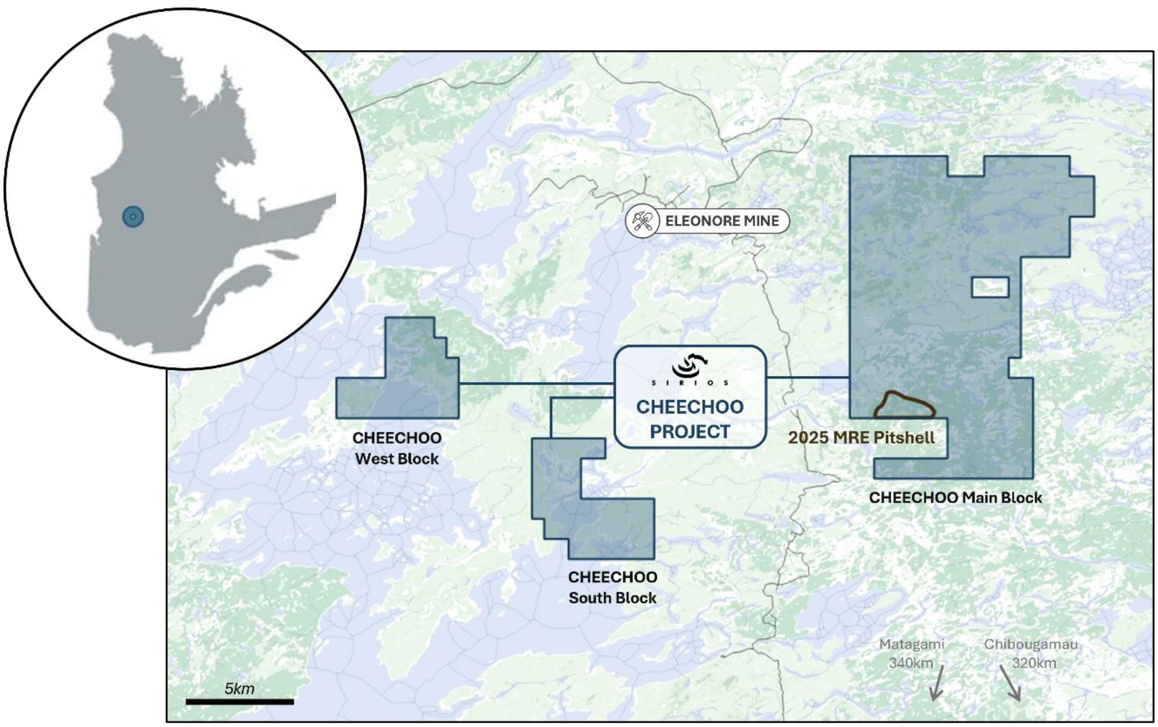

Figure 4-1 Project location

4.1 MINERAL TENURE

Sirios controls three non-contiguous groups of 303 mining titles covering a total of 15,836 ha. The mining titles are distributed as follow: 228 mining titles for the Cheechoo main bck, 35 mining titles for the west block and 40 mining titles for the south block. This information is current as of July 25, 2025 (Figure 4-2). The mining titles are recorded under Sirios and are in good standing as of the effective date of this Report (Table 4-1).

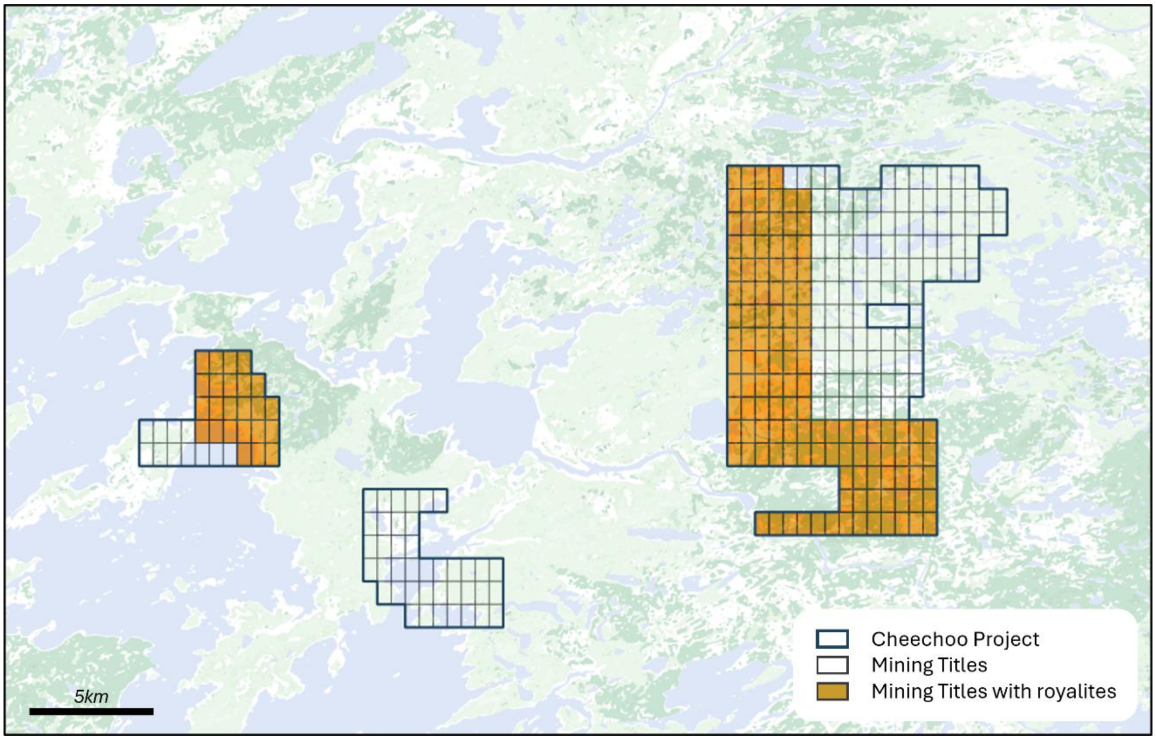

Figure 4-2 Mining Titles

Table 4-1 Details of Mining Titles (as of July 25, 2025)

Title number #	Ownership	Area (ha)	SNRC sheet	Registration	Expiry date	Block
2638384	Sirios	52.28	33B12	Ressources Sirios inc.	2027-03-06	Main
2638385	Sirios	52.28	33B12	Ressources Sirios inc.	2027-03-06	Main
2638386	Sirios	52.28	33B12	Ressources Sirios inc.	2027-03-06	Main
2638387	Sirios	52.28	33B12	Ressources Sirios inc.	2027-03-06	Main
2638388	Sirios	52.28	33B12	Ressources Sirios inc.	2027-03-06	Main
2638389	Sirios	52.28	33B12	Ressources Sirios inc.	2027-03-06	Main
2638390	Sirios	52.28	33B12	Ressources Sirios inc.	2027-03-06	Main
2638391	Sirios	52.27	33B12	Ressources Sirios inc.	2027-03-06	Main
2638392	Sirios	52.27	33B12	Ressources Sirios inc.	2027-03-06	Main
2638393	Sirios	52.27	33B12	Ressources Sirios inc.	2027-03-06	Main
2638394	Sirios	52.27	33B12	Ressources Sirios inc.	2027-03-06	Main
2638395	Sirios	52.27	33B12	Ressources Sirios inc.	2027-03-06	Main
2638396	Sirios	52.27	33B12	Ressources Sirios inc.	2027-03-06	Main
2638397	Sirios	52.27	33B12	Ressources Sirios inc.	2027-03-06	Main
2638398	Sirios	52.26	33B12	Ressources Sirios inc.	2027-03-06	Main
2638399	Sirios	52.26	33B12	Ressources Sirios inc.	2027-03-06	Main
2638400	Sirios	52.26	33B12	Ressources Sirios inc.	2027-03-06	Main
2638401	Sirios	52.26	33B12	Ressources Sirios inc.	2027-03-06	Main
2638402	Sirios	52.26	33B12	Ressources Sirios inc.	2027-03-06	Main
2638403	Sirios	52.26	33B12	Ressources Sirios inc.	2027-03-06	Main
2638404	Sirios	52.26	33B12	Ressources Sirios inc.	2027-03-06	Main
2638405	Sirios	52.25	33B12	Ressources Sirios inc.	2027-03-06	Main
2638406	Sirios	52.25	33B12	Ressources Sirios inc.	2027-03-06	Main
2638407	Sirios	52.25	33B12	Ressources Sirios inc.	2027-03-06	Main
2638408	Sirios	52.25	33B12	Ressources Sirios inc.	2027-03-06	Main
2638409	Sirios	52.25	33B12	Ressources Sirios inc.	2027-03-06	Main
2638410	Sirios	52.25	33B12	Ressources Sirios inc.	2027-03-06	Main
2638411	Sirios	52.25	33B12	Ressources Sirios inc.	2027-03-06	Main
2638412	Sirios	52.24	33B12	Ressources Sirios inc.	2027-03-06	Main
2638413	Sirios	52.24	33B12	Ressources Sirios inc.	2027-03-06	Main
2638414	Sirios	52.24	33B12	Ressources Sirios inc.	2027-03-06	Main
2638415	Sirios	52.24	33B12	Ressources Sirios inc.	2027-03-06	Main
2694689	Sirios	52.27	33B12	Ressources Sirios inc.	2025-11-27	Main
2694690	Sirios	52.26	33B12	Ressources Sirios inc.	2025-11-27	Main
2694691	Sirios	52.25	33B12	Ressources Sirios inc.	2025-11-27	Main
2694692	Sirios	52.24	33B12	Ressources Sirios inc.	2025-11-27	Main
2694693	Sirios	52.23	33B12	Ressources Sirios inc.	2025-11-27	Main
2694694	Sirios	52.23	33B12	Ressources Sirios inc.	2025-11-27	Main
2694695	Sirios	52.23	33B12	Ressources Sirios inc.	2025-11-27	Main
2694696	Sirios	52.23	33B12	Ressources Sirios inc.	2025-11-27	Main
2694697	Sirios	52.23	33B12	Ressources Sirios inc.	2025-11-27	Main
2694698	Sirios	52.23	33B12	Ressources Sirios inc.	2025-11-27	Main
2694699	Sirios	52.23	33B12	Ressources Sirios inc.	2025-11-27	Main
2694700	Sirios	52.23	33B12	Ressources Sirios inc.	2025-11-27	Main
2694701	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694702	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694703	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694704	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694705	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694706	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694707	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694708	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694709	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694710	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694711	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694712	Sirios	52.22	33B12	Ressources Sirios inc.	2025-11-27	Main
2694713	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main

Table 4-1 (cont'd) - Details of Mining Titles (as of July 25, 2025)

Title number #	Ownership	Area (ha)	SNRC sheet	Registration	Expiry date	Block
2694714	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694715	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694716	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694717	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694718	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694719	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694720	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694721	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694722	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694723	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694724	Sirios	52.21	33B12	Ressources Sirios inc.	2025-11-27	Main
2694725	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694726	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694727	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694728	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694729	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694730	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694731	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694732	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694733	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694734	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694735	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694736	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694737	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694738	Sirios	52.20	33B12	Ressources Sirios inc.	2025-11-27	Main
2694739	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694740	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694741	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694742	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694743	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694744	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694745	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694746	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694747	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694748	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694749	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694750	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694751	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694752	Sirios	52.19	33B12	Ressources Sirios inc.	2025-11-27	Main
2694753	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694754	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694755	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694756	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694757	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694758	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694759	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694760	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694761	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694762	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
2694763	Sirios	52.18	33B12	Ressources Sirios inc.	2025-11-27	Main
39989	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39990	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39991	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39992	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39993	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39994	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39995	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main

Table 4-1 (cont'd) - Details of Mining Titles (as of July 25, 2025)

Title number #	Ownership	Area (ha)	SNRC sheet	Registration	Expiry date	Block
39996	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39997	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39998	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
39999	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
40000	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
40001	Sirios	52.33	33B12	Ressources Sirios inc.	2026-09-26	Main
40002	Sirios	52.32	33B12	Ressources Sirios inc.	2026-09-26	Main
40003	Sirios	52.32	33B12	Ressources Sirios inc.	2026-09-26	Main
40004	Sirios	52.32	33B12	Ressources Sirios inc.	2026-09-26	Main
40005	Sirios	52.32	33B12	Ressources Sirios inc.	2026-09-26	Main
40006	Sirios	52.32	33B12	Ressources Sirios inc.	2026-09-26	Main
40007	Sirios	52.32	33B12	Ressources Sirios inc.	2026-09-26	Main
40008	Sirios	52.32	33B12	Ressources Sirios inc.	2026-09-26	Main
40009	Sirios	52.31	33B12	Ressources Sirios inc.	2026-09-26	Main
40010	Sirios	52.31	33B12	Ressources Sirios inc.	2026-09-26	Main
40011	Sirios	52.31	33B12	Ressources Sirios inc.	2026-09-26	Main
40012	Sirios	52.31	33B12	Ressources Sirios inc.	2026-09-26	Main
40013	Sirios	52.31	33B12	Ressources Sirios inc.	2026-09-26	Main
40014	Sirios	52.31	33B12	Ressources Sirios inc.	2026-09-26	Main
40015	Sirios	52.31	33B12	Ressources Sirios inc.	2026-09-26	Main
43408	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43409	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43410	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43411	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43412	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43413	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43414	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43415	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43416	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43417	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43418	Sirios	52.30	33B12	Ressources Sirios inc.	2026-09-28	Main
43419	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43420	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43421	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43422	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43423	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43424	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43425	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43426	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43427	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43428	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43429	Sirios	52.29	33B12	Ressources Sirios inc.	2026-09-28	Main
43430	Sirios	52.28	33B12	Ressources Sirios inc.	2026-09-28	Main
43431	Sirios	52.28	33B12	Ressources Sirios inc.	2026-09-28	Main
43432	Sirios	52.28	33B12	Ressources Sirios inc.	2026-09-28	Main
43433	Sirios	52.28	33B12	Ressources Sirios inc.	2026-09-28	Main
43436	Sirios	52.27	33B12	Ressources Sirios inc.	2026-09-28	Main
43437	Sirios	52.27	33B12	Ressources Sirios inc.	2026-09-28	Main
43438	Sirios	52.27	33B12	Ressources Sirios inc.	2026-09-28	Main
43439	Sirios	52.27	33B12	Ressources Sirios inc.	2026-09-28	Main
43442	Sirios	52.26	33B12	Ressources Sirios inc.	2026-09-28	Main
43443	Sirios	52.26	33B12	Ressources Sirios inc.	2026-09-28	Main
43444	Sirios	52.26	33B12	Ressources Sirios inc.	2026-09-28	Main
43445	Sirios	52.26	33B12	Ressources Sirios inc.	2026-09-28	Main
43448	Sirios	52.25	33B12	Ressources Sirios inc.	2026-09-28	Main
43449	Sirios	52.25	33B12	Ressources Sirios inc.	2026-09-28	Main
43450	Sirios	52.25	33B12	Ressources Sirios inc.	2026-09-28	Main

Table 4-1 (cont'd) - Details of Mining Titles (as of July 25, 2025)

Title number #	Ownership	Area (ha)	SNRC sheet	Registration	Expiry date	Block
43451	Sirios	52.25	33B12	Ressources Sirios inc.	2026-09-28	Main
43454	Sirios	52.24	33B12	Ressources Sirios inc.	2026-09-28	Main
43455	Sirios	52.24	33B12	Ressources Sirios inc.	2026-09-28	Main
43456	Sirios	52.24	33B12	Ressources Sirios inc.	2026-09-28	Main
43457	Sirios	52.24	33B12	Ressources Sirios inc.	2026-09-28	Main
43460	Sirios	52.23	33B12	Ressources Sirios inc.	2026-09-28	Main
43461	Sirios	52.23	33B12	Ressources Sirios inc.	2026-09-28	Main
43462	Sirios	52.23	33B12	Ressources Sirios inc.	2026-09-28	Main
43463	Sirios	52.23	33B12	Ressources Sirios inc.	2026-09-28	Main
43466	Sirios	52.22	33B12	Ressources Sirios inc.	2026-09-28	Main
43467	Sirios	52.22	33B12	Ressources Sirios inc.	2026-09-28	Main
43468	Sirios	52.22	33B12	Ressources Sirios inc.	2026-09-28	Main
43469	Sirios	52.22	33B12	Ressources Sirios inc.	2026-09-28	Main
43472	Sirios	52.21	33B12	Ressources Sirios inc.	2026-09-28	Main
43473	Sirios	52.21	33B12	Ressources Sirios inc.	2026-09-28	Main
43474	Sirios	52.21	33B12	Ressources Sirios inc.	2026-09-28	Main
43475	Sirios	52.21	33B12	Ressources Sirios inc.	2026-09-28	Main
43478	Sirios	52.20	33B12	Ressources Sirios inc.	2026-09-28	Main
43479	Sirios	52.20	33B12	Ressources Sirios inc.	2026-09-28	Main
43480	Sirios	52.20	33B12	Ressources Sirios inc.	2026-09-28	Main
43481	Sirios	52.20	33B12	Ressources Sirios inc.	2026-09-28	Main
43484	Sirios	52.19	33B12	Ressources Sirios inc.	2026-09-28	Main
43485	Sirios	52.19	33B12	Ressources Sirios inc.	2026-09-28	Main
43486	Sirios	52.19	33B12	Ressources Sirios inc.	2026-09-28	Main
43487	Sirios	52.19	33B12	Ressources Sirios inc.	2026-09-28	Main
43490	Sirios	52.18	33B12	Ressources Sirios inc.	2026-09-28	Main
43491	Sirios	52.18	33B12	Ressources Sirios inc.	2026-09-28	Main
43492	Sirios	52.18	33B12	Ressources Sirios inc.	2026-09-28	Main
43493	Sirios	52.18	33B12	Ressources Sirios inc.	2026-09-28	Main
45442	Sirios	52.28	33B12	Ressources Sirios inc.	2026-11-16	Main
45443	Sirios	52.28	33B12	Ressources Sirios inc.	2026-11-16	Main
45444	Sirios	52.27	33B12	Ressources Sirios inc.	2026-11-16	Main
45445	Sirios	52.27	33B12	Ressources Sirios inc.	2026-11-16	Main
45446	Sirios	52.26	33B12	Ressources Sirios inc.	2026-11-16	Main
45447	Sirios	52.26	33B12	Ressources Sirios inc.	2026-11-16	Main
45448	Sirios	52.25	33B12	Ressources Sirios inc.	2026-11-16	Main
45449	Sirios	52.25	33B12	Ressources Sirios inc.	2026-11-16	Main
45450	Sirios	52.24	33B12	Ressources Sirios inc.	2026-11-16	Main
45451	Sirios	52.24	33B12	Ressources Sirios inc.	2026-11-16	Main
45452	Sirios	52.23	33B12	Ressources Sirios inc.	2026-11-16	Main
45453	Sirios	52.23	33B12	Ressources Sirios inc.	2026-11-16	Main
45454	Sirios	52.22	33B12	Ressources Sirios inc.	2026-11-16	Main
45455	Sirios	52.22	33B12	Ressources Sirios inc.	2026-11-16	Main
45456	Sirios	52.21	33B12	Ressources Sirios inc.	2026-11-16	Main
45457	Sirios	52.21	33B12	Ressources Sirios inc.	2026-11-16	Main
45458	Sirios	52.20	33B12	Ressources Sirios inc.	2026-11-16	Main
45459	Sirios	52.20	33B12	Ressources Sirios inc.	2026-11-16	Main
45460	Sirios	52.19	33B12	Ressources Sirios inc.	2026-11-16	Main
45461	Sirios	52.19	33B12	Ressources Sirios inc.	2026-11-16	Main
45509	Sirios	52.30	33B12	Ressources Sirios inc.	2026-11-16	Main
45510	Sirios	52.30	33B12	Ressources Sirios inc.	2026-11-16	Main
45511	Sirios	52.30	33B12	Ressources Sirios inc.	2026-11-16	Main
45512	Sirios	52.30	33B12	Ressources Sirios inc.	2026-11-16	Main
45515	Sirios	52.29	33B12	Ressources Sirios inc.	2026-11-16	Main
45516	Sirios	52.29	33B12	Ressources Sirios inc.	2026-11-16	Main
45517	Sirios	52.29	33B12	Ressources Sirios inc.	2026-11-16	Main
45518	Sirios	52.29	33B12	Ressources Sirios inc.	2026-11-16	Main

Table 4-1 (cont'd) - Details of Mining Titles (as of July 25, 2025)

Title number #	Ownership	Area (ha)	SNRC sheet	Registration	Expiry date	Block
2644050	Sirios	52.37	33C09	Ressources Sirios inc.	2027-04-04	South
2644051	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-04	South
2644052	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-04	South
2644289	Sirios	52.37	33C09	Ressources Sirios inc.	2027-04-05	South
2644290	Sirios	52.37	33C09	Ressources Sirios inc.	2027-04-05	South
2644291	Sirios	52.37	33C09	Ressources Sirios inc.	2027-04-05	South
2644292	Sirios	52.37	33C09	Ressources Sirios inc.	2027-04-05	South
2644293	Sirios	52.37	33C09	Ressources Sirios inc.	2027-04-05	South
2644294	Sirios	52.37	33C09	Ressources Sirios inc.	2027-04-05	South
2644295	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644296	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644297	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644298	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644299	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644300	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644301	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644302	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644303	Sirios	52.36	33C09	Ressources Sirios inc.	2027-04-05	South
2644304	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-05	South
2644305	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-05	South
2644306	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-05	South
2644307	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-05	South
2644308	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-05	South
2644309	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-05	South
2644310	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-05	South
2644311	Sirios	52.35	33C09	Ressources Sirios inc.	2027-04-05	South
2645449	Sirios	52.34	33C09	Ressources Sirios inc.	2027-04-13	South
2645450	Sirios	52.33	33C09	Ressources Sirios inc.	2027-04-13	South
2645451	Sirios	52.33	33C09	Ressources Sirios inc.	2027-04-13	South
2645452	Sirios	52.32	33C09	Ressources Sirios inc.	2027-04-13	South
2645453	Sirios	52.32	33C09	Ressources Sirios inc.	2027-04-13	South
2645454	Sirios	52.32	33C09	Ressources Sirios inc.	2027-04-13	South
2645455	Sirios	52.32	33C09	Ressources Sirios inc.	2027-04-13	South
2645456	Sirios	52.32	33C09	Ressources Sirios inc.	2027-04-13	South
2755010	Sirios	52.34	33C09	Ressources Sirios inc.	2026-03-22	South
2755011	Sirios	52.34	33C09	Ressources Sirios inc.	2026-03-22	South
2755012	Sirios	52.34	33C09	Ressources Sirios inc.	2026-03-22	South
2755013	Sirios	52.33	33C09	Ressources Sirios inc.	2026-03-22	South
2755014	Sirios	52.33	33C09	Ressources Sirios inc.	2026-03-22	South
2755015	Sirios	52.32	33C09	Ressources Sirios inc.	2026-03-22	South

Table 4-1 (cont'd) - Details of Mining Titles (as of July 25, 2025)

Title number #	Ownership	Area (ha)	SNRC sheet	Registration	Expiry date	Block
2427997	Sirios	52.30	33C09	Ressources Sirios inc.	2027-05-24	West
2427998	Sirios	52.30	33C09	Ressources Sirios inc.	2027-05-24	West
2427999	Sirios	52.30	33C09	Ressources Sirios inc.	2027-05-24	West
2428000	Sirios	52.30	33C09	Ressources Sirios inc.	2027-05-24	West
2428001	Sirios	52.30	33C09	Ressources Sirios inc.	2027-05-24	West
2428002	Sirios	52.30	33C09	Ressources Sirios inc.	2027-05-24	West
2428003	Sirios	52.30	33C09	Ressources Sirios inc.	2027-05-24	West
2428004	Sirios	52.29	33C09	Ressources Sirios inc.	2027-05-24	West
2428005	Sirios	52.29	33C09	Ressources Sirios inc.	2027-05-24	West
2428006	Sirios	52.29	33C09	Ressources Sirios inc.	2027-05-24	West
2428007	Sirios	52.29	33C09	Ressources Sirios inc.	2027-05-24	West
47998	Sirios	52.30	33C09	Ressources Sirios inc.	2026-12-09	West
47999	Sirios	52.30	33C09	Ressources Sirios inc.	2026-12-09	West
48000	Sirios	52.30	33C09	Ressources Sirios inc.	2026-12-09	West
48005	Sirios	52.29	33C09	Ressources Sirios inc.	2026-12-09	West
48006	Sirios	52.29	33C09	Ressources Sirios inc.	2026-12-09	West
48007	Sirios	52.28	33C09	Ressources Sirios inc.	2026-12-09	West
48008	Sirios	52.28	33C09	Ressources Sirios inc.	2026-12-09	West
48009	Sirios	52.27	33C09	Ressources Sirios inc.	2026-12-09	West
48010	Sirios	52.27	33C09	Ressources Sirios inc.	2026-12-09	West
48011	Sirios	52.26	33C09	Ressources Sirios inc.	2026-12-09	West
48012	Sirios	52.26	33C09	Ressources Sirios inc.	2026-12-09	West
48013	Sirios	52.29	33C09	Ressources Sirios inc.	2026-12-09	West
48014	Sirios	52.29	33C09	Ressources Sirios inc.	2026-12-09	West
48015	Sirios	52.29	33C09	Ressources Sirios inc.	2026-12-09	West
48016	Sirios	52.29	33C09	Ressources Sirios inc.	2026-12-09	West
48017	Sirios	52.28	33C09	Ressources Sirios inc.	2026-12-09	West
48018	Sirios	52.28	33C09	Ressources Sirios inc.	2026-12-09	West
48019	Sirios	52.28	33C09	Ressources Sirios inc.	2026-12-09	West
48020	Sirios	52.28	33C09	Ressources Sirios inc.	2026-12-09	West
48021	Sirios	52.27	33C09	Ressources Sirios inc.	2026-12-09	West
48022	Sirios	52.27	33C09	Ressources Sirios inc.	2026-12-09	West
48023	Sirios	52.27	33C09	Ressources Sirios inc.	2026-12-09	West
48024	Sirios	52.26	33C09	Ressources Sirios inc.	2026-12-09	West
48025	Sirios	52.26	33C09	Ressources Sirios inc.	2026-12-09	West

4.2 ROYALTIES AND ENCUMBRANCES

Some of the mining titles comprising the Project are subject to certain agreements and royalties. Figure 4-2 shows the mining titles with active royalties.

Royalty

24 mining titles in the West block as well as 121 mining titles in the Main block are subject to a gold royalty to Gold Royalty Corp., which varies between 2.5% and 4% ("Net returns") for gold depending on the price of gold and which is 4% net return for all other substances extracted from these mining titles. Notably, the gold royalty would be 4% for a price of gold over CAD$3,000 per ounce. Those royalties were part of the Sirios and Golden Valley 2012 binding sheet agreement. On July 27, 2016, Sirios confirmed that it had completed its fulfillment obligations and that the remaining 55% interest held by Golden Valley was transferred to Sirios. Sirios now holds 100% interest of the Cheechoo Project.

Option granted on the West and South blocks

In March 2024, the Company signed an option agreement on the South and West blocks of the Cheechoo project with Electric Elements Mining Corp. ("EEM"). Pursuant to the agreement, Sirios granted EEM the option to acquire up to a 100% interest in each of the South and West blocks in return for an investment of $0.5M over a period of two years, as follow: pay an amount of $100,000 to Sirios upon signature (received), carry out a minimum of $50,000 in exploration work on each of the two blocks and pay an amount of $150,000 in cash and/or shares, with a minimum of 50% in cash, per block, at the request of Sirios.

EEM explores both blocks for lithium and if the option is exercised, Sirios will retain a 1.5% NSR ("Net Smelter Return") royalty on the South block. In addition, if the option is exercised, Sirios will be able to recover, at no cost, 100% of the EER on which gold mineralization in bedrock reaching a minimum metal factor of 10 g/t per meter has been identified.

4.3 ENVIRONMENTAL LIABILITIES

There are no known environmental liabilities on the Project.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

5.1.1 ACCESS

The Cheechoo Project is located about 330 km north of the mining town of Matagami or about 500 km north of Val-d'Or. The area can be accessed via the paved James Bay Highway (extension of Highway #109), about midway between Matagami and Radisson, or via the all-weather gravel road Route du Nord from Chibougamau. Various secondary gravel roads give access to the Opinaca Reservoir and other Hydro-Québec infrastructure, as well as to the Éléonore mine.

The main block of the Cheechoo Project is accessible by land via the Éléonore mine all-weather gravel road. At km 54 road marker of this road, an access to the Cheechoo camp or worksite is via a dirt access road.

The west block and the south block of the Cheechoo Project are partially located on islands within the Opinaca Reservoir and are currently only accessible by boat or helicopter.

Helicopters are available at Radisson or Chibougamau, about 1-1.5 hours away. A regional airport is located at Nemiscau, about 100 km south of the Project. Arrangements can also be made to land and fuel at the Éléonore mine (helicopter/plane) or KM-381 relays (helicopter only).

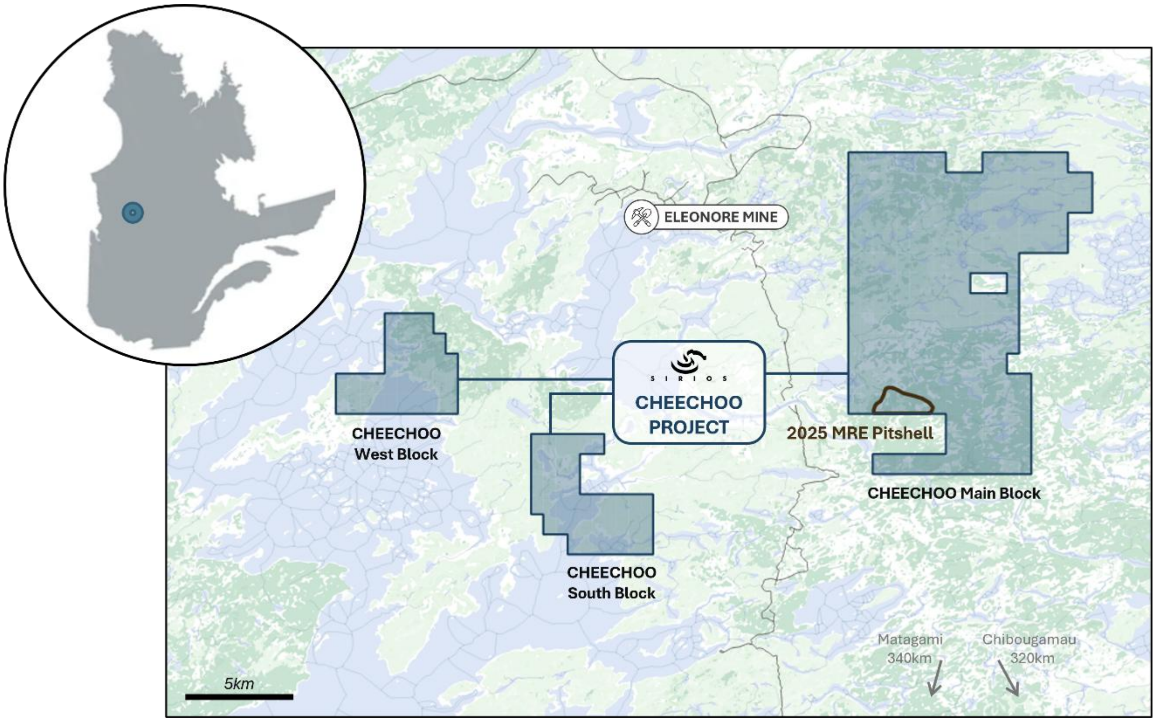

Figure 5-1 Access to the Cheechoo Project

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 -23°C in winter (January and February) to an average maximum of 14°C in the summer (July and August). Extreme temperatures below -40°C or above 35°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. Mining and drilling operations can be conducted year-round, whereas surface exploration work (mapping, channel sampling) can take place from May to October. Ideal period for exploration work is in summer, from May to early September or in spring from late February to early April for programs requiring winter access.

5.2 LOCAL RESOURCES AND INFRASTRUCTURE

5.2.1 LOCAL WORKFORCE

Local workforce could be provided from the neighbouring Cree communities as well as specialized mining personnel from the Abitibi and Chibougamau regions.

5.2.2 ADDITIONAL SERVICES

Services in the vicinity of the project are limited:

- Dhilmar's Éléonore mine is located about 15 km to the north-west of the Cheechoo main block. Emergency services are available, such as a nurse and an airstrip;
- Hydro-Québec EM-1 camp is located about 40 km to the south of Cheechoo;
- KM-381 Roadstop is the most convenient outpost in the area, located along the James Bay Highway. Services such as lodging, cafeteria, fuel, heliport, garage, and an ambulance are available;
- Optical fiber is available about 12 km from the Cheechoo Exploration Camp;
- LG3 airport is located about 105 km to the north, while Nemiscau airport is located about 105 km to the south-east. Both are serviced by Air Creebec, with daily scheduled flights to Montreal's Trudeau Airport;
- The Cree community of Nemaska, located about 100 km to the southeast, offers various services such as lodging, grocery store, garage, and fuel, as well as a dispensary. The head office of the Grand Council of the Crees is located in the community of Nemaska.

Other services are available in the town of Radisson, 160 km to the north of Matagami, but mainly in the Abitibi region, 500 km to the south, where all the services and amenities necessary for industrial development or mining operations are available.

5.3 PHYSIOGRAPHY

The Opinaca Reservoir represents the easternmost extent of the James Bay lowlands, whose limit coincides with the Cheechoo Project. To the west, the landscape is dominated by a flat plain with an altitude of approximately 220 m ASL. This plain is poorly drained with abundant marshes and meandering streams or inundated by the reservoir. It is punctuated by many hills typical of the Canadian Shield. Lakes are abundant, either shallow in muskegs, or more crystalline on hilltops.

The eastern area has a more rugged topography, typical of the Canadian Shield, with abundant lakes, dense drainage, and ubiquitous rounded hills reaching an altitude of 405 m. Drainage is composed of the Opinaca River to the north and the Gipouloux River to the south; both flow into the Opinaca Reservoir then subsequently into Sakami Lake, the La Grande River and James Bay.

Outcrops are not abundant, especially in the western area. Most outcrops are located on hill sides or tops. Overburden deposits are either thin till blankets to the east or a complex assemblage of periglacial and glacio-marine sediment to the west.

5.4 INFRASTRUCTURE

Although the Project is located in a relatively isolated region, the Cheechoo Project benefits from its proximity to the Éléonore mine, which is 15 km away. On top of the mining infrastructure, the support facilities for the Éléonore mine include: an oversized access road accessible year-round, an airstrip and a camp that can accommodate more than 400 people. The mine is supplied with electricity by a 120/25 kV substation, which is itself supplied by the substation at the Eastmain distribution point. The 161 kV power line serving the Éléonore mine runs 5 km to the west of the main Cheechoo block.

Sufficient water is available on the Project from surface water sources for both exploration and mining needs.

The Cheechoo work camp, located on the main Project block, is reached via a 12-kilometer dirt access road. The quality of the road varies greatly with the seasons. The access road has two 40 foot bridges with a load-bearing capacity of 65 t. The work camp can presently lodge up to 40 people. Partial cellular phone coverage is available on the Project.

Railheads are available in Matagami and Chibougamau, about 350 km and 450 km to the south. There is a seasonal seaport at Chisasibi, about 235 km to the northwest.

6 HISTORY

The earliest recorded mineral exploration in the area was undertaken by Noranda Inc. in 1964 and led to the discovery of the Ell Lake showing. Subsequently, various works were carried out in the region by governmental geological survey teams.

In 1972, regional low-density aeromagnetic surveys were carried out by the federal government. A geological framework was then established in the SDBJ period by Franconi (1978). More recent and accurate geological maps were made for NTS 33B (1/250 000) (Simard and Gosselin, 1999), 33C/09-33C/16 (1/50000) (Bandyayera and Fliszár, 2007), 33C/10 and 33C/15 (Bandyayera and Lacoste, 2009) and 33B/12-33B/13 (Bandyayera et al., 2010). A low-density aeromagnetic survey (GSC) and more recent medium density aeromagnetic and aerospectrometric surveys (Goldak, 2008) are available, along with a geochemical survey of lake-bottom sediments (Gleeson, 1976), reanalyzed by Beaumier and Kirouac (1995) for NTS sheet 33B and in 2004 for NTS sheet 33C (Beaumier and Leduc, 2005).

In 2001, Virginia Gold Mines Inc. resumed exploration in the Lac Ell area, which led to the discovery of the Roberto zone in 2004, from which the Éléonore gold mine was developed. This discovery launched a massive claim staking rush in the region. Initial staking in the area by Sirios coincided with this event.

6.1 HISTORICAL MINERAL EXPLORATION WORK ON THE CHEECHOO PROJECT

In 2004, when the discovery of the Roberto zone by Virginia Gold Mines was announced, Sirios acquired hundreds and later in 2005 up to a few thousands of mining titles in the area immediately east and southeast of what is now the Éléonore mine. Close to 600 of these mining titles formed the Project blocks formerly known as Shark, Cheechoo-A, Cheechoo-B (subsequently Cheechoo-B West and Cheechoo-B East) and Cheechoo-C. These claim blocks were progressively reduced to the Cheechoo-A and Cheechoo-B West blocks which, together, now make up the current Cheechoo Project. Based on available data, no previous exploration work was conducted within the Project boundaries prior to staking by Sirios in 2004.

In the same year, Golden Valley signed an option agreement with Sirios to acquire a 60% interest in the Cheechoo and Sharks projects. Golden Valley Mines initiated their prospecting work in the summer of 2005. Intensive efforts continued until 2007, followed by a drilling program in 2009.

In 2009, Golden Valley acquired their 60% interest of the Cheechoo Project after completing $4M of exploration work on the Project. Work continued sporadically until 2011. In 2012, Sirios took over the Project and subsequently reacquired a 100%

interest of the Project in June 2016, after the completion of $5M in exploration work and the issuance of 4,148,374 common shares to Golden Valley following the terms of a second agreement signed in 2012.

6.1.1 GOLDEN VALLEY MINES

2005

In the winter of 2005, Golden Valley Mines commissioned an aeromagnetic and electromagnetic survey (DIGHEM) covering their properties in the area (Smith, 2005). The strategy of Golden Valley was then to outline electromagnetic conductors, using a traditional base-metal exploration approach.

In the summer, Golden Valley completed a lake bottom sediment geochemical survey (Lalancette and Girard, 2006a to 2006d; Allou and Girard, 2006a to 2006g). A prospecting and geological mapping program was also conducted. The prospecting work mainly targeted the identified AEM conductors. The main discovery, a cluster of gold-bearing boulders, was made on the western block of the Cheechoo Project (formerly Cheechoo A). Of the 177 samples collected, 23 graded between 0.1 g/t Au and 3.98 g/t Au, with local copper values up to 1.6% and 1.7% Cu and silver at 37.4 g/t Ag and 52.9 g/t Ag (Girard et al., 2006a). Only marginal gold values were obtained on the Cheechoo main block (formerly part of Cheechoo B) (Girard et al., 2006b). No significant results were found on Cheechoo C (Girard et al., 2006c) and Shark (Girard et al., 2006d).

2006

Pursuing with its approach of targeting AEM conductors, Golden Valley commissioned line cutting for a total of 93 km and a geophysical survey on the northeast corner of Cheechoo A. Geophysical work, performed by Geosig (Hubert, 2006), included induced polarization (77 km), horizontal loop electromagnetic (Max-Min) (13.3 km) and ground magnetic surveys (93 km). The anomalies detected were related to the electromagnetic conductors outlined in the airborne survey (Smith 2005).

A prospecting program was conducted in late summer (Harnois and Boubakour, 2009a,b,c). Targets included geophysical anomalies, lake-bottom anomalies as well as mineral occurrences discovered in 2006. Abundant rock samples were collected, leading to the discovery of three gold-bearing occurrences: Letang (Cheechoo A, 209 g/t Au in a selected sample), Marchand (Shark-Cheechoo B; 11.96 g/t Au in a selected sample) and Garrioch (Cheechoo-B, 0.39 g/t Au in a selected sample). Fourteen trenches were excavated over gossanous zones, most of them on AEM anomalies, for 142 channel samples, without any significant results except for arsenic. Three new gold-bearing boulder fields were also found on Cheechoo-A, with similar gold grade distribution as in 2005, between 0.1 g/t Au and 2.1 g/t Au.

2007

Pursuing its approach of targeting AEM conductors, Golden Valley commissioned line cutting over four grids as follows:

- Grid #1: Shark, North of Gladman Lake, 73.2 km, (Dubois, 2007);
- Grid #2: Straddling Shark and Cheechoo-B, Marchand occurrence, 45.8 km (Dubois and Alvarado, 2007);
- Grid #3: South-east of Cheechoo-B, 29.0 km, Garrioch occurrence, (Alvarado and Lalande, 2007);
- Grid #4: South-east of Cheechoo-B, Last Day occurrence, 45.4 km, (Dubois 2008).

Geophysical surveys were conducted on part of the Project and included a combination of induced polarization, horizontal loop electromagnetic (Max-Min) and ground magnetic surveys with total field and measured vertical gradient (Dubois, 2007). The rationale for the grid selection is not indicated but, seems to relate to mineralized occurrences found during the 2005 or 2006 prospecting. Grids were apparently tailored to AEM conductors although HLEM was not conducted on every grid.

A Golden Valley team conducted a wide array of field work in 2007, as indicated in an exhaustive consolidated report (Harnois and Boubakour, 2009a). This fieldwork aimed to follow up on 2006 results. Very limited work was conducted outside of the geophysical grids. Although well illustrated with photographs, the grid mapping is poorly documented, with the geological features described only near the known occurrences.

The best result obtained during this campaign was 3.83 g/t Au from Cheechoo A from 82 collected grab samples. The program also included trenching and channel sampling of the Trap zone, Outcrop 150 and Outcrop 159 on Cheechoo A (Cheechoo western block). A total of 22 trenches, for 118 m, were excavated by hand and 150 channel samples were collected. Broad low-grade gold was intersected on Outcrop 159. A humus geochemical survey was also conducted with 5,496 samples collected over six grids. Gold by fire assay was the only element analyzed.

Finally, in autumn 2007, Golden Valley conducted an exploratory drilling program (Harnois and Boubakour, 2009b). A total of 19 short holes were drilled for 2,506.7 m and 682 samples collected on the Cheechoo A, Shark and B blocks. Twelve of these holes were drilled on the western block (formerly Cheechoo-A). All these holes targeted AEM conductive or IP chargeable zones. The holes intersected only slightly anomalous gold grades.

6.1.2 GOLDEN VALLEY MINES AND SIRIOS

2010

In the summer of 2010, Golden Valley commissioned a ground magnetometer and a soil geochemical survey in the Cheechoo B West area (main block) (Girard et Gao, 2010). The objective was to outline the source of the geochemical dispersion train found down-ice on the Éléonore-South project of Eastmain Resources (Canova et al., 2010). The surveys were conducted along uncut grids. The geochemical survey included 1,555 humus samples analyzed by ICP-MS after sodium pyrophosphate digestion. The same team conducted a magnetometer survey, using GEM sensor plus a base station located in the centre of the survey. Camille St-Hilaire interpreted the geophysical results.

Upon reception of the preliminary results, Golden Valley and Sirios conducted a ground follow-up prospecting program targeting the main geochemical anomalies (Girard, Aubin and Boubakour, 2011). The program consisted of prospecting, with abundant gold bearing samples being collected, most of them from a slightly altered granitoid. Of the 168 selected samples, 26 contained 0.1 g/t Au to 2.58 g/t Au. Numerous mineralized samples were coincident with soil anomalies.

2011

In the summer of 2011, a second prospecting program was initiated on the main block (formerly Cheechoo B-West) by Golden Valley. The objective was to cover the poorly explored northern and south-eastern part of the Project (Barrette and Ali, 2012). A total of 51 grab samples were collected and assayed, without any significant results.

6.1.3 SIRIOS RESOURCES

2012

In the summer of 2012, line cutting of 51.45 km, followed by induced polarization and ground magnetic survey, was carried out (Dubois, 2012). The grid covers the southeast corner of the main block, encompassing roughly the same area as the 2010 soil geochemical survey.

Following the June 2012 agreement, Sirios became the operator of the Project. At that time, Sirios' interest in the Project was 40% and Golden Valley 60%.

A drilling program was initiated in the fall on the main block (Cheechoo B-West). Eight short, NQ-size holes (CH12-001 to CH12-008) were drilled in October, for 938 m and 792 samples collected. Five of the holes intersected broad low-grade gold mineralization.

2013

In February 2013, Sirios notified Golden Valley regarding the completion of the first terms of the option agreement, which grants the right to acquire a 5% supplementary interest in the Project. Later that year, Sirios notified Golden Valley of its acquisition of the 5% supplementary interest and of its intent to proceed with a complete acquisition of the Project. In the summer, Sirios released a NI 43-101 technical report on the Cheechoo Project (effective date June 14, 2013; Girard, 2013).

In the fall of 2013, four short diamond drillholes (DDH) (CH13-009 to CH13-012), consisting of 750 m of drilling, were initiated with a total of 763 samples sent for analysis. Positive results were obtained in three of the four DDH. These results confirmed the gold zone discovered by the 2012 drilling (Turcotte, 2014a).

2014

In February 2014, a high-resolution heliborne magnetic survey was carried out by Geodata Solutions GDS Inc. for Sirios on the main block (Cheechoo-B West at the time). A total of 1,411 linear kilometers were flown to cover the Project. Traverse line spacing was 50 m, with a nominal height of 30 m above ground level. The goal of the survey was to identify geological structures that could potentially be associated to the positive drill results obtained in 2012 and 2013. Geological structural elements in relation with the tonalite that forms a large low-grade gold envelope were of particular interest. A detailed interpretation of the survey is presented in a report prepared by St-Hilaire (2014).

In the spring of 2014, five additional DDH (CH14-013 to CH14-017) were drilled by Sirios for a total of 1,035 m. A total of 672 samples, covering 813 m, were sent for analysis. All five DDH returned mineralized intervals (Turcotte, 2014b).

In June of 2014, a short prospecting/sampling program was carried out by Sirios in the northern portion of the main block and along the 2012 grid. In total, 212 grab samples were collected; with seven samples returning grades higher than 0.1 g/t Au, but none exceeding 0.5 g/t Au (Allard, 2014).

In the fall of 2014, two DDH (CH14-018 and CH14-019) were drilled. The previous DDH, CH14-017, was also extended by 100 m. In total 522.4 m of additional drilling was completed. A total of 446 samples, covering 504.3 m, were sent for analysis (Joly, 2015).

2015

In the summer of 2015, mechanical outcrop stripping and channel sampling were carried out in the main area, at the same period as the soil and glacial sediment surveys. Four channels (CHRN15-001 to CHRN15-004), totalling 113 m, were sampled.

In the summer of 2015, IOS Services Geoscientifiques Inc. carried out a humus soil geochemical survey on the main block for Sirios. The survey covered two grids (A and B) and totalled 313 samples (Villeneuve and Fournier, 2016). The campaign followed up on the previous 2009 (Éléonore-South) and 2010 (Girard et al., 2011) soil geochemical surveys. Interpreted results of the 2015 survey revealed that gold was relatively abundant in the survey area and that it correlated locally with arsenic anomalies (Villeneuve and Fournier, 2016). Further investigation was recommended without mention of any specific targets.

This ground survey was conducted concurrently with a campaign of glacial sediment sampling where a significant number of gold grains were observed in two samples located inside Grid B (2015 soil survey). Out of the 36 samples collected, 131 grains of gold were counted in sample #91920011, while sample #91920012 contained 46 gold grains. Samples were characterized using the ARTGold® process (Villeneuve, 2015).

In the fall of 2015, 11 DDH were completed (CH15-20 to CH15-30), totalling 1,962 m. High-grade intervals were reported in some of the DDH (Turcotte, 2018).

2016

In winter 2016, drilling resumed from the 2015 drilling campaign, with 27 DDH (CH16-22E and CH16-031 to CH16-056), totalling 4,431 m. Highlights include nearly half of the analyzed samples showing assay results equal to or greater than 0.1 g/t Au, as well as DDH CH16-052 with 12.1 g/t Au over 20.3 m (Turcotte, 2018).

In the summer 2016, 44 grab samples were collected from outcrops. These samples were mostly collected during the regional structural mapping work carried out on the main block. Few samples returned slightly anomalous gold grade (Boudreau and Turcotte, 2018). Eleven additional grab samples were collected from a cluster of large boulders located near drillhole CH16-038, at the border of the Éléonore-South project near the "Moni" prospect area. Two of these samples yielded high-grade gold results, 31.2 g/t Au (sample #1201006) and 113.5 g/t Au (sample #1201007) (Boudreau and Turcotte, 2018).

In the summer and fall of 2016, a large mechanical outcrop stripping and excavation program was undertaken. The "Main Stripping" was excavated in the central mineralized area connecting multiple, already partially exposed, outcrops. The total stripped surface (including outcrops) covers an area of approximately 10,000 m2. From this surface, a grid totalling 910.6 m of channel sampling was collected and sent for analysis (CHRN16 #11 to 25, CHRN16 #26 to 31 and CHRN16 #43 to 177) (Boudreau and Turcotte, 2018).

Two trenches were also excavated to follow up on the 2015 glacial sediment survey and the 2016 soil survey. The "Till Trench" (CHRN16 #5 to 10), located approximately 3 km northwest of the "Main Stripping", did not yield any significant results that could explain the glacial sediment anomaly trend. In total, 36.2 m of channel samples were sent for analysis (Boudreau and Turcotte, 2018).

The "November Trench" (CHRN16 #32 and 33), located 600 m northwest of the "Main Stripping", was excavated to follow up on a gold and arsenic soil anomaly from the 2015 soil survey. Results yielded 4.1 g/t Au over 8.1 m (including 25.4 g/t Au over 1 m). In total, 19.29 m of channel sampling were collected (Boudreau and Turcotte, 2018).

In 2016, a large soil geochemical survey (2,495 humus samples), connecting the 2010 and 2015 grids and extending in the southeastern part of the Project, was carried out by Sirios. The survey prolonged previous coverage by about 3.5 km to the northwest and by 6.5 km to the southeast. Sampling procedures and sample preparation were done by Sirios following similar protocols to the 2010 and 2015 campaigns (Boudreau and Turcotte, 2018). Sirios mandated the consultant IOS Services Geoscientifiques Inc. to level the data and interpret the results. The combination of all soil surveys on the Cheechoo Project covered an area of approximately 23.5 km2.

In the fall of 2016, following the results of the winter 2016 drilling campaign, drilling was resumed. The drilling consisted of 44 DDH (CH16-057 to CH16-093, CH16-025E, CH16-052E, CH16-081A, CH16-081B, CH16-083A and CH16-085A) totalling 9,539 m. Multiple mineralized intervals were encountered with mainly broad low-grade samples locally punctuated by higher gold grade intervals (Turcotte et al., 2018).

2017

In the winter of 2017, 18 DDH were completed, adding 5,322.1 m of drilling to the Cheechoo Project (CH17-094 to CH17-107, CH17-036E, CH17-037E, CH17-082E and CH17-100A). Drilling results were similar to previous campaigns and consisted of broadly low-grade gold over large intervals with localized higher-grade intervals (Turcotte et al., 2018).

In March 2017, ten borehole diagraphy surveys with acoustic and optical televiewer were completed by Wireline Services Group for Sirios. The goal of the surveys was to provide structural oriented data and a 3D core visualization. The information collected was presented to Sirios in the form of raw data to be integrated into its database, and mainly describes fractures, contacts, veins and veinlets, chlorite breccias, and foliations.

In the summer of 2017, a prospecting program was carried out to explore parts of the main block where coverage was considered poor or insufficient. The prospecting targeted three sectors in particular: 1) the southern sector (main mineralized area); 2) the southeast sector (mainly sediments and previously poor exploration coverage); and 3) the northwest sector (follow-up on the 2015 glacial sediments anomalies and Synee target), paragneiss boulder found nearby outside the Project by Goldcorp, with reported 21 g/t Au). A total of 371 grab samples were collected (111 outcrops and 260 boulders). No significant results were obtained (Boudreau and Turcotte, 2018).

In the summer of 2017, 15 trenches were excavated on the Cheechoo main block. These trenches were excavated with the objective of providing additional geological information on the Project and help guide exploration drilling (Boudreau and Turcotte, 2018). Trench “2-2”, located approximately 150 m to the north of the “Main Stripping area”, yielded results of 4.0 g/t Au over 21.6 m (including 23.5 g/t Au over 3.1 m) (CHRN17 #212 and 213). Trench “3” (CHRN17- #354 to 382) yielded values equal to or greater than 0.1 g/t Au in 50 samples and up to 10.8 g/t Au. Additional channel sampling was carried out in the “November Trench” (CHRN17-301) with a new combined interval of 1.4 g/t Au over 26.1 m. Following observations made while prospecting, a trench was manually excavated to the northwest of the “Main Stripping” and yielded channel sampling results of 1.2 g/t Au over 3.7 m (Boudreau and Turcotte, 2018). This new mineralized zone is known as the “Mafic Dyke” showing. Lastly, the “Main Stripping” was expanded and 1,083 m of channel sampling (CHRN17- #258 to 261; CHRN17- #264; CHRN17- #303 to 334 and CHRN17- #341 to 344) was added to the grid for a new total of 1,994.2 m. Many of the trenches were subsequently restored with only the most relevant sites being maintained.

In the summer of 2017, a glacial sediment survey was carried out to follow up on the 2015 survey. In total, 43 samples were collected. The results of the survey confirmed the anomalous trend detected in 2015 but failed to produce any other significant results (Charbonneau and Robillard, 2018).

In the fall of 2017, a high-resolution heliborne magnetic survey was carried out by Novatem Inc. for Sirios on the Project. A total of 1,710 linear kilometers were flown to cover the entire Project. The goal of the survey was to increase the level of detail obtained in the 2014 survey by flying a tighter grid. However, the quality of the survey was considered disappointing as it did not provide the anticipated increase in detail due to the higher sensor elevation above the ground.

In the fall of 2017, 35 DDH (CH17-108 to CH17-140, CH17-111A and CH17-123A), totalling 10,774.4 m, were completed. Drilling results were similar to previous campaigns and consisted of broadly low-grade gold over large intervals with localized higher-grade intervals (Turcotte et al., 2019). Thirteen borehole diagraphy surveys with acoustic and optical televiewer were completed by Wireline Services Group for Sirios.

2018

In the winter of 2018, 61 DDH and four PQ size DDH (CH18-141 to CH18-198, CH18-020E, CH18-033E, CH18 125E, CH18-162A, CH18-162B, CH18-181A and Ch18-195A), totalling 15,588.6 m, were drilled. Again, results revealed large low-grade intervals as well as some higher-grade intervals (Turcotte et al., 2019). The PQ drill core was sent to COREM for metallurgical testing.

In April 2018, 34 borehole diagraphy surveys with acoustic and optical televiewer were completed by Wireline Services Group for Sirios. A total of 57 NQ holes were surveyed and represent a total of 16,150.1 m of structural data, from which 64,471 structural measurements were taken.

In the summer of 2018, prospecting work around the “Mafic Dyke” showing was done. A total of 63 channel samples were collected. Eleven samples had values greater than or equal to 0.1 g/t Au, with three samples yielding results ranging between 1.22 g/t Au and 4.3 g/t Au. The “Mafic Dyke” trench was slightly enlarged manually, and an additional 28 m of channel sampling was collected (CHRN18- #386 to 391). Results yielded 3.05 g/t Au over 4.4 m, including 11.38 g/t Au over 1.1 m (CHRN18-388).

2019

In the winter of 2019, 51 DDH (CH19-199 to CH19-245, CH19-207A, CH19-207B, CH19-215A and CH19-226A) were completed, totalling 11,320.7 m. The main results include the discovery of the Éclipse zone. The high-grade vein first identified in DDH CH17-112 was also confirmed in DDH CH19-240 and CH19-245 (Turcotte and Blanchette, 2020).

In 2019, Sirios received the interpreted results of its 2016 soil geochemical survey. The results revealed the presence of seven discrete arsenic, copper, and molybdenum anomalies (Girard, 2019). A small program of soil anomaly verification following the 2016 survey was carried out. Seven grab samples were collected (five outcrops and two boulders). No significant results were obtained, and the source of the soil anomaly was not discovered, no new outcrops were found in the vicinity.

2020

In the winter of 2020, 25 DDH (CH20-246 to CH20-267, CH20-253A, CH20-256A and CH20-267A) were completed, totalling 5,463.1 m. The results extended the gold mineralization outside of the conceptual pit defined in the 2019 MRE and allowed the development of additional ounces of gold within the new pit boundary (Turcotte and Blanchette, 2021).

2021

In the summer of 2021, 32 DDH (CH21-268 to CH21-296, CH21-051E, CH21-289A and CH21-296A) and two RC holes (CHRC21-001 and CHRC21-002) were completed, totalling 6,836 m. Most of these holes were infill drilling aimed at converting a portion of the Inferred resources to Indicated resources (Turcotte and Blanchette, 2023).

2022

In the summer of 2022, Sirios carried out a surface outcrop sampling program. A total of 61 samples were taken, returning grades up to 0.36 g/t Au. This prospection program highlighted the exploration potential of the meta-greywackes sector, also called the “metasediments area”.

At the end of the summer, Sirios follow up with mechanized trenching and channel sampling in the same area. A total of 218 samples from 216 m of channels were collected. Assay results from these samples returned up to 2.65 g/t Au over 11.0 m, including 10.9 g/t Au over 1.0 m, confirming the presence of gold mineralization beyond the tonalite in the metasediments (Blanchette and Turcotte, 2025).

7 GEOLOGICAL SETTING AND MINERALIZATION

The following Regional Geology section is adapted from documentation available thought the Ministere des Ressources Naturelles et des Forets (https://gq.mines.gouv.qc.ca/lexique-stratigraphique/province-du-superieur/), as well as from the Geological Survey of Canada on the Cheechoo Project by Fontaine et al. (2018) and from Turlin et al. (2019).

7.1 REGIONAL GEOLOGY

The Opinaca Subprovince is a metasedimentary subprovince located in the centre of the Superior Province and in the heart of the Eeyou Istchee James Bay territory, Quebec. It presents itself as a lenticular package that lies between the volcano-plutonic La Grande Subprovince to the north (La Grande River domain) and west (Eastmain domain), and the Opatica Subprovince to the south. The Opinaca Subprovince is restricted to the east by the Ashuanipi Subprovince and connected to the Nemiscau Subprovince by the narrow belt of Montagnes Lake. According to Hocq (1994), the boundary between the Opinaca and La Grande subprovinces generally corresponds to regional deformation zones cut by tonalitic and granodioritic intrusions. This boundary is also characterized by an abrupt change in metamorphic grade from the mid amphibolite facies to the upper amphibolite or granulite facies.

7.1.1 LA GRANDE SUBPROVINCE

The La Grande Subprovince is separated into a northern (La Grande River) and a southern domain (Eastmain River) (Gauthier and Larocque, 1998). These domains consist of Paleo- to Mesoarchean basement, overlain by Meso- to Neoarchean volcano-sedimentary sequences and injected by syn- to late-tectonic intrusions (Card and Ciesielski, 1986; Hocq, 1994; Goutier et al., 2001).

To the north, the La Grande River domain is interpreted to reflect a peri-cratonic environment, located directly to the south of the "Superior proto-craton" (Card, 1990; Percival et al., 1994; Stern et al., 1994; Gauthier, 2000). The Eastmain River domain has been mapped and studied, in detail, by the Geological Survey of Canada (Low, 1896) and the Ministère de l'Énergie et des Ressources Naturelles (Remick, 1977; Franconi, 1978; Simard and Gosselin, 1999; Moukhsil, 2000; Moukhsil et al., 2003). The Eastmain River domain is characterized by greenstone belts composed of four volcanic cycles dated from 2752 to 2703 Ma comprising komatiitic to rhyolitic lavas and tuffs with tholeiitic to local calk-alkaline affinities (Moukhsil et al., 2003). Conglomerate and turbiditic wacke (Roberto host rocks) containing local iron-rich units of the Low Formation overlie volcanic sequences (Franconi, 1978; Moukhsil et al., 2003; Bandyayera and Fliszár, 2007). This domain is host of the Cheechoo intrusion, that is central to the Cheechoo Project.

7.1.2 THE OPINACA SUBPROVINCE

Rocks of the Opinaca Subprovince are metasedimentary in origin, generally found in metasedimentary belts and interpreted as accretionary prisms, such as the Quetico, the Nemiscau and the Ashuanipi Subprovinces (Card, 1990; Williams, 1990; Goutier et al., 2001; Thurston, 2002; Percival et al., 2012; Morfin et al., 2014). The Opinaca Subprovince covers 35,000 km2, characterized by paragneiss and migmatites, intruded by syn- to post-tectonic, locally ultramafic intrusions (Simard and Gosselin, 1999; Bandyayera and Fliszár, 2007; Morfin et al., 2013). Tonalitic to granitic intrusions and leucogranitic dykes and veins have a S type peraluminous composition, suggesting a derivation from partial melting of metasedimentary rocks and fractionated magmas (Moukhsil et al., 2003; Morfin et al., 2014). The timing of episodic partial melting is constrained between 2671 Ma, the age of the oldest metamorphic zircons and the 2637 Ma intrusion of leucogranitic dykes and veins, coeval with the main D2 phase of deformation in the Opinaca (David et al., 2010; Morfin et al., 2013).

7.1.3 REGIONAL GOLD OCCURRENCES

Gold exploration activity is focused on the La Grande Subprovince and its margins with the Opinaca and Nemiscau Subprovinces, and within the Middle and Lower Eastmain belt, the largest greenstone belt in the Eeyou Istchee Baie-James municipality.

As for the Éléonore gold mine (Dhilmar), Moni, JT (Fury Gold Mines), Synee (Dhilmar) prospects and Sakami (Canada Strategic Metals) and Lac Menarik (Harfang Exploration) properties, the Cheechoo Project (Sirios Resources), is located along a NW-trending deformation corridor characterized by a strong metamorphic gradient, roughly subparallel to the Opinaca-La Grande boundary (Gauthier et al., 2007).

Near the Éléonore mine, syn- to late-tectonic intrusions and pegmatite dykes (2620-2603 Ma) intruded the La Grande Subprovince supracrustal rocks (Ravenelle et al., 2010; Dubé et al., 2011; Fontaine et al., 2015). Located 15 km southeast of the Éléonore mine, the 2612±1 Ma Cheechoo intrusion accounts as one of those (Fontaine et al., 2015). The Cheechoo intrusion contains pegmatite dykes, mafic schist enclaves and hosts gold mineralization at Cheechoo and Éléonore South properties (Sirios Inc., 2016).

7.2 LOCAL GEOLOGY

The Cheechoo Project is located towards the western margin of the Opinaca basin, along a sheared NW-SE trending segment of the boundary that separates rocks of the Eastmain domain of the La Grande Subprovince to the southwest from those associated the Opinaca Subprovince to the northeast (see Figure 7-1).

Here, rocks of the Eastmain domain mostly consist of strongly deformed metavolcanic assemblages, displaying evidence of multiple phases of deformation. Other surrounding lithologies include leucogranitic dykes and veins, banded iron formations, amphibolites and conglomerates from the Low formation.

The Cheechoo Project is also host of a significant portion of the Cheechoo intrusion, host of most of the known gold occurrences in the area. The Cheechoo intrusion is entirely hosted within the Eastmain domain, within the strain influence of NW-SE sheared contact. The 10 km2 Cheechoo intrusion has homogeneous, very low magnetic susceptibilities, with local high magnetic domains at its margins, potentially associated with the presence of iron-rich formation with skarn-like assemblages in the metasedimentary package.

The Cheechoo intrusion is strongly recrystallized with saccharoidal texture, and progressively foliated towards its margins. The foliation within the intrusion is generally subparallel to the contact with biotite-rich paragneissic rocks. The high variability of mineral assemblages and proportions, enrichment in volatile elements (e.g. boron, and phosphorus) and the presence of miarolitic cavities suggest that these complex pegmatites are possibly at the magmatic-hydrothermal transition (exsolution of magmatic volatile phases from silicate melt).

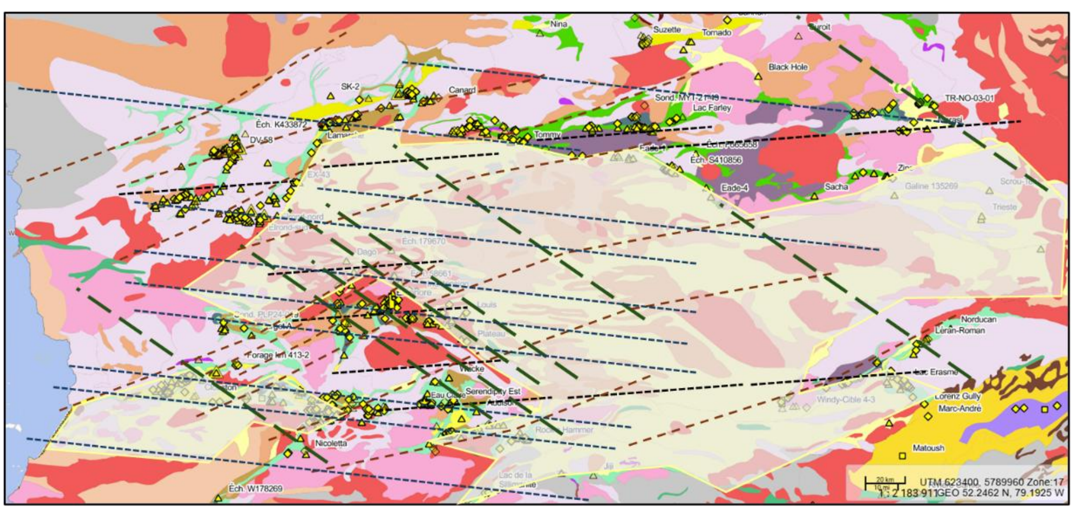

Figure 7-1 Geological Setting of the Opinaca Subprovince. Gold occurrences are shown along with interpretated trends associated to 4 phases of deformation described regionally (Source: Sirios)

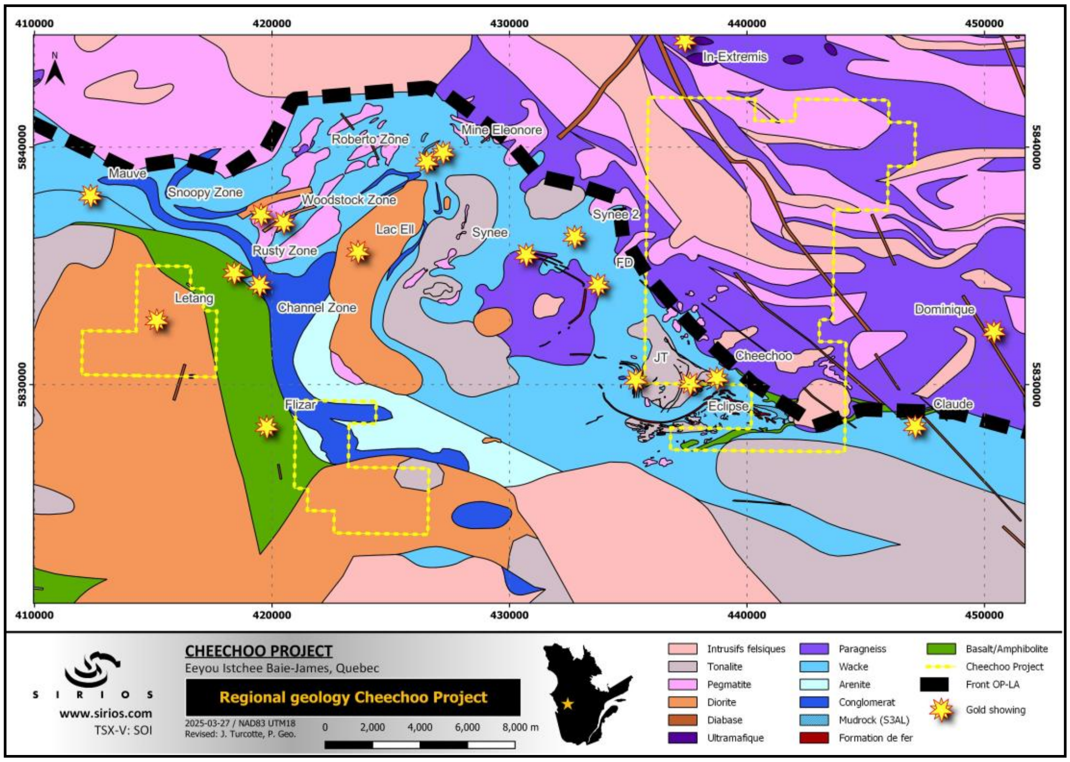

Figure 7-2 Simplified geological map of the vicinity of the Cheechoo Project (Source: Sirios)

7.3 STRUCTURAL GEOLOGY

7.3.1 REGIONAL STRUCTURAL FRAMEWORK

In its tectonometamorphic interpretation of the northern Superior Province, Cadéron (2003) established the first geothermobarometric data characterizing metasedimentary rocks of the Opinaca Subprovince. The Opinaca Subprovince is characterized by a polymetamorphic evolution over a period of 65 Ma, and structural data coupled with geothermobarometric results allowed for the proposition of a tectonometamorphic model of the Opinaca evolution. In this model, the Opinaca Subprovince represents an Archean intracontinental basin formed during an extension period. An ocean plate plunging towards the NW causes crustal thinning and extension, and formation of a graben that separates an Archean continental crust represented by the La Grande and Opatica subprovinces. Metasedimentary rocks of the Opinaca Subprovince would therefore come from erosion of the La Grande and Opatica subprovinces.

A period of compression begins around 2705 Ma and continues until 2680 Ma, corresponding to emplacement of diatxites of the Ashuanipi Complex. Beginning of the closure of the Opinaca Basin would be contemporary with regional deformation phase D1 (2705-2680 Ma).

During basin closure, the Opinaca overthrusts the La Grande Subprovince to the north and Opatica Subprovince to the southwest and would represent a double-verging structure. Ancient normal faults appear to have undergone recurrence of reverse movement in this process. Subsequently, the Ashuanipi (2680-2650 Ma) was emplaced and the compression phase (around 2645 Ma) was completed. During regional deformation phase D2, the Opinaca was folded and formed a large southward-overfold antiform structure.

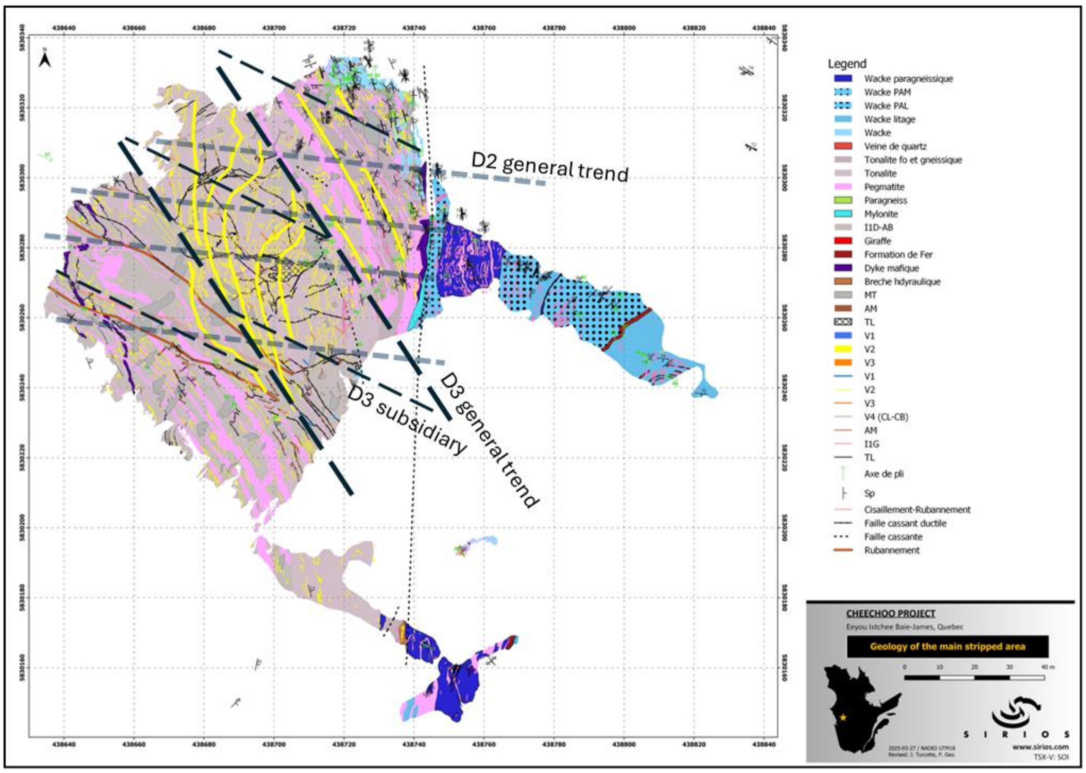

Figure 7-3 Geology of the main stripped area (modified from Fontaine et al. (2018).

7.3.2 LOCAL STRUCTURAL FRAMEWORK

The Cheechoo Project is located a few kilometers southwest of the tectonic contact between the Opinaca and La Grande subprovinces (Bandyayera et al., 2010; Ravenelle et al., 2010), where rocks from both the Opinaca and La Grande

Subprovinces were submitted to high strain deformation and high grade metamorphism facies, especially on the metasedimentary side (e.g., migmatites with ptygmatitic folds similar to those observed in the area (Morfin et al., 2013)) of the contact.

The area recorded four phases of deformation. D1 corresponds to NW-directed thrusts and F1 folds refolded by F2 folds around 2710-2697 Ma (Moukhsil et al. 2003; Ravenelle et al. 2010). D2 is the main phase of deformation, associated with the transposition of S1 into the E-W trending S2 foliation (Bandyayera et al. 2010). It lasted until ca. 2603 Ma and was associated with amphibolite facies metamorphism (Bandyayera et al. 2010; Dubé et al. 2011; Ravenelle et al. 2010; Fontaine et al. 2018). D3 is associated with SW-NE-trending F3 folds, with a dome-and-basin structure and an S3 foliation. D4 is recognized as E-W to NW-SE subvertical faults and high strain zones (Fig. 1, Morfin et al. 2013; Fontaine et al. 2018).

The Cheechoo intrusion is inferred to be emplaced syn- to late-D2 at ca. 2612 Ma (U-Pb TIMS on zircon, Fontaine et al. 2015). It is granodioritic to tonalitic and of metaluminous and reduced composition (Fontaine et al. 2018). It underwent hydrothermal alteration including pervasive albitisation, local chloritization, and zones of calc-silicate alteration composed of plagioclase, quartz, phlogopite, diopside ± titanite porphyroblasts.

The margins of the Cheechoo intrusion are foliated to gneissic (Figure 7 2), and characterized by elongated biotite porphyroblasts, commonly attributed to the sub-magmatic S2. The latter is commonly reoriented along the NW- to N-striking S3 foliation. On the main stripped area, the S2 foliation is visible in the gneissic margins of the Cheechoo intrusion, spatially associated with the presence of sheeted pegmatite dykes. The S3 foliation dips steeply to the E-NE, similar to the S2 foliation within the paragneiss and mafic schists, to the north of the main stripped area. In the paragneissic wacke, the S2 and S3 foliations are characterized by EW-striking bedding-parallel foliation and NW-striking crenulation cleavage, respectively. The S3 crenulation cleavage is also present within mafic schist enclaves. On the 6-9 trench, the E-striking moderately dipping S2 foliation is present within the intrusion, while the dip of the S2 foliation is steeper in the paragneissic wacke. Pegmatite dykes are commonly oriented sub-parallel to intrusion margins.

At least two generations of folds can be mapped in the Cheechoo intrusion. The most common type is the F3 fold, affecting the S2 foliation and pegmatite dykes. F3 microfolds and axial-planar S3 crenulation cleavage are also developed in the paragneissic rocks. F3 folds are open, tight to isoclinal with strong asymmetries suggesting a close link with high-strain zone during late-D2 to D3. Earlier folding (F1 and/or F2) can be inferred based on the geometry of Mafic Dyke and the local refolded pegmatite dykes (Figure 7 3). In the paragneissic rocks, F2 folds with S2 axial planar are locally identified.

7.4 MINERALIZATION TYPES

The vein network of the Cheechoo Project is composed of various types of auriferous veins including sheeted extensional, en-echelon quartz-dominated veins, as well as pegmatitic quartz-feldspar veins. Mainly occurring within the intrusion, but also in the surrounding paragneissic rocks, the vein network is commonly 40 m to 50 m wide and, at least, 100 m long. The vein density increases (from 15% to 50% of the rock volume) towards intrusion margins and with the occurrence of pegmatite dykes, tonalite apophyses, and mafic schist. The gold grade is controlled by the presence of sulphides (particularly arsenopyrite), the density of veins, and deformation gradients.

The vein types (V1, V2, V2', V3, and V4) are essentially based on crosscutting relationships and are not related to the nomenclature of deformation events. The early V1 auriferous vein network (about 10% of the vein network) is composed of millimetric to centimetric veins characterized by quartz, feldspar, and minor amounts of diopside, actinolite and scheelite in association with pyrite, pyrrhotite, arsenopyrite, and local visible gold. Veins are generally dismembered, with diopside, actinolite, albite-rich centimetric halos. Those veins are mainly perpendicular or at a high angle with the margins of the Cheechoo intrusion. V2 veins (about 70% of the vein network) cut the V1 vein network and are composed of quartz, feldspar, phlogopite, arsenopyrite and pyrrhotite. V2 veins are oriented subparallel or at a low-angle with the intrusion margins and form a sheeted vein array. For instance, in the southern part of the 6-9 trench, the auriferous en-echelon V2 vein network is oriented at a low-angle with the contact between the paragneiss and the intrusion. It is interpreted to represent ENE-trending dextral shear component associated with discrete high-strain zones. V2' veins (about 15% of the vein network) are composed of quartz ± feldspar and characterized by actinolite and feldspar-rich selvages. In all of those veins, feldspar is commonly interstitial to quartz grains, like those of some auriferous pegmatitic quartz-feldspar veins hosted by the Cheechoo granodiorite (Moni showing) or by paragneiss at the Éléonore gold mine. Locally, pegmatites laterally evolve into V2 and V2' veins, while some pegmatite dykes cut veins, suggesting that some of them may be contemporaneous. V3 are extensional veins from D3 event (roughly 5% of the vein network) composed of quartz, actinolite, and feldspar. Those veins are NNW-striking on the main stripped area. Late V4 are commonly barren. They are composed of chlorite ± (epidote, quartz) and oriented to the N-NNW in the northeastern part of the main stripped area. V4 veins locally contain pyrite and visible gold in association with chlorite. They are associated with late brittle fault.

The hydrothermal and gold mineralization features of the Cheechoo Project, temporal and/or spatial association with a reduced intrusion, pegmatites, and mafic enclaves or dykes, share analogies with reduced intrusion-related gold systems (Thompson and Newberry, 2000; Hart, 2007). The composition of the Cheechoo intrusion shares similarities with reduced ilmenite series and gold-associated granitoids (Fontaine et al., 2017) described in Yukon, and Alaska (Hart et al., 2004) and in New Brunswick

(Yang et al., 2008). In New Brunswick Appalachians, Yang et al. (2008) have proposed that intrusion-related gold systems are controlled by magma sources, magmatic processes, redox conditions (country-rock nature), and local structural regimes. As suggested by Hart et al. (2004), the nature of the host rocks and the redox state of the magma is the most important factor controlling the metallogeny of intrusion-related systems. Particularly, during fractionation, redox features controlled the behaviour of metals (Ishihara, 1981; Hart et al., 2004). The crosscutting relationship between vein types can be explained by temperature variations and a possible steep thermal gradient on fluid chemistry, as described in detail by Hart (2007). In this scenario, V1 veins, could have formed at 400-300°C, just below the brittle-ductile transition, whereas V2, V2' and V3 veins were later emplaced at 250-300°C (Hart, 2007). According to Thompson and Newberry (2000), the early feldspathic alteration stage followed by a younger sericite-carbonate alteration, a feature described at Cheechoo, could illustrate the shift in sulphidation state from pyrite-pyrrhotite (early, Au-poor) to pyrite-arsenopyrite (late, Au-rich).

In terms of geometry and constraints on resources evaluation, the vast majority of gold bearing veinlets are quartz+sulphides. Their orientation and deformation characteristics suggest that they relate to the end stage of the main D2 deformation and metamorphism; they can be interpreted as the last fluids crystalizing from the pegmatites development. Later, during D3, high-temperature and deformation under a ductile regime, would have then folded and transposed these pre-existing veinlets and pegmatites, while other veinlets (V3, V4) also forming during D3. D3 deformation could have favoured remobilization of high grade mineralization within D3 related structures; also creating the observed shoots that seem to coincide with the intersection of pre-existing D2 related structures, and those active during D3.

Gold mineralization hosted by the 2612 Ma Cheechoo reduced intrusion is a new style of gold mineralization in the Éléonore gold mine area and elsewhere in the Eeyou Istchee Baie-James. The age and composition of the intrusion may represent a new regional metallotect, especially where occurring near the contact between the Opinaca and La Grande Subprovinces.

7.5 MINERALIZED ZONES

The Main Zone gold occurrence is localized in the south part of the Cheechoo Project. It includes the eastern extremity of the Cheechoo granodiorite intrusion and the adjacent paragneissic rock. The intrusive-metasediment contact is generally sharp but can show presence of granodiorite apophyses and/or dykes, pegmatites, and a NNE-trending pegmatitic V2 vein network. The Main zone consists of a network of various generations of deformed and auriferous quartz to quartz ± K-feldspar veins and veinlets (mm to cm) hosted by the granodiorite intrusion, particularly developed along the margins. The mineralization is defined essentially by free gold associated with stockwork of quartz and quartz-amphibolite breccia and veinlets with arsenopyrite grains.

Veins are typically composed of sheeted quartz and feldspar with diverse shape (extension, en-echelon, pegmatite) and size (micrometer to centimeter). The mineralized veins are generally associated with a Na-K-Mg alteration envelope. The metallic signature is defined by bismuth, arsenic and tungsten, and more rarely by tellurium, selenium and lead. Sulphides associated with the mineralization account for a maximum of 1% of vein material and occur in the centre, on the margin, and disseminated throughout the veins network. The most common sulphide minerals are arsenopyrite, pyrrhotite and pyrite and their size varies from micrometer to millimeter. They are disseminated and are automorph. The gold grains are relatively coarse, from ten micrometers to a few millimeters. Those grains are isolated, locally in cluster or in fractures.

8 DEPOSIT TYPES

8.1 REDUCED INTRUSION-RELATED GOLD SYSTEMS

Currently, the Cheechoo deposit is being interpreted as a Reduced Intrusion-Related Gold System (RIRGS), as described in detail by Fontaine et al. (2018). Most of the following deposit type description is borrowed and slightly modified from Hart (2007) and references therein, unless specified otherwise. The most diagnostic deposit style within the RIRGS classification is intrusion-hosted, sheeted arrays of thin, low-sulphide quartz veins with an Au-Bi-Te-W signature, which typically comprises bulk tonnage, low-grade Au resources.

RIRGS also include a wide range of intrusion-related mineral deposit styles (skarns, replacements, veins) that form within the region of hydrothermal influence surrounding the causative pluton and are characterized by proximal Au-W-As and distal Ag-Pb-Zn metal associations, thereby generating a zoned mineral system.

RIRGS are distinct from intrusion-related Au deposits as defined by Sillitoe (1991,1995). The RIRGS are a distinct class that lacks anomalous Cu, have associated W, low sulphide volumes, and a reduced sulphide mineral assemblage, and that are associated with felsic, moderately reduced (ilmenite-series) plutons; whereas oxidized intrusion-related Au deposits are mostly Au rich (or relatively Cu-poor) variants of the porphyry Cu deposit model associated with mafic, oxidized, magnetite-series plutons. Therefore, within the intrusion-related clan, two different types of Au mineralizing systems can be identified using the prefixes “reduced” and “oxidized”.

The magmas have a reduced primary oxidation state that forms ilmenite-series plutons. This reduced state causes associated sulphide assemblages to be characterized by pyrrhotite, and quartz veins that host methane-rich inclusions. RIRGS mostly form at a depth of 5 km to 7 km and generate mineralizing fluids that are low salinity, aqueous carbonic in composition and are, therefore, unlike typical porphyry Cu deposits.

8.1.1 GRADE AND TONNAGE

The most characteristic deposit style, intrusion-hosted sheeted vein deposits, is best represented by mineralization at active mines of Fort Knox (Kinross) and Eagle Gold Mine (Dublin Gulch, Victoria Gold Corp.). The grades of individual veins are 5 g/t Au to 50 g/t Au within otherwise barren host rocks, thus yielding ~1 g/t. Gold grade is, therefore, mainly controlled by vein density. Whereas Fort Knox and Dublin

Gulch have similar overall grades, The low-grade mineralization at Fort Knox is enriched by higher-grade and overprinting, late-stage quartz shear veins. Sheeted vein arrays also occur at deposits such as Brewery Creek (Classic Zone), Dolphin, Shotgun, and Gil, but are not the main mineralization hosts because each deposit has other features that control grade distribution.

8.1.2 GEOLOGICAL SETTINGS AND MINERALIZATION CONTROLS

The RIRGS are best developed in and surrounding the apices of small, cylindrical-shaped plutons that intruded sedimentary or metasedimentary country rocks. Intrusion-hosted mineralization is preferentially sited in tensional zones that develop in the pluton's brittle carapace near the country rock contact.

Pluton size is important because batholiths are unlikely to develop into mineralizing systems. The RIRGS are generally well developed, surrounding small (< 2 km2) isolated plutons with mineralization in the intrusion and in the hornfelsed thermal aureole. Larger plutons (2–10 km2) may have apophyses or later phases that are preferentially mineralized. Roof zones immediately above plutons may also be mineralized, in particular where there is a large surface area of contact between the pluton and reactive country rocks.

Pluton geometry is also important. Elongate plutons reflect structural controls on pluton emplacement and indicate a dominant extensional direction that may be important for localizing later mineralization. Cylinder-shaped plutons with steep sides and domed or cupola-like roofs are preferred geometries because these features enhance fluid focusing (Figure 8 1). Sharp shoulders also provide regions of structural and rheological contrast that may enhance development of fluid focusing structures (Stephens et al., 2004).

Depth of pluton emplacement may be a feature critical to RIRGS formation. These systems generally lack multidirectional, interconnected vein stockworks that are characteristic of porphyry deposits. This is likely due to their deeper levels of emplacement (5–9 km; Baker and Lang, 2001; Mair et al., 2006a), whereby the increased confining pressure prevents rapid fluid exsolution and explosive pressure release, and the development of high permeability stockworks and breccias. As well, the depth precludes the entraining of significant volumes of meteoric water and the formation of broad alteration haloes. As a result, fluid flow and mineralization in most RIRGS systems is largely controlled by structural features that impinge on the thermally driven hydrothermal system (Hart et al., 2000b; Stephens et al., 2004; Mair, 2004).

The dominant structural control on RIRGS is a weak extension that forms arrays of parallel fractures in the brittle carapace, filled with thin (0.1–5 cm), auriferous, low-sulphide quartz veins that form extensive, intrusion-hosted sheeted arrays. Hornfels quartzite forms a brittle host lithology for mineralized quartz veins that range from shattered "stockworky" fractures to veins several meters in width (O'Dea et al., 2000). Solitary fracture, fissure, and shear-hosted veins occur in the pluton, in the hornfels, and as far as several kilometers from the pluton, and may fill structures that were active while creating space during pluton emplacement (Stephens et al., 2004).

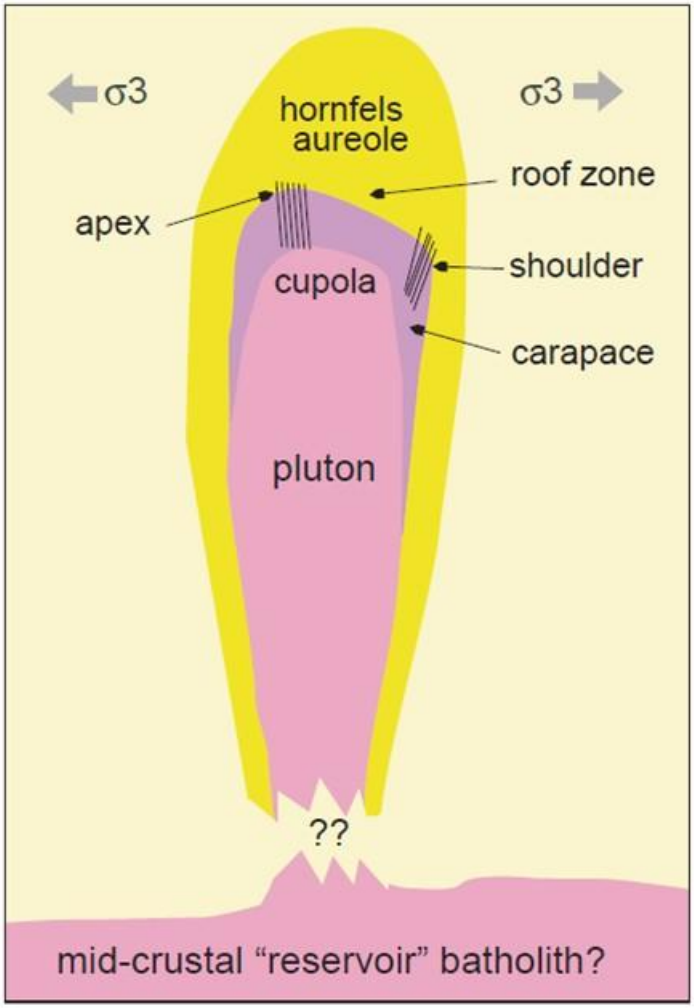

Figure 8-1 Hypothetical cross-section of a small (100 m-5k m across) pluton (Probably derived from a larger magmatic reservoir and intruding into extensional regimes at higher crustal levels.

Of note are the asymmetric hornfels aureole and the early-chilled and more brittle marginal carapace. Preferred sites of intrusion-hosted Au mineralization are above the cupola, where exsolved fluids will accumulate, and mineralized fractures developed in the pluton's apex and shoulders. Epizonal styles of mineralization are associated with dike and sill complexes that would be hosted near the top of the hornfels aureole (Hart, 2007).

8.1.3 DEPOSIT SIZE

Areas influenced by fluid interactions from the causative pluton in RIRGS are generally restricted to the limits of the hornfelsed zones, which themselves may extend for as far as 3 km from the pluton margins. Deposit size and geometry are also dependent on the style of mineralization.

8.1.4 ALTERATION

Alteration in intrusion-hosted mineralization is neither extensive nor intensive and is typically limited to 0.5 cm to 3 cm-wide selvages adjacent to the veins with intervening, apparently fresh, barren rock. The proximal alteration zone consists of either texture-destructive K-feldspar replacement (Maloof et al., 2001) or pervasive carbonate replacement of mafic minerals. An adjacent sericite-dominant ± pyrite ± carbonate assemblage overprinting plagioclase and mafic minerals is common.

8.1.5 GENETIC MODEL

The RIRGS genetic model requires that the mineralization-generating cooling pluton reach volatile saturation and that a fluid exsolve from the melt. Metals and volatiles such as sulphur and halogens presumably preferentially partition from the melt into an exsolving aqueous-carbonic mineralized fluid phase. Pressure, or depth of emplacement, exerts the greatest control on volatile saturation, particularly because volatiles are easily dissolved in felsic melts under higher pressures (Burnham and Ohmoto, 1980). However, volatile saturation is also induced by magmatic processes such as fractional crystallization, magma mixing, or simple cooling. Pluton emplacement depth appears, therefore, to be critical and explains why RIRGS are typically associated with a specific suite of plutons distributed over a broad area; such plutons likely represent melt crystallization at the same general crustal level.

At the pluton scale, mineralization is limited to regions above and outward from the site of volatile saturation. Being less dense than the melt, fluids will migrate to the uppermost parts of the less viscous portion of the magma chamber, which is usually the volatile-rich magmatic cupola immediately under the earlier-formed carapace (Candela and Blevin, 1995). Fluids will invade fractures in the carapace and opportunistically leak into and react with adjacent country rocks. Mineral occurrences are, therefore, most commonly sited at the pluton's apex, in the igneous carapace, or in hornfelsed country rocks adjacent to and above the pluton. The host plutons to many RIRGS likely have magma volumes that are too small to provide the large amount of metals and volatiles contained in these deposits, thereby suggesting the participation of larger volumes of primary magmatic fluids and metals (Candela and Piccoli, 2005). These could include deeper unexposed batholiths or mafic lamprophyric melts.

9 EXPLORATION

Exploration work completed prior to 2022 is described in Chapter 6 (History). All exploration work described in the sub-sections below was carried out by, or under the supervision of, Sirios Resources.

Drilling work is described in Chapter 10 of this Report.

9.1 STRUCTURAL GEOLOGY STUDY

The Company engaged 3DGS to complete a structural geological study to better understand the relationships between the different veins/veinlets and mineralized faults of this structurally-hosted Au deposit. The purpose of the study was to integrate all the available observations, including surface stripping, drill core and airborne magnetic data, into a comprehensive structural model for the Cheechoo Deposit.

9.2 RE-INTERPRETATION OF GEOLOGICAL MODEL

Following the structural study, the geological model was re-interpreted as largely controlled by large structures. The higher-grade intercepts follow NW-SE structures, and large envelopes associated with lower grade tend to be oriented W-E to ENE-WSW. Both of these orientations were used for the current mineral resource estimate.

Recent data suggest lower grade envelopes are likely following a unique orientation of NE-SW at the deposit scale.

10 DRILLING

This chapter presents the drilling program carried out by Sirios between October 15 and November 4, 2023 (the “2023 Program”); between February 8 and March 28, 2024 (the “2024 winter Program); and between November 13, 2024 and February 8, 2025 (the “2024-2025 Program) on the Cheechoo Project.

10.1 DRILLING METHODOLOGY

All three drilling campaigns were performed by Forage Pelletier, with the collection of NQ size core from a track-mounted diamond drill.

10.1.1 DRILLHOLE LOCATION/SET-UP

Diamond drillholes (DDH) for the 2023 program were focused on the metasediment zone exposed during the 2022 overburden stripping program. Diamond drillholes (DDH) for the 2024 winter program were focused on the Eclipse zone and diamond drillholes (DDH) for the 2024-2025 program were focused on infill drilling in the Main area.

The coordinate system in use was UTM NAD83 zone 18N.

The software used were QGIS and Leapfrog to visualize the drillholes and GeoticLog to record and store the information. Hole collars were spotted (wooden pickets) by the geologist with a handheld GPS Garmin 60cx. The drillers aligned the drill according to the wooden pickets and with an gyroscopic azimuth alignment tool (Axis Aligner). Once the drilling was completed, the drill casings were surveyed by the Sirios geologist using a high-precision differential GPS (DGPS Trimble R8s). Collar azimuth and dip were measured when possible.

10.1.2 DRILLHOLE ORIENTATION DURING OPERATION

The drillhole orientation is checked and monitored using a gyroscopic downhole surveying device as follows:

- During drilling, the orientation, including the azimuth and dip of the drillhole are measured every 24 m for the 2023 program, every 15 m for the 2024 winter program (no multi-shots test) and every 50 m for the 2024-2025 program with a Gyro Axis instrument. The data is collected and recorded by the driller. The geologist verifies the information afterward and transfers the data into the GeoticLog software.

- At the completion of every drillhole (except for 2024 winter program), the driller collects continuous data readings every 3 m with a Axis device until the instrument reaches the surface (multi-shots test). The orientation data collected includes the azimuth and dip of the drillhole. This data is then transferred onto a USB device by the geologist or the drill foreman. The raw file is saved in the database. The geologist verifies the file, modifies the format for the importation (this manipulation is performed automatically using a macro), and invalidates the inconsistent data. The modified file is then imported into the GeoticLog software.

10.1.3 DRILLING AND CORE HANDLING

Recovered drill cores by the drilling contractor are in NQ size. The core is collected in a standard drilling tube and the driller's helper carefully places the core into wooden core boxes at the drill rig. The helper also marks the depth (m) after each 3-m run with wooden blocks and closes the box with fiber tape. Core trays are numbered with a permanent marker indicating the drillhole number and the sequential box number.

Generally, the drillhole is stopped at a specific depth determined by the project manager or following the instructions of the field geologist.

Once the drillhole is completed and the final downhole survey reading is collected, the drill crew pulls the rods for mobilization to the next drill site. A metallic cap with a metal tag displaying the hole number is put on the collar of the hole. All casing has been left in place, except for the drillholes that had been stopped and restarted due to a bad orientation or dip. No drillholes have been grouted or cemented.

10.1.4 CORE LOGGING AND MEASUREMENT

In the core shack, Sirios employees place the boxes on the logging tables. The geologists rotate the core so that all pieces are fitted together, showing a cross-sectional view. They verify that distances are correctly indicated on the wooden blocks placed every 3 m. The core is then measured.

Sirios geologists log and record the data using GeoticLog software. Lithologies (principal and secondary), alteration, mineralization, veins, structures, sample, and assay results are compiled in the database.

10.1.4.1 Core Recovery

The core recovery is calculated by measuring the core in the core tray divided by the theorical drilled length as shown by the meterage blocks. Core recovery is recorded for each drill run (3 m). Specific areas of loss are noted, if possible, and marked by a wooden marker and the estimated loss. The ideal core recovery is 100%. However, it is not always possible due to ground conditions or sometimes loss of drill core during the coring process (e.g., grinding, etc.). For the 2023 to 2024-2025 Program, the average core recovery is 99.9%.

10.1.4.2 Rock Quality Designation (RQD)

The rock quality designation is designed to give qualitative and quantitative information on the stability of rock surrounding and included in mineralized material. This information is used to determine the mineability and rock control procedures that will be required to extract the mineralized material.

RQD is a quantitative index of rock quality based on a core recovery procedure in which the core recovery is determined by incorporating only those pieces of hard, solid core longer than twice the diameter of the core. For NQ core, the nominal diameter is 5 cm, so the length index is 10 cm; shorter lengths of core are ignored. RQD is determined for each core run as these are the only definitively known distance markers. RQD is determined using the following formula for each core run:

RQD (%) = 100 x sum of the core pieces length equal to or longer than 10 cm / Core run length

It is important to distinguish between mechanical breaks and natural breaks identified in the core.

RQD is valid for solid core only and should not be used for very poorly disaggregated materials such as highly weathered rock, clays, or un-cemented aggregates.

The average RQD for the 2023 to 2024-2025 Program is 97.6% based on 2,462 measurements.

10.1.5 CORE PHOTOGRAPHY

Once logged by the geologist, all drill core is photographed wet, four boxes at a time. The objective of core photos is to have a digital image recorded with sufficient details to clearly see core features prior to destructive sampling procedures. This record can be used later to qualify rock quality features and to examine core images against geological logging if the core is unavailable for examination. The photos are also used, as required, during the construction of geological sections.

Once the core is photographed, the boxes are place on a mobile rack until it is assigned to the core saw operator for splitting and sampling on site.

10.1.6 CORE STORAGE

After the sampling process, the core boxes are stored at the Cheechoo camp facilities. Every box is labelled with an aluminum tag displaying the hole number, box number, and From-To meterage. All boxes are stored outside at the camp designated storage area. They are piled on wooden pallets or stored on metallic racks. Pulps and rejects are stored in locked containers in Technominex's yard.

10.2 RECENT DIAMOND DRILLING

Since the latest Technical Report, and as of May 13 2025 (close-out date of the current MRE database), Sirios has completed a total of 35 new DDH (CH23-297 to CH23-304, CH23-269E, CH23-297A and CH24-305 to CH24-320, CH24-318A, CH24-318B and CH25-321 to CH25-325, CH25-317E, CH25-319E) during the 2023, 2024 winter and 2024-2025 campaign on the Project, totalling 7,740.7 m (Table 10-1; Figure 10-1). Most of these holes were infill drilling aimed at converting a portion of the Inferred resources to Indicated resources.

Table 10-1: Summary of the drilling completed on the Project during the 2023, 2024 Winter and 2024-2025 Program

Year	Drillhole Count	Total Length (m)
2023	10	1,108.0
2024 Winter	12	3,260.7
2024-2025	13	3,372.0
Total	35	7,740.7

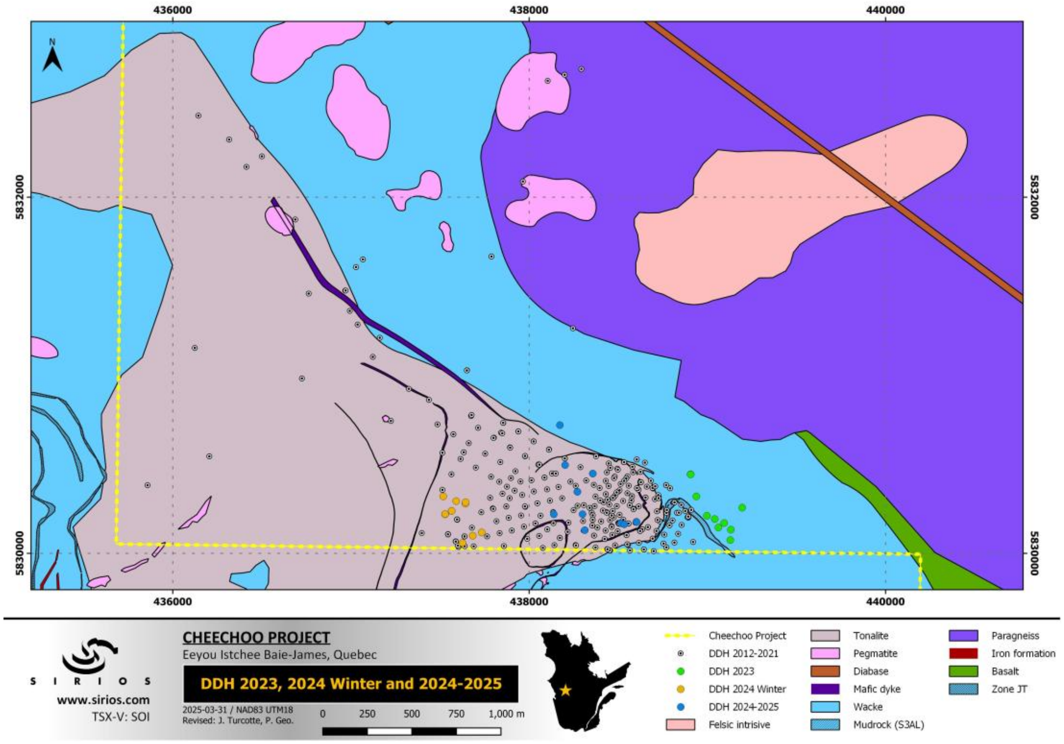

Figure 10-1: Location of the drillholes throughout the Project as of March 31, 2025

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

The following sections describe Sirios' core handling, sampling, and security procedures for the 2023, 2024 2025 diamond drilling programs. The QP did not conduct any drilling or sampling on the Project and the data in this chapter was provided by Jordi Turcotte, P. Geo., Sirios Senior Geologist.

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.

11.1 CORE HANDLING, SAMPLING, AND SECURITY

The drill core is boxed and sealed at the drill rigs and transported, by the drillers, skidoo sleigh or pick-up truck to the on-site core shack. After being logged and sampled on-site, the drill core is store on-site to a designated core storage area.

Drill core were sawed in half with a diamond saw along length and sampled based on geologist’s instructions. Individual sample bags were placed in larger rice bags along with the list of samples. QA/QC samples were inserted by Sirios personnel in each batch following the geologist’s instructions. Batches were shipped via a transport company to certified laboratories, MSALABS in Val d’Or.

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.

11.1.1 GOLD ASSAYS SAMPLES

With some exceptions and as the mineralization continues, all the drill core intervals were sampled. To create representative and homogenous samples, sampling honours as best as possible the lithological contacts, alteration boundary or mineralization boundary.

Sampling intervals are determined by the geologist during logging and marked on the core itself using red coloured lumber pencils with a line drawn at right angles to the core axis. Sample lengths typically range from 0.7 m to 2.0 m, with a preferred length of 1.0 m for the mineralized zones. The sampled cores are considered representative.

Samples are numbered in consecutive order using waterproof tags printed directly from the database. Two tag are printed; The first tag is used to indicate the position of the sample in the core box. This is a permanent sample reference that will remain in the wooden core box. The second tag is inserted inside the sample bag. The two tags are separated from the page and tucked under the core at the beginning of each sample by the geologist.

The sample sequence includes blank samples, duplicate samples, and Certified Reference Materials (CRM) that are inserted into the sample stream using sample numbers in sequence with the core samples. A CRM sample, consisting of material of known metal content and internationally recognized and verified, is included in the sample sequence by the trained core sampler. A “blank” sample is material technically devoid of any metals. Blanks and CRMs are stored in a designated secure area at the sample preparation facility.

Once logged and labelled, the core of each selected interval is sawed in half using a typical table-feed circular rock saw. The core saw operator, trained in core cutting procedures, executes the core cutting at on-site. The logging geologist has already clearly marked out all pertinent cores for cutting and sampling. The core is sawn in half, along its length, with a diamond bladed saw. One half (consistently from the same half of the split core) is put into the plastic sample bag and the other half is retained and kept in the core box for later reference. The paired sample tags are then torn with one tag stapled in the core box at the start of its sample interval and the other tag placed into the sample bag with the core sample.

Sample tag number of the core sample is also written on the outside of the sample bag using a permanent marker. The bag is then sealed using a zip tie and stored in sequence prior to sample dispatch preparation. Sample bags are packed in large “rice” bags and the rice bag is sealed with a zip tie, which is only ‘broken’ or opened at the assay laboratories. The range of sample numbers inside the bag is written on the ‘rice’ bag. The sealed rice bags are pack on a wood pallet for shipping to the laboratories.

11.1.2 CORE DENSITY SAMPLES

Specific gravity (SG) was measured by water displacement method at the core shack.

Approximately 0.10 m to 0.20 m of core was selected for each density measurement. The dry mass was measured on the scale top plate, followed by the submerged mass, by placing the sample in the submerged wire basket under the scale. Both measurements were recorded in the database and the density was measured using the following formula:

$$Density = {Mass_{Dry}}\Big/{(Mass_{Dry} - Mass_{Submerged})}$$

In 2023, 29 additional samples were tested, consisting of mineralized and host rock samples (Table 11-1). In 2024 Winter, 73 additional samples were tested, consisting of mineralized and host rock samples (Table 11-2). In 2024-2025, 63 additional samples were tested, consisting of mineralized and host rock samples (Table 11-3).

Table 11-2: Measured specific gravity for the different lithologies, 2023

Specific Gravity, 2023 Drillings					
Lithology	Quantity	Mean	Median	Min	Max
I1D	2	2.65	2.65	2.64	2.66
I1G	4	2.62	2.62	2.61	2.63
M4	4	2.77	2.77	2.74	2.78
S3	10	2.76	2.75	2.74	2.82
S3AL	5	2.78	2.78	2.74	2.80
S9	4	3.14	3.15	2.88	3.40
Total	**29**	-	-	-	-

Table 11-3: Measured specific gravity for the different lithologies, 2024 Winter

Specific Gravity, Winter 2024 Drillings					
Lithology	Quantity	Mean	Median	Min	Max
I1D	52	2.65	2.65	2.62	2.66
I1G	7	2.62	2.62	2.59	2.64
M8	14	2.89	2.93	2.64	3.05
Total	**73**	-	-	-	-

Table 11-4: Measured specific gravity for the different lithologies, 2024-2025

Specific Gravity, 2024-2025 Drillings					
Lithology	Quantity	Mean	Median	Min	Max
I1D	44	2.65	2.65	2.62	2.66
I1G	9	2.62	2.62	2.60	2.64
M8	8	2.87	2.89	2.73	2.92
M4	1	2.75	2.75	2.75	2.75
S3	1	2.76	2.76	2.76	2.76
Total	**63**	-	-	-	-

11.2 LABORATORIES ACCREDITATION AND CERTIFICATION

The 2023 to 2025 drill programs' samples were shipped to MASLABS in Val-d'Or. MSALABS have the ISO/IEC Standard 17025:2017 accreditation from the International Accreditation Service (IAS). It is an independent commercial laboratories.

11.3 LABORATORY PREPARATION AND ASSAYS

11.3.1 SAMPLE ANALYSIS PROCEDURE (MSALABS)

At MSALABS, samples are sorted, bar-coded and logged into the system. Damaged samples are documented and Sirios personnel is informed. Samples are dried to constant weight and weighted (PWE-100). The sample is then crushed to P70 2,000 µm (CRU-CPA). A 500g split is collected using a riffle splitter and place into a CPA jar for the gamma ray analysis by Photon Assay (CPA-AU1).

Samples were analyzed by Photon Assay (CPA-Au1). The lower detection limit was 0.015 g/t. When sample as visible gold, the sample was assayed to extinction by Photon Assay (CPA-Au1).

Results were sent by email to the geologist in charge of the Project, in Excel format, and the official certificate (sealed and signed) in PDF format.

As part of MSALABS internal quality control program, five different gold CRM standard are inserted in alternance at a rate of 1 every 20 samples. One Blank material is inserted every 100 samples. A duplicate crushed sample is drawn at random at a rate of about 3.5% and assayed for each work order to monitor precision.

11.3.2 SAMPLE SHIPPING AND SECURITY

The following procedures are applied to ensure a safe and secure management of materials and data as it pertains to core samples of the Cheechoo Project:

- All core samples submitted for preparation and analysis to the laboratories are secured in rice bags with zip ties and sent directly to the laboratories;
- The lab is notified by email that the samples are sent and is instructed to notify Sirios geologists, Jordi Turcotte, P. Geo., when they arrive at the preparation lab;

- The sample shipment contains a sample submittal form as well as a sample dispatch list detailing the rice bag number, and the number of samples contained in each rice bag;
- The sample submittal form and sample dispatch list is electronically transmitted to the laboratories once the shipment has left the Sirios core shack;
- Samples are sent to:

  MSALABS
  1020 Rue Léo-Fournier, Val-D'Or JP9 6X8, QC, CANADA
- Results are downloaded by Jordi Turcotte, the data base manager, as Excel files and PDF format;
- QA/QC data is evaluated when the samples are integrated into the master database;
- The core boxes are stored on wooden pallets in the outdoor core storage on-site;
- The sample and rejects are stored in Rouyn-Noranda.

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.

As per NI 43-101, quality control samples were inserted into the sample batches sent to the laboratory. Inserts included pulp duplicate samples, blank samples, and standards. For illustration purpose, values below detection limit were assigned half of the detection limit value. Values above the maximum detection limit were ignored and not used in the scatterplots.

Table 11-4 summarizes the QA/QC samples submitted to the laboratories along with routine drill core samples.

Table 11-1 Samples submitted to the laboratories for analysis

Type of Sample	Quantity	%	Comments
Primary drill core samples	5,139	85%	
Field blanks	128	2%	
CRM	410	7%	
Coarse duplicates	263	4%	Included 33 core duplicates
Check-assays	129	2%	
Total	**6,069**	**100%**	

11.4.1 BLANKS

Blanks are used to monitor for potential sample contamination that may take place during sample preparation and/or assaying procedures at the laboratory. Samples of barren crushed white quartz or carbonate (blank) were used by Sirios.

One blank sample was inserted for every 20 samples. According to Sirios QA/QC protocol, if any blank yields a gold value above 0.1 g/t Au, all samples from the 20-sample batch should be reanalyzed. From the 128 inserted blanks, none failed the protocol. Figure 11-3 shows the results of the blanks used during the 2023, 2024 Winter and 2024-2025 programs on the Project.

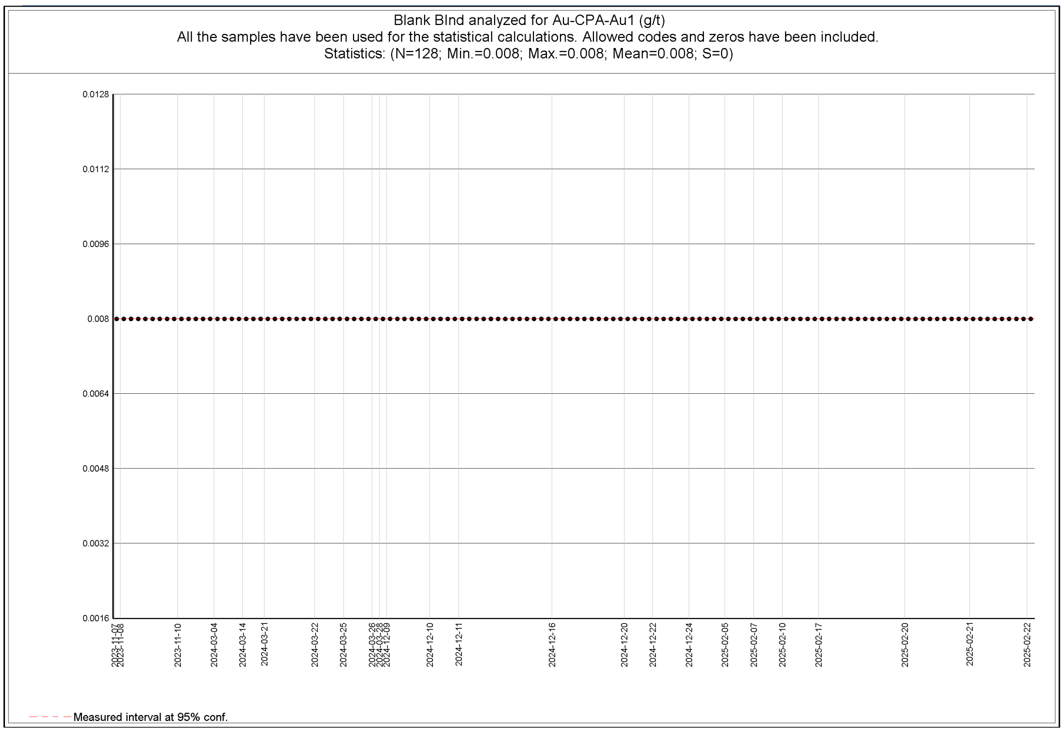

Figure 11-1: Results for blanks used during the 2023, 2024 Winter and 2024-2025 drilling program (128 samples assayed by MSALABS; detection limit was 0.015 g/t)

A blank failure can indicate a contamination problem at the laboratories. In every case where a failure was observed, adequate follow-up has been put in place to explain, or re-assay affected samples.

11.4.2 STANDARDS

Accuracy and precision are monitored by the insertion of CRMs. A suite of commercially available CRMs is used at Cheechoo (Table 11-2). One CRMs sample was inserted for every 20 samples.

Table 11-5: Standard reference materials used at Cheechoo – 2023, 2024 Winter and 2024-2025 drilling campaigns

Standard (CRMs)	Certified FA-AA		Calculated CPA		Min. Limit	Max. Limit	MSALABS CPA-Au1 Method used			
	Gold Value (g/t)	Standard Deviation	Gold Value (g/t)	Standard Deviation	(mean-3SD)	(mean+3SD)	Quantity Inserted	Failed	Gross Outliers	(%) Passing QC
SE86	0.595	0.015	0.575	0.034	0.473	0.677	109	0	0	100.00%
SN91	8.679	0.194	8.676	0.188	8.112	9.240	105	1	0	99.05%
OREAS 293	0.073	0.005	0.062	0.018	0.009	0.115	49	0	0	100.00%
OREAS 152b	0.134	0.005	0.126	0.019	0.069	0.183	23	0	0	100.00%
OREAS 153b	0.313	0.009	0.311	0.028	0.227	0.395	124	0	0	100.00%
Total							**410**	**1**	**0**	**99.76%**

CRMs were considered failed by Sirios when a result exceeded three standard deviations (±3 SD) beyond the expected value. During the 2023, 2024 Winter and 2024-2025 drilling programs, only one CRMs failed. Considering the low failure rate and actions taken when such failures occurred, the QP is of the opinion that the failed CRMs are not material for the purpose of this MRE and show the natural statistical spread in the data.

11.4.3 DUPLICATES

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

Saw duplicates consist of a quarter split of the core sample, the material is then crushed separately from the original core sample.

Coarse duplicates consist of second splits of crushed material.

As part of the Sirios QA/QC program, the laboratory assayed one saw duplicate for every drillhole. The QA/QC program also included one coarse duplicate for every 20 samples. Figure 11-1 shows the scatterplots of the coarse duplicate. Figure 11-2 shows the scatterplots of the saw duplicate. In both case the correlation is not very good, as the duplicate are on coarse crushed material and that the project is known for it high nuggetty effect.

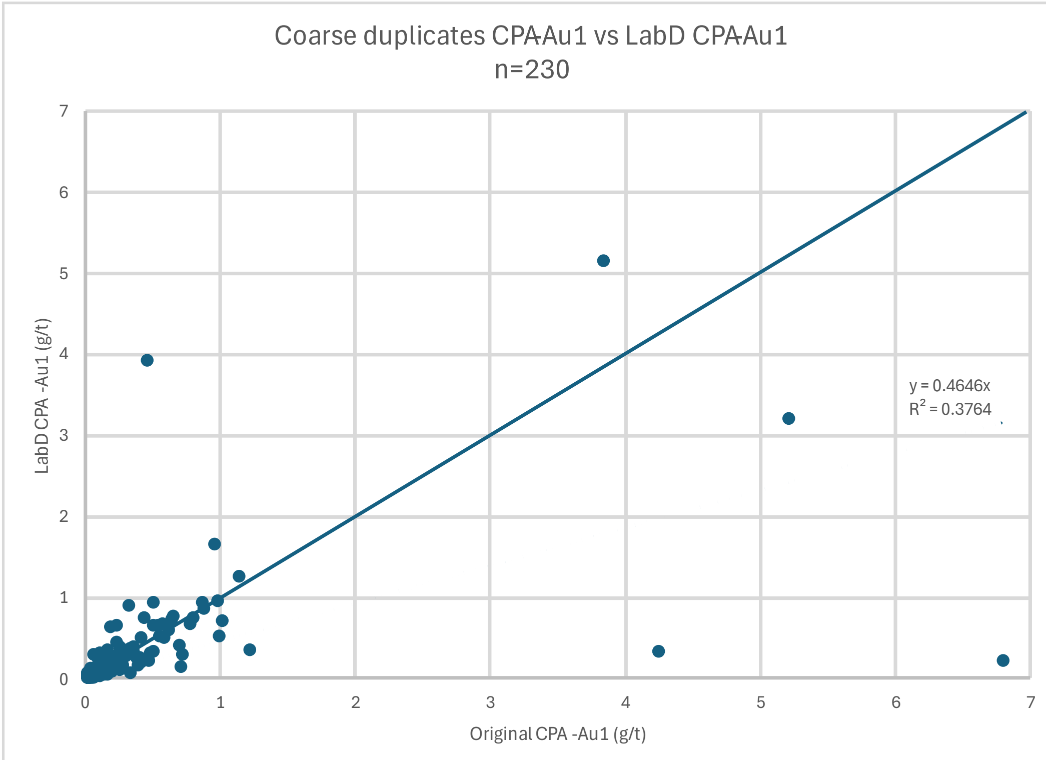

Figure 11-2: Scatterplot with linear trend of coarse duplicates and original sample results from MSALABS – 2023, 2024 Winter and 2024-2025 drilling program (n=230)

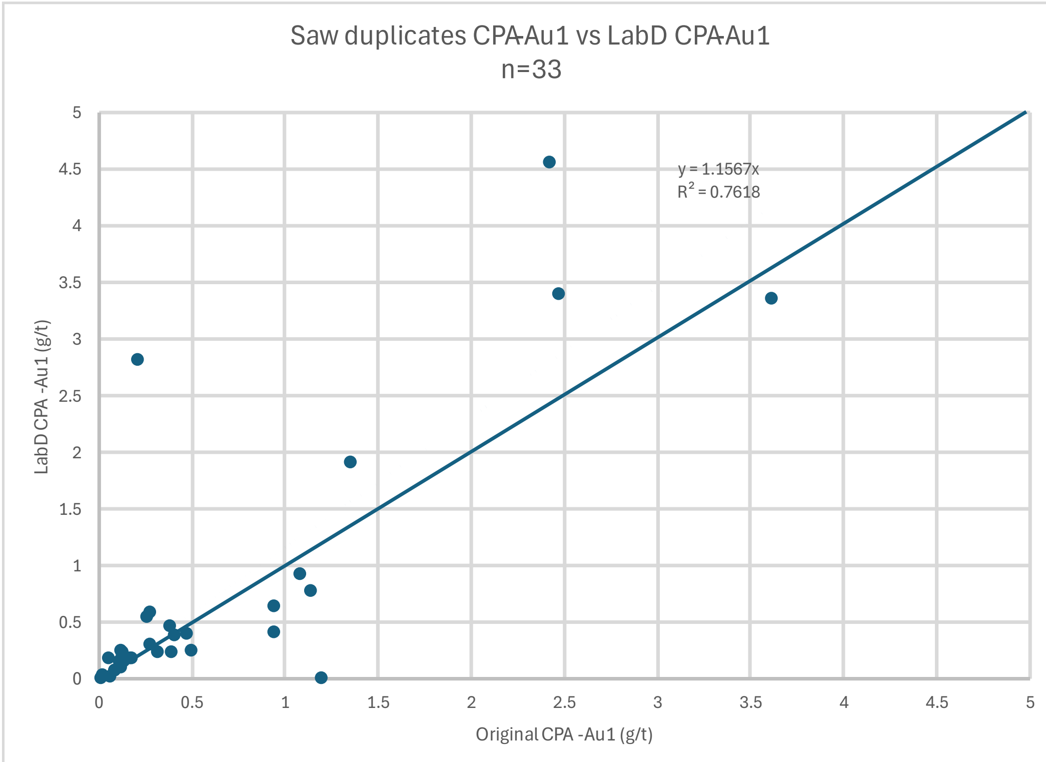

Figure 11-3: Scatterplot with linear trend of saw duplicates and original sample results from MSALABS – 2023, 2024 Winter and 2024-2025 drilling program (n=33)

11.4.4 CHECK ASSAYS

Lab check assays are conducted in a second lab. A total of 129 samples from MSALABS were reanalyzed by ALS. In 2023, lab checks were reanalysed by FA-AA-50g. In 2024 Winter, lab checks were reanalysed by metallic screen and in 2024-2025, lab checks were reanalysed by CPA and FA-AA-50g. Figure 11-4 shows the scatterplot of the results conducted by ALS on MSALABS for 2023, Figure 11-5 shows the scatterplot of the results conducted by ALS on MSALABS for 2024 Winter and Figure 11-6 and Figure 11-7 shows the scatterplot of the results conducted by ALS on MSALABS for 2024-2025. The correlation coefficient varies from 91% to 99%. The QP considers these results acceptable.

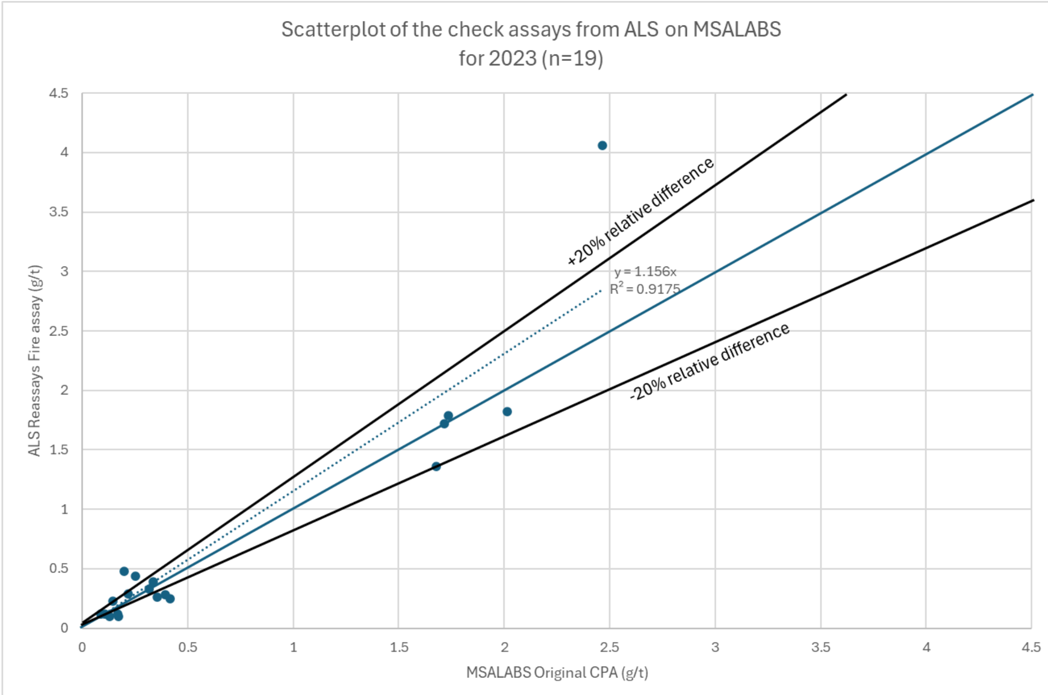

Figure 11-4: Scatterplot of lab check assays from ALS on MSALABS for the 2023 drilling program (n=19)

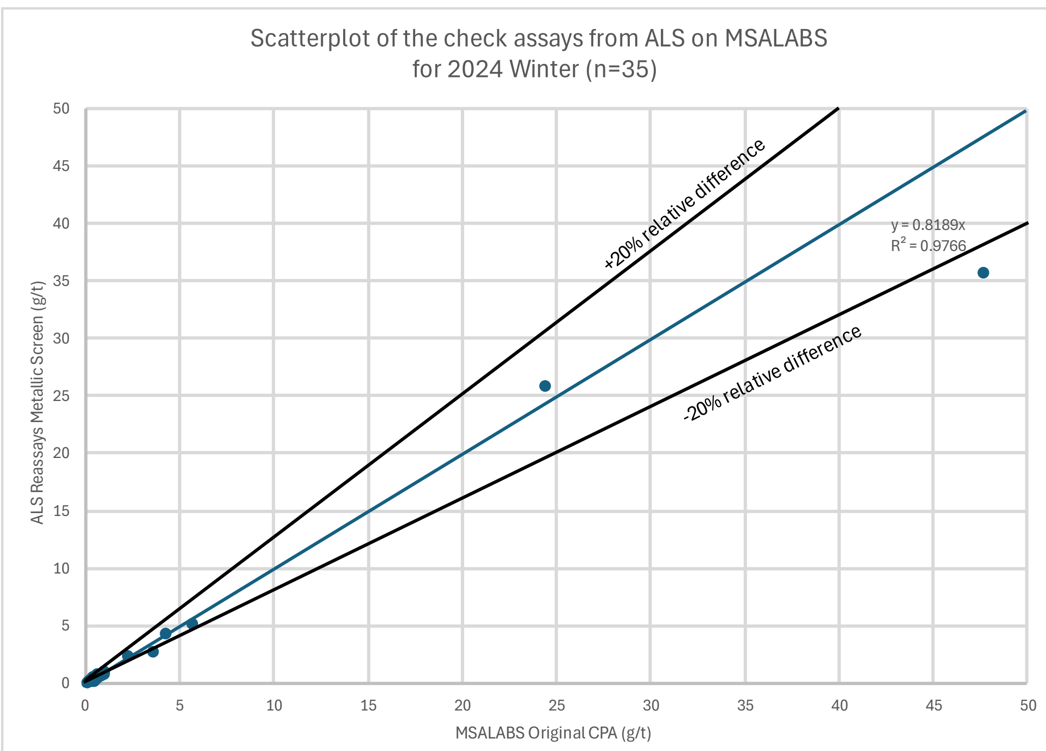

Figure 11-5: Scatterplot of lab check assays from ALS on MSALABS for the 2024 Winter drilling program (n=35)

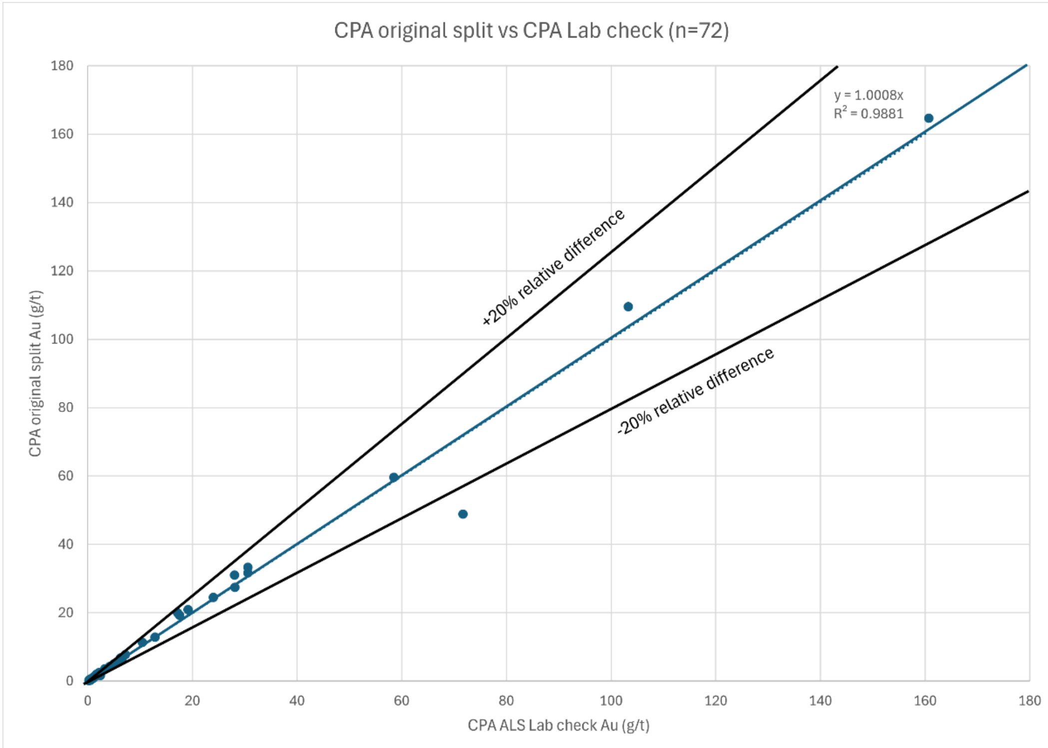

Figure 11-6: Scatterplot of CPA lab check assays from ALS on MSALABS for the 2024-2025 drilling program (n=72)

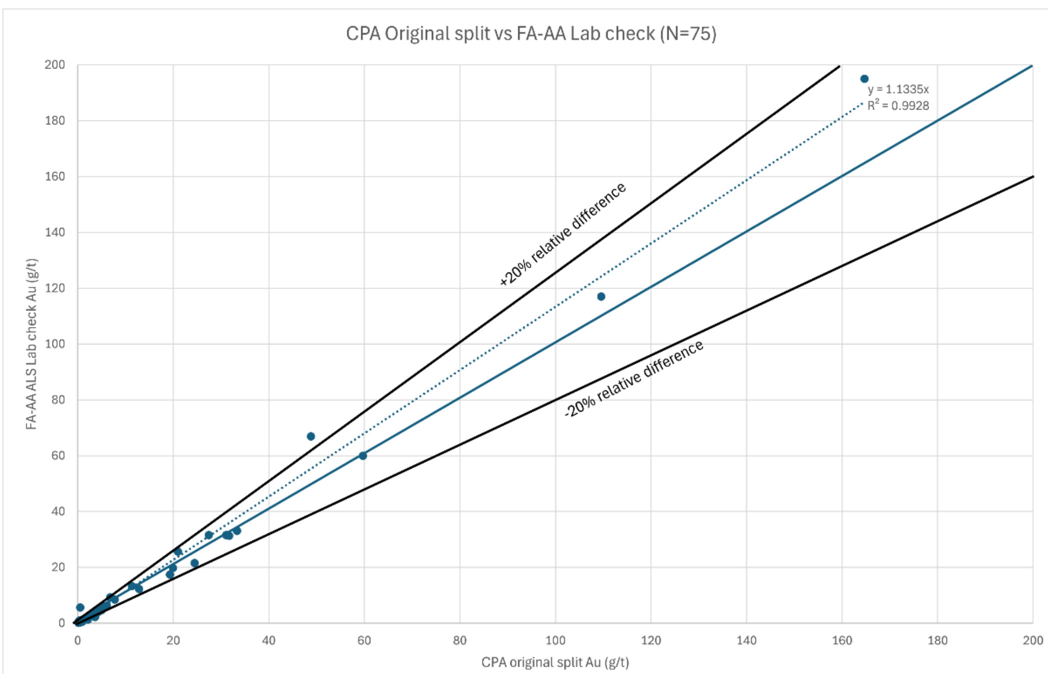

Figure 11-7: Scatterplot of fireassay lab check assays from ALS on MSALABS for the 2024-2025 drilling program (n=75)

11.5 ROCK SAMPLING

Grab samples from outcrops and boulder were sent to ALS and Actlabs for assaying. Same procedure as drill core samples was applied for the shipping, security, and QA/QC protocols.

11.6 CHANNEL SAMPLING

Channel samples from outcrops and stripping were sent to ALS and Actlabs for assaying. Same procedure as drill core samples was applied for the shipping, security, and QA/QC protocols.

11.7 CONCLUSION

The QP reviewed the sample preparation, analytical and security procedures, as well as insertion rates and the performance of blanks, standards, and duplicates for the 2023 to 2025 drilling programs. The QP concluded that the observed failure rates are within expected ranges and that no significant assay biases are present.

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

The Mineral Resource Estimate (MRE) in this Report is based on drillholes completed between 2012 and 2025. Therefore, numerical data and quality control on assaying has been implemented from the beginning.

For the purpose of this MRE, PLR performed a basic verification on the entire Project database. All data was provided by Sirios in UTM coordinates. The database close-out date for the resource estimate is May 13, 2025; data from 345 diamond drillholes (DDH) (82,717 m) and 56,337 assays is part of the database.

12.1 SITE VISIT

Pierre-Luc Richard of PLR visited the Project in July 2025, during the course of this mandate. The QP also visited the Project in October 2019, and in August 2022. Mr. Richard also visited the core cutting and storage facility in September 2019, November 2020, and November 2022. The purpose of the visits was to review the Project with the Sirios team. The visits included an overview of the general geological conditions, a tour of the core storage facility, visual inspections of selected mineralized drill core samples, survey of numerous drillhole casings, and a visit of various mechanically stripped outcrops. A review of assaying, QA/QC and drillhole procedures was also completed.

Mr. Richard also visited the Sirios office in Montreal, on several occasions, to exchange ideas with the geologists.

12.2 SAMPLE PREPARATION, ANALYTICAL, QA/QC AND SECURITY PROCEDURES

Sirios procedures are described in Chapters 10 and 11 of the current Report. Discussions held with on-site geologists confirmed that the procedures were adequately applied.

Pierre-Luc Richard reviewed sections of mineralized core while visiting the Project. All core boxes were labelled and properly stored either in roofed core storage or palleted (Figure 12-1). Sample tags were present in the boxes, and it was possible to validate sample numbers and confirm the presence of mineralization in witness half-core samples from the mineralized zones. Rejects and pulps are securely kept in maritime containers.

All the data used in this MRE was taken after the implementation of the NI 43-101. Information about sample preparation, analytical, QA/QC or security procedures is mostly available and conducted in accordance with the industry standards.

Figure 12-1: Storage and sampling procedures reviewed during some visits at the Rouyn-Noranda facilities
A) Palleted drill core boxes; B) Core saw used to sample the core; C) Roofed drill core storage

12.2.1 DRILLHOLE LOCATION

For the 2012 drilling campaign, collars were located with the use of cut grids and hand-held GPS. The 2012 casings were removed. Collars were implemented with a handheld GPS Garmin 60cx afterwards. In February 2018, Corriveau J.L. & Associés Inc. implemented six reference stations to use a DGPS instrument (Trimble R8s) in order to properly survey the collar locations.

12.2.2 DOWNHOLE SURVEY

Downhole survey data for the drilling programs were checked for discrepancies. Spurious measurements were tagged by the Sirios geologist as “false” in the database and were not considered by the software for the modelling. For the 2012 drilling campaign, acid tests were done at the end of the holes with acid tubes. From 2013 up to fall 2015, downhole surveying was carried out with a Flexit device at 30 m intervals. Starting in the fall 2015 campaign, deviation tests were carried out as described in Chapter 10, Section 10.1.2.

12.2.3 ASSAYS

PLR was granted access to the original assay certificates directly from ALS , Actlabs, and MSA Labs for all the holes drilled by Sirios on the Project since the previous MRE. All certificates received were verified against the Sirios database. Values lower than the detection limits were set to 0.005 ppm. No major discrepancies were noted.

In the assay table, the final gold value (AuMoy) is calculated using a conditional priority. Metallic screen procedure results always have priority over the gravimetric finish results. The gravimetric finish results always have priority over atomic absorption finish (AA). If more than one assay is done using the same analytical method, the weighted mean of the results is used but still considering the priority listed above.

12.3 CONCLUSION

The QP is of the opinion that the drilling protocols in place are adequate. The database for the Cheechoo Project is of good overall quality. Minor issues have been noted during the validation process but have no material impact on the MRE. In the QP’s opinion, the Cheechoo database is appropriate to be used for the estimation of Mineral Resources.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 INTRODUCTION

The technical content presented in the following chapter is largely taken from Chapter 13 of the 2022 Mineral Resource Estimate (MRE report reference, 2022) with minor modifications to language and presentation.

This chapter presents the results of four testwork programs conducted on mineralized material from the Cheechoo deposit during the period of 2015 to present.

A preliminary assessment of the response of metallurgical samples from the Cheechoo Gold Project was conducted at ALS Metallurgy (Sloan and Mehrfert, March and October 2015). A second program designed to explore the heap leach performance of metallurgical samples was conducted at Actlabs (Steyn, 2017). The third testwork program was conducted at COREM as follows: Mineralogy (Perez, 2019); and Comminution and Metallurgical (Tremblay-Bouliane et al., 2019). This was followed by a testwork program conducted at Kappes, Cassiday & Associates (KCA) laboratories in Reno, Nevada (February 2021).

Sirios selected and prepared the samples used for all testwork programs.

13.2 MINERALOGY

A mineralogy study of the Cheechoo material was conducted by COREM in 2019 (Perez, 2019).

As part of project T2450, mineralogical and chemical characterization was performed on 12 samples:

- Three composite samples having different P80: Composite 9 (P80 = 106 µm),
  Composite 12 (P80 = 112 µm) and Composite 26 (P80 = 140 µm);
- Three Knelson concentrates were obtained after Knelson concentration of Composites 9, 12 and 26;

- Six samples obtained after flotation of each composite Knelson tailings (one concentrate and one tailings sample for each composite Knelson tailings).

The goal of this study was to obtain the mineralogical composition of the samples, as well as a detailed gold deportment of Knelson concentrate and tailings.

The analyses performed on the composite samples showed that Composites 9, 12 and 26 had gold grades of 0.5 g/t, 1.3 g/t and 0.3 g/t respectively. Granodiorite Composites 9 and 12 were quite similar regarding their mineralogical composition, and they were mostly composed of plagioclase, feldspar, and quartz, while sulphide minerals composed 0.7% of both composites, being the amount of arsenopyrite 0.3% in both composites.

Metasediment Composite 26 presented a higher amount of micas (almost 20%) than the other two composites with traces of arsenopyrite (0.01%).

The mineralogical and chemical characterization performed on Knelson concentrates showed that the Knelson concentrate from Composite 12 contained 28.8 g/t of gold, while Knelson concentrates from Composites 9 and 26 were richer with gold grades of 67.0 g/t and 75.2 g/t respectively.

According to the characterization of gold deportment of Knelson concentrates, gold was present in the form of native gold and electrum. The characterization of gold liberation performed on Knelson concentrates showed that free gold represented 50% of gold in Knelson concentrate for Composite 12 and 65% of gold in Knelson concentrate for Composite 26. No free gold particles were observed in Knelson concentrate for Composite 12. Exposed gold accounted for 28%, 87% and 6% of Knelson concentrates on Composites 9, 12 and 26 respectively. Locked gold (non-exposed gold) represented 22%, 13% and 29% of gold in Knelson concentrates for Composites 9, 12 and 26 respectively, based on particle counts.

In all Knelson concentrates, the most frequent association of gold was with arsenopyrite, being the proportion of gold surfaces associated with this mineral, at 63%, 46%, and 14% respectively in Knelson concentrates from all three composites. Locked gold in the form of very fine inclusions (< 5 µm) represented 11%, 3% and 3% of gold weight proportion in Knelson concentrates from Composites 9, 12, and 26 respectively.

The characterization of flotation products obtained after flotation of Knelson tailings of leach concentrate showed that gold grade was 4.2 g/t, 5.2 g/t and 2.3 g/t respectively in flotation concentrate of Knelson tailings for Composites 9, 12 and 26.

In flotation tailings of all three composites Knelson tailings, gold assays were lower than 0.2 g/t.

The few gold grains observed during the mineralogical analysis of these samples showed that gold was in the form of very fine inclusions (< 2 µm) disseminated in arsenopyrite. No observations were made of gold associated with silicates. However, it should be noted that this lack of observations might be due to an insufficient number of polished sections analyzed considering the low gold grades of the samples.

13.1 TESTWORK

The objective of the testwork was to provide data to select metallurgical unit operations, develop preliminary flowsheets and produce a preliminary process design criteria for the process engineering and associated operating and capital cost estimations.

The work has been conducted from 2015 to 2020 at four different laboratories: ALS Metallurgy (2015), Actlabs (2017), COREM (2019), with column leach testwork conducted at Kappes, Cassiday & Associates (KCA) laboratory in Reno, Nevada (December 2020).

13.1.1 SAMPLE PREPARATION

13.1.1.1 ALS Testwork

The material tested in the ALS testwork program included 72 samples of crushed rock weighing a total of approximately 97 kg. Three samples were prepared under the instructions of Sirios (Sloan and Mehfert, March 2015). All assays were performed at the ALS geochemistry laboratory located in Rouyn-Noranda, Quebec. Table 13-1 presents the composite feed assays.

Three composites named Composite 1, Composite 2 and Composite 3 were prepared. Each composite was constructed according to Sirios instructions, homogenized, and rotary split into 2 kg charges for metallurgical testing. The composite construction information is included in report by Sloan and Mehrfet (March 2015; Appendix II - KM4609). A sub-sample was split from Composite 1 and Composite 2 for comminution testing.

Table 13-1: Composite feed assays ALS testwork

Composite ID	Calculated Au (g/t) (Average of Fire Assay Triplicates)	Assay Au (g/t) Metallic
Composite 1	0.37	0.30
Composite 2	0.37	2.21
Composite 3	2.59	4.87

Some variability in the gold content by fire assay was measured, particularly with Composite 2 and Composite 3. Coarse gold particles were suspected; therefore, a screen metallic determination was performed with a 1 kg sub-sample of each composite. The sub-sample was first pulverized and then screened at 106 μm (Tyler 150-mesh). The entire screen oversize fraction was fire assayed, as well as representative duplicate splits from the screen undersize fraction. Screen metallic results are shown in Table 13-1 and may be more representative of the gold head assays for the three composites.

13.1.1.2 Actlabs Testwork

Three samples at three different crush sizes were prepared under the instructions of Sirios (Steyn, 2017).

Each sample was crushed to -3/4 inch and a 3.5-4-kg sub-sample was taken. The remainder of each sample was further crushed to -3/8 inch and another split was reduced further to -10 mesh. A split of the -10 mesh was also retained for a head assay. Due to the difficulty in obtaining a small representative head split from the larger crush size (above 10 mesh), only the -10 mesh fraction of each sample was assayed.

Table 13-2: Composite feed assays Actlabs testwork

Composite ID	Calculated (g/t)		Assay (g/t)
1306720	-19 mm	0.27	0.64
	-12.5 mm	0.22	
	-2 mm	1.14	
1306721	-19 mm	0.40	0.43
	-12.5 mm	0.80	
	-2 mm	0.47	
1306722	-19 mm	26.20	43.50
	-12.5 mm	34.20	
	-2 mm	29.40	

The testing procedure is presented below in Figure 13-1.

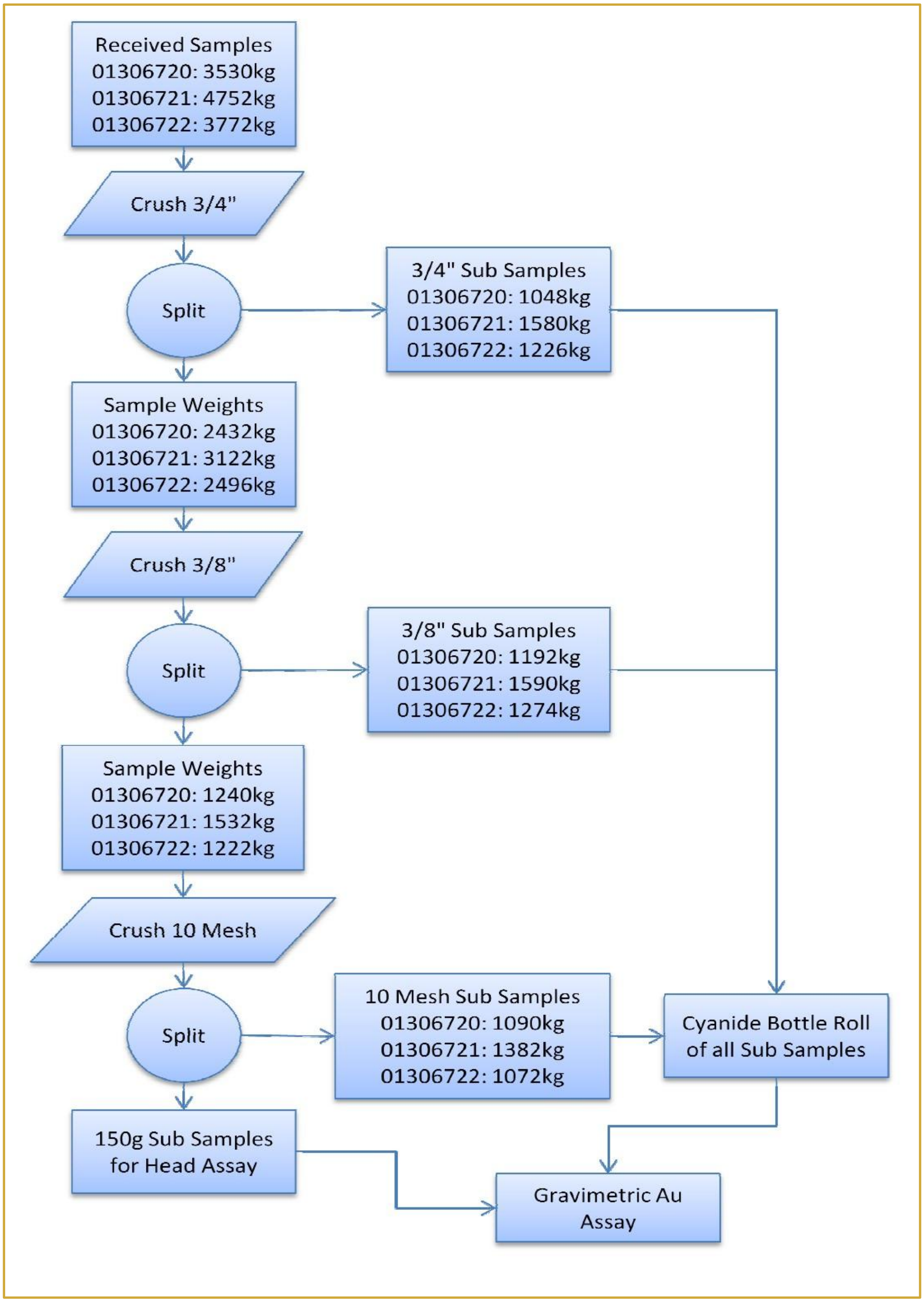

Figure 13-1: Actlab testing procedure protocol

13.1.1.3 COREM Testwork

A series of metallurgical tests were planned on composite samples selected by Sirios. The work was designed to study the response of gold recovery to different gold grades of mineralized samples. A mineralogical study (Perez, 2019) and comminution and metallurgical testwork (Tremblay-Bouliane et al., 2019) programs were performed.

Phase 1 of the project was limited to three composite samples of varying lithologies and gold grades: Composite 9 (tonalite, survey CH18-195, 0.66 g/t Au expected), Composite 12 (tonalite, pegmatite and mafic dyke, survey CH18-195, 4.38 g/t Au expected) and Composite 26 (sediment, survey CH18-198, 0.22 g/t Au expected).

Based on Sirios evaluation, Composite 9 is expected to represent 70% of the processed material, while Composites 12 and 26 are expected to represent 20% and 5% of the deposit respectively.

All three composite samples were subjected to head assays, grinding characterization, mineralogical characterization, gravity separation (GRG), bottle roll cyanidation and bulk sulfide flotation tests. The results from Phase 1 will help define the optimal conditions and flow sheet for the larger testwork planned in future Phase 2, which implies the processing of 30 samples of 100-200 kg each.

For each composite (Composites 9, 12 and 26), some pieces of drill core were randomly chosen and cut into pieces (-75 mm +50 mm) for Bond crusher work index testing (CWi) and part of the drop weight test. Then, all the material was crushed for the other comminution characterization testing. Figure 13-2 presents the comminution sample preparation protocol.

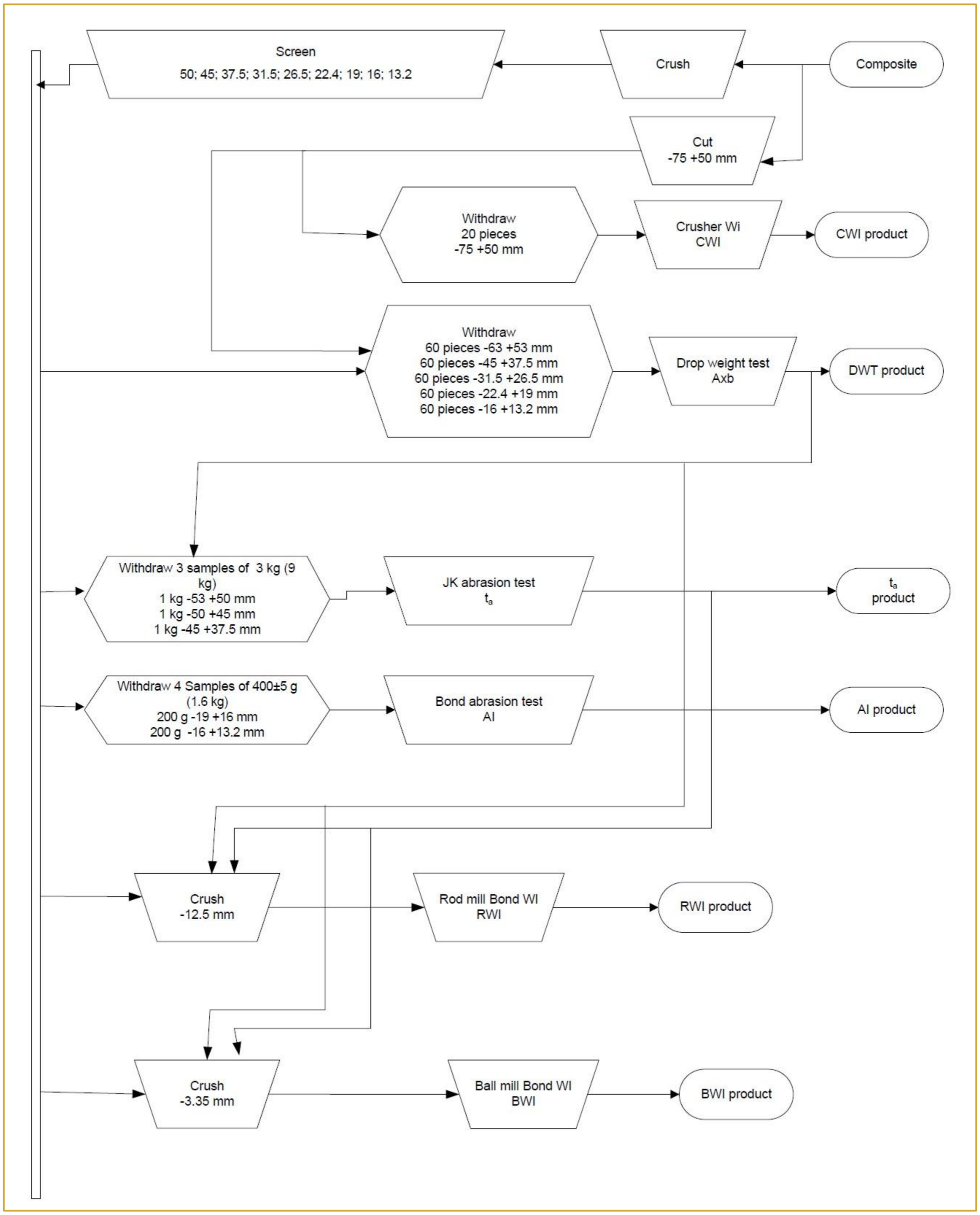

Figure 13-2: COREM comminution testwork protocol

Following the comminution testwork, the SMC, RWi, Ai, JK abrasion and DWT products of each composite were combined and crushed to P_{100}=850 µm. Each composite was then homogenized through three passes on a rotary splitter; at this point, 30 kg of each composite was reserved for the GRG tests, while the rest of the material was split in 2-kg bags (Figure 13-3).

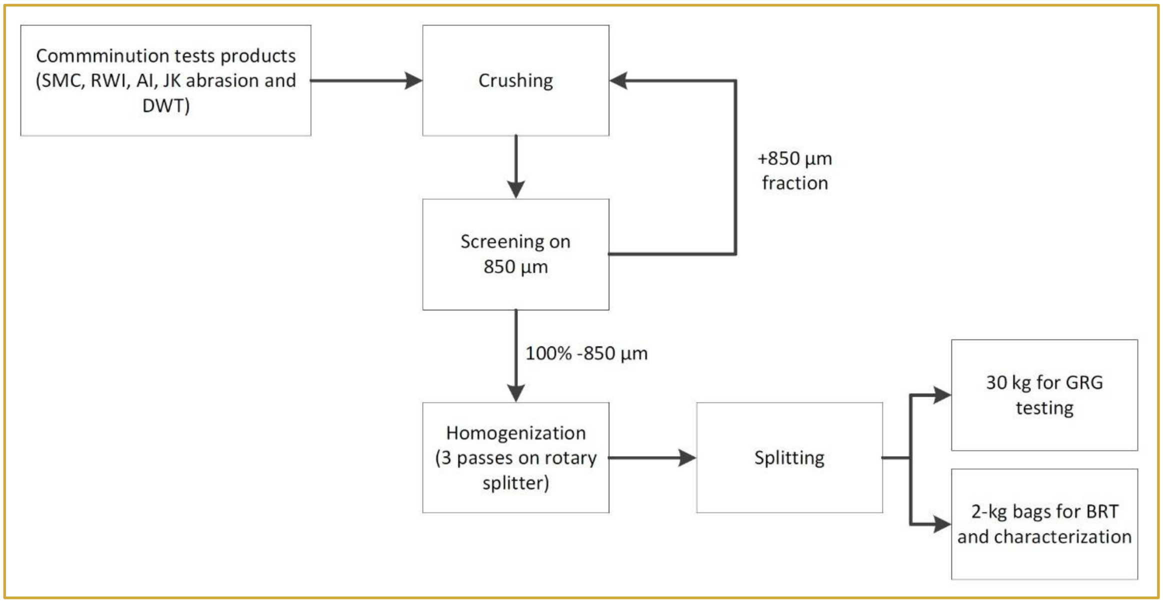

Figure 13-3: COREM metallurgical samples preparation flow diagram

Table 13-3 presents the composite Au feed from COREM testwork. Composite 12 presents the highest difference between the direct assays and the calculated assays; this could be explained by the presence of coarse gold. As in ALS testwork, it can be solved by performing a metallic gold analysis in the feed samples.

Table 13-3: Composite feed assays COREM testwork

Composite Number	P_{80} (microns)	Calculated Au Feed (g/t)	Assay Feed Au (g/t)
9	105	0.60	0.56
	75	0.53	
	50	0.54	
12	105	1.67	3.06
	75	1.68	
	50	2.44	
26	105	0.34	0.27
	75	0.31	
	50	0.27	

13.1.2 COMMINUTION

Comminution testwork was conducted at ALS (only Bond mill work index, report KM4609), COREM (report T2450) and JKTech (SMC testwork conducted at SGS under the instructions of COREM). Results analysis presented in JKTech job No 19007/P6; Feb. 2019).

Samples were selected by Sirios to provide representative samples for the testwork.

13.1.2.1 ALS Testwork

Bond ball mill work index (BWi) was conducted on two composites (1 and 2) with closing aperture of 106 microns. Table 13-7 indicates the testwork results. The samples were classified as hard based on the Julius Kruttschnitt Mineral Research Centre (JKMRC) evaluation.

13.1.2.1 COREM Testwork

The comminution testwork was conducted on three of the main mineralized zones (composites 9, 12 and 26). Table 13-3 indicates the composites characteristics.

Table 13-4 indicates the results of the Bond crusher work index (CWi). The results are classified as hard material under COREM's evaluation.

Table 13-4: Bond crusher work index

Sample's ID	CWi (kWh/t)
Composite 9	15.3
Composite 12	14
Composite 26	13.9

Table 13-5 and Table 13-6 present the results of the drop weight tests (DWT), abrasion test results and SMC respectively. Composites are classified as relatively soft (12), normal (26) and relatively hard (9) for DWT based on JKMRC evaluation. Regarding the SAG mill comminution (SMC) test, the composites are classified as relatively soft (12 and 26) and normal (9) according to JKMRC evaluation.

Table 13-5: Drop weight and abrasion test results

Sample ID	DWT				ta	
	A	b	Axb	Classification*		Classification*
Composite 9	93.1	0.453	42.2	Relatively hard	0.24	Hard
Composite 12	73.5	0.876	64.3	Relatively soft	0.34	Hard
Composite 26	76.5	0.699	53.5	Normal	0.36	Relatively hard

* Classification based on JKMRC evaluation.

Table 13-6: SMC testwork results

Sample Name	A	b	Axb	Hardness Percentile	ta	DWI (kWh/m³)	Mia (kWh/t)	Mih (kWh/t)	Mic (kWh/t)	SCSE (kWh/t)	Relative Density
Composite 9	97.5	0.48	46.8	48	0.46	5.7	17.4	12.4	6.4	9.1	2.65
Composite 12	80.6	1.01	81.4	17	0.80	3.2	11.1	7.1	3.7	7.3	2.65
Composite 26	77.5	0.91	70.5	22	0.66	3.9	12.4	8.2	4.2	7.8	2.76

Table 13-7 presents the results of the Bond ball and rod mill index results for ALS and COREM test programs. Composites are classified as hard and very hard (26) based on JKMRC evaluation for the BWi. In terms of RWi, the results indicate that the mineralized material is soft according to JKMRC evaluation.

Table 13-7: Bond ball and rod mill work index

Sample's ID	Reference Screen (microns)	BWi (kWh/t)	Hardness*	RWi (kWh/t)	Hardness*
Composite 1 (ALS)	106	16.2	Hard		
Composite 2 (ALS)		14.1	Hard		
Composite 9 (COREM)		15.1	Hard	8	Soft
Composite 12 (COREM)		16.5	Hard	8.5	Soft
Composite 26 (COREM)		22.8	Very hard	6.3	Soft

* Classification based on JKMRC evaluation.

Table 13-8 presents the results of the Bond abrasion index (Ai). Additionally, the wear rate estimations for rods, balls, and liners are presented. Composites are classified as low abrasion index (26) to medium (9 and 12) based on BBA database.

Table 13-8: Bond abrasion test results

Sample ID	Ai (g)	Wear rate (kg/kW)					
		Rod Mill		Ball Mill		Gyr/Jaw/Cone	Roll Crusher
		Rod	Liner	Ball	Liner	Liner	Liner
Composite 9	0.457	0.1347	0.0125	0.1211	0.0094	0.0278	0.0581
Composite 12	0.352	0.1276	0.0115	0.1107	0.0086	0.0235	0.0489
Composite 26	0.229	0.1162	0.0101	0.0951	0.0075	0.0184	0.0366

13.1.3 METALLURGICAL TESTWORK

The testwork objective was to evaluate the gold recovery through the following processes:

- Gravity separation and leaching of gravity tails;
- Gravity separation and flotation of gravity tails;
- Whole ore leach (WOL);
- Heap leaching;
- High Pressure Grinding Roll (HPGR) versus Conventional Crushing Cone (CC).

Testwork was conducted in four programs:

- ALS (whole ore leach, gravity and leaching of gravity tails);
- Actlabs (heap leach);
- COREM (whole ore leach); and Gravity Recovery Gold (GRG) testwork with leaching of GRG tails or flotation of gravity tails); and

- Kappes Cassidy KCA (Column Leach, Bottle Roll Leaching and Crushing Testwork - Conventional Cone and HPGR).

13.1.4 GRAVITY

Gravity testwork was conducted at two locations: ALS (Report 4609 and 4836, dated March and October 2015) and COREM (Report T2450 – Phase 1; dated August 29, 2019).

13.1.4.1 ALS Testwork

Gravity separation tests with a Knelson separator and panning of the Knelson concentrate were performed to assess the potential for gold recovery to a gravity concentrate. Nominal primary grind sizings of 100 and 150 µm K_{80} (Sloan and Mehrfet, March 2015; KM4609); and 200 and 250 µm K_{80} (Sloan and Mehrfet, October 2015; KM4836) were tested.

On the first series of gravity tests, 2 kg samples of Composites 1, 2 and 3 were tested. The Knelson concentrate was hand panned to achieve a mass recovery that is somewhat more representative of a Knelson unit operation in a concentrator. Feed gold recovery to the pan concentrate ranged between 66% and 75% for Composites 1 and 2. Between 0.2% and 0.7% of the feed mass was recovered to the pan concentrates grading between 65 g/t and 368 g/t gold. The calculated gold feed grade for Composite 1 was between 0.7 g/t and 1.1 g/t, higher than the gold head grade measured by fire assay and screen metallic methods.

A single gravity recovery test with Composite 3 was completed at a primary grind sizing of about 157 µm K_{80}. Feed gold was about 76% recovered to a pan concentrate grading 295 g/t gold, and about 1.2% of the feed mass was recovered. The results indicate that there is potential for including a gravity recovery circuit for the three feed types.

On the second series of gravity tests, 4 kg charges of Composite 1 and 2 kg charges of Composite 2. Feed gold recovery to the pan concentrate ranged between 28% and 49% for Composite 1, and between 52% and 73% for Composite 2. Mass recovery to the pan concentrate averaged 0.3% and 0.5% for Composite 1 and Composite 2 respectively. Although gravity gold recovery decreased for Composite 1 at coarser primary grind sizings, an increase in gravity gold recovery at a coarser sizing was recorded for Composite 2. The higher gold recovery for Composite 2 for the test completed at a coarser grind sizing might be attributed to a “nugget” effect gold in the feed, given the difference in calculated gold head grade between the two tests.

The gravity testwork was followed by a series of cyanidation on either gravity tailings or direct feed for grind sizes of 100, 150, 200 and 250 µm.

Table 13-9: ALS: Gravity recovery results

Program	Composites	P_{80} microns	Au Head Grade g/t	Gravity Recovery %
KM4609	1	146	1.08	70.4
		109	0.70	72.5
	2	146	1.09	74.8
		100	0.90	65.8
	3	157	4.52	76.2
KM4836	1	196	0.40	49.4
		242	0.49	27.8
	2	202	0.64	52.3
		245	0.95	72.9

13.1.4.1 COREM Testwork

Following the preparation and the homogenization of the material, a GRG test was carried out according to the standard 3-stage methodology developed by André Laplante.

The composite sample was processed with a MD3 Knelson separator to perform the three stages GRG test. These three stages were realized successively on reground samples: 100% -850 µm for stage 1, 50% -75 µm for stage 2, and 80% -75 µm for stage 3. Each concentrate and tailings were screened, and each size fraction was analyzed by fire assay with an atomic adsorption finish to estimate its gold grade. A metallurgical balance was realized at each stage to evaluate the gold recovery at all stages.

The gravity testwork was followed by a series of cyanidation on either gravity tailings (µm) or direct feed for grind sizes of 106 µm, 75 µm and 50 µm.

An additional Knelson test, as well as sulfide flotation on the gravity tailings, was carried out for each of the three composites to produce material for the mineralogical characterization.

Table 13-10 shows the results of the gravity test.

Table 13-10: COREM: Gravity recovery results

Composites	P_{80} microns	Au Head Grade g/t	Gravity Recovery %
9	75	0.92	81.4
12	75	2.81	88.0
26	75	0.31	56.5

13.1.5 LEACHING OF GRAVITY TAILS

Leaching of gravity tails testwork was conducted at two locations: ALS (Sloan and Mehrfet, March and October 2015) and COREM (Tremblay-Bouliane et al, 2019).

13.1.5.1 ALS Testwork

Cyanidation leach bottle roll tests at grind size between 100 µm and 150 µm on the combined gravity tail were performed on Composites 1, 2 and 3 to measure overall gold recovery (report KM4609); and at coarser grind (200 µm to 250 µm) Composites 1 and 2 (report KM4836). No material was available for Composite 3 (report KM4836). The combined Knelson and pan tail was subjected to cyanidation bottle roll leaching for 48 hours at a sodium cyanide concentration of 1,000 ppm with interval samplings at 2, 6, 24 and 48 hours. The slurry was sparged with oxygen and the pH was maintained at a target of 11.0 during the cyanidation leach test with lime. Table 13-11presents the results of both programs.

Regarding leaching conducted at grinds between 100 µm to 150 µm, it was observed that:

- Combined gold recovery by gravity concentration followed by cyanidation leach extraction of the gravity tail averaged about 92% for the three composites tested. Overall gold recovery varied between 1% and 3% for Composite 1 and Composite 2 at the two primary grind sizes tested; additional testing would be required to determine whether the difference was significant.
- Gold leach kinetics recorded for tests at a nominal primary grind sizing of 150 µm K_{80} appeared to be more rapid than for tests performed with gravity tails at 100 µm K_{80}. Additional testing would be required to confirm. Sodium cyanide and lime consumption averaged about 0.4 kg/t over the tests completed.

Regarding leaching at coarser grind results (200 µm to 250 µm) leach feed:

- Combined gold recovery by gravity concentration followed by cyanidation leach extraction of the gravity tail averaged about 88% for Composite 1 and 93% for

Composite 2. This represents a 4% decrease from the 92% overall gold extraction recorded for Composite 1 at146 µm K_{80} in the previous test program. For Composite 2, the combined gold recoveries recorded at coarser primary grind sizings averaged 93%, similar to gold recoveries recorded in the previous test program at 146 µm K_{80}.

- Sodium cyanide and lime consumption averaged about 0.1 kg/t and 0.3 kg/t respectively, for tests completed in this program, a substantial decrease from the 0.4 kg/t average recorded in the previous test program at finer primary grind sizings.

Table 13-11: ALS: Leaching of gravity tails results

Program	Composites	P_{80} microns	Calculated Au Head Grade g/t	Au Recovery %	NaCN kg/t	Lime kg/t
KM4609	1	146	0.25	74.4	0.5	0.47
		109	0.12	67.3	0.4	0.55
	2	146	0.18	67.5	0.34	0.30
		100	0.22	84.1	0.30	0.40
	3	157	0.89	69.2	0.54	0.32
KM4836	1	196	0.21	80.7	0.16	0.30
		242	0.26	80.6	0.08	0.28
	2	202	0.24	79.1	0.13	0.36
		245	0.28	82.2	0.10	0.39

13.1.5.1 COREM Testwork

Approximately 1 kg of sample was used for leaching tests in 4-L bottles. Leaching parameters were duration 48h, % solids 50%, pH (lime) 10.25-10.75, $[NaCN]_{maintained}$ 1,000 mg/L NaCN, Aeration Natural (open bottles).

In preparation for the bottle roll cyanidation, the ground mineralized material is introduced in a 4-L bottle, followed by the addition of the required demineralized water. The mixture is stirred, and the pre-leach pH noted and adjusted to the required pH using slaked lime powder. The bottle is then rolled for approximately 15 minutes and the pH is adjusted, if necessary, followed by the initial cyanide addition to start the cyanidation reaction.

Sampling and assays schedule for bottle roll tests was at 2, 6, 24 hours (with control of pH, residual cyanide/cyanide addition, dissolved oxygen (D.O.), dissolved Au by atomic absorption), and 48 hours (with control of pH by total lime addition, residual cyanide, D.O., dissolved Au by atomic absorption, Au in solid tailings by metallic sieve on 500 g).

A total of nine bottle roll cyanidation tests were carried out. Bottle roll cyanidation results are presented in Table 13-12.

Testwork observations:

- Au recovery for the GRG tailings BRTs was lower when compared to the direct feed BRTs. The 48-hour Au recovery was 81.7%, 75.6% and 79.2% for composites 9, 12 and 26 respectively. The lower cyanidation recovery can be explained by the generally lower feed grade, as most of the gold was recovered during the GRG tests. With the lower feed grades, the encapsulated gold represents a higher proportion of the total gold present in the GRG tailings, resulting in a lower calculated recovery for the cyanidation step.
- Consumption was slightly higher for the leaching of gravity tailings: 0.67 kg/t, 0.67 kg/t and 0.89 kg/t for composites 9, 12 and 26 respectively.

The cyanide concentration was maintained at a notably high setpoint of 1,000 mg/L NaCN throughout the cyanidation tests to provide adequate leaching kinetics for proper evaluation of the achievable final Au recovery. Furthermore, for some of the tests (more specifically for the GRG tailings cyanidation tests), the pH dropped slightly below 10 overnight, which probably caused some amount of hydrocyanic acid (HCN) volatilization.

Cyanide concentration optimization through additional leaching tests would most likely lead to the determination of a lower setpoint and to overall lower cyanide consumption, even more so when combined with a pH maintained over 10.5 for the whole duration of the leaching.

Lime consumption can be considered low for most of the tests. Among the three composites, Composite 26 has the highest lime consumption. Lime consumption values of 0.70 kg/t, 0.73 kg/t and 1.23 kg/t were measured respectively for composites 9, 12 and 26.

Table 13-12: COREM: Gravity tails leach results

Composite	Product	P_{80} µm	Replicate	Calc Feed g/t	Assayed Feed g/t	Au Recovery, 48 hours %	NaCN Consumption kg/t	CaO Consumption kg/t	CaO Equivalent kg/t
9	GRG tailings	75	1	0.14	0.17	83.2	0.51	1.14	0.86
			2	0.18		81.2	0.75	0.74	0.56
			3	0.11		80.5	0.76	0.90	0.68
			Average	0.15		81.7	0.67	0.93	0.70
12		75	1	0.35	0.29	76.6	0.5	1.0	0.76
			2	0.36		76.0	0.8	0.9	0.70
			3	0.36		74.1	0.7	1.0	0.73
			Average	0.36		75.6	0.67	0.97	0.73
26		75	1	0.12	0.12	80.6	0.9	1.8	1.32
			2	0.13		75.9	0.9	1.2	0.93
			3	0.12		81.1	0.9	1.9	1.42
			Average	0.13		79.2	0.89	1.62	1.23

13.1.6 FLOTATION OF GRAVITY TAILS

13.1.6.1 COREM Testwork

Bulk sulphide flotation test was carried out on gravity separation tailings from each composite to study the gold-sulphide mineral associations. Testwork was conducted at COREM (Tremblay-Bouliane et al, 2019).

A 12-kg sample from each composite sample was subjected to a single Knelson gravity separation step at P_{80}=75 µm. The tailings were filtered, dried, and split in 4-kg sub-samples to undergo flotation tests. Flotation tests were carried out in a 10-litre Denver cell at the following operating conditions: 30-35% solids, pH = 9.5, air flowrate = 50 L/min, rotation speed 900 rpm. The reagent additions were: 40 g/t of $CuSO_4$ at the rougher stage and PAX51 additions of 40, 20 and 20 g/t for the rougher and two stages of scavenger flotation. These conditions were set to recover as much sulphides as possible, while still obtaining a grade high enough to facilitate the mineralogical characterization of Au-sulphide associations.

Table 13-13 shows the bulk sulphide flotation results.

Table 13-13: COREM: Flotation of gravity tails results

Composite	Conc. Mass %	Tails Mass %	Sulphur Mass Balance				Gold Mass Balance			
			Conc. Grade %	Tail Grade %	Calc. Feed* %	Recovery %	Conc. Grade %	Tail Grade %	Calc. Feed %	Recovery %
9	2.72	97.3	3.8	< 0.1	0.15	51.5	4.2	0.07	0.18	62.7
12	5.30	94.7	2.7	< 0.1	0.19	60.1	5.2	0.15	0.42	65.8
26	3.70	96.3	4.2	< 0.1	0.20	61.8	2.3	0.06	0.14	59.5

* The sulphide calculated feed was based on a 0.1% S grade in the tailings since the assay was under the detection limit. Thus, sulphide recovery is probably underestimated.

13.1.7 WHOLE ORE LEACH *

Whole ore leach (WOL) testwork was conducted at two locations: ALS (Sloan and Mehrfet, March and October 2015) and COREM (Tremblay-Bouliane et al, 2019).

* Note, in the context of this MRE Update report, here the reference to "ore" in the commonly used expression "Whole Ore Leach (WOL)" means *whole mineralized material*, not "whole ore" with economic value, so as to be consistent with the Resource classifications used in this MRE update report.

13.1.7.1 ALS Testwork

Cyanidation leach bottle roll tests (WOL) using feed charges at a nominal primary grind sizing of 150 µm K_{80} were performed on Composite 1, Composite 2 and Composite 3 to measure gold extraction to benchmark with leaching of gravity tails results. The selection of the primary grind sizing was based on the previous gravity and cyanidation leach test results. Bottle roll leaching was carried out over 48 hours at a sodium cyanide concentration of 1,000 ppm with interval sampling at 2, 6, 24 and 48 hours. The slurry was sparged with oxygen and the pH was maintained to a target of 11.0 over the duration of the test with lime. The following comments relate to the test data (in comparison to Table 13-11):

- Gold extraction values by cyanidation leaching were 24% and 14% lower than the values measured for combined gravity and cyanidation leaching of the gravity tails for Composite 1 and Composite 2 respectively, at a similar primary grind sizing. However, the gold extraction by whole ore leaching for Composite 3 was only about 2% lower.
- Gold extraction kinetics were slower for the whole ore cyanidation leach tests than those measured for cyanidation leaching of gravity tails. Peak gold extraction was

reached within about 24 hours for Composite 1 and Composite 2 in the whole ore leach tests but required only about 6 hours for the gravity tails. Peak gold extractions were measured after 24 hours or longer with the higher-grade Composite 3.

- Sodium cyanide consumption was between 0.2 kg/t and 0.3 kg/t higher for whole ore cyanidation leach tests than values measured for cyanidation leach tests with gravity tails.

Table 13-14: ALS: Direct cyanidation (WOL) and gravity recovery followed by leaching of gravity tails (Grav + CN)

Composites	P_{80} microns	Test Type	Calculated Au Head Grade g/t	Au Recovery %	NaCN kg/t	Lime kg/t
1	146	WO	0.36	68.2	0.70	0.27
	146	Grav + CN	1.08	92.4	0.50	0.47
2	146	WO	0.73	78.1	0.66	0.31
	146	Grav + CN	1.09	91.8	0.34	0.30
3	157	WO	6.8	91.1	0.88	0.34
	157	Grav + CN	4.52	92.7	0.54	0.32

13.1.7.2 COREM Testwork

The same protocol was used to test the direct cyanidation (WOL) as presented in Section 13.1.5.1.

A total of 27 bottle roll cyanidation tests were carried out. Bottle roll cyanidation results are presented in Table 13-15.

Direct leach (WOL) tests observations:

- For the direct feed cyanidation tests, Au recovery generally increases with finer grind sizes. At a grind size of P_{80}=50 µm, the 48-hour Au recovery reached 88.1%, 92.0% and 87.8% for composites 9, 12 and 26 respectively.
- The smaller grind sizes also led to an increase in Au leaching kinetics, which is probably the result of an increase in the exposed gold surface.
- Cyanide consumption was moderate to low for all three composites tested for direct cyanidation and were slightly higher for coarser grind sizes; it ranged between 0.49-0.58 kg/t, 0.22-0.48 kg/t and 0.19-0.29 kg/t for composites 9, 12 and 26 respectively.

- Lime consumption was moderate to low for all three composites tested for direct cyanidation and were slightly higher for coarser grind sizes; it ranged between 0.56-0.70 kg/t, 0.65-0.88 kg/t and 0.84-1.09 kg/t for composites 9, 12 and 26 respectively.

Table 13-15: COREM: Direct cyanidation (WOL) testwork results

Composite	Product	P_{80} µm	Replicate	Calc Feed g/t	Assayed Feed g/t	Au Recovery 48 hours %	NaCN Consumption kg/t	CaO Consumption kg/t	CaO Equivalent kg/t
9	Direct feed (WOL)	105	1	0.75	0.56	83.0	0.40	0.73	0.55
			2	0.53		73.6	0.70	0.56	0.42
			3	0.53		75.1	0.63	0.50	0.38
			Average	0.60		77.9	0.58	0.59	0.45
		75	1	0.56		82.4	0.50	0.66	0.50
			2	0.54		82.8	0.66	0.56	0.42
			3	0.49		81.4	0.35	0.48	0.36
			Average	0.53		82.2	0.50	0.56	0.43
		50	1	0.55		89.0	0.41	0.50	0.38
			2	0.47		87.0	0.54	0.93	0.70
			3	0.60		88.1	0.51	0.69	0.52
			Average	0.54		88.1	0.49	0.70	0.53
12		105	1	1.80	3.06	86.8	0.44	0.74	0.56
			2	1.62		85.9	0.58	0.33	0.25
			3	1.61		86.3	0.41	0.88	0.66
			Average	1.67		86.4	0.48	0.65	0.49
		75	1	1.86		87.7	0.19	1.00	0.74
			2	1.62		86.5	0.23	0.66	0.49
			3	1.57		86.0	0.27	0.67	0.49
			Average	1.68		86.8	0.23	0.78	0.57
		50	1	2.67		92.8	0.20	0.91	0.67
			2	2.46		92.0	0.25	0.99	0.73
			3	2.18		91.1	0.21	0.75	0.56
			Average	2.44		92.0	0.22	0.88	0.65
26		105	1	0.33	0.27	85.2	0.27	0.87	0.64
			2	0.37		86.1	0.32	0.86	0.63
			3	0.33		84.2	0.28	0.79	0.58
			Average	0.34		85.2	0.29	0.84	0.62
		75	1	0.33		88.1	0.22	0.92	0.68
			2	0.31		88.9	0.23	1.28	0.94
			3	0.28		84.8	0.26	1.07	0.79
			Average	0.31		87.4	0.24	1.09	0.80
		50	1	0.25		87.0	0.20	0.97	0.71
			2	0.28		88.9	0.05	1.01	0.75
			3	0.27		87.4	0.19	0.95	0.70
			Average	0.27		87.8	0.19	0.98	0.72

13.1.8 HEAP LEACH

Heap leach amenability testwork was conducted at Actlabs on behalf of Sirios Resources Inc.

The objective of the testwork was to study the gold extraction at three crush sizes: 19 mm (-3/4 inch), 12.5 mm (-3/8 inch) and 2 mm (-10 mesh). The cyanidation testwork was conducted using intermittent bottle rolls (as a proxy for heap leach) on three samples of mineralized material. Table 13-16 shows the results of the testwork.

Table 13-16:Actlabs: Heap leach amenability testwork

Material Type (ID)	Crush Size mm	Au Head Assay g/t	Calc Head g/t	Leach Residue %	Au Final Solution ppm	Au Adjusted Solution ppm	Cyanide Consumption kg/t	Au recovery %
Met Sed (01306720)	-19	0.64	0.27	0.22	0.05	0.06	1.31	21
	-12.5		0.22	0.13	0.09	0.10	1.29	43
	-2		1.14	0.17	0.90	1.00	1.47	85
Ton (01306721)	-19	0.43	0.40	0.22	0.16	0.17	1.16	45
	-12.5		0.80	0.47	0.31	0.33	1.21	41
	-2		0.47	0.16	0.28	0.31	1.22	66
Peg (01306722)	-19	43.5	26.20	18.20	7.46	7.99	1.25	30
	-12.5		34.20	18.10	15.42	16.20	1.20	46
	-2		29.40	12.70	15.56	16.70	1.25	57

Actlabs report indicates that:

- The best results were found for the finer crushed size: 2 mm;
- Analysis of the leaching kinetics curves indicated that the gold dissolution rate increase between the 7th and 14th days indicating potential higher gold recovery with longer leaching time;
- The cyanide consumption (from 1.16 kg/t to 1.47 kg/t) was in an average range and lime consumption was negative, an indication that the samples were alkaline, and the pH increased during the leaching time.

13.1.9 KCA BOTTLE ROLL AND COLUMN LEACH TESTWORK

Both heap leach amenability (column leach testwork) and bottle roll testwork was conducted at Kappes Cassiday & Associates Laboratories (KCA) in Reno, Nevada on behalf of Sirios Resources Inc in 2020.

13.1.9.1 Sample Receipt and Preparation

On March 18, 2020, the laboratory facility of KCA in Reno, Nevada received 30 5-gallon buckets of bulk material from the Cheechoo Project in Québec (KCA, 2020). The received material represented a single bulk sample.

Upon receipt, each bucket was weighed. The material from the buckets was then combined into a single sample with a total mass of 506.6 kg. The sample was photographed and described geologically.

One half of the sample was conventionally crushed using laboratory scale jaw and cone crushers (CC). The remaining half was crushed utilizing a High Pressure Grinding Roll unit - PILOTWAL (HPGR). The crushed products were individually prepared and utilized for metallurgical testwork.

Additional sample preparation was conducted to provide material for metallic screen head analyses, head screen analyses with metallic screen assays by size fraction, bottle roll leach testwork, agglomeration testwork, and column leach testwork.

All preparation, assaying and metallurgical studies were performed utilizing accepted industry standard procedures.

The above sample preparation and handling procedures appear to have been completed acceptably according to international standards of metallurgical sample testwork at laboratory.

13.1.9.2 Bottle Roll Testwork

Bottle roll leach test work was conducted on the bulk material sample to evaluate the following:

- Effect of crush type - Conventional versus High Pressure Grinding Roll (HPGR);
- Crush size (P100 9.5 mm and P100 6.3 mm);
- Leach temperature (20°C and 4°C).

Each set of test parameters were conducted using a series of five individual bottle roll tests, which were run for a leach period of 21 days.

The results of each bottle roll test series were averaged, as discussed below:

Conventionally Crushed Material

Average gold extractions for the conventionally crushed material ranged from 51% to 58% based on calculated heads, which ranged from 0.739 g/t to 0.968 g/t. The sodium cyanide consumptions ranged from 0.19 kg/t to 0.38 kg/t. The material utilized in leaching was blended with 0.50 kg/t lime.

HPGR Crushed Material

The average gold extractions for the HPGR crushed material ranged from 61% to 71% based on calculated heads, which ranged from 0.637 g/t to 0.832 g/t. The sodium cyanide consumptions ranged from 0.25 kg/t to 0.54 kg/t. The material utilized in leaching was blended with 0.50 kg/t lime.

Bottle Roll Leach Conclusions

The following points on the testwork with key conclusions should be noted:

- For the conventionally crushed material, at a coarse crush size (PI00 9.5 mm), and leached at 20°C, averaged 2% higher gold extraction than tests leached at 4°C;
- The finer crush tests (P100 6.3 mm) leached at 20°C averaged 7% higher gold extraction than tests leached at 4°C;
- For the HPGR crushed material, the coarse crush tests leached (PI00 9.5 mm) at 20°C averaged 4% higher gold extraction than tests run at 4°C;
- The fine crush tests (PI00 6.3 mm) run at 20°C averaged 9% higher gold extraction than tests leached at 4°C;
- For both crush methods, the finer crush size (PI00 6.3 mm) results in a significantly higher gold leach recovery of 7-9%, over the coarse crush size (PI00 9.5 mm);
- The warmer leach temperature at 20°C, under an HPGR crush method, appears to result in higher gold leach recoveries. The colder temperature at 4°C is likely to retard the mass transfer of NaCN solutions into the material, to the gold particles, and could be a cause of the lower gold recoveries;
- The use of HPGR as the material crush method should be investigated further on additional samples from the Cheechoo deposit.

Importantly, the duration of the bottle roll leach testwork was only for 21 days (3 weeks). Comparatively, on the same material, the column leach testwork was run over 151 days. The bottle roll leach time is 7 times shorter, which is likely to be the main cause of lower gold recoveries seen in the bottle roll testwork.

The comparative gold recoveries, as shown in Table 13-17, are as follows:

- For bottle roll leaching: 51% to 58% (on conventionally crushed material) and 61% to 71% (HPGR crushed material); versus
- For the column leach testwork: 68% (conventionally crushed material) and 80% (for HPGR compaction crushed material).

The estimation of gold recoveries for heap leaching is discussed later in Section 13.1.10 with the calculation of overall gold recoveries, as applied to the Cheechoo deposit for the MRE Update.

Table 13-17 Gold recovery comparison – KCA Column versus Bottle Roll Leach Testwork

KCA Column Leach Sample	Temp °C	Crush Size P100 mm	Crush Type	Days of Column Leach	Column Leach Extracted % Au	Days of Bottle Roll Leach	Bottle Roll Average Extracted % Au
88301 C	20	6.3	Conv.	151	68%	21	51%
88301 C	4	6.3	Conv.	151	73%	21	58%
88303 A	20	6.3	HPGR	151	80%	21	61%
88303 A	4	6.3	HPGR	151	76%	21	68%

13.1.9.3 Agglomeration Testwork

The results of agglomeration testwork on crushed Cheechoo material (P100 6.3 mm) show that the addition of cement at a minimum of 2.0 kg/t material is required. According to the KCA metrics presented in Table 13-18, the percolation flow result was scored as a “Fail” with zero cement addition.

During the four column tests, no bed slumping was observed, indicating adequate cement addition rates at 2.0 kg/t. Further load compressibility testwork is recommended to optimize the cement addition rates on further material samples from Cheechoo.

During cyanide leaching of materials placed in lifts on a permanent heap pad, the cemented agglomerates will give both valuable additional in situ alkalinity and will agglomerate the fines to provide sufficient cured strength of the agglomerates. This will lead to:

- Adequate percolation flow-rates of leach solutions downward through the lifts;
- Sufficient material compression strength for multiple lifts played on top of each other, for the heap not to collapse and prevent percolation of pregnant liquor solution (PLS) through each lift;
- Stability to the heap preventing slumping and run-outs from the side slopes.

For heap leaching of Cheechoo materials at a fine crush size of P100 = 6.3 mm, agglomeration of the material with the use of cement is recommended.

Table 13-18: KCA Summary of preliminary agglomeration testwork

KCA Sample No.	Description	Cement, kg/t dry material	pH on Day 3	pH Comment	% Slump	Slump Result	Flow Out, L/hr/m²	Flow Result	Visual Estimate of % Pellet Breakdown	Pellet Result	Out Flow Solution, Color and Clarity	Solution Result	Overall Test Result
88301 C	Bulk Material, Conventional Crush P100 6.3 mm	**0**	7.6	Low	0%	Pass	204	**Fail**	N/A	--	Colorless & Clear	Pass	**Fail**
		2	11.2	Good	0%	Pass	1,868	Pass	< 3	Pass	Colorless & Clear	Pass	Pass
		4	11.6	High	0%	Pass	11,425	Pass	< 3	Pass	Colorless & Clear	Pass	Pass
		8	11.9	High	0%	Pass	9,221	Pass	< 3	Pass	Colorless & Clear	Pass	Pass
88303 A	Bulk Material, HPGR Crush P100 6.3 mm	**0**	7.7	Low	0%	Pass	99	**Fail**	N/A	--	Colorless & Clear	Pass	**Fail**
		2	11.2	Good	0%	Pass	1,933	Pass	< 3	Pass	Colorless & Clear	Pass	Pass
		4	11.5	Good	0%	Pass	7,752	Pass	< 3	Pass	Colorless & Clear	Pass	Pass
		8	11.8	High	0%	Pass	8,046	Pass	< 3	Pass	Colorless & Clear	Pass	Pass

13.1.9.1 KCA Column Leach Testwork Conditions

KCA completed column leach tests utilizing conventionally crushed material as well as HPGR crushed material. Based on the results of the bottle roll leach tests, column leach tests were conducted with material crushed to 100% passing 6.3 mm. For both types of crushed material, agglomeration of each column charge sample was completed with 2.01 kg of cement per tonne of material.

One portion of agglomerated material from each crush type was leached at a temperature of 20°C, and the second portion of material was leached at a temperature of 4°C. This cold column leach was conducted in a refrigerated room, maintained at 4°C. This was to simulate the extreme cold weather conditions likely to occur near James Bay, Ontario.

During testing, the material was leached for 151 days with a sodium cyanide solution, percolating through the column at an average of 10 -12 L/h/m^2.

The initial leach solution for each column test contained 1.0 gram of sodium cyanide per liter of leach solution (1,000 ppm). The cyanide strength of the return on-flow solution was maintained at a target level of 0.5 grams of sodium cyanide per liter (500 ppm).

Protective alkalinity in the test was maintained by the initial addition of cement during column setup. The leach solution was monitored to ensure that a high pH range was maintained throughout testing. The pH was maintained in the PLS at above pH 10.5, with regular additions of NaCN solution (1.0 g/L NaCN).

The initial and final leach solutions exiting from the column base were monitored for colour and clarity in each column test.

All four column tests exhibited no change in solution colour and no generation of fines over the duration of each column test. Initial exit solutions were clear and colourless, and then light brown (expected) and clear, indicating no buildup of leached metals. The observation results are tabled below in Table 13-19.

Table 13-19 Column leach solution observations at KCA

KCA Sample No.	KCA Test No.	Description	Temp °C	Crush Type	Colour and Clarity of Initial Column Effluent	Colour and Clarity of Final Column Effluent
88301 C	88315	Bulk Material	20	Conv.	Colorless & Clear	Brown and Clear
88301 C	88318	Bulk Material	4	Conv.	Colorless & Clear	Brown and Clear
88303 A	88321	Bulk Material	20	HPGR	Colorless & Clear	Brown and Clear
88303 A	88324	Bulk Material	4	HPGR	Colorless & Clear	Brown and Clear

13.1.9.2 KCA Column Leach Testwork Results - Gold and Silver Recovery

Key column test results from the KCA testwork are summarized below in Table 13-20 and Table 13-21, showing gold and silver recoveries from the four column leach tests conducted at KCA over a period of 151 days.

Table 13-20 KCA column leach results – Gold

KCA Sample No.	Description	Temp °C	Crush Size P100 mm	Crush Type	Calculated Head g Au/Mt	Extracted g Au/Mt	Extracted, % Au	Calculated Tail p80 Size mm	Days of Leach	Consumption NaCN kg/Mt	Addition Cement kg/Mt
88301 C	Bulk Material	**20**	6.3	**Conv.**	**0.807**	0.549	**68%**	4.09	**151**	2.35	2.01
88301 C	Bulk Material	**4**	6.3	**Conv.**	**0.912**	0.662	**73%**	4.04	**151**	1.41	2.01
88303 A	Bulk Material	**20**	6.3	**HPGR**	**0.967**	0.771	**80%**	3.53	**151**	2.45	2.02
88303 A	Bulk Material	**4**	6.3	**HPGR**	**0.802**	0.607	**76%**	3.23	**151**	1.40	2.02

Table 13-21 KCA column leach results – Silver

KCA Sample No.	Description	Temp °C	Crush Size P100 mm	Crush Type	Weighted Avg. Head Assay g Ag/Mt	Extracted g Ag/Mt	Estimated Extracted % Ag	Calculated Tail p80 Size mm	Days of Leach	Consumption NaCN kg/Mt	Addition Cement kg/Mt
88301 C	Bulk Material	**20**	6.3	**Conv.**	**0.45**	0.30	**68%**	4.09	**151**	2.35	2.01
88301 C	Bulk Material	**4**	6.3	**Conv.**	**0.45**	0.26	**57%**	4.04	**151**	1.41	2.01
88303 A	Bulk Material	**20**	6.3	**HPGR**	**1.09**	0.42	**39%**	3.53	**151**	2.45	2.02
88303 A	Bulk Material	**4**	6.3	**HPGR**	**1.09**	0.39	**36%**	3.23	**151**	1.40	2.02

For the column leach testwork tabled above in Table 13-20 and Table 13-21 the kinetics of gold leaching in the four KCA column leach tests are shown below in Figure 13-4 (KCA Report Figure 6-1).

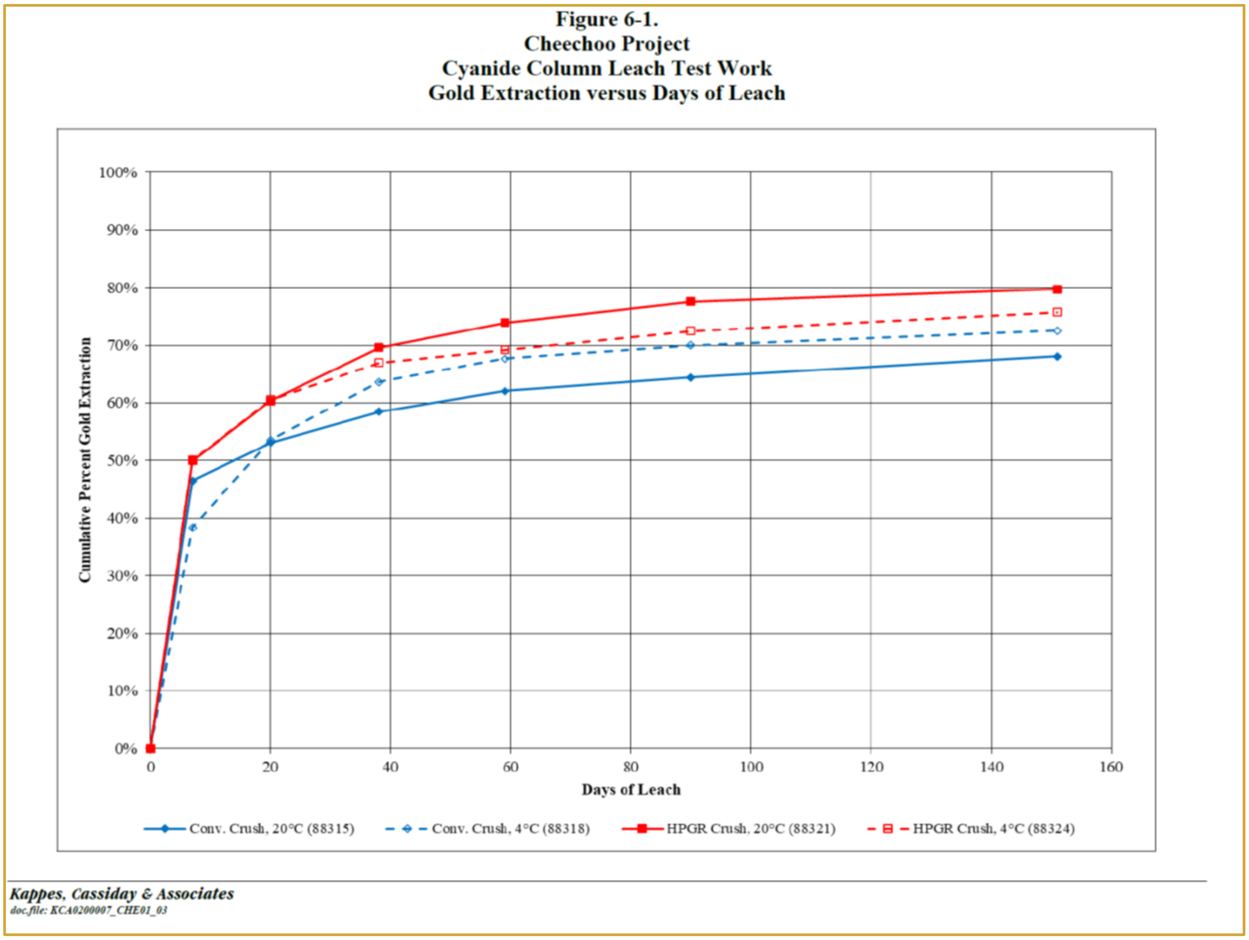

Figure 13-4: KCA column leach kinetics for Au leaching

From the leach kinetic curves in Figure 13-4, the upward slope of the gold recovery leach curves, from 90 days approaching 151 days suggests that for a longer leach time on a heap, increased gold recovery is likely to occur. In the overall gold recovery estimations recommended for heap leaching of Cheechoo materials, this important observation was taken into account.

13.1.10 GOLD RECOVERY ESTIMATION

The gold recovery estimates applied in the earlier BBA 2020 Mineral Resource Estimate Update (2020 MRE Update) (Richard et al., 2020) are presented below in Section 13.1.10.1 where estimates are still relevant.

In Section 13.1.10.2, for this Mineral Resource Estimate Update (MRE Update), a revised set of gold recoveries, are discussed and presented for the two metallurgical operations:

1. Crush – Grind Gravity + Gravity Tails Cyanide Leach;
2. Crush – Agglomeration – Heap Leaching on a permanent pad.

Section 13.3.10.3 gold recovery forecast is based on the previous testwork program. No additional testwork was done for the 2025 MRE Update. Gold recovery estimates were derived for a Gravity Recovery and Leaching of Gravity Tail flowsheet. A variable gold recovery-grade relationship was developed.

13.1.10.1 Gold Recovery Estimates Applied in the 2020 MRE Update

Overall gold recoveries were calculated using results from the above testwork programs and assuming four processing methods: 1) gravity recovery followed by leaching of gravity tails; 2) gravity recovery followed by flotation of gravity tails; 3) whole ore leach (1 to 3 as part of COREM testwork); and 4) heap leach (only the Actlabs testwork).

The Au head grades of composites used for the heap leach testwork were 0.64 g/t, 0.43 g/t and 43.5 g/t for composites 01306720 (Metasediments), 01306721 (Tonalite) and 01306722 (Pegmatite) respectively. In contrast, the Au head grades of composites 9, 12 and 26 were 0.92 g/t, 2.81 g/t and 0.31 g/t respectively. Those composites were used for whole ore leach; gravity recovery followed by leach of gravity tails and gravity recovery followed by flotation of gravity tails.

The whole ore leach testwork was conducted at three different particle sizes (P_{80}) of 50, 75 and 105 microns, and leaching or flotation of gravity tails were conducted at P_{80} = 75 microns (product of the third stage of GRG testwork). A particle size of 75 microns was selected to estimate the gold recovery and to compare results of WOL versus gravity recovery followed by leaching or flotation of gravity tails testwork.

Summaries of each gold recovery method are presented in Table 13-22 to Table 13-25.

In the case of the testwork involving gravity recovery, the overall gold recoveries reported by COREM were:

- Gravity recovery (GRG): 81.4%, 88% and 56.5% for composites 9, 12 and 26 respectively (average of 75.3%);
- For gravity recovery followed by leach of gravity tails: 96.6%, 97.1% and 91.0% for composites 9, 12 and 26 respectively (average of 94.9 %);
- Gravity recovery followed by flotation of gravity tails: 93.1%, 95.9% and 82.4% for composites 9, 12 and 26 respectively (average of 90.5%).

These overall gold recovery values were calculated assuming a gold gravity recovery of 100% of the GRG. The GRG results are only referential from testwork. At industrial scale it is common to recover 40% to 50% of the GRG in a well-designed gravity recovery circuit. BBA recommends that 50% of the GRG index is to be assumed when estimating the gold gravity recovery. Therefore, the average recovery decreases by 7.7% when the gravity circuit recovery is assumed to be 50% instead of 100% of the GRG. The recalculated overall recoveries are:

- Gravity recovery (corrected): 41.0%, 44.0% and 28.0% for composites 9, 12 and 26 respectively (average of 38%);
- For gravity recovery followed by leach of gravity tails: 89.1%, 86.3% and 85.0% for composites 9, 12 and 26 respectively (average of 86.8%);
- Gravity recovery followed by flotation of gravity tails: 77.9%, 80.8% and 70.9% for composites 9, 12 and 26 respectively (average of 76.6%).

The gold recovery (at 75 microns) for the whole ore leach method was 82.2%, 86.8% and 87.4% (average = 85.5%) for composites 9, 12 and 26 respectively.

Table 13-22: Gravity gold recovery estimation from COREM testwork

Criterion	Unit	Composite		
		9	12	26
Average Feed Grade	g/t Au	0.92	2.81	0.31
Gravity (GRG) recovery	%	81.4	88.0	56.5
GRG correction factor	%	50.0	50.0	50.0
Corrected gold gravity recovery	%	41.0	44.0	28.0

Table 13-23: Gold recovery estimation by flotation of gravity tails method from COREM testwork

Criterion	Unit	Composite		
		9	12	26
GRG tailings gold flotation recovery (P_{80} of 75 microns)	%	62.7	65.8	59.5
Overall gold recovery (GRG corrected)	%	77.9	80.8	70.9

Table 13-24: Gold recovery estimation by leaching of gravity tails method from COREM testwork

Criterion	Unit	Composite		
		9	12	26
GRG tailings gold leach recovery (P_{80} of 75 microns)	%	81.7	75.5	79.1
Overall gold recovery (GRG corrected)	%	89.1	86.3	85.0

Table 13-25: Gold recovery estimation by whole ore leach method from COREM testwork

Criterion	Unit	Composite		
		9	12	26
Whole ore leaching gold recovery (P_{80} of 75 microns)	%	82.2	86.8	87.4

In the ALS heap leach testwork, it was observed that the best results were found at a crush size of -2 mm. However, this particle size is not applicable on an industrial scale in an operating heap. To overcome this situation, the gold recovery was plotted versus particle size and using heap leach results as presented in Table 13-16; the gold recovery was interpolated for two particle sizes: -6.5 mm and -9 mm; Table 13-26 presents the results. The average gold recovery at 6.5 mm and 9 mm are 58.6% and 53% respectively.

Table 13-26: Heap leach Au recovery from Act labs testwork

Criterion	Unit	Composite		
Composite ID	-	01306720	01306721	01306722
Material type	-	Meta-Sediments	Tonalite	Pegmatite
Average feed grade	g/t Au	0.64	0.43	43.5
a) Au Recovery interpolated at crush particle size = -9 mm	%	57.9	53.6	47.7
b) Au Recovery interpolated at crush particle size = -6.5 mm	%	67.3	56.9	51.5

From the 2020 MRE Update conclusions on overall gold recoveries were:

The best gold recovery results were found when the mineralized material was processed by gravity recovery followed by leach of gravity tails, but the results were comparable to the whole ore leach results. An optimization and variability testwork program are recommended to validate the best method of processing Cheechoo mineralized material.

- For gravity recovery followed by leach of gravity tails: 89.1%, 86.3% and 85.0% for composites 9, 12 and 26 respectively (average of 86.8%);
- Cyanide consumption was slightly higher for the leaching of gravity tailings: 0.67 kg/t, 0.67 kg/t and 0.89 kg/t for composites 9, 12 and 26 respectively;
- Lime consumption can be considered low for most of the tests. Among the three composites, Composite 26 has the highest lime consumption. Lime consumption values of 0.70 kg/t, 0.73 kg/t and 1.23 kg/t were measured respectively for composites 9, 12 and 26.

Heap leach Au recovery results were maximized at finer crushed size. It is recommended to use a crushed size of -6.3 mm, but it requires future percolation testwork at the recommended particle size.

- The estimated Au recovery for heap leach process is 67.3%, 56.9% and 51.5 % for composites 01306720 (Meta- Sediments), 01306721 (Tonalite) and 01306722 (Pegmatite) respectively;
- The cyanide consumption (from 1.16 kg/t to 1.47 kg/t) was in an average range and lime consumption was negative, an indication that the samples were alkaline, and the pH increased during the leaching time.

13.1.10.2 Overall Gold Recovery Estimates for this Mineral Resource Estimate Update

Gravity Concentration and Gravity Tails CN Leach Operation

The overall gold recoveries for the Crush - Grind - Gravity and Gravity Tails NaCN Leaching option (Grind + Gravity + Gravity Tails Leach), based on data from the COREM testwork, are tabled here below in Table 13-27.

These overall gold recoveries are used in this MRE Update for the resource estimation, and pit shell modeling.

Table 13-27 Overall gold recoveries Grind + Gravity + Gravity Leach

Metallurgical Process Operation	Material Type - Lithology	Material Gold Grade Class Au g/t	NaCN Leach Duration hours	Crush Size P80 mm	Overall Gold Recovery %
Crush - Grind - Gravity and Gravity Tails NaCN Leaching	I1D and I1G	< 0.3	48	75	**84**
	I1D and I1G	> 0.3 < 0.5	48	75	**88**
	I1D and I1G	> 0.5	48	75	**92**
	S3	< 0.3	48	75	**84**
	S3	> 0.3 < 0.5	48	75	**88**
	S3	> 0.5	48	75	**92**

The following notes support the data in Table 13-27:

- Material types – Lithologies are tagged here as I1D and I1G, and S3. These correlate to the lithological domain rock types and sample composite numbers as reported in the testwork and used in the 2020 MRE Update, as follows:
  - I1D and I1G as Tonalite /Pegmatites (Sample Composites 9 and 12);
  - S3 as Meta- Sediments (Sample Composite 26).
- For the 33 composite samples submitted to COREM for gravity and gravity tails leaching, the bulk of the samples is mainly classed as material type I1D and I1G, which represents approx. 90% of the deposit.
- A limited number of samples were classed as S3. However, the same Au grade classes and gold recoveries were applied to the S3 material type, which were consistent with the testwork data, and the grade classes used for the material types I1D and I1G.
- The selected Au grade classes cover a representative range of gold grades (Au g/t), as assayed in the 33 Cheechoo composite samples.

The gold grade classes with values are as follows:

- Less than 0.3 Au g/t, Average 0.19 Au g/t, Range Min – Max: 0.06 – 0.21 Au g/t;
- Greater than 0.3 Au g/t, less than 0.5 Au g/t, Average 0.38 Au g/t, Range Min – Max: 0.32 Au – 0.48 g/t;
  Greater than 0.5 Au g/t, Average 0.74 Au g/t, Range Min – Max: 0.56 – 0.93 Au g/t;
- The gravity concentration recovery and gravity concentrate and tails leach gold recovery data from the COREM testwork were used to estimate the overall plant gold recoveries for an actual operation, with downward corrections applied to the GRG gold recovered to gravity concentrates. These gravity concentrates would feed an intensive CN leach, with electrowinning of PLS followed by doré smelting;
- The estimated gold recoveries are aligned with the three Au grade classes defined above and are applied to the main material rock types currently representing the Cheechoo deposit;
- The overall estimated gold recoveries are tabled below in Table 13-28. Applicable plant Au recoveries typically seen in such operating plants are estimated, namely those for % GRG gold recovery to concentrates with Acacia intensive leach recovery at 99%;
- Also, gravity tails CN leaching of gold recoveries are taken from testwork, with average values of 78%, 80% and 85% for each gold grade. A carbon elution – electrowinning – smelter circuit gold recovery was set at 99%;
- The overall gold recoveries for the Crush - Grind - Gravity and Gravity tails leach process operation have been applied in this MRE Update.

Table 13-28 Overall plant Au recovery for gravity and gravity tails leach operation

Crush - Grind - Gravity and Gravity Tails CN Leaching with Carbon to Dore Au			
Material Type – Lithology	**I1D and I1G and S3**		
Gold Grade Class Average Grade g/t Au	0.19	0.38	0.74
Testwork GRG Gold Recovery %	56.5	81.4	88.0
GRG Recovery Correction for Plant operation % Au recovered to Gravity Concentrate	52	56	60
Acacia PLS Recovery to Doré gold %	99	99	99
Gravity tails CN Leach recovery %	78	80	85
Gravity tails Leach – Carbon in Leach(CIL) Au Recovery to Doré %	99	99	99
Overall Plant Gold Recovery %	**84**	**88**	**92**

Heap Leach Operation

The heap leach gold recoveries used in this MRE Update are tabled below in Table 13-29.

From the Actlabs and KCA testwork described earlier, the gold recoveries are estimated for the given Au grade classes and for the given material types.

Table 13-29: Heap leach operation gold recoveries

Metallurgical Process Operation	Material Type	Material Gold Grade Class Au g/t	Leach Duration Minimum Hours	Crush size P100 mm	Overall Gold Recovery %
Heap leaching Crushing, agglomeration with cement and NaCN leaching on a permanent pad	I1D and I1G	< 0.3	151	6.3	**64**
	I1D and I1G	> 0.3 < 0.5	151	6.3	**68**
	I1D and I1G	> 0.5	151	6.3	**80**
	S3	< 0.3	151	6.3	**64**
	S3	> 0.3 < 0.5	151	6.3	**68**
	S3	> 0.5	151	6.3	**80**

From the above table, note the following:

- For the lower Au grades less than 0.3 g/t Au, gold recoveries averaging 66% were seen from the Actlabs testwork although only for 21 days of leaching. The KCA Column test range from 60 - 68%. These data confirm a gold recovery set at 64% which includes a deduction of 2% in gold recovery from testwork into actual operation - giving an average overall gold recovery of 64%.
- For Cheechoo materials with gold grades > 0.3 < 0.5 g/t the gold recovery value of 68% is closer to the KCA column data but is also supported by Actlabs intermittent bottle roll leach data.
- Gold recoveries of 73% - 80 % for higher gold grades of > 0.5 g/t are taken from the KCA column testwork with HPGR crushing, for the leach duration of 151 days. From the leach kinetic curves presented in Figure 13-4, extended leach times of +151 days on a permanent pad in an actual operation would likely add about 3% extra Au leach recovery. However, with the typical 2% reduction in gold recovery applied in going from testwork to an actual operation, the long-term heap leach recovery estimate of 80% Au recovery is reasonable, and has been applied as the overall heap leach operation's gold recovery, for materials with gold grades > 0.5 g/t.

- A crush size of a P100 = 6.3 mm is recommended with agglomeration using cement to ensure adequate downward percolation of cyanide leach solutions through the heap, to maximize gold recovery from the materials placed on heap.
- The testwork data supports the use of a High-Pressure Grinding Roll as the secondary / tertiary crusher, to likely reduce power consumption and create the generation of micro-cracks in the rock particles. These micro-cracks do enhance leaching rates and increase gold recovery. Th HPGR testwork reported by KCA gives evidence of such increased gold recoveries, over those from conventional crushed materials. However, further HPGR crushing with leach testwork, and mineralogy is needed here to confirm these initial findings.

13.1.10.3 Overall Gold Recovery Estimates for this 2025 Mineral Resource Estimate Update

No additional testwork was done since the latest MRE 2022. The 2025 Mineral Resource Estimate gold recovery forecast was performed by analyzing the previous metallurgical testwork data.

Gravity Concentration and Gravity Tails CN Leach Operation

Gravity recoverable gold is described using logarithmic equation on Corem EGRG testwork as showed in following graph.

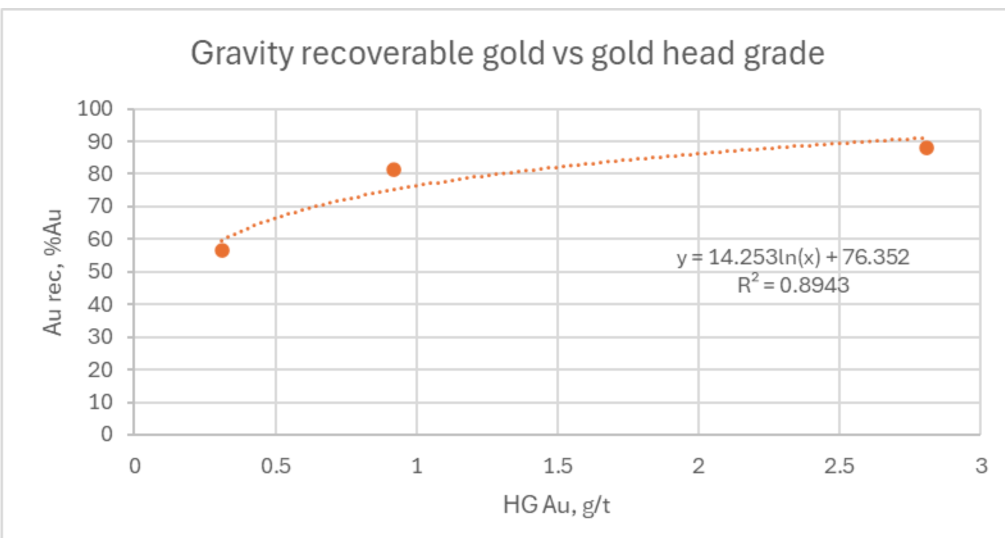

Figure 5 - Gravity recoverable gold vs Gold head grade

Laplante scale up model correction factor of 65% is applied to the natural logarithmic equation:

Gold gravity recovery = $0.65 * (14.253*LN(HG_{Au})+76.352)$

Gravity tail gold recovery by can be estimated using Michaelis-Menten equation. Gold recovery of the gravity tail is dependent of gold grade and is represented by the equation described in the graph.

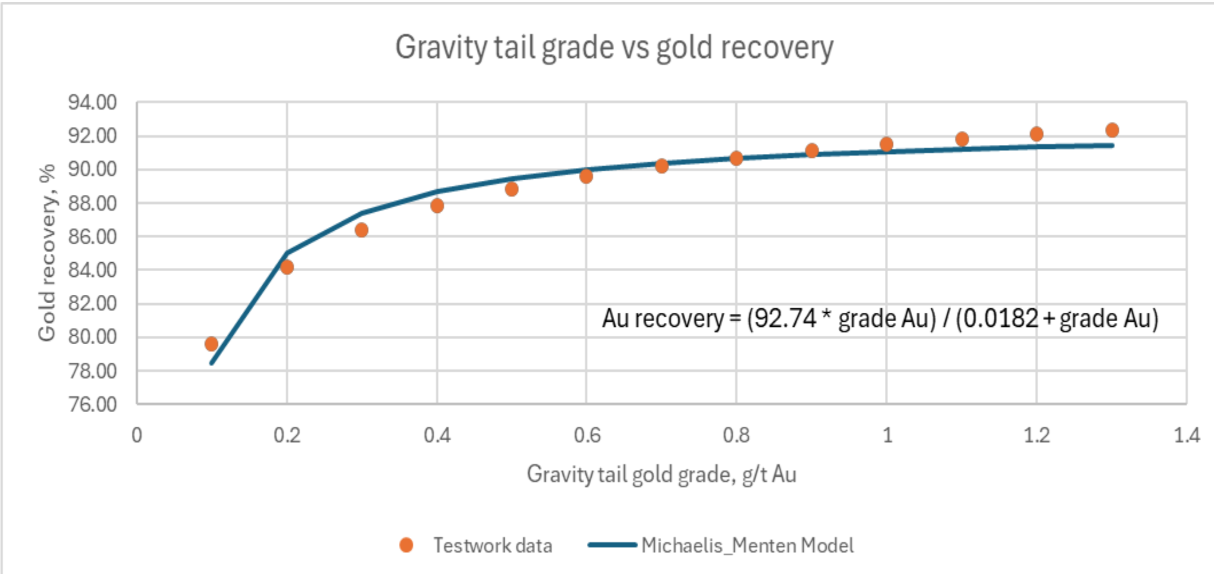

Figure 6 - Gravity tail gold recovery vs gravity tail gold grade

A 99% gold recovery should be applied on both gravity recovery and gravity tail gold recovery to consider efficiency lost in adsorption-desorption-electrowinning process.

13.1.11 RECOMMENDATIONS FOR FUTURE WORK

The following future testwork is recommended for the Cheechoo deposit:

- A comminution testwork program to study the mineralized material hardness variability;
- A more extensive sampling campaign is recommended to prepare composite core samples that cover the full spatial extent of the Cheechoo deposit in both surface plan and with depth – suitably logged. From these samples GRG gravity recovery tests, with cyanide leaching should be conducted. These samples and data would investigate Au recovery variability with Au head grade, at depth and with rock type. Include composition analyses (Multi-element ICP) with some mineralogy work (MLA) with several polished sections for Qemscan testwork. These would enhance existing data on the mineralogy and gold occurrence;

- As a result of the favourable response of the material to the gravity GRG concentration and gravity tails leach testwork, it is recommended to prepare composites for further batch gravity testwork followed by cyanide leaching of gravity tails, to investigate:
  - Optimization of the gravity feed size to investigate the effect of coarser particle sizing on GRG Au recovery;
  - Optimization testwork program of the leaching variables applied to both GRG concentrates and gravity tails leaching, namely NaCN addition rates, leach residence time < 48 hours, use of oxygen versus air sparging, lead nitrate addition, CIL carbon in leach parameters - carbon concentration in pulp, pulp temperature, density, and pulp viscosity measurements.
- A preliminary NaCN and WAD cyanide destruction testwork program based on the future tailings handling system.

14 MINERAL RESOURCE ESTIMATE

The mineral resource estimate herein (the “2025 MRE” or the “MRE”) covers the Cheechoo Project only. Figure 14-1 shows the Cheechoo Project in 3D view.

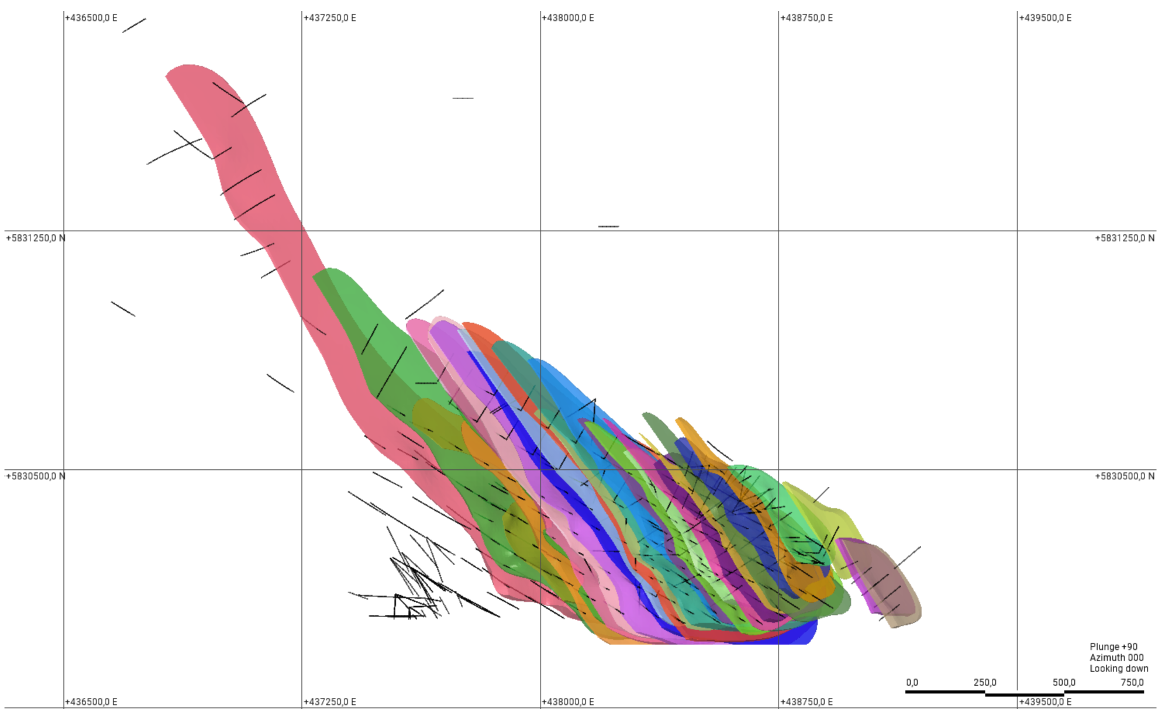

Figure 14-1 Overall 3D view looking down showing the high-grade zones and the drillholes

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 the compositing, 3D block modelling, grade interpolation, and classification. Statistical studies were conducted using Excel and Leapfrog. The pit optimization to develop the mineral resource-constraining pit shells was done using the pseudoflow algorithm in Deswik software. The stope optimization to develop the underground mineral resource was done using Deswik.SO software.The methodology for the mineral resource estimation involved the following steps:

- Database verification and validation;
- 3D modelling update of the mineralized zones;
- 3D modelling of structural corridors;

- Drill hole intercepts 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 345 drill holes, totalling 82,717 meters drilled and 56,337 assays, all of which were completed by Sirios between 2012 and 2025. The cut-off date for the drill hole database was May 13, 2025.

The resource database was validated, and the protocols were reviewed before proceeding to the resource estimation. The validation steps are detailed in Chapter 12 of this Report.

The QP is of the opinion that the database is appropriate for the purposes of the mineral resource estimation and that the sample density, quality and spatial distribution allow to make a reliable estimate of the geometry, tonnage and grade continuity of the mineralization in accordance with the level of confidence established by the mineral resource categories as set forth in the CIM Standards.

14.3 GEOLOGICAL MODEL

A total of 36 high-grade domains and 13 low-grade corridors were modelled, as were two (2) lithologies, the overburden and the topography for the purpose of this MRE. They were modelled using geological knowledge of the deposit, geological mapping from the strippings, grade continuity, and geological information provided in the DDH and channel logs (i.e., lithology, alteration, and structure). The low-grade corridors were comprised within the tonalite unit. The geological model, the mineralized zones and the dilution envelope were clipped to the overburden/bedrock interface when necessary.

The QP reviewed the geological model in 3D view, plan view and cross-section and is of the opinion that the level of detail to which the geology model was constructed represents adequately the complexity of the deposit. In the QP's opinion, the geological model is appropriate for the size, grade distribution and geometry of the mineralized zones and is suitable for the resource estimation of the Project.

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

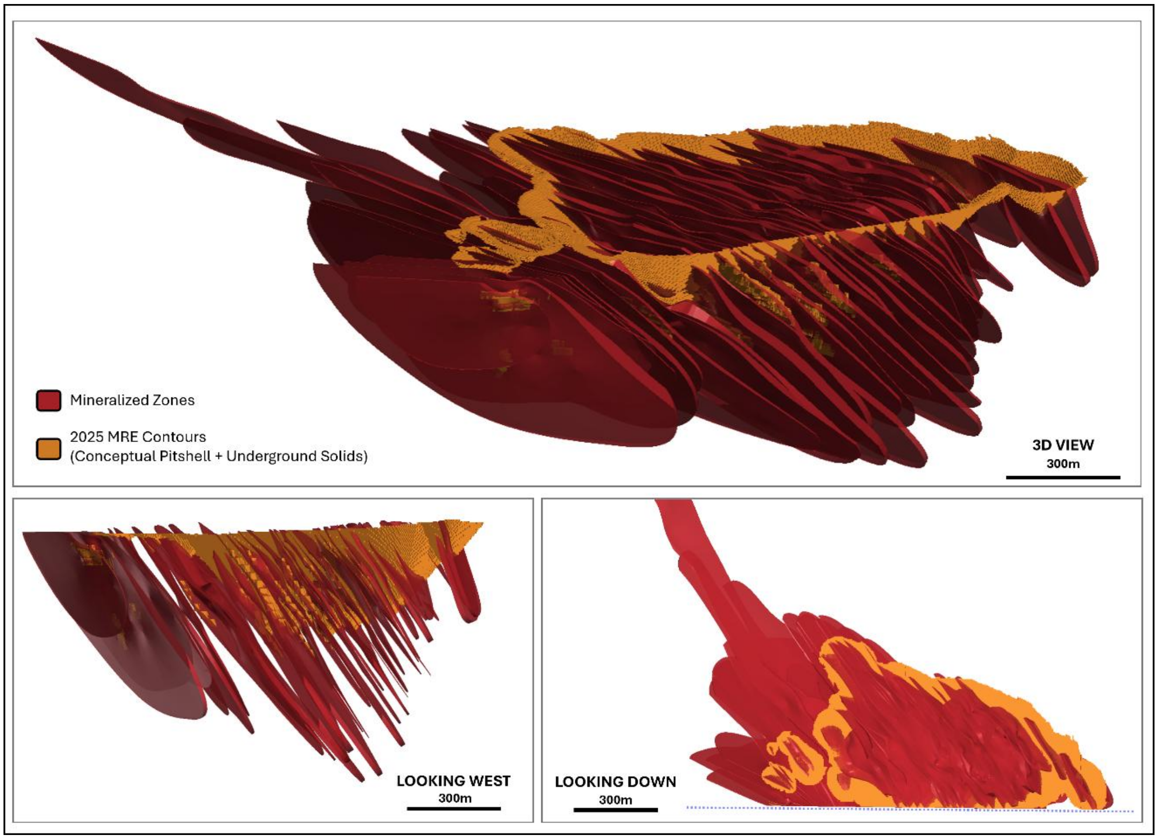

Figure 14-2 3D Geological model of the Cheechoo deposit

14.3.1 VOIDS MODEL

No excavation has been done on the Project.

14.3.2 OVERBURDEN AND TOPOGRAPHY

A Lidar survey (2018) was used for the topographic surface. The overburden-rock interface was created by Sirios in Leapfrog Geo™ and is based on the drill holes collar coordinates, elevation, and lithological description.

14.4 COMPOSITING

All raw assay data intersecting the mineralized zones, the corridors 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 16,114 assays are included in the high-grade mineralized zones, 31,434 in the corridors and 4,941 in the tonalite (I1D).

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. Compositing was done within each domain in order that composite samples do not cross domain boundaries.

The average sample length is 1.27 m and the median is 1.40 m inside the high-grade domains. In the corridors, the average sample length is 1.34m and the median is 1.50m. Based on these statistics and geological considerations, 13,940 composites were generated in the high-grade zones; 6,989 in the Corridors zones and 4,518 in the tonalite, with an average length of 1.5 m after redistributing the tails. Figure 14-4 shows the sample length distribution within the high-grade mineralized zones.

14.5 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 Au composites and capped composites are summarized in Table 14-3. Figure 14-5 to Figure 14-7 show graphs supporting the capping threshold decisions for some of the high-grade zones.

Based on individual statistical study for each zone, composites were capped at 25.0 g/t Au for the high-grade zones, 2.0 g/t Au for the corridors and 1.0 g/t for the tonalite intrusion. A three-pass capping strategy defined by capping values decreasing to 12.0

g/t Au as interpolation search distances increase was used in the grade estimation for the high-grade zones.

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

Zone / Corridor	Count	Min	Max	Mean	Median	COV	Capping	Restricted Search (RS)	Min	Max	Mean	Median	COV	COV with RS
0001	1,142	0.01	88.18	0.99	0.37	4.14	25.00	12.00	0.01	25.00	0.86	0.37	2.61	2.00
0001'	501	0.00	9.55	0.67	0.43	1.35	25.00	12.00	0.00	9.55	0.67	0.43	1.35	1.35
0002	1,100	0.01	100.94	1.27	0.37	4.37	25.00	12.00	0.01	25.00	1.04	0.37	2.99	2.22
0004	1,010	0.01	290.62	1.76	0.41	6.01	25.00	12.00	0.01	25.00	1.30	0.41	2.63	1.99
0005	799	0.00	46.92	1.39	0.53	2.73	25.00	12.00	0.00	25.00	1.32	0.53	2.35	1.80
0006	526	0.02	124.00	1.63	0.53	4.33	25.00	12.00	0.02	25.00	1.28	0.53	2.61	1.85
0007	523	0.00	115.93	1.40	0.44	4.64	25.00	12.00	0.00	25.00	1.10	0.44	2.43	1.85
0019	751	0.01	84.58	0.99	0.29	4.07	25.00	12.00	0.01	25.00	0.89	0.29	2.90	2.22
0020	534	0.00	36.86	0.84	0.44	2.63	25.00	12.00	0.00	25.00	0.82	0.44	2.30	1.73
W-E_01	7,903	0.00	71.14	0.16	0.08	6.38	2.00	-	0.00	2.00	0.14	0.08	1.27	-
W-E_02	5,969	0.00	3.00	0.13	0.07	1.27	2.00	-	0.00	2.00	0.13	0.07	1.23	-
W-E_03	4,106	0.00	68.70	0.16	0.07	7.11	2.00	-	0.00	2.00	0.14	0.07	1.41	-
W-E_04	2,417	0.01	1.23	0.16	0.11	0.99	2.00	-	0.01	1.23	0.16	0.11	0.99	-
NE-SW_01	1,221	0.00	4.86	0.16	0.11	1.45	2.00	-	0.00	2.00	0.16	0.11	1.13	-
NE-SW_03	985	0.01	0.81	0.11	0.07	1.08	2.00	-	0.01	0.81	0.11	0.07	1.08	-
NE-SW_06	1,734	0.00	4.89	0.09	0.03	2.04	2.00	-	0.00	2.00	0.09	0.03	1.67	-
NE-SW_07	845	0.00	2.29	0.08	0.03	2.09	2.00	-	0.00	2.00	0.08	0.03	2.05	-
I1D	4,489	0.00	3.98	0.08	0.03	1.92	1.00	-	0.00	0.65	0.08	0.03	1.44	-

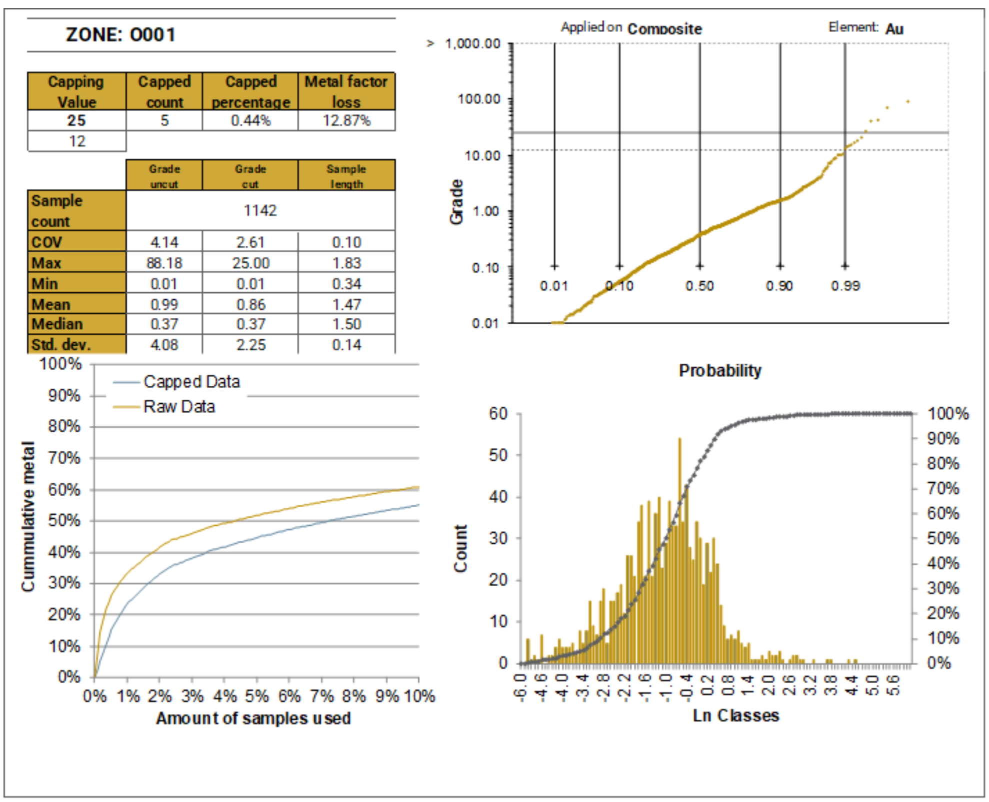

Figure 14-3 Graphs supporting Au capping on composites in the high-grade zone 0001

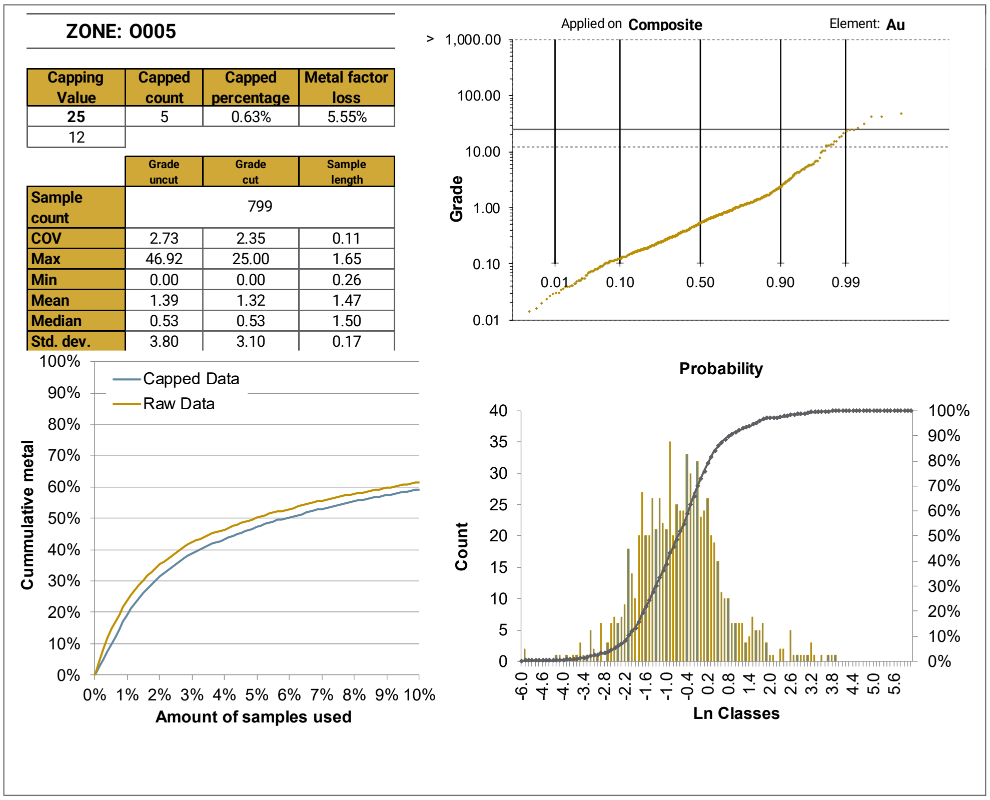

Figure 14-4 Graphs supporting Au capping on composites in the high-grade zone O0005

14.6 DENSITY

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

A total of 1,244 density measurements were collected by Sirios within the mineralized zones. The samples selected were from a variety of lithologies located across the Project and also included a range of associated gold grades. The specific gravity (SG) measurement was determined by the water displacement method. A summary of the SG data is presented in Table 14-4.

Table 14-2 Density basic statistics

Specific Gravity					
Lithology	**Quantity**	**Mean**	**Median**	**Min**	**Max**
I1D (tonalite)	1,150	2.67	**2.64**	2.58	3.11
S3 (sediments)	94	2.74	**2.76**	2.59	3

For this MRE, fixed density values were established on a per lithology basis, corresponding to the median of the SG data. Therefore, the tonalite was assigned 2.64 g/cm3 and the sedimentary unit was assigned 2.76 g/cm3.

A fixed density of 2.00 g/cm3 was assigned to the overburden.

14.7 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, and therefore allowing building search ellipsoids to be used during interpolation.

Three-dimensional directional variography was carried out on the composites using the Leapfrog Edge™ v.2024.1.3 software. Variograms were modelled in the three orthogonal directions to define a 3D ellipsoid for each domain. The three directions of ellipsoid axes were set by using the variogram fans and visually confirmed with geological knowledge of the deposit. Lag distances were set according to drill hole grid spacing specific to the structural domain analyzed.

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.

All variography tests were modelled with a nugget effect, as determined from the downhole semi-variograms and two spherical structures.

Table 14-5 presents the chosen variogram model parameters. Figure 14-8 and Figure 14-9 illustrate an example of the variography results.

In the QP's opinion, the data density and spatial distribution of this project are adequate to produce acceptable experimental variograms to which models can be fitted with confidence.

Table 14-3 Variogram model parameters

		First structure				Second structure				Leapfrog orientation		
Zone	Nugget	Sill	Range X (m)	Range Y (m)	Range Z (m)	Sill	Range X (m)	Range Y (m)	Range Z (m)	Dip Azimuth	Dip	Pitch
High-grade	0.20	0.40	40	35	10	0.40	100	87.5	25	Variable orientation		
Corridors	0.20	0.80	200	100	30	-				Variable orientation		

14.8 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 14-4 Block model parameters

Properties	X (column)	Y (row)	Z (level)
Origin coordinates	436,600	5,829,950	300
Number of blocks	550	370	180
Block size (m)	5.0	5.0	5.0
Sub-block size (down to)	0.625	0.625	0.625
Rotation	0		

Table 14-5 Block model coding

Attribute	Description
Au	Au capped grade interpolated with Ordinary Kriging
Classification	Classification 4 = Indicated 5 = Inferred 6 = Exploration Target
Blockcode	Code attributed to individual: - lithological units - mineralized zones - overburden
Density	Density (fixed)

14.9 SEARCH ELLIPSOID STRATEGY

The ranges and orientation of the ellipsoids used for the 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 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 14-6 presents the orientation and ranges of the search ellipsoids for each pass.

Table 14-6 Search ellipsoids range and orientation by interpolation passes

	Leapfrog orientation			First Pass			Second Pass			Third Pass		
Zone	Dip Azimuth	Dip	Pitch	Range X (m)	Range Y (m)	Range Z (m)	Range X (m)	Range Y (m)	Range Z (m)	Range X (m)	Range Y (m)	Range Z (m)
High-grade	Variable orientation			40	35	10	100	87.5	25	250	250	50
Corridors	Variable orientation			100	50	15	200	100	30	400	400	400
Tonalite	Variable orientation			100	100	100	500	500	500	-		

14.10 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 14-7 Interpolation methods

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

14.11 INTERPOLATION PARAMETERS

The parameters provided in Table 14-7 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 14-8 Interpolation parameters

	First Pass				Second Pass				Third Pass			
Zone	Min. composites	Max. composites	Max. composites per DDH	Variography ratio	Min. composites	Max. composites	Max. composites per DDH	Variography ratio	Min. composites	Max. composites	Max. composites per DDH	Outlier restriction
High-grade	4	16	3	1.0 x 1st structure	4	16	3	1.0 x 2nd structure	2	12	Not limited	Clamping 1.0 x 2nd structure
Corridors	4	16	3	1.0 x 1st structure	4	16	3	1.0 x 2nd structure	2	12	Not limited	-
Tonalite	2	12	Not limited	1.0 x 1st structure	2	12	Not limited	1.0 x 2nd structure	-			

14.12 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 Cheechoo block model provides a reasonable estimate of in situ mineral resources.

14.12.1 VISUAL VALIDATION

Block model grades were visually compared against drill hole composite grades and raw assays in cross-section, plan, longitudinal and 3D views (Figure 14 11 and Figure 14 12). This visual validation process also included confirming that the proper coding was done within the various domains and checks for global and local bias. 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 Cheechoo deposit.

14.13 MINERAL RESOURCE CLASSIFICATION

The mineral resources for the Cheechoo Project 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").

14.13.1 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.

14.13.2 CHEECHOO 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. No Measured Mineral Resources were defined for this phase of the Project.

Inferred Mineral Resources were defined for blocks within the mineralized zones within 50 m of a drill hole (100 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

When needed, a series of clipping boundaries were created manually in plan, longitudinal, and 3D views to either upgrade or downgrade classification in order to homogenize the groups of resources by removing artificial features and isolated blocks due to automatically generated classification. All remaining estimated but unclassified blocks were flagged as “Exploration Target” or were not reported.

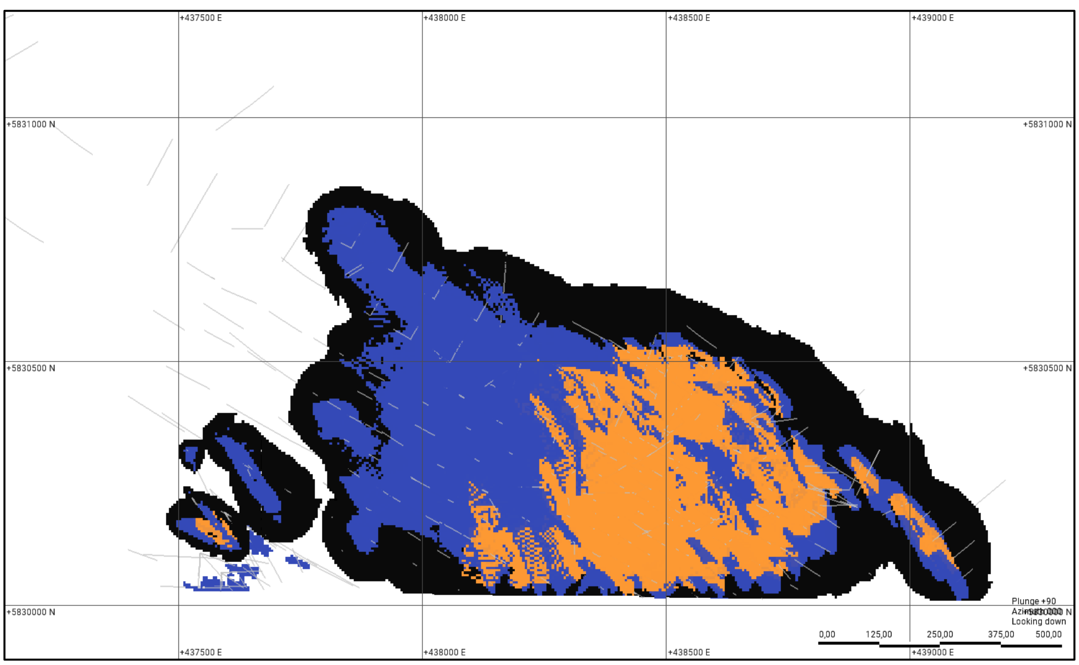

Figure 14-2: 3D view of the resource classification (orange = Indicated Resources and blue = Inferred Resources)

14.14 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 14-9 Optimization parameters

Optimization parameters			
Parameter	**Unit**	**Open Pit**	**Underground**
Revenue			
Gold price	USD/oz	2,500	2,500
Exchange rate	CAD/USD	1.35	1.35
Operating costs			
Mining cost	CAD/t mined	4.00	75.00
Incremental bench cost	CAD/t mined/10m bench	0.05	N/A
Processing cost	CAD/t milled	17.50	17.50
General & administration cost	CAD/t milled	5.50	5.50
Mineralization material based costs	CAD/t milled	23.00	98.00
Mining			
Selective mining unit	m	5x5x5	N/A
Minimum mining width	m	N/A	2.5
Stope height	m	N/A	25.0
Minimum slope angle - rock	°	50	N/A
Minimum slope angle - overburden	°	25	N/A
Cut-off grade			
Cut-off grade applied	g/t milled	0.25	1.50

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.

14.15 CHEECHOO MINERAL RESOURCE ESTIMATE

The 2025 Cheechoo 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 14-10 Cheechoo Mineral Resource Estimate

Pit constrained *0.3 g/t Au Cut-off grade*	***Tonnes*** *(t)*	***Au*** *(g/t)*	***Au*** *(koz)*
Indicated	34,993,000	1.12	**1,262**
Inferred	38,222,000	1.01	**1,242**
Stope constrained *1.5 g/t Au Cut-off grade*	***Tonnes*** *(t)*	***Au*** *(g/t)*	***Au*** *(koz)*
Inferred	4,493,000	3.09	**446**
TOTAL *0.3 & 1.5 g/t Au Cut-off grade*	***Tonnes*** *(t)*	***Au*** *(g/t)*	***Au*** *(koz)*
Total Indicated	**34,993,000**	**1.12**	**1,262**
Total Inferred	**42,715,000**	**1.23**	**1,688**

Notes to Table 14-13:

1. The independent qualified person 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 Alexandre Burelle, P.Eng., of Evomine for cut-off values, open pit optimization solids and underground optimization solids, and Christian Laroche, P.Eng., from Synectiq, for metallurgical parameters. The effective date of the MRE is July 01, 2025.
2. These Mineral Resources are not mineral reserves as they have no demonstrated economic viability. No economic evaluation of these Mineral Resource has been produced. The quantity and grade of reported Inferred Resources in this MRE are uncertain in nature and there has been insufficient drilling to define these Inferred Resources as Indicated. However, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated category with continued drilling.
3. The Qualified Persons are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially affect the Mineral Resource Estimate.
4. Calculations used metric units (meters (m), tonnes (t), and g/t). Metal contents in the above table are presented in troy ounces (metric tonne x grade / 31.103475). Values were rounded, and any discrepancies in total amounts are due to rounding errors.
5. The Cheechoo Mineral Resource estimate follows the November 29, 2019, CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.
6. 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 50 degrees in bedrock and 25 degrees in overburden. The pit optimization to develop the mineral resource-constraining pit shells was done using the pseudoflow algorithm in Deswik software. The stope optimization to develop the underground mineral resource was done using Deswik.SO software.
7. The MRE wireframe was prepared using Leapfrog Edge v.2024.1.3 and is based on 345 drill holes, totalling 82,717 meters drilled and 56,337 assays. The cut-off date for the drill hole database was May 13, 2025.

8. Composites of 1.5 meters were created inside the mineralization domains. High-grade capping was done on the composited assay data. Based on individual statistical study for each zone, composites were capped at 25.0 g/t Au for the HG zones, 2.0 g/t Au for the corridors and 1.0 g/t for the tonalite intrusion. A three-pass capping strategy defined by capping values decreasing as interpolation search distances increase was used in the grade estimation for the HG zones.
9. Pit constrained Mineral Resources for the base case are reported at a cut-off grade of 0.3 g/t Au; DSO-constrained Mineral Resources for the base case are reported at a cut-off grade of 1.5 g/t Au and include internal dilution (must-take). The cut-off grades will be re-evaluated in light of future prevailing market conditions and costs.
10. Specific gravity values were estimated using data available in the drill hole database. Density values between 2.64 and 2.76 were applied to the host rocks.
11. 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.
12. The Indicated and Inferred Mineral Resource categories are constrained to areas where drill spacing is less than 50m and 100 meters respectively and show reasonable geological and grade continuity.

Table 14-13 shows the sensitivity of the block model to grade cut-off for the Indicated and 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 14-11 Pit-constrained Indicated Resources at various cut-off grades

Pit constrained	Indicated Resources			Inferred Resources		
	***Tonnes** (t)*	***Au** (g/t)*	***Au** (koz)*	***Tonnes** (t)*	***Au** (g/t)*	***Au** (koz)*
0.15 g/t Au Cut-off	64,892,000	0.70	1,465,000	67,101,000	0.67	1,436,000
0.20 g/t Au Cut-off	51,128,000	0.84	1,388,000	53,308,000	0.79	1,359,000
0.25 g/t Au Cut-off	41,229,000	0.99	1,317,000	43,800,000	0.92	1,291,000
0.30 g/t Au Cut-off	**34,993,000**	**1.12**	**1,262,000**	**38,222,000**	**1.01**	**1,242,000**
0.35 g/t Au Cut-off	31,204,000	1.22	1,222,000	34,424,000	1.09	1,203,000
0.40 g/t Au Cut-off	28,462,000	1.30	1,189,000	31,529,000	1.15	1,168,000
0.50 g/t Au Cut-off	24,157,000	1.45	1,127,000	26,510,000	1.29	1,095,000
1.00 g/t Au Cut-off	11,056,000	2.33	829,000	10,476,000	2.17	730,000

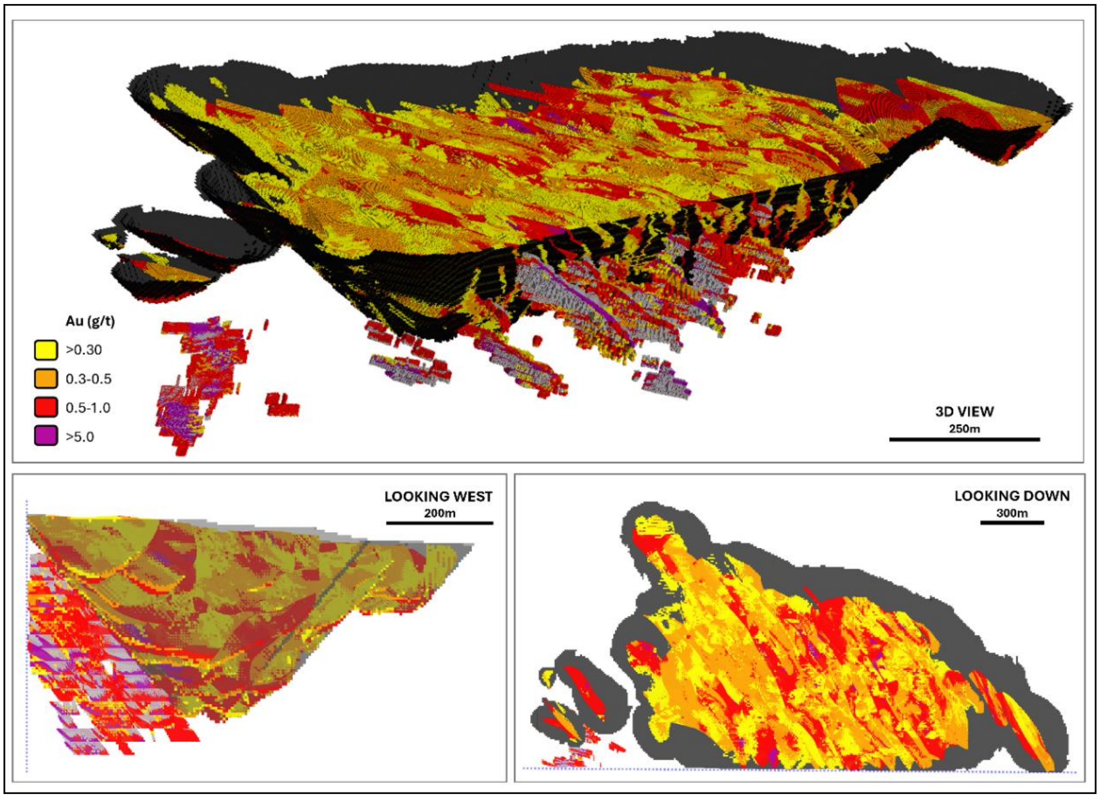

Figure 14-5: 3D view of the mineralized zones, the pit shell and the underground solids

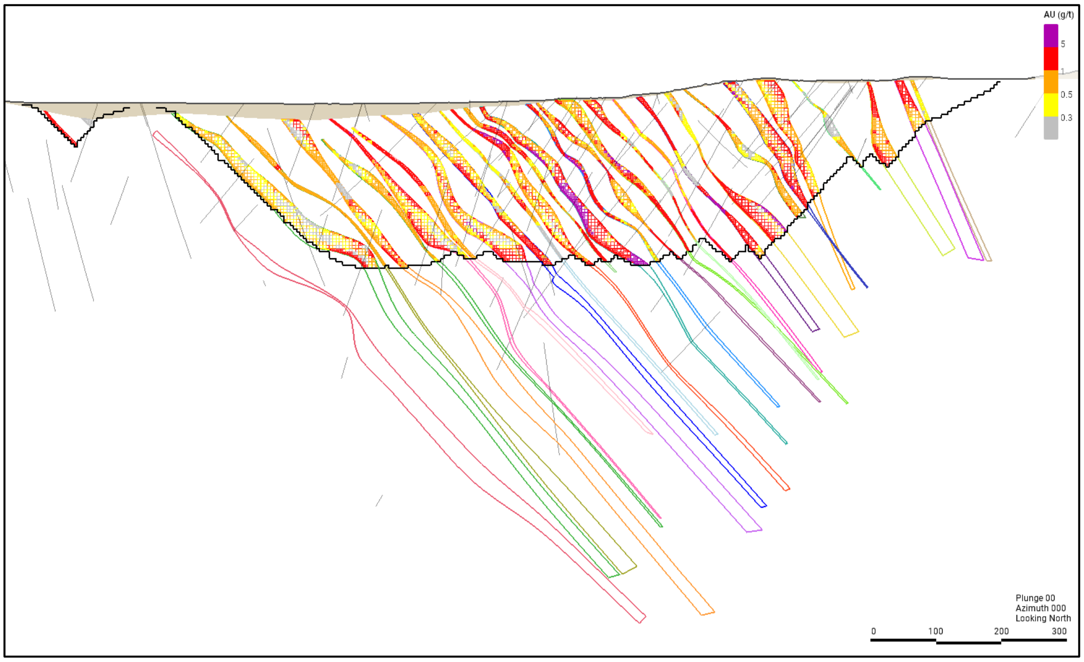

Figure 14-4 : Cross-section view of the Au grade within the pit shell; only blocks within the pit shell are shown

15 MINERAL RESERVE ESTIMATE

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

16 MINING METHODS

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

17 RECOVERY METHODS

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

18 PROJECT INFRASTRUCTURE

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

19 MARKET STUDIES AND CONTRACTS

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

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

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

21 CAPITAL AND OPERATING COSTS

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

22 ECONOMIC ANALYSIS

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

23 ADJACENT PROPERTIES

Several junior exploration companies and prospectors are active in the area as illustrated in Figure 23-1. The author has not been able to verify the information presented below and the information is not necessarily indicative of the mineralization on the Cheechoo Project (the subject of this Report).

23.1 ÉLÉONORE GOLD MINE

In November 2024, Newmont sold the Éléonore mine to the private company Dhilmar. It is adjacent to the Cheechoo Project to the north-west.

The host rocks are metasediments such as wackes and paragneisses, often deformed, with the presence of diabase dykes and pegmatites. The gold mineralization occurs mainly as a stockwork of quartz-tourmaline-arsenopyrite veins and veinlets, often grouped into complex networks. The deposit is an orogenic gold deposit in metasedimentary rocks, of the hydrothermal type, characterized by vein-type veins and stockworks in a highly deformed and metamorphosed environment.

23.2 ÉLÉONORE SOUTH PROJECT

The Éléonore South project is now wholly owned by Fury Gold Mines Limited. This consolidation was completed in early 2024, when they acquired Newmont's interest in the project. It is adjacent to the Cheechoo Project to the south-west.

The mineralization is vein-type, complex, and stockwork, in a folded metasedimentary context altered by hydrothermalism. The project is in an exploration-drilling-stage.

23.1 OPINACA A, B, AND D PROPERTIES

Located 18 km north and 36 km northwest of the Cheechoo Project, the Opinaca A and Opinaca D properties are held by Azimut Exploration. These properties contain some gold prospects with various exploration work carried out since 2005. The mining titles are held by Azimuth Exploration, Molécule Holdings, and Hécla Québec.

23.2 ÉLÉONORE JOINT VENTURE PROJECT

The Éléonore Joint Venture project is held by Midland Exploration (50%) and Osisko Gold Royalties (50%). A part of the project is adjacent to the south of the Cheechoo Project and the majority of the project is located about 20 km southeast. Numerous gold anomalies in the paragneiss have been found.

23.3 WILDCAT PROJECT

The Wildcat project is adjacent to the east of the Cheechoo Project, and is 100% Hecla Quebec owned mining titles. Various exploration work has been carried out since 2010 on the project, including 44 diamond drillholes (DDH).

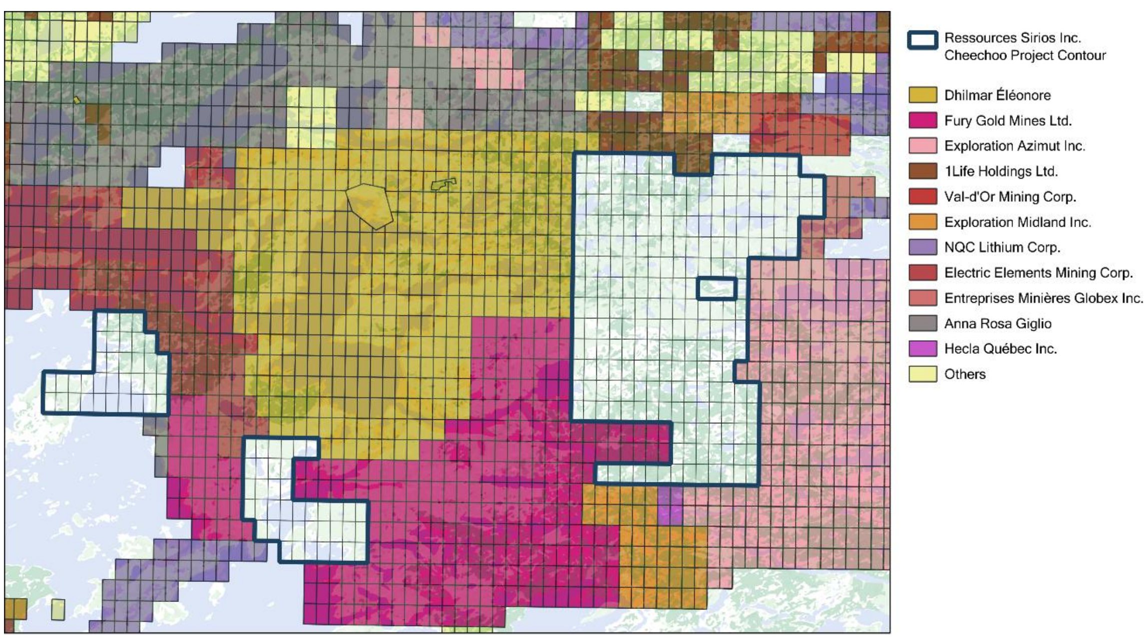

Figure 23-1: Cheechoo Project adjacent properties

24 OTHER RELEVANT DATA AND INFORMATION

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.

25 INTERPRETATION AND CONCLUSIONS

25.1 OVERVIEW

PLR Resources Inc. ("PLR") was mandated by Sirios (the "issuer") to update the mineral resource estimate for the Cheechoo deposit (the "2025 MRE" or the "Cheechoo MRE" or the "MRE"). Evomine Consulting 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 Cheechoo Project (Main Block) is located 9 km east of the Éléonore gold mine whereas the Cheechoo deposit is approximately 15 km southeast of the Éléonore gold mine, in the Opinaca Reservoir area of the Eeyou Istchee James Bay region, in the Province of Québec, Canada. The Project is located approximately 200 km east of the Cree community of Wemindji, 330 km north of the towns of Matagami and Chibougamau, and 815 km north of Montreal.

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 Sirios proceed to the next phase for the Cheechoo 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 Cheechoo are sufficient to support the 2025 MRE.

25.3 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.

25.4 MINERAL RESOURCES

The Cheechoo 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 July 1, 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 0.3g/t Au for open-pit and 1.5g/t Au for underground potential, the Indicated Mineral Resources amount to 35.0Mt grading 1.12g/t Au for 1.3Moz Au.
- Using a cut-off grade of 0.3g/t Au for open-pit and 1.5g/t Au for underground potential, the Inferred Mineral Resources amount to 42.7Mt grading 1.23g/t Au for 1.7Moz Au.

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 Cheechoo deposit by extending 3D modelling at depth and laterally.
- The potential to upgrade Inferred Mineral Resources to the Indicated category with additional drilling is high.
- The exploration potential remains high at the Project scale, justifying further geological compilation and continuing exploration target generation programs.

A Conceptual Exploration Target, with both open-pit and underground potential, was identified during the preparation of the MRE. This conceptual Exploration Target is integrated into the litho-structural model used for the MRE, with the aim of facilitating future targeting and drill hole planning.

The assessment of the target for further exploration was completed by PLR Resources Inc. The estimation of the potential quantity and grade of the exploration target was based on the same drill hole database used for the Mineral Resource Estimate. With the available drilling information, PLR developed conceptual gold mineralization volumes, constrained by interpreted lithological and structural models. The original core samples were composited, and the composited gold assays were capped (similarly to the Mineral Resource Estimate) after evaluating the statistical distributions on probability plots. The gold values were interpolated into a three-dimensional block model using Ordinary Kriging. To estimate a tonnage, PLR used the same specific gravity values used for the Mineral Resource Estimate.

An open-pit scenario limited by the Project's boundary as well as DSO stopes were run to constrain the Exploration Target.

The Conceptual Exploration Target is estimated to be of 31 to 40 million tonnes of mineralization grading between 1.27 to 1.45 g/t Au, including an open-pit component of 25 to 32 million tonnes of mineralization grading between 0.90 to 1.05 g/t Au and an underground component of 6 to 8 million tonnes of mineralization grading between 2.80 to 3.05 g/t Au.

Please note the following disclosure warnings in respect to this exploration target:

- An Exploration Target is not a National Instrument 43-101 compliant resource or reserve.
- The Exploration Target is confirmed only as a target for further exploration.
- Potential quantity and grades are conceptual in nature only.
- There has not been sufficient drilling to define any mineral resource on this Exploration Target; drilling intercepts crosscut the Exploration Target but drill spacing is too scarce to classify these blocks as Inferred Mineral Resources.
- There is no certainty that further drilling will result in the target being delineated as a mineral resource.

25.2 PROJECT RISKS AND OPPORTUNITIES

As noted in Chapter 4, the QPs are not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or relevant issues could be expected to affect the reliability or confidence in the exploration information and Mineral Resource discussed herein or the right or ability to perform future work on the Cheechoo Project.

As with all mineral projects, there is an inherent risk associated with mineral exploration. Many of these risks are based on a lack of detailed knowledge and can be managed as more sampling, testing, design, and engineering are conducted at the next study stages. The mineral resources may be affected by a future conceptual study assessment of mining, processing, environmental, permitting, taxation, socio-economic and other factors.

Table 25-1 identifies what are currently deemed to be the most significant internal project risks, potential impacts and possible mitigation approaches that could affect the Project.

External risks are, to a certain extent, beyond the control of the Project proponents and are much more difficult to anticipate and mitigate, although, in many instances, some risk reduction can be achieved. External risks are things such as the political situation in the Project's region, metal prices, exchange rates and government legislation. These external risks are generally applicable to all mining projects. Negative variance to these items from the assumptions would affect the mineral resource estimate.

There are opportunities that could improve the Project. The major opportunities that have been identified at this time are summarized in Table 25-2, excluding those typical to all mining projects, such as changes in metal prices, exchange rates, etc. Further information and assessments are needed before these opportunities should be included in the Project economics.

Table 25-1 Project risks (preliminary risk assessment)

Risk Description and Potential Impact	Mitigation Approach
The interpreted mineralized zones could be affected by some structures (faults or folds) that could displace or stop the mineralized zones.	Definition drilling and eventually Grade Control will improve the confidence in the interpretation.
Presence of a nugget effect in the gold distribution of the deposit could lead to local variability within the mineralized zones.	A bulk sample could provide a better understanding of the nugget effect on this Project.
The mineralized corridors might have slightly different shapes and orientations due to the complex geometry of the deposit.	Definition drilling and eventually Grade Control will help define with more precision the mineralized zones.

Table 25-2 Project opportunities

Opportunity Explanation	Benefit
The deposit remains open at depth and laterally to the west.	Potential to increase resources by adding drillholes.
Reducing the drill spacing by adding infill drilling in the remaining inferred resources.	Could potentially upgrade Inferred resources to the Indicated category.
Improve metallurgical knowledge on the Project.	Could improve assumptions.

26 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.

The QPs recommend the two-phase work program described below, in which Phase 2 depends on the success of Phase 1.

26.1 PROPOSED WORK – PHASE 1

The following activities are recommended for the Phase 1.

26.1.1 PEA ON THE CHEECHOO DEPOSIT

A Preliminary Economic Assessment (PEA) is recommended based on the results of the MRE presented in the current Report.

26.2 PROPOSED WORK – PHASE 2

The following activities are recommended for the Phase 2.

26.2.1 DRILLING ON THE CHEECHOO DEPOSIT (RESOURCE EXPANSION)

Exploration drilling should be done to continue investigating any potential lateral extensions of the currently identified mineral resources as well as downplunge extensions. A provision of approximately 20,000 m should be considered.

26.2.2 DRILLING ON THE CHEECHOO PROJECT (EXPLORATION TARGETS)

Exploration drilling should be done to identify additional targets on the Project. A provision of approximately 5,000 m should be considered.

26.2.3 METALLURGICAL TESTWORK

Additional metallurgical studies should be conducted on the Project in order to improve the understanding of the deposit for further mine planning and valuation. The following future testwork is recommended for the Cheechoo deposit:

- A comminution testwork program to study the mineralized material hardness variability;
- A more extensive sampling campaign is recommended to prepare composite core samples that cover the full spatial extent of the Cheechoo deposit in both surface plan and with depth – suitably logged. From these samples GRG gravity recovery tests, with cyanide leaching should be conducted. These samples and data would investigate Au recovery variability with Au head grade, at depth and with rock type. Include composition analyses (Multi-element ICP) with some mineralogy work (MLA) with several polished sections for Qemscan testwork. These would enhance existing data on the mineralogy and gold occurrence;
- As a result of the favourable response of the material to the gravity GRG concentration and gravity tails leach testwork, it is recommended to prepare composites for further batch gravity testwork followed by cyanide leaching of gravity tails, to investigate:
    - Optimization of the gravity feed size to investigate the effect of coarser particle sizing on GRG Au recovery;
    - Optimization testwork program of the leaching variables applied to both GRG concentrates and gravity tails leaching, namely NaCN addition rates, leach residence time < 48 hours, use of oxygen versus air sparging, lead nitrate addition, CIL carbon in leach parameters - carbon concentration in pulp, pulp temperature, density, and pulp viscosity measurements;
- A preliminary NaCN and WAD cyanide destruction testwork program based on the future tailings handling system.

26.3 PROPOSED BUDGET

The estimated cost for the recommended work program is approximately 11.0M$, 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

Phase 1 – Work Program	
Preliminary Economic Assessment (PEA)	$500,000
Contingencies (15%)	$75,000
Total Phase 1	**$575,000**
Phase 2 – Work Program	
Resource Expansion Drilling (20,000 m)	$7,000,000
Exploration Drilling (5,000 m)	$1,750,000
Metallurgical Testwork	$300,000
Contingencies (15%)	$1,357,500
Total Phase 2	**$10,407,000**
Total Phase 1 and Phase 2	**$10,982,500**

27 REFERENCES

Allard, P., (2014). Travaux d’exploration sur le projet Cheechoo B, Baie-James, Québec, SNRC 33B12, GM 68462, 46 pages.

Allou, B., and Girard, R., (2006a). Lake Bottom Sediment Sampling Program South-East of Opinaca Reservoir, James Bay, Cheechoo C Project, IOS Services Géoscientifiques, 41 pages.

Allou, B., and Girard, R., (2006b). Lake Bottom sediment Sampling Program North-East of Opinaca Reservoir, James Bay, Sharks Project, IOS Services Géoscientifiques, 43 pages.

Allou, B., and Girard, R., (2006c). Lake Bottom sediment Sampling Program South-East of Opinaca Reservoir, James Bay, Sharks East Project, IOS Services Géoscientifiques, 34 pages.

Allou, B., and Girard, R., (2006d). Lake Bottom sediment Sampling Program South-East of Opinaca Reservoir, James Bay, Isolated A Project, IOS Services Géoscientifiques, 25 pages.

Allou, B., and Girard, R., (2006e). Lake Bottom sediment Sampling Program South-East of Opinaca Reservoir, James Bay, Isolated B Project, IOS Services Géoscientifiques, 38 pages.

Allou, B., and Girard, R., (2006f). Lake Bottom sediment Sampling Program South-East of Opinaca Reservoir, James Bay, Isolated C Project, IOS Services Géoscientifiques, 24 pages.

Allou, B., and Girard, R., (2006g). Lake Bottom sediment Sampling Program South-East of Opinaca Reservoir, James Bay, Isolated D Project, IOS Services Géoscientifiques, 20 pages.

Alvarado, A., Lalande, C., M., (2007). Levés magnétométrique et de résistivité/polarisation provoquée. Propriétés Cheechoo et Sharks-Grille 3., GM 63700, 30 pages.

Baker, T., and Lang, J.R., (2001). Fluid inclusion characteristics of intrusion-related gold mineralization, tombstone-Tungsten magmatic belt, Yukon Territory, Canada: Mineralium Deposita, v. 36, pp. 563-582.

Bandyayera, D., Fliszár, A., (2007). Géologie de la région de la baie Kasipasikatch (33C09) et du lac Janin (33C16), MRNF, RP 2007-05.

Bandyayera, D., Lacoste, P., (2009). Géologie de la région du lac de Rotis (33C10), du lac Bernou (33C11) et du lac Boyd (33C15), Ministère de l'Énergie et des Ressources naturelles, RP-2009-06.

Bandyayera, D., Rhéaume, P., Maurice, C., Bédard, É., Morfin, S., Sawyer, E., (2010). Synthèse géologique du secteur du réservoir Opinaca, Baie-James, MRNF, RG 2010-02.

Barrette, J.-P., and Ali, A., (2012). Cheechoo B West, Exploration Program 2011, Opinaca Reservoir, James Bay Area, Northern Québec, NTS 33B/12, IOS Services Géoscientifiques, 24 pages.

Beaumier, M., Kirouac, F., (1995). Série de cartes géochimiques couleur : échantillonnage des sédiments de lac. Région du lac Lichteneger (SNRC 033B). Gouvernement du Québec. Ministère des Ressources naturelles, [MB 94-41], 5 pages.

Beaumier, M., and Leduc, M., (2005). Nouvelles analyses géochimiques de sédiments sur la Côte-Nord et à la Baie-James. Ministère des Ressources naturelles et de la Faune, [PRO 2005-03], 8 pages.

Boudreau, D. and Turcotte, J., (2018). Rapport des travaux d'exploration de surface 2016-2017 sur la propriété Cheechoo, Eeyou Istchee Baie-James, GM 71027, 2468 pages.

Burnham, C.W., and Ohmoto, H., (1980). Late-stage processes of felsic magmatism: Kozan Chishitsu (Mining Geology), v. 8, pp. 1-11.

Candela, P.A., and Blevin, L.P., (1995). Do some miarolitic cavities preserve evidence of magmatic volatile phase permeability? Economic Geology, v. 90, pp. 2310-2316.

Candela, P.A., and Piccoli, P.M., (2005). Magmatic processes in the development of porphyry-type ore systems: Economic Geology 100th Anniversary Volume, pp. 25-38.

Canova, E., Farkas, A., Tolhurst, J., (2010). Report on 2009 drill and mapping programs, Éléonore South project. Eastmain Resources Inc., exploration Azimut Inc., Les Mines Opinaca Ltée, GM 65239, 2782 pages.

Card, K., Ciesielski, A., (1986). Subdivisions of the Superior Province of the Canadian shield. Geoscience Canada 13(1).

Card, K., (1990). A review of the Superior Province of the Canadian Shield, a product of Archean accretion. Precambrian Research 48(1-2): pp. 99-156.

Charbonneau, R. and Robillard, I., (2018). Suivis d'échantillonnage de till 2017 Propriété Cheechoo, Eeyou Istchee Baie-James, Québec, GM 71026, 51 pages.

Condie, K.C., (1981) Archean greenstone belts, Volume 3, 1st Edition, Elsevier, 443 pages.

David, J., Parent, M., (1997). Géochronologie U-Pb du Projet Moyen-nord, GM59903, 88 pages.

David, J., Vaillancourt, D., Bandyayera, D., Simard, M., Dion, C., Goutier, J., Barbe, P., (2010). Datations U-Pb effectuées dans les sousprovinces d'Ashuanipi, de La Grande, d'Opinaca et d'Abitibi en 2008–2009, MRNF, Québec, RP 11, 37 pages.

Dubé, B., Ravenelle, J-F., McNicoll, V., Malo, M., Creaser, R., Nadeau, L., Simoneau, J., (2011). The world-class Roberto gold deposit, Éléonore property, James Bay area, Québec: insights from geology and geochronology, Joint Annual Meeting of the GAC - MAC – SEG - SGA, Ottawa, Canada.

Dubois, M., (2007). Levés magnétométriques EM à cadres horizontaux (EHM) et de résistivité/ polarisation provoquée, propriétés Cheechoo et Sharks-Grille 1, municipalité de la Baie-James, Québec, Canada, volumes 1 and 2, Abitibi Géophysique, GM 63698, 41 pages.

Dubois, M., (2008). Levé magnétométrique, propriétés Cheechoo et Sharks-Grille 4, municipalité de la Baie-James, Québec, Canada, rapport d'interprétation, Abitibi Géophysique, GM 63701, 10 pages.

Dubois, M., (2012). Levés magnétométriques et de polarisation provoquée, projet Cheechoo, région du Réservoir Opinaca, municipalité de la Baie-James, Québec, Canada, Abitibi Géophysique, 40 pages.

Dubois, M. and Alvarado, A., (2007). Levés magnétométriques et de résistivité/polarisation provoquée, propriétés Cheechoo et Sharks-Grille 2, municipalité de la Baie-James, Québec, Canada, rapport d'interprétation, Abitibi Géophysique, GM 63699, 30 pages.

Fontaine, A., Dubé, B., Malo, M., McNicoll, V., Brisson, T., Doucet, D., Goutier, J., (2015). Geology of the metamorphosed Roberto gold deposit (Éléonore mine), Baie-James region, Québec: diversity of mineralization styles in a polyphase tectono-metamorphic setting, in Targeting Geoscience Initiative 4, Geological Survey of Canada Open File 7852.

Fontaine, A., Dubé, B., Malo, M., Ravenelle, J-F., Fournier, E., McNicoll, V.J., Beausoleil, C., Prud'homme, N., Goutier, J., (2017). The Éléonore gold mine: Exploration, Discovery and Understanding of an emerging gold district in Eeyou Istchee James Bay, Superior Province, Northern Québec, Canada; in Proceedings of Exploration 17: Sixth Decennial International Conference on Mineral Exploration, (ed.) V. Tschirhart and M.D. Thomas; Decennial Minerals Exploration Conferences, Toronto, Ontario, pp. 601-617.

Fontaine, A., Dubé, B., Malo, M., Turcotte, J., and Doucet, D., (2018). Geology of the Cheechoo gold property, Eeyou Istchee Baie-James, Superior Province, northern Québec. 10.4095/308244, 25 pages.

Franconi, A., (1978). La bande volcanosédimentaire de la rivière Eastmain inférieure (ouest de la longitude 76 15'). Ministère des Richesses naturelles, Québec, 2 maps. [DPV-574], 176 pages.

Gauthier, M., Larocque, M., (1998). Cadre géologique, style et répartition des minéralisation métalliques de la Basse et de la Moyenne Eastmain, Territoire de la Baie James. (Governement of Québec).

Gauthier, M., (2000). Styles et répartition des gîtes métallifères du territoire de la Baie-James (Québec). Chronique de la Recherche minière (No. 539).

Gauthier, M., Trépanier, S., Gardoll, S., (2007). Metamorphic gradient: A regional-scale area selection criterion for gold in the northeastern Superior province, eastern Canadian Shield. Society of Economic Geologists Newsletter 69: pp. 10-15.

Girard, R., (2013). Cheechoo Project A gold exploration project near the Opinaca reservoir James Bay, Québec, NI 43-101 technical report, 176 pages.

Girard, R., (2019) Réinterprétation d'une série de levés de pédogéochimie de l'humus 2010-2016, Projet Cheechoo, GM 71738, 413 pages.

Girard, R., Aubin, A. and Boubakour, M., (2011) Report on the 2010 Cheechoo B Southwest exploration program, Opinaca reservoir, James Bay Area, GM 65719, 102 pages.

Girard, R. and Gao S., (2010). Soil geochemistry survey Opinaca reservoir James Bay, Northern Québec. Cheechoo B property, GM 65670, 457 pages.

Girard, R., Martel, C., and Allou, B., (2006a). The Cheechoo A Property, Gold Exploration Project, Opinaca Reservoir, James Bay, Northern Québec, IOS Services Géoscientifiques, 22 pages.

Girard, R., Martel, C., and Allou, B., (2006b). The Cheechoo B Property, Gold Exploration Project, Opinaca Reservoir, James Bay, Northern Québec, IOS Services Géoscientifiques, 20 pages.

Girard, R., Martel, C., and Allou, B., (2006c). The Cheechoo C Property, Gold Exploration Project, Opinaca Reservoir, James Bay, Northern Québec, IOS Services Géoscientifiques, 24 pages.

Girard, R., Martel, C., and Allou, B., (2006d). The Sharks Property, Gold Exploration Project, Opinaca Reservoir, James Bay, Northern Québec, IOS Services Géoscientifiques, 30 pages.

Gleeson C.F. (1976) Geochemical Report on a Lake Sediment Survey, Bereziuk Lake, Eastmain River and Rupert River area, 133 maps. GM 34046, 90 pages.

Goldak airborne surveys, (2008). Levé aéromagnétique sur le territoire de la Baie-James - Opinaca, sud de LG-3 et sud de LG-4. 58 plans. DP 2008-01, 48 pages.

Goutier, J., (2017). Géologie de la région du lac Ewart, sous-provinces de La Grande et d'Opinaca, à l'est de Radisson, Municipalité Eeyou Istchee Baie-James, Québec, Canada

Goutier, J., Dion, C., Lafrance, I., David, J., Parent, M., Dion, D., (1999). Géologie de la région des lacs Langelier et Threefold (SNRC 33F/03 et 33F/04). Ministère des Ressources naturelles, Québec, RG : pp. 98-18.

Goutier, J., Dion, C., Ouellet, M., Mercier-Langevin, P., Davis, D., (2001). Géologie de la région de la colline Masson (33F/09), de la passe Awapakamich (33F/10), de la baie Carbillet (33F/15) et de la passe Pikwahipanan (33F/16). Ministère des Ressources naturelles, Québec :2000-2010.

Harnois, L., and Boubakour, M., (2009a). Cheechoo Prospect, Cheechoo A, B and Sharks Properties, Report on the 2007 Diamond Drilling Program, James Bay Area, NTS 33C/04, 33B/12, Golden Valley Mines, GM 65271, 153 pages.

Harnois, L., and Boubakour, M., (2009b) Cheechoo Prospect, Cheechoo A, B and Sharks Properties, Report on the 2007 Diamond Drilling Program, James Bay Area, NTS 33B/11, 33B/12, 33B/13, 33C/09, Golden Valley Mines, GM 65272,153 pages.

Harnois, L., and Boubakour, M., (2009c). Cheechoo Prospect, Report on Exploration Activities, Opinaca Reservoir, James Bay Area, Northern Québec, NTS 33B/11, 33B/12, 33B/13, 33C09, Golden Valley Mines, 150 pages.

Hart, C. J., (2007). Reduced intrusion-related gold systems. *Geological Association of Canada, Mineral Deposits Division*, *5*, pp. 95-112.

Hart, C.J.R., Baker, T., Lindsay, M.J., Oliver, N.H.S., Stephens, J.R., and Mair, J.L., (2000b). Structural controls on Tombstone Plutonic Suite gold deposits, Tintina Gold Belt, Yukon [abs.]: Geological Society of America Abstracts with Programs, Cordilleran Section, v. 32, p. 6.

Hart, C.J., Mair, J.L., Goldfarb, R.J., Groves, D.I., (2004). Source and redox controls on metallogenic variations in intrusion-related ore systems, Tombstone-Tungsten Belt, Yukon Territory, Canada. Transactions of the Royal Society of Edinburgh: Earth Sciences 95(1-2): pp. 339-356.

Hart, C.J., (2007). Reduced intrusion-related gold systems. Mineral Deposits of Canada: A synthesis of Major deposit types, district metallogeny, the Evolution of geological provinces, and exploration methods: Geological Association of Canada, Mineral Deposits Division, Special Publication 5: pp. 95-112.

Hocq, M., (1994). La Province du Supérieur dans Géologie du Québec. 94(1).

Hubert, J.-M., (2006). Levés de polarisation provoquée, d'électromagnétisme EMH et de gradient magnétique, propriété Cheechoo, région de la Baie-James, Québec, Geosig Inc., GM 62533, 26 pages.

Ishihara, S., (1981). The granitoid series and mineralization Economic Geolology 75th Anniversary Volume.: pp. 458-484.

Jahn, B-M., Glikson, A., Peucat, J., Hickman, A., (1981). REE geochemistry and isotopic data of Archean silicic volcanics and granitoids from the Pilbara Block, Western Australia: implications for the early crustal evolution. Geochimica et Cosmochimica Acta 45(9): pp.1633-1652.

Joly, M., (2015). Campagne de forage d'exploration automne 2014 sur la propriété Cheechoo, Réservoir Opinaca, Baie-James, Nord-du-Québec, GM 69710, 365p.

KCA (2020). Reference KCA Testwork Report - Project No. 9365C File: 9365 Report I.D. KCA0200007_CHE01_03).

Kruckenberg, S. C., O. Vanderhaeghe, E. C. Ferré, C. Teyssier, and D. L. Whitney (2011), Flow of partially molten crust and the internal dynamics of a migmatite dome, Naxos, Greece, Tectonics, 30, TC3001, doi:10.1029/2010TC002751.

Lalancette, J., and Girard, R., (2006a). Campagne d'échantillonnage de sédiments lacustres dans le secteur de la Basse Eastmain : Projet Cheechoo-C. Saguenay, IOS Services Géoscientifiques: 15 pages.

Lalancette, J., and Girard, R., (2006b). Campagne d'échantillonnage de sédiments lacustres dans le secteur du Réservoir Opinaca, projet Cheechoo A, IOS Services Géosientifiques, 23 pages.

Lalancette, J., and Girard, R., (2006c). Campagne d'échantillonnage de sédiments lacustres dans le secteur du Réservoir Opinaca, projet Cheechoo B, IOS Services Géosientifiques, 27 pages.

Lalancette, J., and Girard, R., (2006d). Lake Bottom Sediment Sampling Program North-east of Opinaca Reservoir, James Bay, Shark Project, IOS Services Géosientifiques, 39 pages.

Low, A.P., (1896). Report of exploration in Labrador Peninsula, Geological Survey, Summary report, 1895 (Annual report, vol. 8), part A, pp.95-105.

Mair, J.L., (2004). Tectonic setting, magmatism, and magmatic-hydrothermal systems at Scheelite Dome, Tombstone Gold Belt, Yukon: Critical constraints on intrusion-related gold systems: Unpublished Ph.D. thesis, Perth, University of Western Australia, 197 pages.

Mair, J.L., Goldfarb, R.J., Johnson, C.A., Hart, C.J.R., and Marsh, E.E., (2006a). Geochemical constraints on the genesis of the Scheelite Dome intrusion-related gold deposit, Tombstone Gold Belt, Yukon, Canada: Economic Geology, v. 101, pp. 523–553.

Maloof, T.L., Baker, T., and Thompson, J.F.H., (2001). The Dublin Gulch intrusion-hosted deposit, Tombstone Plutonic Suite, Yukon Territory, Canada: Mineralium Deposita, v. 36, pp. 583–593.

Morfin, S., Sawyer, E., Bandyayera, D., (2013). Large volumes of anatectic melt retained in granulite facies migmatites: An injection complex in northern Québec. Lithos 168: pp. 200-218.

Morfin, S., Sawyer, E.W., Bandyayera, D., (2014). The geochemical signature of a felsic injection complex in the continental crust: Opinaca Subprovince, Québec. Lithos 196: pp. 339-355.

Moukhsil, A., (2000). Géologie de la région des lacs Pivert, Anatacau, Kauputauchechun et Wapamisk, RG 2000-04, 49 pages.

Moukhsil, A., Legault, M., Boily, M., Doyon, J., Sawyer, E., Davis D.W., (2003). Synthèse géologique et métallogénique de la Ceinture de roches vertes de la Moyenne et de la Basse Eastmain (Baie-James). Ressources naturelles, Faune et Parcs,1 carte. ET 2002-06, 55 pages.

O'Dea, M., Carlson, G., Harris, S., Fields, M., Tucker, T.L., and Smith, M.T., (2000). Structural and metallogenic framework for the Scheelite Dome Deposit, Yukon Territory: British Columbia and Yukon Chamber of Mines, Special Volume 2, pp. 115-129.

Percival, J., Stern, R., Skulski, T., Card, K., Mortensen, J., Begin, N., (1994). Minto block, Superior province: Missing link in deciphering assembly of the craton at 2.7 Ga. Geology 22(9), pp. 839-842.

Percival, J.A., Stern, R.A., Rayner, N., (2003). Archean adakites from the Ashuanipi complex, eastern Superior Province, Canada: geochemistry, geochronology and tectonic significance. Contributions to Mineralogy and Petrology 145(3): pp. 265-280.

Percival, J.A., Skulski, T., Sanborn-Barrie, M., Stott, G.M., Leclair, A.D., Corkery, M.T., Boily, M., (2012). Geology and tectonic evolution of the Superior Province, Canada. Tectonic Styles in Canada: The LITHOPROBE Perspective. Edited by JA Percival, FA Cook, and RM Clowes. Geological Association of Canada Special Paper 49: pp. 321-378.

Perez, L. (2019). Évaluation de L'Effet de la Granulométrie D'Échantillons de Minerai Aurfère sur la Récupération D'Or par Gravimétrie et Cyanuration. Report T2450, July 3rd, 2019.

Ravenelle, J-F., Dubé, B., Malo, M., McNicoll, V., Nadeau, L., Simoneau, J., (2010). Insights on the geology of the world-class Roberto gold deposit, Éléonore property, James Bay area, Québec; Geological Survey of Canada, Current Research 2010-1, 26 pages.

Remick, J.H., (1977). *Wemindji Area, Municipality of James Bay.* Ministère des Richesses naturelles, Québec, 14 maps. DPV-446, 51 pages.

Richard, P.L., Torrealba, J., and Evangelista, D., (2020). Mineral Resource Estimate Update for the Cheechoo Project, Eeyou Istchee James Bay, Québec, Canada, dated December 18, 2020. Prepared by BBA for Sirios Resources Inc. 203 pages.

Sillitoe, R.H., (1991). Intrusion-related gold deposits, in Foster, R.P., ed., Gold metallogeny and exploration: Glasgow, Blackie, pp. 165-209.

Sillitoe, R.H., (1995). Gold-rich porphyry copper deposits: Geological model and exploration implications: Geological Association of Canada, Special Paper 40, pp. 465-478.

Simard, M., Gosselin, C., (1999). Géologie de la région du lac Lichteneger (SNRC 33B). Gouvernement du Québec. Ministère des Ressources naturelles, 1 carte. [RG 98-15], 25 pages.

Sloan, R. and Mehrfert, P., March, (2015). Preliminary assessment of metallurgical samples from the Cheechoo gold property, ALS Metallurgy, Kamloops, KM4609, 69 pages.

Sloan, R. and Mehrfert, P., October (2015). Further assessment of two metallurgical samples from the Cheechoo gold property, ALS Metallurgy, Kamloops, KM4836, 36 pages.

Smith, P. A., (2005). Dighem Survey for Golden Valley Mines Ltd., Cheechoo Prospect, Blocks A, B, C, James Bay Area, Northern Québec, NTS 33C09, 33B/12, Fugro Airborn Surveys Corps, 104 pages.

Stephens JR., Mair JL., Oliver NH., Hart CJ., Baker T., (2004). Structural and mechanical controls on intrusion-related deposits of the Tombstone Gold Belt, Yukon, Canada, with comparisons to other vein-hosted ore-deposit types. Journal of structural geology 26(6): pp. 1025-1041.

Stern, RA., Percival, JA., Mortensen, JK., (1994). Geochemical evolution of the Minto block: a 2.7 Ga continental magmatic arc built on the Superior proto-craton. Precambrian Research 65(1-4), pp. 115-153.

Steyn, J., (2017). Heap leach amenability Test Report. Actlabs. Report A17-11534. December 1, 2017.

St-Hilaire, C., (2014). Data acquisition report, high resolution helicopter-borne aeromagnetic survey. Cheechoo-B West Property, Opinaca Reservoir Area, James Bay, Québec. GM 68300, 28 pages.

Thompson, J., Newberry., (2000). Gold deposits related to reduced granitic intrusions. Reviews in Economic Geology 13: pp. 377-400.

Thurston, P., (2002). Autochthonous development of Superior Province greenstone belts? Precambrian Research 115(1): pp. 11-36.

Tremblay-Bouliane, K. et al., (2019). Evaluation of the Effect of Grind Size on Gravity and Cyanidation Recovery of Gold-Bearing Ore Samples. COREM. Final Report – Revision 1 – Phase 1. No. T2450, August 29, 2019.

Turcotte, J., (2014a), Campagne de forage d'exploration 2013 sur la propriété Cheechoo B, réservoir Opinaca, Baie-James, Nord du Québec, GM 69038, 356 pages.

Turcotte, J., (2014b), Campagne de forage d'exploration du printemps 2014 sur la propriété Cheechoo B, réservoir Opinaca, Baie-James, Nord du Québec, GM 69103, 352 pages.

Turcotte, J., (2018), Campagne de forage d'exploration, automne 2015 et hiver 2016 sur la propriété Cheechoo, Eeyou Istchee Baie-James, GM 71021, 1497 pages.

Turcotte, J., Blanchette, A., Schnitzler, N., (2018), Campagne de forage d'exploration été-automne 2016 et hiver 2017 sur la propriété Cheechoo, Eeyou Istchee Baie-James, GM 71022, 2372 pages.

Turcotte, J., Blanchette, A., Schnitzler, N., (2019), Campagne de forage automne 2017 et hiver 2018 sur la propriété Cheechoo, Eeyou Istchee Baie-James, GM 71733, 2713 pages.

Turcotte, J., Blanchette, A., (2020), Campagne de forage hiver 2019 sur la propriété Cheechoo, Eeyou Istchee Baie-James, GM 71736, 1882 pages.

Turcotte, J., Blanchette, A., (2021), Campagne de forage hiver 2020 sur la propriété Cheechoo, Eeyou Istchee Baie-James, 50 pages.

Villeneuve, P., (2015), Campagne d'échantillonnage de sédiments glaciaires à l'été 2015 sur la propriété Cheechoo, Baie-James, Québec. IOS Services Géoscientifiques Inc. 23 pages.

Villeneuve, P. and Fournier, N., (2016). Campagne de pédogéochimie, été 2015, Projet Cheechoo Baie-James, Québec, GM 69726, 302 pages.

Weinberg, R., Searle, M., (1998). The Pangong Injection Complex, Indian Karakoram: a case of pervasive granite flowthrough hot viscous crust. Journal of the Geological Society 155(5): pp. 883-891.

Williams, H.R., (1990). Subprovince accretion tectonics in the south-central Superior Province. Canadian Journal of Earth Sciences 27(4): pp. 570-581.

Yang, X-M., Lentz, D.R., Chi, G., Thorne, K.G., (2008). Geochemical characteristics of gold-related granitoids in southwestern New Brunswick, Canada. Lithos 104(1): pp. 355-377.