INNOVEXPLO
MINING EXPERTISE

Val-d'Or Head Office
560, 3e Avenue
Val-d'Or (Québec) J9P 1S4

Quebec City Office
725, boulevard Lebourgneuf
Suite 310-12
Québec (Québec) G2J 0C4

Montreal Office
859, boulevard Jean-Paul-Vincent
Suite 201
Longueuil (Québec) J4G 1R3

Phone: 819-874-0447
Toll-free: 866-749-8140
Email: info@innovexplo.com
Website: http://www.innovexplo.com

NI 43–101 Technical Report and Mineral Resource Estimate Update for the Chimo Mine Project, Québec, Canada

Prepared for

CARTIER RESOURCES

Cartier Resources Inc.
1740, Chemin Sullivan, Suite 1000
Val-d'Or (Québec, Canada), J9P 7H1

Project Location
Latitude: 48°00' North; Longitude: 77°15' West
Province of Québec, Canada

Prepared by:

Christine Beausoleil, P.Geo.
Claude Savard, P.Geo.
InnovExplo Inc.
Val-d'Or (Québec)

Effective Date: March 22, 2021
Signature Date: May 6, 2021

SIGNATURE PAGE – INNOVEXPLO

NI 43-101 Technical Report and Mineral Resource Estimate Update for the Chimo Mine Project, Québec, Canada

Prepared for

Cartier Resources Inc.
1740, Chemin Sullivan, Suite 1000
Val-d'Or (Québec, Canada), J9P 7H1

Project Location
Latitude: 48°00' North; Longitude: 77°15' West
Province of Québec, Canada

Effective Date: March 22, 2021

(Original signed and sealed)

Christine Beausoleil, P.Geo.
InnovExplo
Val-d'Or (Québec)

Signed at Val-d'Or on May 6, 2021

(Original signed and sealed)

Claude Savard, P.Geo.
InnovExplo
Val-d'Or (Québec)

Signed at Val-d'Or on May 6, 2021

CERTIFICATE OF AUTHOR – CHRISTINE BEAUSOLEIL

I, Christine Beausoleil, P.Geo. (OGQ No. 656, PGO No. 2958, EGBC No. 36156), do hereby certify that:

1. I am a professional geoscientist, employed as Director of Geology for InnovExplo Inc., located at 560, 3^{e} Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Mineral Resource Estimate Update for the Chimo Mine Project, Québec, Canada" (the "Technical Report") with an effective date of March 22, 2021, and a signature date of May 6, 2021, prepared for Cartier Resources Inc. (the "issuer").
3. I graduated with a Bachelor of Geology degree from Université du Québec à Montréal (Montréal, Québec) in 1997.
4. I am a member in good standing of the Ordre des Géologues du Québec (OGQ licence No. 656), the Association of Professional Geoscientists of Ontario (PGO licence No. 2958) and the Engineers & Geoscientists of British Columbia (EGBC licence No. 36156).
5. I have practiced my profession continuously as a geologist for a total of twenty-three (23) years, during which time I have been involved in mineral exploration, mine geology, ore control and resource modelling projects for gold, copper, zinc and silver properties in Canada.
6. I have read the definition of "qualified person" set out in National Instrument/Regulation 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of that instrument.
7. I have visited the Property and the core shack on April 7 and April 23, 2021, for the purpose of the Technical Report.
8. I am the author of items 13 and 14 of the Technical Report, and I am the co-author of and share responsibility for items 1 to 3, 12, and 25 to 27.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of May 2021, in Val-d'Or, Québec.

(Original signed and sealed)

Christine Beausoleil, P.Geo.
InnovExplo Inc.
christine.beausoleil@innovexplo.com

CERTIFICATE OF AUTHOR – CLAUDE SAVARD

I, Claude Savard, P.Geo. (OGQ No. 1057, PGO No. 2959, APEGNB No. L6242), do hereby certify that:

1. I am a professional geoscientist, employed as Senior Geologist at InnovExplo Inc., located at 560, 3^{e} Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Mineral Resource Estimate Update for the Central, North and South Gold Corridors on the Chimo Mine Project, Québec, Canada" (the "Technical Report") with an effective date of March 22, 2021, and a signature date of May 6, 2021, prepared for Cartier Resources Inc. (the "issuer").
3. I graduated with a Bachelor of Geology degree from Université du Québec à Chicoutimi (Chicoutimi, Québec) in 1996.
4. I am a member in good standing of the Ordre des Géologues du Québec (OGQ licence No. 1057), the Association of Professional Geoscientists of Ontario (PGO licence No. 2959) and Association of Professional Engineers and Geoscientists of New Brunswick (L6242).
5. I have practiced my profession of geologist continuously for twenty-four (24) years, during which time I have been involved in mineral exploration, mine geology (underground and open pit), ore control and resource modelling projects for gold, copper, zinc and silver properties in Canada.
6. I have read the definition of "qualified person" set out in National Instrument/Regulation 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of that instrument.
7. I have visited the Project and core shack on February 24 and 25, 2020 for the purpose of the Technical Report.
8. I am the author of items 4 to 11 and 23 of the Technical Report, and I am the co-author of and share responsibility for items 1 to 3, 12 and 25 to 27 of the Technical Report.
9. I have had prior involvement with the property that is the subject of the Technical Report as an independent QP for the Technical Report "NI 43-101 Technical Report for the Central, North and South Gold Corridors on the Chimo Mine Project, Québec, Canada" published on SEDAR website (Ressources Cartier inc.) on June 17, 2020
10. I am independent of the issuer in accordance with the application of section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form
12. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of May 2021 in Val-d'Or, Québec, Canada.

(Original signed and sealed)

Claude Savard, P.Geo.
InnovExplo Inc.
claude.savard@innovexplo.com

INNOVEXPLO

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. SUMMARY

Introduction

Cartier Resources Inc. (“Cartier” or the “issuer”) retained InnovExplo Inc. (“InnovExplo”) to produce an updated mineral resource estimate (the “2021 MRE”) for the Chimo Mine Project (the “Property” or the “Project”) and to prepare a supporting Technical Report (the “Technical Report”) in accordance with Canadian Securities Administrators’ National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects (“NI 43-101”) and Form 43-101F1. The mandate was assigned by Gaétan Lavallière, Vice-President of Cartier.

The effective date of the mineral resource estimates is March 22, 2021.

InnovExplo is an independent mining and exploration consulting firm based in Val-d’Or, Québec.

Issuer

Cartier is a junior exploration company listed on the Toronto Venture Exchange (“TSX-V”) under the symbol ECR. Its head office and exploration office are at the same address: 1740, Chemin Sullivan, Suite 1000, Val-d’Or, Québec, Canada J9P 7H1, Telephone: 1-877-874-1331.

Contributors and Qualified Persons

This Technical Report was prepared by InnovExplo employees Christine Beausoleil (P.Geo.), Director of Geology and Claude Savard (P.Geo.), Senior Geologist. Both are qualified persons (“QPs”) as set out in NI 43-101.

Ms. Beausoleil is a professional geologist in good standing with the OGQ (licence No. 656), the PGO (licence No. 2958) and the EGBC (licence No. 36156). She is the author of items 13 and 14 and the co-author of items 1 to 3, 12 and 25 to 27.

Ms. Savard is a professional geologist in good standing with the OGQ (licence No.1057) and the PGO (licence No. 2959). She is the author of items 4 to 11 and 23 and the co-author of items 1 to 3, 12 and 25 to 27.

Property Description and Location

The Property is situated in the province of Québec, Canada, more specifically in the administrative region of Abitibi-Témiscamingue. The Property lies 50 km east-southeast of the city of Val-d’Or and 12 km southeast of the municipality of Louvicourt.

The Property comprises 12 active mineral titles (map-designated claims; “CDC”), covering an area of 334 ha. Cartier holds a 100% interest in the Property for which a 1% NSR royalty has been granted to IAMGOLD Corporation.

Geology Setting and Mineralization

The Property is located in the Southern Volcanic Zone of the Abitibi Subprovince. The northern part of the Property is transected by a possible extension of the Cadillac–Larder Lake Deformation Zone.

No outcrops are present on the Property. It is underlain by volcano-sedimentary rocks of the Trivio Complex. The Trivio Complex is a structural complex enclosing a set of lenticular bands of sedimentary rocks and mafic volcanic rocks, in sheared contact with each other; stratigraphic correlations are not possible.

At the former Chimo mine, mineralized zones and their margins (wallrocks) are characterized by hydrothermal alteration that manifests in different ways depending on the lithology:

- Silicification took place in sedimentary host rocks where iron formations were present. Silicification, typically accompanied by chloritization and biotization, is limited to the immediate wall rock in mineralized areas;
- Carbonatization affects a much larger volume of rock in volcanic or pyroclastic lithologies. Primarily characterized by calcite, sometimes accompanied by chlorite;
- Tourmalinization affects all the zones, but its distribution is very irregular. It can be found locally along the margins of mineralized veins; and
- Sulphidation manifests as pyrrhotite and coarse-grained arsenopyrite in veins, as semi-massive horizons, or as disseminations in quartz veins and selvages. Arsenopyrite replaces pyrite and pyrrhotite.

Mineralization on the Property consists of five main lenses (zones 1 to 3, 5 and 6).

Based on the nature of the host rock in the Chimo mine, the mineralized zones have been divided into two types of lode deposits: semi-massive sulphide veins associated with iron formations (zones 1 and 2) and lenticular quartz veins associated with altered volcanic rocks mineralized with arsenopyrite (zones 3, 5 and 6).

It is unlikely that these two types of gold mineralization are genetically distinct since they occur together in the Chimo mine. Mineralization is associated with quartz and arsenopyrite minerals into fractured zones.

Mineral Resource Estimate

The 2021 MRE was prepared by Christine Beausoleil (P.Geo.) using all available information.

The Project covers a strike length of 2.0 km ESE-WNW, a width of 1.0 km, and extends to a vertical depth of 1.7 km below the surface. The estimate is based on a compilation of historical and recent diamond drill holes.

The GEMS database used for the 2021 MRE contains 1,495 drill holes within the resource area: 241 historical drill holes.

The issuer provided the geological model, and it was reviewed and validated by the authors. It consists of 17 mineralized structures were modelled.

The authors are of the opinion that the 2021 MRE can be classified as Indicated and Inferred resources. The authors consider the 2021 MRE reliable and based on quality data, reasonable hypotheses and parameters that follow CIM Definition Standards.

The following table displays the results of the 2021 MRE for the Chimo Mine Project at the official 1.5 and 2.0 g/t Au cut-off grades for an underground scenario.

2021 Mineral Resource Estimate for the Chimo Mine Project (Table 14.8)

Corridor	INDICATED			INFERRED		
	Tonnes	Grade (g/t Au)	Gold Ounces	Tonnes	Grade (g/t Au)	Gold Ounces
North Gold (>2.0)	1,119,000	3.85	139,000	1,563,000	3.54	178,000
Central Gold (>1.5)	5,053,000	3.03	493,000	11,728,000	2.55	963,000
South Gold (>2.0)	444,000	3.61	52,000	1,949,000	3.47	217,000
Total	6,616,000	3.21	684,000	15,240,000	2.77	1,358,000

Mineral Resource Estimate notes:

1. The independent and qualified person, as defined by NI 43-101, is Christine Beausoleil, P.Geo. (InnovExplo Inc.). The effective date is March 22, 2021.
2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The mineral resource estimates follow CIM Definition Standards and Guidelines.
3. Seventeen (17) structures were modelled: five (5) for the North Gold Corridor; five (5) for the South Gold Corridor with a minimum true thickness of 2.4 m; and seven (7) structures for the Central Gold Corridor with an average thickness of 7.42 m.
4. A density value of 2.90 g/cm^3 or 3.10 g/cm^3 (supported by measurement) was applied to all structures.
5. High-grade capping supported by statistical analysis was carried out on assay data and established on a per-structure basis for gold varying from 30 to 120 g/t Au prior to compositing at 1 m using the grade of the adjacent material when assayed, or a value of zero when not assayed.
6. The reasonable prospect for an eventual economical extraction is met by having used reasonable cut-off grades for underground scenarios, a minimum width and constraining volumes (Deswik shapes). The estimate is reported for a potential underground scenario at a cut-off grade of 1.5 g/t Au (Central gold corridor and 2.0 g/t Au (North and South) Gold corridors. The COG reflects the geometry and the true width of each corridor. The cut-off grade was calculated using a gold price of US$1,612 per ounce, a USD:CAD exchange rate of 1.34; a mining cost of $50.75/t (Central) and $75.50/t (North and South); definition drilling $3/t (Central) and $6/t (North and South); transport cost of $9.80/t; environment cost of $0.75/t (Central) and $1.50/t (North and South); a processing cost of $17/t; and G&A of $12/t. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.).
7. Resources were estimated using GEOVIA GEMS software v.6.8.2 using hard boundaries on composited assays. The OK method was used to interpolate a block model (block size = 5 m x 5 m x 5 m).
8. The resource estimate is classified as Indicated and Inferred. The Indicated category is defined by a minimum of three (3) drill holes within a closest distance of 25 m, and Inferred with a minimum of two (2) drill holes within a closest distance of 65 m and where there are reasonable geological and grade continuities.
9. Results are presented in-situ. Ounce (troy) = metric tons x grade / 31.10348. The number of tonnes and ounces was rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects; rounding followed the recommendations as per NI 43-101.
10. The qualified person is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issue that could materially affect the mineral resource estimate.

Interpretation and Conclusions

InnovExplo believes that the information presented in this report provides a fair and accurate picture of the Property's potential.

The Property is located in the Val-d'Or mining camp, a 50-km drive east of the city of Val-d'Or. Mining infrastructure is still present at the site and could facilitate the transition to a more advanced stage of exploration.

The authors conclude the following:

- The database supporting the 2021 MRE is complete, valid and up to date.
- The geological and grade continuity of gold mineralization is demonstrated and supported by historical, past-producing underground exposures and dense drilling (15-30 m drill hole spacing).
- The Project contains an estimated Indicated Resource of 6,616,000 tonnes grading 3.21 g/t Au for 684,000 ounces of gold and an estimated Inferred Resource of 15,240,000 tonnes grading 2.77 g/t Au for 1,358,000 ounces of gold.
- The 2021 MRE was prepared for a potential underground scenario at a cut-off grade of 1.5 g/t Au for the Central gold Corridor and 2.0 g/t for the North and South Gold corridors.
- It is likely that additional diamond drilling at depth would increase the Inferred Resource tonnage and upgrade some of the Inferred Resources to the Indicated category.

Recommendations

Based on the results of the 2021 MRE, the authors recommend that the Project move to an advanced phase of exploration and an initial economic study. A two-phase work program is recommended, where Phase 2 is conditional upon the positive conclusions of Phase 1.

In Phase 1, the authors recommend using the results from the updated MRE and internal studies as a basis for a Preliminary Economic Assessment ("PEA"):

- Continue and complete the metallurgical, rock sorting and internal mining engineering studies.
- Initiate environmental and hydrogeological characterization testing.
- Initiate a rock mechanics studies for potential stope optimization.
- In support to the PEA study, complete an updated NI 43-101 Technical Report.

In Phase 2, the authors recommend to:

- Define and complete a PFS study in accordance with the PEA results and recommendations.
- In support to PFS study, complete an updated NI 43-101 Technical Report.

The authors have prepared a cost estimate for the recommended two-phase work program to serve as a guideline for the Project. Expenditures for Phase 1 are estimated at C$805,000 (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at

C$1,150,500 (incl. 15% for contingencies). The grand total is C$1,955,000 (incl. 15% for contingencies). Phase 2 is contingent upon the success of Phase 1.

The authors are of the opinion that the recommended work programs and proposed expenditures are appropriate and well thought out. The authors believe that the proposed budget reasonably reflects the type and amount of the contemplated activities.

2. INTRODUCTION

2.1 Overview

Cartier Resources Inc. (“Cartier” or the “issuer”) retained InnovExplo Inc. (“InnovExplo”) to prepare a Technical Report (the “Technical Report”) to present and support the results of an updated Mineral Resource Estimate (the “2021 MRE”) for the Chimo Mine Project (the “Property” or the “Project”).

This Technical Report was prepared in accordance with Canadian Securities Administrators’ National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects (“NI 43-101”) and Form 43-101F1. The mandate was assigned by Gaétan Lavallière, Vice-President of Cartier.

InnovExplo is an independent mining and exploration consulting firm based in Val-d’Or, Québec.

Cartier is a junior exploration company listed on the Toronto Venture Exchange (“TSX-V”) under the symbol ECR. Its head office and exploration office are at the same address:

1740, Chemin Sullivan, Suite 1000
Val-d’Or, Québec, Canada J9P 7H1

The 2021 MRE follows the 2014 CIM Definition Standards on Mineral Resources and Mineral Reserves (“CIM Definition Standards”).

2.2 Report Responsibility and Qualified Persons

This Technical Report was prepared by InnovExplo employees Christine Beausoleil (P.Geo.), Director of Geology, and Claude Savard (P.Geo.), Senior Geologist. Both are qualified persons (“QPs”) as set out in NI 43-101.

Ms. Beausoleil is a professional geologist in good standing with the OGQ (licence No. 656), the PGO (licence No. 2958) and the EGBC (licence No. 36156). She is the author of items 13 and 14 and the co-author of items 1 to 3, 12 and 25 to 27.

Ms. Savard is a professional geologist in good standing with the OGQ (licence No.1057) and the PGO (licence No. 2959). She is the author of items 4 to 11 and 23 and the co-author of items 1 to 3, 12 and 25 to 27.

2.3 Site visits

Ms. Beausoleil visited the issuer’s Property and core shack on April 7 and 23, 2021. During the visits, she examined mineralized exploration diamond drill core, reviewed the core logging and sampling procedures, and performed onsite data verification, including a visual assessment of the access roads.

Ms. Savard visited the Property and the core shack on February 24 and 25, 2020. During the visits, she focused on the mineralized structures of the North and South Gold Corridors examining selected core intervals and reviewing the QA/QC program, downhole survey data and the descriptions of lithologies, alteration and mineralization. Field data verification included a visual inspection of surface drill pads, a check of drill collar location coordinates, and a visual assessment of access roads.

2.4 Effective Date

The effective date of the mineral resource estimate is March 22, 2021.

2.5 Sources of Information

The information described in Item 3 and the documents listed in Item 27 were used to support this Technical Report. Excerpts or summaries from documents authored by other consultants are indicated in the text.

The authors' assessment of the Project was based on published material in addition to the data, professional opinions and unpublished material submitted by the issuer. The authors reviewed all relevant data provided by the issuer and/or by its agents.

The author also consulted other sources of information, mainly the Government of Québec's online claim management and assessment work databases (GESTIM and SIGEOM, respectively), as well as the issuer's other technical reports, annual information forms, MD&A reports and press releases published on SEDAR (www.sedar.com).

The authors reviewed and appraised all the information used to prepare this Technical Report, and believe that such information is valid and appropriate considering the status of the project and the purpose for which this Technical Report is prepared. The authors have thoroughly researched and documented their conclusions and recommendations made in this Technical Report.

2.6 Currency, Units of Measure, and Abbreviations

The abbreviations and units used in this report are provided in Table 2.1 and Table 2.2. All currency amounts are stated in Canadian Dollars ($, C$, CAD) or US dollars (US$, USD). Quantities are stated in metric units, as per standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area, percentage (%) for copper and nickel grades, and gram per metric ton (g/t) for precious metal grades. Wherever applicable, imperial units have been converted to the International System of Units (SI units) for consistency (Table 2.3).

Table 2.1 – List of abbreviations

Abbreviation	Unit or Term
AA	Atomic absorption
AGB	Abitibi Greenstone Belt
Au	Gold
BIF	Banded Iron Formation
BQ	BQ-caliber drill hole
Cartier	Cartier Resources Inc.
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CLLDZ	Cadillac–Larder Lake Deformation Zone
CRM	Certified reference material
CO2	Carbon dioxide

Abbreviation	Unit or Term
COV	Coefficient of variation
COG	Cut-off grade
DSO	Deswik stope optimizer
EGBC	Engineers and Geoscientists BC
Fe	Iron
G&A	General and administration
GESTIM	Gestion des titres miniers (MERN's online claim management system)
GPS	Global Positioning System
HQ	HQ-caliber drill hole
ISO	International Organization for Standardization
K	Potassium
km^2	Square kilometre
kV	Kilo volt
LIMS	Laboratory Information Management System
Ma	Million years
MD&A	Management Discussion and Analysis
MDDEP	Ministère du Développement durable, de l'Environnement et des Parcs (Centre de contrôle environnemental)
MERN	Ministère de l'Energie et des Ressources naturelles du Québec (Québec's Ministry of Energy and Natural Resources)
MF	Metal Factor
MFFP	Ministère des Forêts, de la Faune et des Parcs (Québec's Ministry of Forests, Wildlife and Parks)
MgO	Magnesian oxide
MRE	Mineral resource estimate
Na	Sodium
NAD	North American datum
Nbr	Number
NI 43-101	National Instrument 43-101
NQ	NQ-caliber drill hole
NSR	Net Smelter Return
NTS	National Topographic System
OGQ	Ordre des Géologues du Québec (Order of Geologists of Québec)
Pb	Lead
PDDZ	Porcupine-Destor Deformation Zone
PEA	Preliminary economic assessment
PGO	Professional Geoscientists Ontario
PFS	Prefeasibility study
ppb	Part per billion

Abbreviation	Unit or Term
QA/QC	Quality Assurance / Quality Control
QP	Qualified person
RQD	Rock Quality Designation
S	Sulphur
SD	Standard deviation
SiO2	Silica
SIGEOM	Système d'information géominière
U	Uranium
UTM	Universal Transverse Mercator
Y	Yttrium
yyyy-mm-dd	Year-month-day
Zr	Zirconium

Table 2.2 – List of units

Symbol	Unit
%	Percent
$, CAD	Canadian dollar
$/t	Dollars per metric ton
°	Angular degree
°C	Degree Celsius
AuEq	Gold equivalent
μm	Micron (micrometre)
cm	Centimetre
g	Gram
Ga	Billion years
g/cm^3	Gram per cubic centimetre
g/t	Gram per metric ton (tonne)
ha	Hectare
in	Inch
k	Thousand (000)
ka	Thousand years
kg	Kilogram
km	Kilometre
km^2	Square kilometre
koz	Thousand ounces
kV	Kilo volt
lb	Pound

Symbol	Unit
M	Million
m	Metre
m^3	Cubic metre
Ma	Million years (annum)
masl	Metres above mean sea level
mm	Millimetre
MPa	Megapascal
oz	Troy ounce
oz/t	Ounce (troy) per short ton (2,000 lbs)
ppb	Parts per billion
ppm	Parts per million
t	Metric ton (1,000 kg)
ton	Short ton (2,000 lbs)
tpd	Metric tons per day
US$, USD	American dollar

Table 2.3 – Conversion Factors for Measurements

Imperial Unit	Unit Multiplied by Metric Unit	Metric Unit
1 inch	25.4	mm
1 foot	0.3048	m
1 acre	0.405	ha
1 ounce (troy)	31.1035	g
1 pound (avdp)	0.4535	kg
1 ton (short)	0.9072	t
1 ounce (troy)/ton (short)	34.2857	g/t

3. RELIANCE ON OTHER EXPERTS

The authors did not rely on other experts to prepare this Technical Report. It was prepared at the request of the issuer. Christine Beausoleil (P.Geo.) and Claude Savard (P.Geo.) are the QPs assigned to the mandate of reviewing technical documentation relevant to the Technical Report, preparing a mineral resource estimate on the Project, and recommending a work program if warranted.

The QPs relied on the issuer's information about mining titles, option agreements, royalty agreements, environmental liabilities and permits. Neither the QPs nor InnovExplo are qualified to express any legal opinion with respect to property titles, current ownership or possible litigation. This disclaimer applies to item 4.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Property is located in the administrative region of Abitibi-Témiscamingue in the Province of Québec, Canada (Figure 4.1). It is about 50 km east-southeast of the city of Val-d'Or and about 12 km southeast of the municipality of Louvicourt.

The Property lies within NTS map sheet 32C03 in the Vauquelin Township. The approximate coordinates of the centre of the Property are 48°00'42" North and 77°15'10" West (UTM coordinates: 331995E, 5320038N, NAD 83, Zone 18).

4.2 Mineral Title Status

InnovExplo verified the status of all mineral titles using GESTIM, the Government of Québec's online claim management system (gestim.mines.gouv.qc.ca).

The Property comprises 12 active mineral titles (map-designated claims; "CDC"), covering an area of 334 ha.

Cartier holds a 100% interest in the Property for which a 1% NSR royalty has been granted to IAMGOLD Corporation. No rights of first refusal ("buy-back") have been granted.

Figure 4.2 presents the mineral title map, and Table 4.1 lists the mineral titles with ownership and royalties.

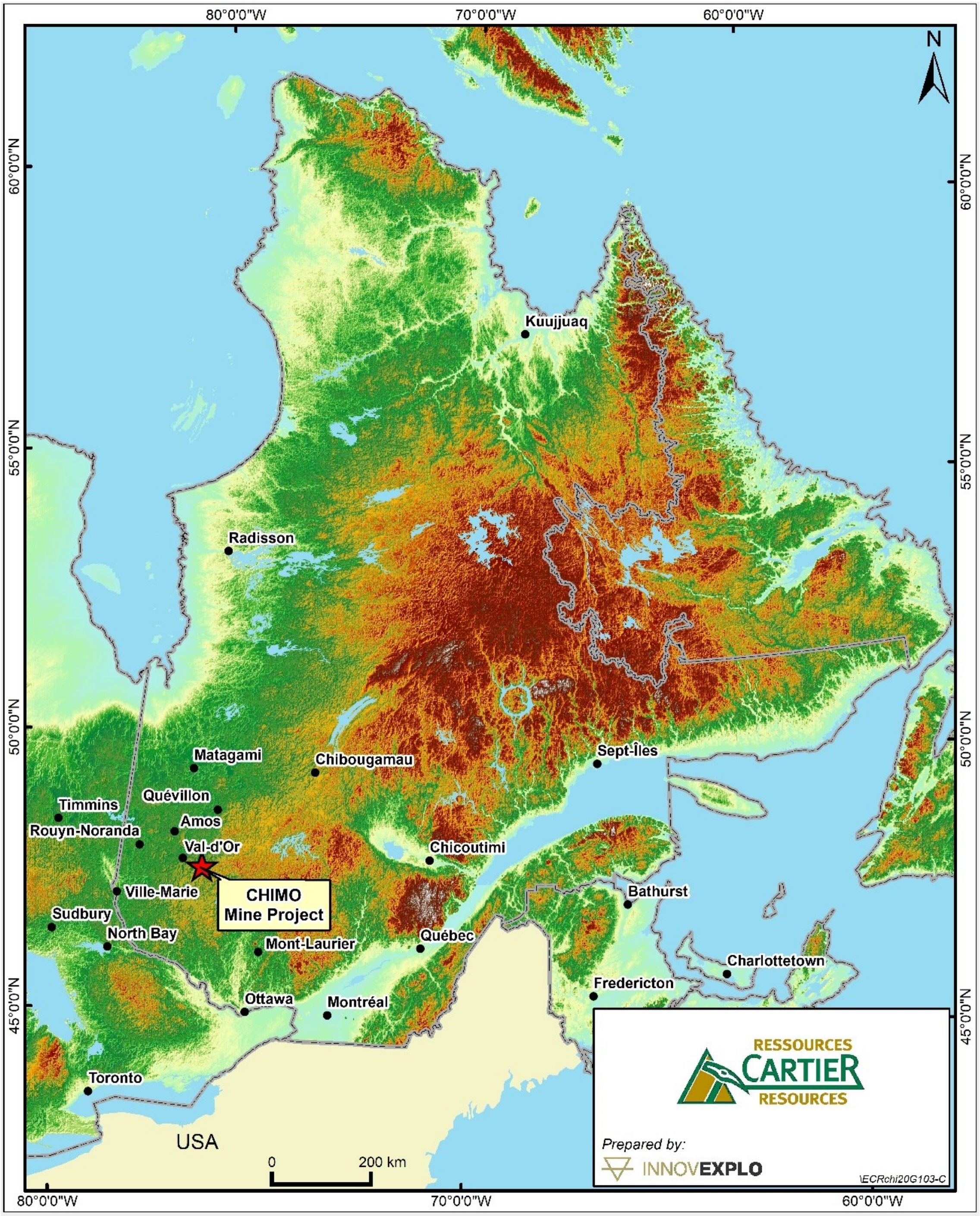


Figure 4.1 – Location of the Chimo Mine Project

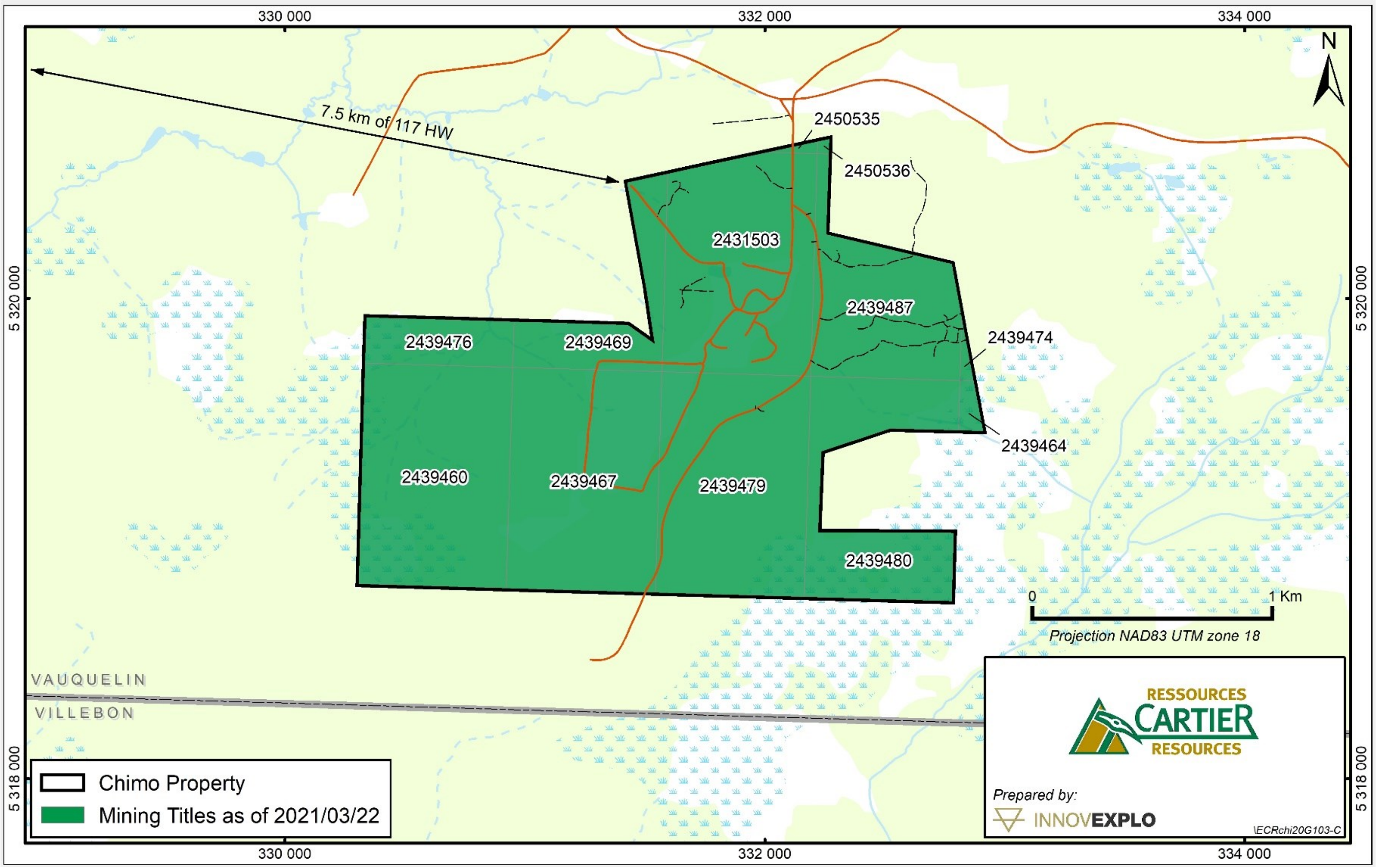


Figure 4.2 – Chimo Mine Property claim map

Table 4.1 – List of claims

Title number	Title type	Title status	Area (ha)	Registration date yyyy/mm/dd	Expiration date yyyy/mm/dd	Owner
2431503	CDC	Active	55.78	2015-07-23	2022-07-22	Cartier Resources Inc. 100%
2439460	CDC	Active	57.61	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2439464	CDC	Active	1.88	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2439467	CDC	Active	57.61	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2439469	CDC	Active	19.05	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2439474	CDC	Active	0.93	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2439476	CDC	Active	12.27	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2439479	CDC	Active	57.61	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2439480	CDC	Active	35.42	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2439487	CDC	Active	35.24	2016-04-22	2024-02-29	Cartier Resources Inc. 100%
2450535	CDC	Active	0.69	2016-06-22	2023-06-21	Cartier Resources Inc. 100%
2450536	CDC	Active	0.35	2016-06-22	2023-06-21	Cartier Resources Inc. 100%

4.3 Socio-Environmental Responsibilities

The issuer has adopted a sustainable development policy that focuses on three main aspects:

- Social: Listen to the concerns of stakeholders by carrying out socio-environmental studies. Regularly follow up to ensure the social acceptability of activities and add value to the social environment through structuring actions.
- Environmental: Minimize the footprint of Cartier's mineral exploration activities by complying with existing laws and regulations while remaining committed to the e3 Plus principles.
- Preventive Health & Safety: Apply Cartier's rigorous preventative health and safety procedure (IPDE: Inspection, Planning, Decision and Execution).

There are no socio-environmental liabilities pertaining to the Property.

The issuer holds all required permits to complete surface drilling work on the Property.

The tailings pond on the Property, restored by Cambior Inc. ("Cambior") in 1998-1999, does not pose any environmental problems. The MERN released Cambior from its mine site restoration obligation in the 2000s as there were no issues related to the final effluent. The site has been restored, and no environmental studies have been carried out since. It is classified as safe, and the MERN no longer performs monitoring or environmental characterization work (pers. comm. Robert Lacroix, MERN).

In September 2014, an inspection of the Property by the Environmental Control Centre of the MDDEP (Ministry of Sustainable Development, Environment and Parks, now the Ministry of the Environment and the Fight Against Climate Change, “MELCC”) confirmed the Property’s compliance with the applicable standards. The Ministry continues each year to sample the effluent from the waste pond.

4.4 Permits

Cartier obtained all the necessary authorizations to conduct its 2016-2020 surface drilling programs on the Property.

4.5 Other Important Risk Factors

InnovExplo is not aware of any other significant factors or risks that could affect access, title, or the right or ability to estimate the mineral resources on the Property.

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

5.1 Accessibility

The Property is accessible from the city of Val-d'Or by driving 50 km east on Highway 117 and then about 11 km east on the gravel Chimo Road (Figure 5.1). A multitude of secondary gravel roads and forestry trails on the Property make it accessible throughout the year.

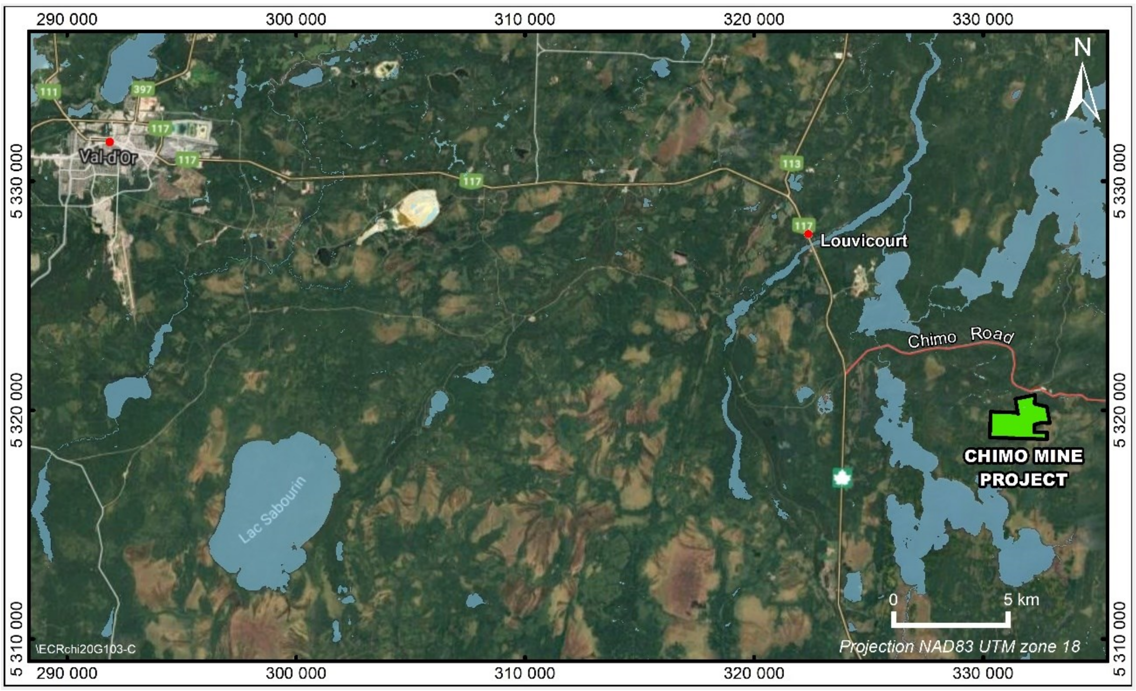


Figure 5.1 – Access map to Chimo Mine Property

5.2 Climate

The Abitibi region is under the influence of a typical continental-style climate marked by cold, dry winters and warm, humid summers. According to Environment Canada's climate data at the nearest weather station (Amos) (climate.weather.gc.ca), the average temperatures are +17.2°C in July and -17.3°C in January. The mean annual temperature is +1.2°C, slightly above freezing. The lowest recorded temperature was -52.8°C, and the highest was +37.2°C. In this area, the temperature drops below freezing an average of 204.9 days per year. Snow accumulates from mid-October or November to early/mid-May. Freeze-up usually occurs in late December and break-up in March-April. Average annual precipitation indicates a mean rainfall of 918.4 mm, with the highest precipitation occurring in July (112.8 mm). Information validated in March 2021.

Climate conditions do not have a significant impact on exploration activities. However, it is preferable to conduct drilling on the few marshy areas on the Property during winter when the ground is frozen.

5.3 Local Resources

The area is well served by existing infrastructure and human resources from Val-d'Or (approx. population 33,000), a well-established mining region. The area has a network of paved provincial roads, including highways, and commercial airline companies service the local airport. Many suppliers and manufacturers in the mining industry are based in Val-d'Or and other nearby communities.

Hydro-Québec supplies electricity to the area.

Skilled administrative personnel, technicians, geologists, mining engineers and experienced miners are available in the area.

5.4 Infrastructure

The Val-d'Or mining region has several mills that could potentially process ore from the Project.

The underground mine workings comprise 7 km of drifts distributed over 19 main levels connected by a 3-compartment shaft (5.5 m x 1.8 m) that extends to a depth of 920 m. About 20 sublevels and raises complete the underground infrastructure. The spacing between levels 18 and 19 is 75 m, decreasing to 65 m between levels 17 and 18 and to 35 m between levels 16 and 17. The other upper levels are spaced 30 m apart and sublevels between 10 and 20 m, depending on which zone was being mined. In the fourth quarter of 1996, more than 1,500 t were hoisted per day using the equipment in place at that time (skips, cable, hoist and headframe) (Vallières, 1996).

The headframe, mill and other surface facilities were dismantled in 2008, but the 25 kV power line is in good condition, and the sandpit is still in place. The walls of the shaft and its underground infrastructure were in good condition when the mine closed, and the shaft access at the surface was carefully sealed with a concrete slab. The tailings pond has been restored, and a certificate of release and letter of authorization were issued by the Ministry of Natural Resources and the Ministry of the Environment.

The issuer's office and a fully equipped core shack are located in Val-d'Or, providing easy access and logistics for all exploration work carried out on the Property.

5.5 Physiography

The regional landscape is typical of the Abitibi Lowlands, with small rolling hills and widespread wetlands and swamps, and mixed broadleaf and conifer forests. The average altitude is around 360 to 380 masl.

Outcrops are rare on the Property. Overburden is often thick, ranging from 20 to 50 m, and consists mainly of boulders, sand and clay.

6. HISTORY

The following is taken from a Cambior internal report (Houle, 1995).

Outcrops are rare in the vicinity of the Chimo mine. The deposit was discovered by drilling magnetic anomalies. Before the discovery, prospecting had revealed gold showings, which stimulated interest in the area.

6.1 Quemartic Mines – 1936 to 1938

The area of the future Property and mine site was staked in the fall of 1936 and transferred in September 1937 to Quemartic Mines Ltd, who then transferred it to a subsidiary, Quemartic Mines (Québec) Ltd. While prospecting in 1937 and 1938, visible gold was discovered at two locations in volcanic rocks (Zone 2 and the western part of the mine). Two exploration drill holes totalling 336 m did not encounter mineralization of economic interest, and the claims were eventually abandoned.

6.2 Chimo Gold Mines – 1943 to 1948 and 1963 to 1967

The land was again staked in 1943 and purchased in 1945 by Chimo Gold Mines Ltd ("Chimo Gold Mines"). A magnetometric survey was carried out, and 45 drill holes totalling 5,800 m were drilled between 1945 and 1947. Encouraging results were obtained further south, where six gold zones were soon recognized. In 1948, preparations were made to sink the shaft and machinery was transported to the site, but the work was suspended until 1963.

In 1963, a detailed magnetometric survey and an airborne electromagnetic survey were conducted, followed by a 44-hole drilling program (8,390 m) located 300 m east of the known gold zones. Four new areas were discovered (including zones 2 and 3). A vertical 3-compartment shaft was sunk to a depth of 183 m, and drifts were developed at depths of 80, 120 and 175 m from November 1964 to June 1965. Production began on January 1, 1966, and the first gold brick was poured in February 1967. Production was halted in late August 1967 when the known near-surface reserves had been depleted. The ore was transported to the Bevcon Mill, which had been purchased by Chimo Gold Mines. Table 6.1 shows historical production from 1964-1967.

6.3 SOQUEM/Louvem – 1978 to 1989

SOQUEM Inc. ("SOQUEM") acquired the Property in 1978 and proceeded to carry out magnetic and electromagnetic surveys. A 12-hole drilling program (1,548 m) was carried out in 1978, followed by a second 25-hole program (6,230 m) in 1980. SOQUEM then sold the claims to its subsidiary Louvem Mines Inc. ("Louvem"). Between 1981 and 1983, Louvem dewatered and rehabilitated the former mine, excavated exploration drifts, and performed 10,750 m of diamond drilling. Start-up work commenced, and the mine entered into production in August 1984. In 1984, 33 holes drilled from the surface led to the discovery of a new gold zone (Zone 5), 150 m south of the previously mined areas. Mining was suspended in the old areas to hasten the development of Zone 5. Production resumed in mid-August 1985. New drilling (29 holes for 5,755 m) was carried out on the extensions of known zones and geophysical targets, leading to the discovery of Zone 6 in April 1985. Successive drilling programs

(1986: 11 holes for 1,878 m; 1987: 14 holes for 1,118 m) were carried out to better define the known zones. Table 6.1 shows historical production from 1984-1988.

6.4 Cambior – 1989 to 1997

On May 8, 1989, Cambior Inc. ("Cambior") acquired 50% of Louvem's interest and became the operator. In 1990, Cambior bought the 50% residual interest from Louvem. The work carried out from 1989 to 1997 was mainly construction, production and development. The shaft was deepened to 920 m, and two additional levels were developed (18 and 19). The concentrator was also relocated from the Lucien Béliveau Mill to the Chimo mine, and a paste backfill plant and administrative office were built. Surface exploration on the Property ceased during this period; however, the lateral extensions of Zone 6 were drill-tested from claims on the adjacent Nova Property belonging to Cambior (1989-90: 12 holes, 2,141 m). In 1995, exploration drilling (11 holes for 3,492 m) tested the strike extensions of Zone 5, revealing a possible extension, 750 m to the east. Table 6.1 shows historical production from 1989-1997.

Table 6.1 – Historical production for the Chimo mine

Date	Company	Tonnes	Grade (g/t Au)	Contained ounces
1964-1967	Chimo Gold Mines	132,738	14.8	63,168
1984-1988	Louvem	521,403	5.7	95,395
1989-1997	Cambior	1,790,069	3.8	220,449
	Total	2,444,210	4.8	379,012

6.5 South-Malartic Exploration, X-Ore Resources and Blue Note Mining – 2001 to 2013

On January 24, 2001, South-Malartic Exploration purchased all of the mineral rights to the Chimo and Nova properties from Cambior. On April 24, 2007, South-Malartic Exploration changed its name to X-Ore Resources, which was amalgamated with Blue Note Mining on January 15, 2010. The first exploration work since 1997 took place in 2010 and 2011 when Blue Note Mining conducted a 12-hole drilling program (3,427 m) that tested the strike extensions of the main gold zones.

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Property is located in the Abitibi Greenstone Belt of the southeastern Abitibi Subprovince, in the Archaean Superior Province (Figure 7.1).

The following is taken from Beausoleil et al. (2019), unless indicated otherwise.

(Monecke et al., 2017)

Figure 7.1 – Location map of the Abitibi Greenstone Belt within the Superior Province

7.1.1 Archean Superior Province

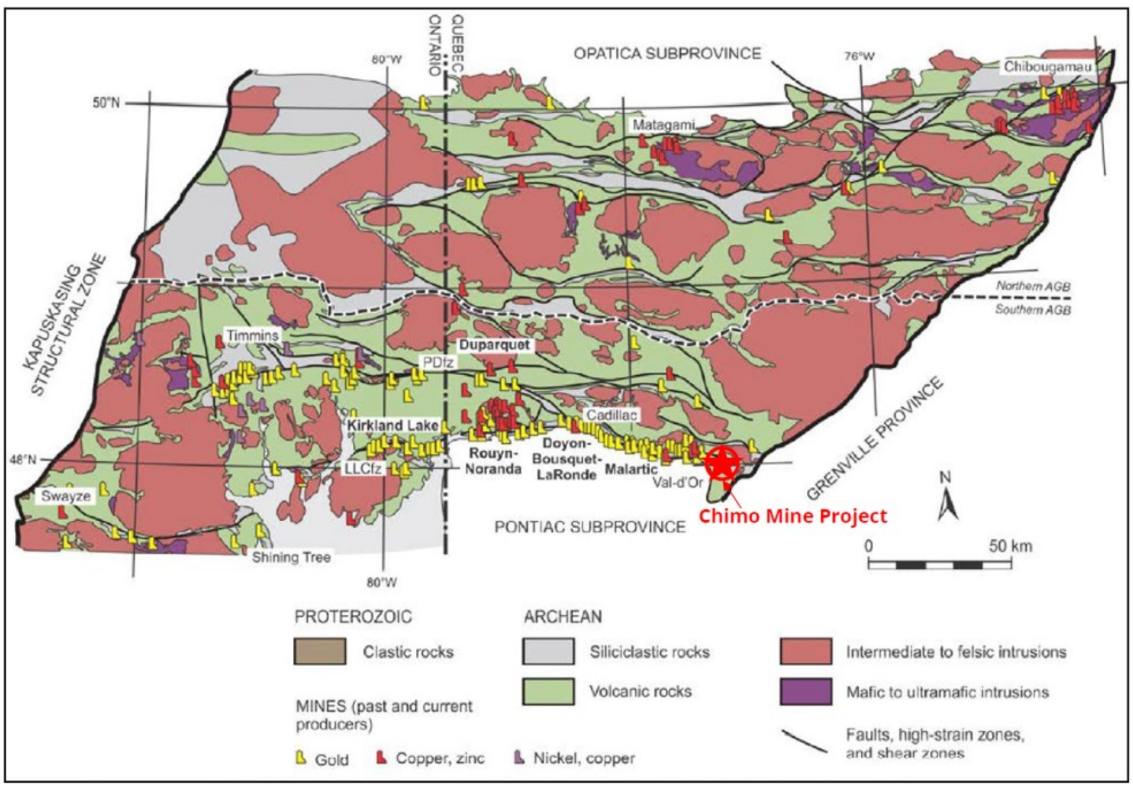
The Archean Superior Province forms the core of the North American continent and is surrounded by provinces of Paleoproterozoic age to the west, north and east, and by the Mesoproterozoic Grenville Province to the southeast.

Tectonic stability has prevailed since approximately 2.6 Ga in large parts of the Superior Province. Proterozoic and younger activity is limited to rifting of the margins, emplacement of numerous mafic dyke swarms (Buchan and Ernst, 2004), compressional reactivation, large-scale rotation at approximately 1.9 Ga, and failed rifting at approximately 1.1 Ga. With the exception of the northwest and northeast Superior margins that were pervasively deformed and metamorphosed at 1.9 to 1.8 Ga, the craton has escaped ductile deformation.

A first-order feature of the Superior Province is its linear subprovinces, or ″terranes″, of distinctive lithological and structural character, accentuated by subparallel boundary faults (e.g., Card and Ciesielski, 1986). Trends are generally E-W in the south, WNW in the northwest, and NW in the northeast. The term ″terrane″ is used in the sense of a geological domain with a distinct geological history prior to its amalgamation into the Superior Province during the 2.72 to 2.68 Ga assembly events; a ″superterrane″ shows evidence for internal amalgamation of terranes prior to the Neoarchean assembly; ″domains″ are defined as distinct regions within a terrane or superterrane.

7.1.2 Abitibi Subprovince

The Abitibi Subprovince (a.k.a. the Abitibi Greenstone Belt) is located in the southern portion of the Superior Province (Figure 7.2).



(Modified after Monecke et al., 2017)

Figure 7.2 – Geological map of the Abitibi Greenstone Belt

It is bounded to the west by the Kapuskasing Structural Zone and to the east, by the Grenville Province. To the north, the Abitibi Subprovince is in structural contact with the plutonic Opatica Subprovince. The southern boundary of the Abitibi Greenstone Belt (“AGB”) is marked by the Cadillac–Larder Lake Deformation Zone (“CLLDZ”), a major structural break marking the contact with the younger metasedimentary rocks of the Pontiac Subprovince.

The AGB was formed over a period that spans approximately 150 Ma and is composed of east-trending synclines of largely volcanic rocks and intervening domes cored by synvolcanic and/or syntectonic plutonic rocks (gabbro-diorite, tonalite and granite in composition) alternating with east-trending bands of turbiditic wackes (Ayer et al., 2002; Daigneault et al., 2004; Goutier and Melançon, 2007; Monecke et al., 2017). Most of the volcanic and sedimentary strata have a subvertical dip.

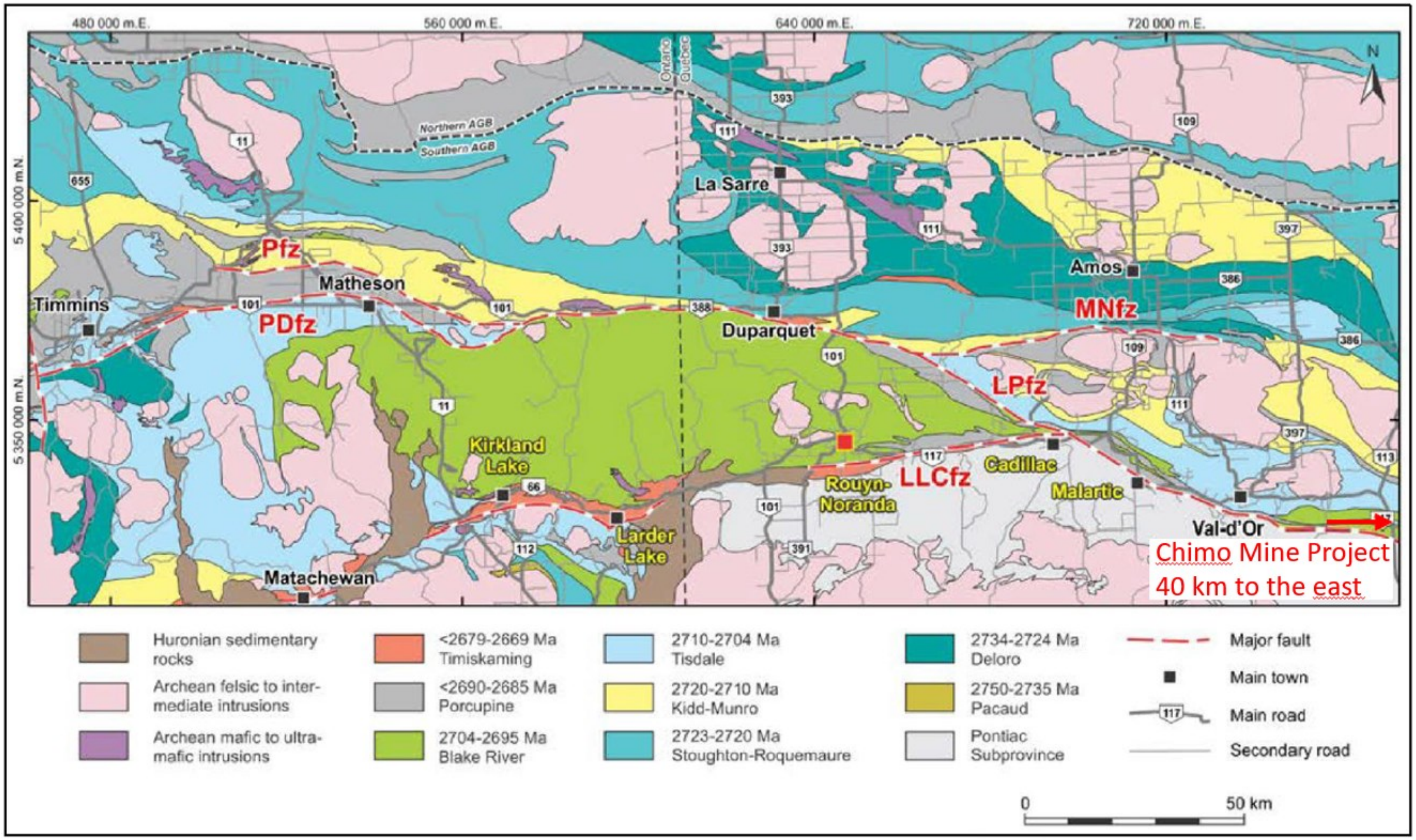
Volcanic and sedimentary packages are generally separated by steep east-trending faults. Some of these faults, such as the major CLLDZ and the Porcupine-Destor Deformation Zone, and similar breaks in the northern Abitibi, transect the entire belt and display evidence of overprinting deformation events including early thrusting, and later strike-slip and extension (Daigneault et al., 2004; Benn and Peschler, 2005; Bateman et al., 2008).

The CLLDZ is transcrustal and inherited from the accretion suture between the Pontiac and the AGB. The fault is important not only for its metallogenic wealth but also for its geodynamic models and juxtaposition of varied lithologic assemblages along its subsidiary faults. As the E-W and ESE-WNW segments of the fault cross through the AGB, they reflect a deep asymmetry, a feature that influenced the styles and episodes of gold mineralization.

In addition, the AGB is cut by numerous late-tectonic plutons ranging in composition from gabbro to granite with lesser dykes or plugs of syenite, lamprophyre and carbonatite. The greenstone belt is affected by a widespread greenschist facies metamorphism (Jolly, 1978; Dimroth et al., 1983; Powell et al., 1993; Benn et al., 1994; Faure, 2015). The grade of metamorphism increases to amphibolite at the fringes of some plutons and approaching the Pontiac and Opatica subprovinces or the Proterozoic Grenville Province.

According to Monecke et al. (2017) and references therein, the AGB is subdivided into eight (8) discrete stratigraphic episodes or assemblages, depending on the authors (Figure 7.3), based on groupings of U-Pb zircon ages. Submarine volcanism mostly occurred between 2795 and 2695 Ma and was followed by sedimentation in large deep basins and then by large-scale thin-skin folding and thrusting. New U-Pb zircon ages and recent mapping by the Ontario Geological Survey and Géologie Québec clearly shows similarity in the timing of volcanic episodes and ages of plutonic activity between the northern and southern AGB.

Two ages of unconformable sedimentary basins are recognized: early, widely and laterally extensive distributed Porcupine-style basins of fine-grained clastic rocks (turbidites), followed by Timiskaming-style basins of coarser aerial clastic and minor volcanic rocks, which are largely proximal to major faults where strike-slip movements occurred (Thurston and Chivers, 1990; Mueller et al., 1992; Ayer et al., 2002; Goutier and Melançon, 2007).



(Modified after Monecke et al., 2017)

Figure 7.3 – Geological map of the southern Abitibi Greenstone Belt

The episodes are listed below from oldest to youngest:

- Pacaud Assemblage (2750-2735 Ma);
- Deloro Assemblage (2734-2724 Ma);
- Stoughton-Roquemaure Assemblage (2723-2720 Ma);
- Kidd-Munro Assemblage (2720-2710 Ma);
- Tisdale Assemblage (2710-2704 Ma);
- Blake River Assemblage (2704-2695 Ma);
- Porcupine Assemblage (<2690-2685 Ma); and
- Timiskaming Assemblage (<2679-2669 Ma).

Three large intrusions are found within the local stratigraphy: 1) the Bourlamaque batholith (Campiglio, 1977), a coarse-grained synvolcanic quartz-diorite intrusive (2700 ±1 Ma) of transitional affinity, which is interpreted to be the magma chamber that fed the Val-d'Or Formation volcanism; 2) the Bevcon pluton, a similar but higher level and more differentiated medium to fine-grained tonalite of transitional affinity; and 3) the East Sullivan stock, a post-kinematic (2684 ±1 Ma) alkaline composite monzonitic stock (Taner, 1996). Numerous calc-alkaline granodioritic-tonalitic intrusives and subconcordant to discordant sill-like intrusions of subvolcanic to post-kinematic origin and a suite of early- to post-kinematic feldspar/quartz-feldspar/porphyry dykes occur throughout the region.

The Chimo Mine Property is close to the contact of the CLLDZ, which hosts numerous gold deposits and mines that have produced several million ounces of gold. The Kirkland Lake, Rouyn-Noranda, Cadillac, Malartic and Val-d'Or mining camps are all found along this deformation zone.

7.2 Local Geology

The following descriptions were taken in part from Sauvé et al. (1988), Rocheleau et al. (1997) and Moorhead et al. (2000).

The Property is located in the Southern Volcanic Zone of the Abitibi Subprovince. The northern part of the Property is transected by a structure that may represent a branch of the CLLDZ (Figure 7.4).

No outcrops are present on the Property. According to Racine (1989) and Rocheleau et al. (1997), the Property is underlain by volcano-sedimentary rocks of the Trivio Complex. The Trivio Complex is a structural complex enclosing a lenticular band of sedimentary rocks and mafic volcanic rocks in sheared contact with each other. Stratigraphic correlations are not possible.

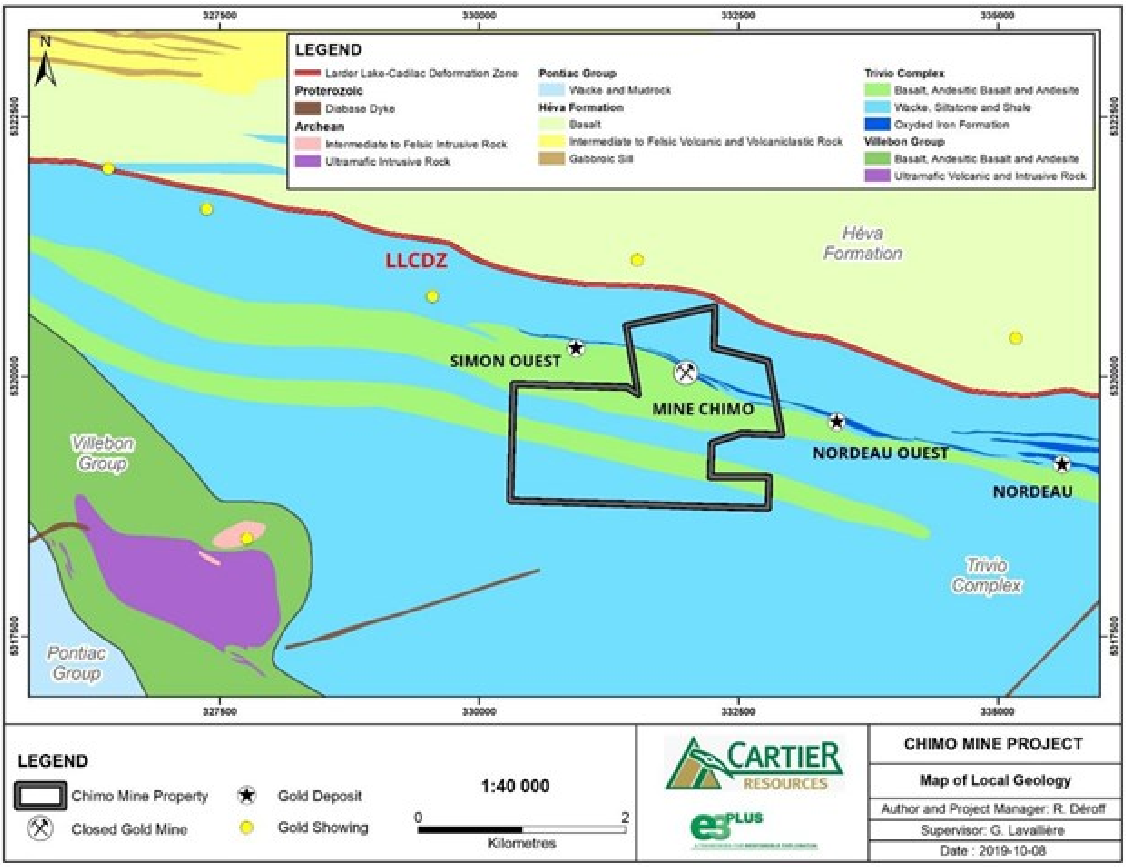


Figure 7.4 – Geologic map of the Chimo Mine Property

Sedimentary rocks form a rhythmic sequence of proximal turbidites, composed of fine-grained quartzofeldspathic sandstone and siltstone, interbedded with magnetite iron formation, coarse-grained feldspathic sandstone and minor polymictic conglomerate.

Volcanic rocks form two main belts (northern and southern) and consist mainly of basaltic and andesitic flows with massive, pillowed and more rarely brecciated facies (Racine 1989; Rocheleau et al., 1997). Layers of volcanoclastic and exhalative rocks interdigitate with sedimentary rocks, indicating that volcanism was active during sedimentation.

7.2.1 Sedimentary bands

The most common sedimentary facies is a rhythmic sequence of fine-grained quartzofeldspathic sandstone and siltstone. The beds range from 5 to 10 cm thick on average, often showing normal grading and alternating with thin interbeds of shale 1 to 5 cm thick. A thin layer of parallel laminae is observed at the top of some beds. In thin section, the sandstone is composed of rounded fragments of feldspar and quartz. Lithic fragments are rare and, when present, appear restricted to coarser-grained beds. The abundant matrix (30-40%) is completely recrystallized as quartz, muscovite, biotite and chlorite.

A magnetite iron formation can be traced on magnetic maps produced by the federal government and in drill holes over a distance of more than 16 km, from the former Chimo mine to the Lac Matchi-Manitou area (Rocheleau et al., 1988). Magnetite beds are interstratified with sandy pelitic beds displaying graded bedding, and they form a folded band ranging in width from 3 to 70 m in the Chimo mine area. The iron formations are characterized by alternating magnetite-rich millimetric to centimetric laminations, white cherty laminations, and green beds of iron silicates with or without magnetite. Under the microscope, magnetite occurs as small irregular grains 0.05 mm in diameter or as poikiloblastic grains 0.3 mm across. Quartz forms a mosaic of 0.05 mm grains and is likely recrystallized chert (Sauvé et al., 1987). Iron silicates include grunerite, ferrohornblende, chlorite and some biotite. Slightly manganiferous almandine garnet was documented in the southern iron formation in the Chimo mine (Sauvé et al., 1987).

A secondary sandy facies consists of coarse-grained feldspathic and conglomeratic (2 to 4 mm) sandstone, chloritized and quartz-poor (<5%). On outcrop, the beds have an average thickness of 15 to 30 cm. The boundaries between the beds are not very sharp. These sandstones are generally massive with no sedimentary structures. Thin interbeds of shale break the monotony of this sequence. In thin section, the coarse sandstone is made up of fragments of plagioclase (albite) in a matrix similar to that of the sandstone described above. The matrix is recrystalized as chlorite, biotite and quartz, and also contains 3 to 7% carbonate minerals (calcite).

The polymictic conglomerate, characterized by pebbles, cobbles and boulders, is generally strongly deformed and occurs as lenticular beds of variable thickness, either massive or showing graded bedding. The proportions of fragments to matrix are particularly difficult to determine due to the high degree of deformation. However, in less deformed areas, the matrix appears abundant enough to support the fragments. The fragments are composed mainly of volcanic rocks, mainly felsic tuffs and crystal tuffs, intrusive rocks of tonalitic composition, and lesser quantities of pebbles of black chert and mafia volcanic rocks. More rarely, it is possible to identify pebbles of felsic volcanic rocks, sedimentary rocks and fuchsite. The matrix is either sandy or silty and of the same composition as the fine-grained quartzofeldspathic sandstone and siltstone facies. These lenticular conglomerate layers are interpreted as filled submarine channels.

7.2.2 Volcanic bands

The mafic and intermediate lavas, mainly basalts and andesites, show massive, pillowed and more rarely brecciated facies. Massive lavas are generally aphanitic, although locally coarse (1 to 2 mm). The pillow lavas are vesicular in places, and the pillows are highly variable in size with very little associated hyaloclastic material. Brecciated lavas are infrequent and generally restricted to thin lenticular horizons. These are usually flow breccias containing fragments of lava rock, relatively abundant (0 to 60%) and small (1 to 5 cm), in a hyaloclastic matrix. Pyroclastics consist of feldspar-rich mafic tuffs: ash tuffs, crystal tuffs, lapilli tuffs and agglomerates. In the vicinity of the Chimo mine, some levels are particularly rich in graphite. In thin section, the observed mineralogy is similar for all volcanic rocks: the mineral assemblage and textures are essentially metamorphic, the rocks being completely recrystallized. The major constituents are quartz, chlorite, actinolite and epidote (zoisite and clinozoisite). A small amount of biotite and opaque minerals (magnetite, ilmenite and pyrite) are present, along with traces of sphene, leucoxene and tourmaline.

7.3 Lithogeochemistry

The following text is taken in part from Moorhead et al. (2000).

Mafic lava analyses reveal some samples with high levels of MgO (10.0%, 13.4% and 17.1%), consistent with magnesian basalt compositions (Rocheleau et al., 1997). Basalts and andesites have Zr/Y ratios ranging from 2 to 6, grouped into two trends: the first, with a Zr/Y ratio of 2.5, would be tholeiitic, and the second, less abundant, with a Zr/Y ratio of 5.5 would be transitional. Volcanoclastic rocks have more felsic compositions (SiO_2 between 53 and 73%), usually dacitic (Rocheleau et al., 1997). They have Zr/Y ratios ranging from 2 to 12.

According to Racine (1989), the northern volcanic belt of the Trivio Complex is composed mainly of tholeiitic basalts, while the volcanics in the southern band are tholeiitic andesites. Lavas have Zr/Y ratios ranging from 2.2 to 5.5; the vast majority of the analyzed lava samples have ratios less than 4, clearly indicating their tholeiitic affinity. The lavas of the two belts form the same linear trend on a Zr-Y diagram, indicating that they are probably comagmatic (Racine, 1989).

7.4 Hydrothermal Alteration

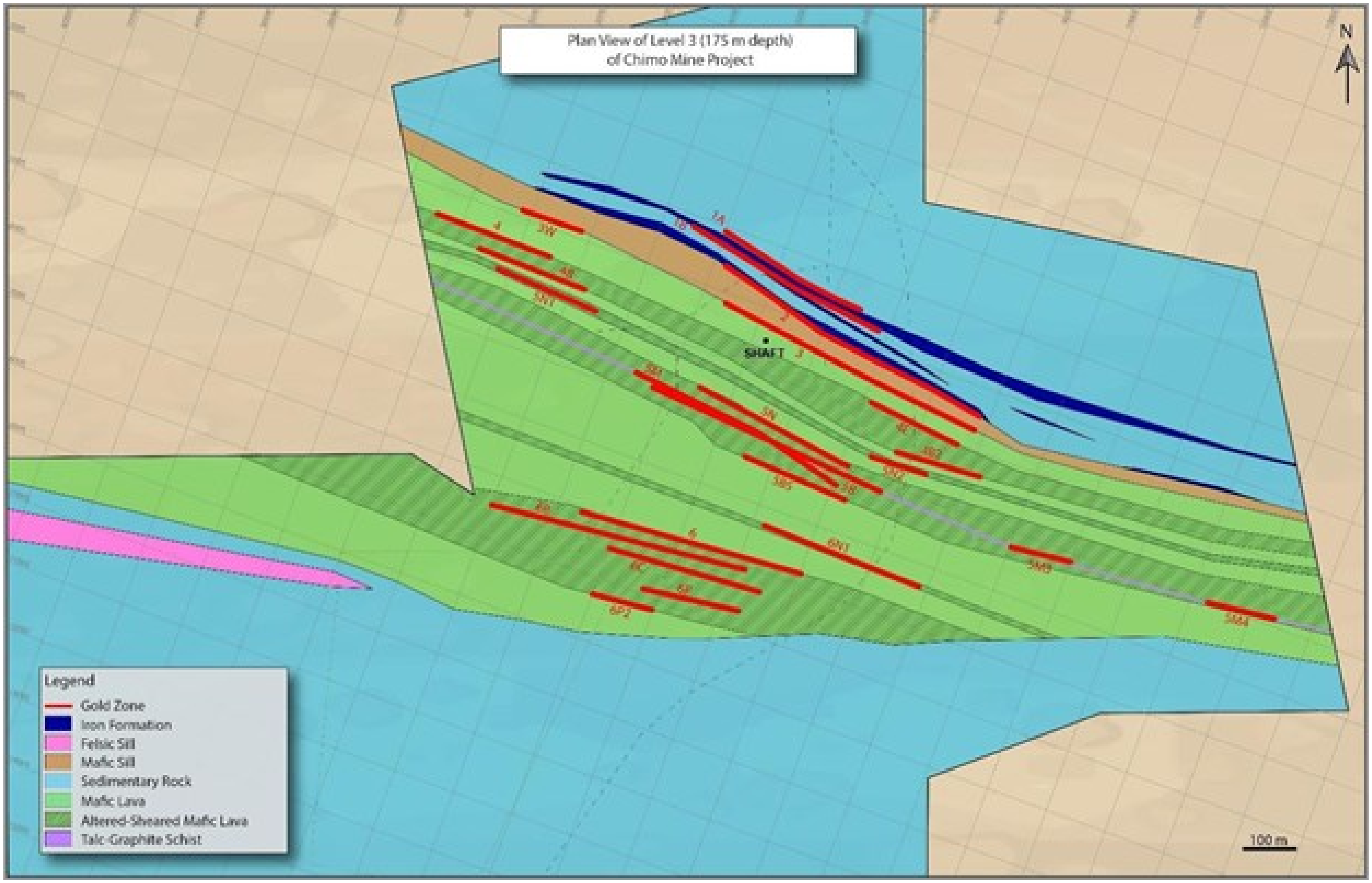
The following text is taken in part from Plouffe (1990).

At the former Chimo mine, mineralized zones and their margins (wallrocks) are characterized by hydrothermal alteration that manifests in different ways depending on the lithology:

- Silicification took place in sedimentary host rocks where iron formations were present. Silicification, typically accompanied by chloritization and biotization, is limited to the immediate wallrock in mineralized areas;
- Carbonatization affects a much larger volume of rock in volcanic or pyroclastic lithologies. Primarily characterized by calcite, chlorite may also be present;
- Tourmalinization affects all the zones, but its distribution is very irregular. It can be found locally along the margins of mineralized veins; and
- Sulphidation manifests as pyrrhotite and coarse arsenopyrite in veins, as semi-massive horizons, or as disseminations in quartz veins and along vein walls. Arsenopyrite replaces pyrite and pyrrhotite.

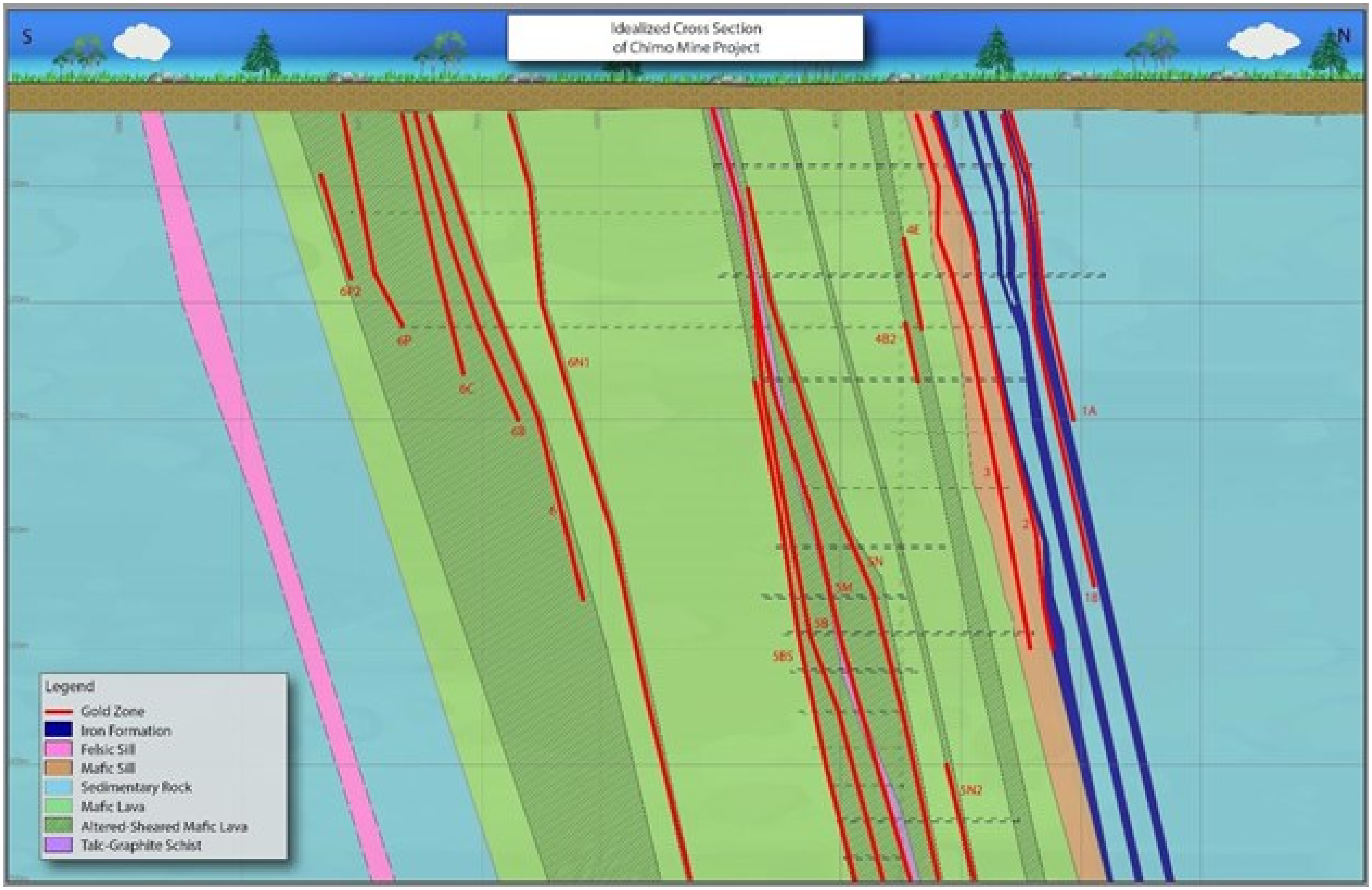
7.5 Mineralization

The following is taken in part from Sauvé et al. (1988) and Plouffe (1990). Mineralization on the Property consists of five main lenses: zones 1 to 3, 5 and 6 (Figure 7.5 and Figure 7.6).



(before the reinterpretation of 2019)

Figure 7.5 – Plan view of level 3 (depth of 175 m) showing the mineralized areas of the Chimo Mine Property



(before the reinterpretation of 2019)

Figure 7.6 – Idealized cross-section (looking west) of the mineralized zones on the Chimo Mine Property

Zone 1 generally follows the northernmost iron formation. Mineralization consists mainly of centimetric to decimetric veinlets of coarse-grained arsenopyrite. Semi-massive layers of pyrrhotite with minor pyrite are sometimes present, but these latter sulphide minerals are almost barren if not accompanied by arsenopyrite. Lenses or veins of white quartz are found along the margins of uneconomic sulphidized areas. Arsenopyrite veins are sometimes deformed into small tight folds and occasionally intersect the bedding at a low angle.

Zone 2 roughly follows the contact between the southernmost iron level and a mafic intrusion. Sulphide minerals are found in a brownish-coloured area rich in biotite. Pyrrhotite and coarse-grained arsenopyrite define thick ribbons parallel to schistosity. The margins of mineralized areas consist of finely ribboned pyrrhotite or disseminated arsenopyrite. Bluish quartz forms irregular lenses and veins and contains visible gold but few sulphides.

Zone 3 is located along the southern contact of the schistose and carbonatized mafic intrusion. Mineralization consists, on average, of 3 to 5% disseminated sulphides and multiple veins of bluish quartz showing good continuity. The veins show ribboning that may include layers of wallrock containing disseminated sulphides. Sulphides consist mainly of fine-grained arsenopyrite with lesser pyrrhotite and small amounts of pyrite and chalcopyrite. Quartz veins contain a lot of visible gold, especially near their borders, but few sulphides.

Zone 5 lies within a schistose and carbonatized greyish lava and includes thin units of graphitic schist. The sheared zone may have followed a thin layer of tuff, but deformation and alteration extended into the surrounding volcanics. In the upper parts of level 5, the main type of mineralization is a large concordant lens of black quartz intersected by numerous graphitic veins. Sulphide content is low, but visible gold is present. At each end, the lens may terminate abruptly against graphitic schist. Elsewhere, the lens splits into parallel quartz veins that locally intersect with each other or intersect schistosity. These multiple digitations or veins give the impression that the wide lens formed gradually by accretion in a dilating zone. The rock encasing the lens of graphitic quartz contains many quartz veins and veinlets that contain only small amounts of arsenopyrite, although greater concentrations are found along the selvages. These veins of quartz and arsenopyrite do not contain graphite. They yield good gold grades but are narrow and lenticular. In the lower parts of level 5, the graphitic quartz lens disappears and gives way to graphite-free quartz veins with borders of disseminated arsenopyrite.

Zone 6 is similar in many ways to Zone 5. It consists of several subparallel en echelon gold-bearing lenses. These lenses are composed of sheared and carbonatized rock of volcanic and pyroclastic origin, injected with multiple lenticular quartz veins. Disseminated arsenopyrite, pyrrhotite and pyrite occur within the veins and along the vein walls. Free gold is found in quartz veins and as scattered fine grains in the selvages or as inclusions in arsenopyrite. Layers of graphitic schist occur in the eastern part of the zone.

Gold appears to be the last metal phase in the mineralized zones of the former Chimo mine. It is preferentially associated with arsenopyrite and some of the quartz veins.

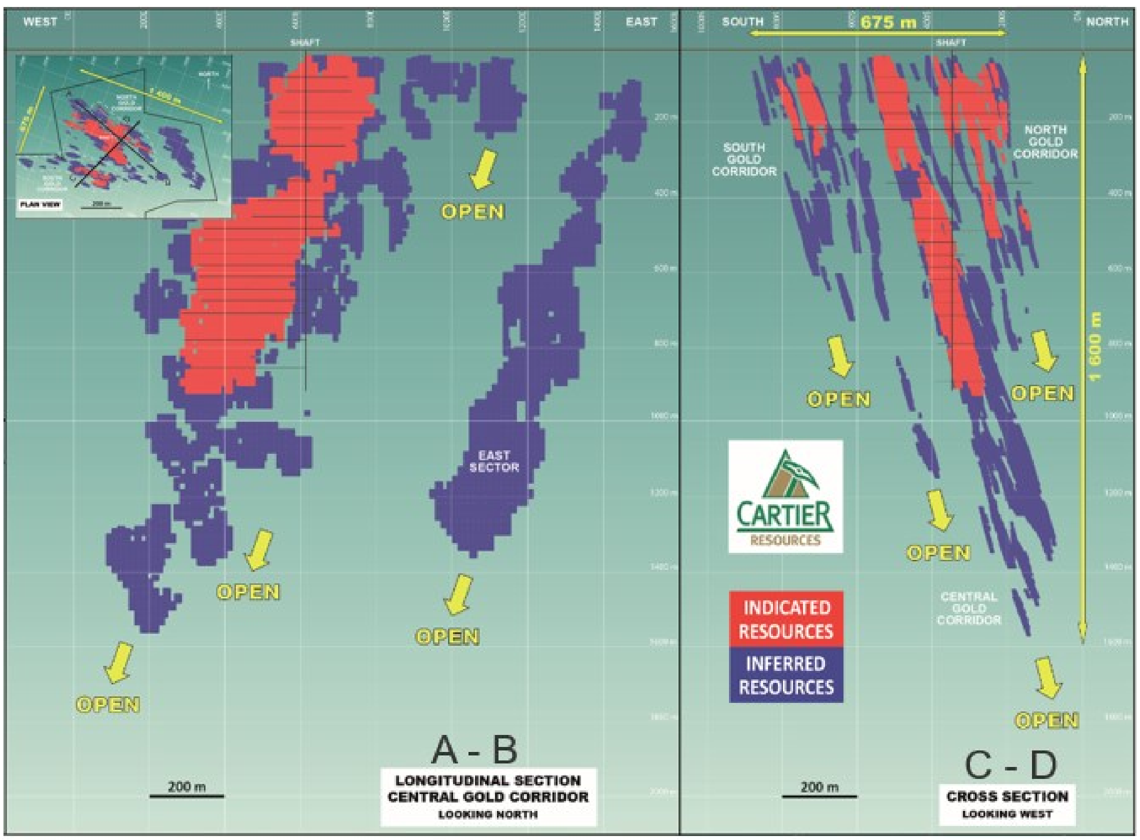
The layers of semi-massive coarse-grained arsenopyrite have consistently elevated gold grades; however, when arsenopyrite is disseminated, the grade is much lower. Massive pyrrhotite and pyrite have negligible gold grades when arsenopyrite is absent.

Quartz veins bordered by disseminated arsenopyrite have good gold grades. Visible gold is present within the veins and along the vein walls. Veins devoid of arsenopyrite have negligible gold grades, with the exception of the graphitic quartz veins that contain visible gold.

Based on the nature of the host rock in the Chimo mine, the mineralized zones have been divided into two types of lode deposits: semi-massive sulphide veins associated with iron formations (zones 1 and 2), and lenticular quartz veins associated with altered volcanic rocks mineralized with arsenopyrite (zones 3, 5 and 6).

It is unlikely that these two types of gold mineralization are genetically distinct since they occur together in the Chimo mine. Mineralization is associated with injections of quartz and sulphide minerals into sheared zones at the contacts between lithologies of contrasting competency and chemical composition.

These contacts promoted the development of deformation and micro-porosity in ductile rock and fracturing and brecciation in more competent rock, and thus the circulation of hydrothermal fluids. The mineralization then appears to be structurally controlled Figure 7.7.



Modified from Cartier Press Release, March 23, 2021

Figure 7.7 – Gold distribution at the Chimo Mine Project showing structural control

7.6 Metamorphism

The following text is taken in part from Moorhead et al. (2000).

In the Trivio Complex, a garnet-hornblende-calcite-quartz±biotite assemblage marks areas with a strong gradient where WNW-ESE faults delimit contrasting blocks of volcanics and sediments. The northern zone contains metasomatic lenses rich in pyrrhotite, with low gold and copper grades. These lenses are oriented N260° to N280°, with dips of 62° to 75° to the north. They range in thickness from 0.5 to 3.0 m. The southern zone extends along the axis of the former Chimo mine and the Nordeau showing, and it corresponds to the contact between volcanic rock and an iron formation. In this area with economic gold concentrations, the garnet-hornblende-calcite-quartz assemblage is accompanied by pyrrhotite, arsenopyrite, chalcopyrite and pyrite.

Berclaz (1993) conducted a mineralogical and geochemical study of the amphibolite- and garnet-rich metasomatized rocks in the volcanic belts of the Trivio Complex. He determined that the volcanic and sedimentary rocks recrystallized into massive amphibolite and garnetiferous aluminous schist in the high-temperature area of a hydrothermal system with a high geothermal gradient. He concluded that this metasomatic episode took place before the main Kenorean phase of deformation and metamorphism underestimated pressure-temperature conditions of 600-700 MPa and 500-580°C (Berclaz 1993). This event is characterized by calcic, ferric and aluminous hydrothermal metamorphism, including almandine garnet, calcic amphibole, calcic plagioclase, biotite, chlorite and pyrrhotite (Berclaz 1993).

7.7 Structure

The following text is taken in part from Rocheleau et al. (1997) and Moorhead et al. (2000).

The Trivio Complex forms a structural discontinuity and represents an area of strong deformation that transects less deformed areas. This lithotectonic domain is characterized by the presence of anastomosing deformation corridors (shear zones and/or brittle faults) of variable widths (metric, decametric and even hectometric), which restrict the structural blocks to hectometric and kilometric size. Deformation intensity (flattening and stretching of geological materials) is relatively low in the centre of the structural blocks but increases significantly as it approaches the deformation corridors where rocks are completely mylonitized. The change from less deformed rocks into mylonites is either gradual (over tens of metres) or sharp (over a few metres).

Regardless of the width of the deformation corridors, all the structural elements (folds, schistosities, lineations, etc.) increase in intensity in the mylonitic zones and are transposed, in some cases forming tectonic layering. The rock changes into chlorite-carbonate schist or amphibolite. Schistosity and shear planes, usually E-W with a steep dip to the north or south, are defined by the alignment of phyllosilicates, mainly biotite and chlorite, and amphiboles. As shown by Racine (1989) for the CLLDZ, schistosity sometimes forms at a low angle to the shear, revealing a dextral component of strike-slip movement at surface. Stretching lineations are generally well developed and always steep, plunging to the east or west.

Within the less deformed structural blocks of these tectonic zones, regional E-W folds can be traced for several kilometres. These folds were mapped in the sedimentary and volcanic rocks of the Trivio Complex.

Two main features reflecting changes in Archean deformation have been documented on the Property:

- Regional pre-deformation phase: characterized by early, isoclinal, very localized folds. The S1 schistosity is difficult to recognize due to overprinting by the regional D2 deformation. Observed only locally in sedimentary rocks and pyroclastics, never in lavas, S1 forms an angle of 10° to 15° with the S2 schistosity (Racine, 1989).
- Regional deformation phase: responsible for the E-W-oriented tectonic grain, major F2 folds and dominant S2 schistosity. Interpreted as flow cleavage, it represents a much stronger structural event than the previous phase of Archean deformation. It is characterized by very tight, isoclinal, generally E-W trending mesoscopic folds, with a variable plunge of 30° to 70° generally towards the NE. Shears, subparallel to the axial planes of the mesoscopic folds, are considered contemporaneous with this phase of deformation. S2 schistosity is subparallel to the axial planes of most mesoscopic F2 folds, and also to the E-W shears and the planes of flattening affecting geological features (pillows, vesicles, clasts and crystals). Microscopically, this foliation is expressed as the preferential alignment of all minerals in the rock, particularly minerals such as chlorite, sericite, biotite and some amphiboles.

7.8 Stratigraphic Relationships

The following text is taken in part from Moorhead et al. (2000).

No U-Pb isotopic dating has been performed on the sedimentary rocks of the Trivio Complex. However, the complex is comparable to other predominantly sedimentary lithotectonic domains in the southern part of the Abitibi Subprovince, to the west of the Property. Detrital zircons from these sequences have been dated by the U-Pb method, yielding maximum ages. These sedimentary sequences include the Kewagama Group (<2687 Ma; Davis, 1991), the Cadillac Group (<2688 Ma; Davis, 1991) and the Pontiac Group (<2688 Ma; Davis, 1991). Further west, the Trivio Complex is in mapping continuity with the Pontiac Group. The age of the Trivio sediments should be comparable to that of the Pontiac.

The volcanic rocks of the Trivio Complex form lenticular bands within a structural complex dominated by sedimentary rocks. Where they have been documented, contacts between volcanics and the encasing sedimentary rocks are sheared (Rocheleau et al., 1997). There does not appear to be any stratigraphic relationship between sedimentary and volcanic rocks. If the Trivio volcanic rocks are allochthonous vis-à-vis the sedimentary rocks, they may have originated in the adjacent volcanic sequences and been imbricated by the thrust faults affecting the Trivio sedimentary assemblage. Mafic volcanics are composed mainly of basalts and andesites of tholeiitic affinity and, to a lesser extent, basalts and andesites of transitional affinity. These tholeiitic lavas are similar to those in the lower part of the Val-d'Or Formation or the Jacola Formation. The presence of magnesian basalts, locally intercalated with bands of Trivio mafic lava (Rocheleau et al., 1997), supports the hypothesis that a portion of the tholeiitic mafic lavas may correlate with the Jacola Formation. Basalts and andesites with transitional affinities are similar to the mafic lavas of the Val-d'Or Formation. Intermediate to felsic volcaniclastics have transitional to calcalkaline affinities and may correlate with the intermediate to felsic volcaniclastics of the Val-d'Or Formation.

In summary, it is plausible that the lenticular bands of volcanic rocks in the Trivio Complex represent sections of the Val-d'Or Formation or, to a lesser extent, the Jacola Formation, which has been thrust southward and imbricated into the Trivio Complex sedimentary assemblage during compressional deformation.

To the west of Lac Trivio, the sheared basaltic and ultramafic lavas of the Piché Group encompass the CLLDZ, at the contact between the sedimentary Cadillac and Pontiac groups. If the same hypothesis used for the lava horizons in the Trivio Complex is applied to the Piché Group, the latter's mafic and ultramafic lavas would represent structural slices of ultramafic-mafic volcanic units from the Val-d'Or Formation, and possibly the Jacola, Dubuisson or La Motte-Vassan formations, thrust southwards and imbricated into the deformed sedimentary units.

8. DEPOSIT TYPES

The following description is taken from Langton et al. (2019) unless indicated otherwise.

Archean orogenic gold deposits are generally defined as structurally controlled vein or shear margin deposits emplaced epigenetically in all lithologies occurring in Archean volcano-plutonic belts (Groves et al., 1998). These gold concentrations are the result of relatively homogeneous hydrothermal fluid flows of variable origin, including metamorphic devolatilization, felsic plutonism and mantle fluids (Hagemann and Cassidy, 2000).

Orogenic gold deposits are emplaced along active convergent margins during compressive tectonic regimes (Groves et al., 1998). This type of setting promotes the flow of hydrothermal fluids along major dislocation zones, which serve as structural traps for gold that precipitates out of solution. The importance of these structures is very clear in the Abitibi, where the vast majority of mines are located within 5 km of major structural discontinuities; however, relatively few deposits are situated at the heart of the main conduits (Eisenlohr et al., 1989, Groves et al., 1998; Robert, 1990), but are preferentially deposited along second- and third-order structures of the regional fracture/shear network, in close proximity to the large-scale compressive structures.

Structural control is predominant at both the mesoscopic and macroscopic scales of mineralization. The brittle to ductile nature of the structural controls is expressed in a wide variety of styles, including (a) brittle faults in ductile shear zones indicating low to high-angle reverse movement, strike-slip or oblique movement; (b) networks of fractures, stockworks or brecciated zones in competent rocks; (c) foliated zones; and, (d) fold hinges in ductile turbidite and iron formation sequences (Groves et al., 1998).

Orogenic gold deposits exhibit strong hydrothermal alteration with lateral zoning composed of mineral assemblage indicative of proximal to distal alteration. These assemblages composed generally of carbonates (ankerite, dolomite and/or calcite) and sulphides (mainly pyrite, pyrrhotite and arsenopyrite), vary with the type of host rock and crustal depth. Alkaline metasomatism is characterized by sericitization or albitization, or by the formation of fuchsite, biotite, alkaline feldspars and/or by chloritization of mafic minerals. Sulphidation reaches a peak in iron formations and in iron-rich host rocks. Greenschist facies alteration of host rocks imply the addition of significant quantities of CO2, S, K, H2O, SiO2, ±Na and light lithophile elements (Groves et al., 1998).

The Property has geological potential for two main types of orogenic gold deposits: Type I greenstone-hosted quartz-carbonate vein type (Dubé and Gosselin, 2007), and Type II BIF-hosted gold mineralization (Robert et al., 2007).

8.1 Gold Deposits Associated with Quartz-Carbonate Veins (Type I)

Type I gold deposits comprise structurally controlled gold mineralization in altered high-strain (shear) zones infilled with quartz or quartz and carbonate veins, parallel with the shear zones, which are most likely to be within the volcanic units. Associated disseminated sulphides include arsenopyrite, pyrite and minor chalcopyrite. Graphitic horizons are common.

The following description is modified from Dubé and Gosselin (2007).

Type I deposits typically occur in deformed greenstone belts of all ages, especially those with variolitic tholeiitic basalts and ultramafic komatiitic flows that are intruded by intermediate to felsic porphyry intrusions, and sometimes with swarms of albitite or lamprophyre dykes. These deposits are distributed along major compressional to trans-tensional crustal-scale fault zones in deformed greenstone terrains, commonly marking the convergent margins between major lithological boundaries, such as volcano-plutonic and sedimentary domains. The large greenstone-hosted quartz-carbonate vein deposits are commonly spatially associated with fluvio-alluvial conglomerate distributed along major crustal fault zones. This association suggests an empirical time and space relationship between large-scale deposits and regional unconformities.

Type I deposits are structurally controlled complex epigenetic deposits characterized by simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins. These veins are hosted by moderately to steeply dipping compressional brittle-ductile shear zones and faults with locally associated shallow-dipping extensional veins and hydrothermal breccias. The deposits are hosted by greenschist to locally amphibolite-facies metamorphic rocks of dominantly mafic composition and formed at intermediate depth (5-10 km).

8.2 Gold Deposits Associated with Banded Formations (Type II)

Type II gold deposits are hosted in or spatially associated with BIF. Gold mineralization is generally located in silicified lodes with disseminated to semi-massive sulphides (arsenopyrite, pyrrhotite and pyrite) spatially related to the BIF. Secondary quartz veining is commonly associated with this type of mineralization.

The following description is modified from Robert et al., 2007.

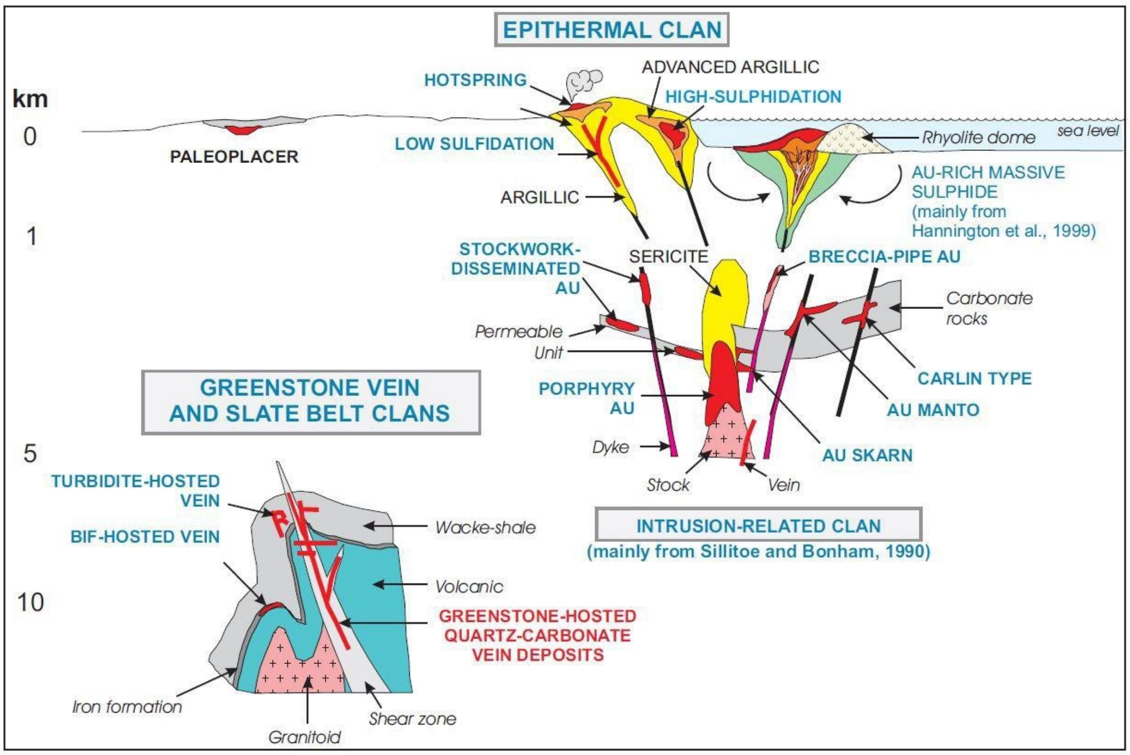
Type II deposits consist mainly of sulphidic replacements of Fe-rich layers in magnetite or silicate-BIF, containing variably-developed quartz veins and veinlets. The intensely mineralized central parts of some deposits consist of nearly continuous wallrock replacements that can obscure their epigenetic character and can lead to ambiguities about the timing of mineralization.

Type II deposits occur in greenstone belts that are either volcanic dominated or sediment dominated, where they are located stratigraphically near regional volcanic-sedimentary transitions. These deposits may also occur near the edges of large clastic sedimentary basins, in the absence of significant mafic volcanic rocks. Magnetite-BIF is the dominant host in greenschist grade rocks, whereas silicate-BIF prevail in rocks of mid-amphibolite grade or higher.

At the local scale, Type II deposits are commonly associated with the hinge areas of folds and with intersections of shear zones and faults. As a consequence, the deposits are commonly stratabound and plunge parallel to their host fold hinge or to the line of intersection between controlling shear zones and the BIF unit. In greenstone belts, many BIF-hosted deposits also contain concentrations of intermediate to felsic porphyry stocks and dykes.

The best intersections from the various recent and historical drilling campaigns on the Property consistently occur at or near the contacts of the iron formation. However, the mineralized zones are not present along the entire BIF/country rock contact but instead appear to cross-cut stratigraphy. It is envisioned that a mineralized hydrothermal ″front″ cut the stratigraphy, depositing gold-bearing sulphides at the iron formation horizons. It is generally accepted that the fluids that precipitated gold-bearing quartz veins in the LLCDZ were not locally derived, and it is assumed that the close association between iron formation and gold mineralization along the mineralized horizon that transects the Property is the result of a chemical interaction at the iron-rich horizons rather than the existence of primary auriferous iron formation.

The two gold deposit types described above, belong to the Greenstone Vein and Slate Belt "clans", shown in Figure 8.1 at their inferred crustal level of formation. Although sulphides are associated with the gold mineralization on the Property, the discovery of significant base metal deposits is not likely as the Property's geological environment appears to be relatively distal to any paleo-volcanic centre.



(Dubé et al., 2007)

Figure 8.1 – Schematic illustration of different types of gold deposits

8.3 Gold Mineralization East of the Val-d'Or District

The following text is taken in part from Rocheleau et al. (1997) and Moorhead et al. (2000).

The area to the east of the Val-d'Or district (about 20 km from the city of Val-d'Or) is host to a multitude of mineralized showings, deposits of gold and massive sulphides, and former mines (Louvicourt, Louvem, Béliveau, Sigma 2, Monique, Beaufor and Chimo).

The gold deposits have a number of common parameters: epigenetic-type mineralization, dominant structural control, and the physical and chemical behaviour of the host rock affected by variable degrees of extensive metasomatism. Although all stratigraphic units in the region carry gold, there is a frequent association with synvolcanic or at least pre-orogenic intrusions (quartz-feldspar porphyries, dioritic sills and dykes, and the granodioritic Bevcon pluton).

The structural aspect seems common to all deposits: mineralized zones are associated with shears, faults, tension fractures and/or tectonic breccias. Ductile-brittle and brittle deformation appear to be the dominant controls on gold mineralization, as is the case with many other Abitibi Greenstone Belt deposits (Colvine et al., 1988).

The gold potential of metasomatized E-W shear zones has been clearly established in the region (Gaudreau et al., 1986; Rocheleau et al., 1987). In addition to acting as a conduit for hydrothermal fluids, these shear zones are at the contact between rocks of different competencies and compositions, thus promoting fracturing and gold precipitation. Mineralization is generally found in E-W quartz or quartz-carbonate veins and lenses, generally subparallel to shear zones and the regional S2 schistosity. The walls of the shear zones are sometimes fractured and transformed into mineralized tectonic breccias. In some places, tension fractures (Riedel shears) developed at an angle of 15° to 75° with the shear C planes and were then infilled with subvertical mineralized veins. Another type of mineralized vein, decimetric in size, is also found in generally subhorizontal to shallow dipping tension fractures.

Hydrothermal metamorphism is very evident in the Chimo mine area along the CLLDZ. The information gathered in this area sheds light on the physico-chemical conditions involved in the formation of some epigenetic deposits where mineralizing fluids circulated in settings with high geothermal gradients.

9. EXPLORATION

No exploration has been conducted on the Property since July 2020.

10. DRILLING

10.1 Drilling Methodology

Cartier's drilling programs tested the geometric extensions of gold zones along the intersections between two deformation systems. Longitudinal sections (looking north), cross-sections (looking west) and plan views were used to increase the accuracy of the intersection angles (as perpendicular as possible to strike and dip). During the planning stage and when monitoring the drilling every 3, 6 or 9 m, Cartier used Devisoft software and the Geotic software suite (GeoticLog, GeoticGraph, GeoticCAD and GeoticMine) for all geomatics operations.

Drill collars were positioned using three comparable readings taken with a Garmin 60CSx GPSmap (coordinate system: UTM, NAD 83, Zone 18). The collars were then marked with a wooden stake flagged with orange, fluorescent tape inscribed with the hole number and the intended direction and plunge of the hole. A TN14 Gyrocompass from Reflex Instruments was used to align the drill rig. The gyroscope in this device detects geographical north by its sensitivity to the Earth's rotation. It is not affected by interference from highly magnetic ground or by the drift effect.

Access to some drill sites is afforded by an old network of forestry trails and roads. These were restored to a useable condition to minimize the environmental impact and maximize employee safety. New access roads were built to reach other sites. Any trees, shrubs and alders growing on the drill sites or access roads were shredded by contractor F. Alarie of Val-d'Or and used as ground cover.

At the end of each drilling program, Cartier closed the drill sites by inspecting the area and removing any waste left behind after the rig was demobilized. Anchor casings were left in place and secured with bolted steel caps to prevent debris from falling inside, with the exception of abandoned holes. Aluminum tags with the engraved hole number were attached to the base of the casing and the top of the 2-m rod connected to the steel cap. Drill sites with suitable soil composition and light exposure were seeded.

10.2 Drill Hole Deviation

The first deviation measurement in each hole was taken with an EZ-GYRO device (Reflex Instruments), 9 m past the bedrock contact. Drilling continues if the value corresponds to the desired azimuth and plunge. If the value is too far off (azimuth and/or plunge), the hole is pulled out and restarted until the measurement in the bedrock is satisfactory.

Deviation tests are then carried out every 3, 6 to 9 m down the hole, depending on whether one or two core barrels are used.

Despite these protocols, some holes still deviate from the intended trajectory. In such cases, Cartier uses Devico's DeviDrill technology to correct the hole plunge or azimuth and quickly reposition the hole along the planned trajectory. DeviDrill tests are carried out every 3 m to quickly obtain deviation readings and determine the next action to be taken.

At the start of each day or when a DeviDrill intervention is underway, the project geologist collects the readings from the drilling foreman. The deviation data, once filtered and validated, are added to the GeoticLog database. Cartier's geomatics senior geologist can generate the drill hole trace and, if necessary, stop the hole to reposition it.

10.3 Core Logging Procedures

The core is recovered by the wireline technique. It is removed from the salvage casing by the driller helper and placed in wooden boxes. A wooden block is placed at the end of each 3-m run or closer if a DeviDrill correction is underway. Once the boxes are filled, they are sealed with metal staples.

Every morning or when the hole intersects the target, the foreman brings the boxes to Cartier's core shack in Val-d'Or. If the geologist halts the drilling, they become responsible for bringing the boxes to the core shack.

A Cartier employee halts drilling once the hole has passed through the target, with a high degree of confidence, by approximately 5 m.

A detailed log of the drill core is documented by experienced and qualified geologists, who are members in good standing of the OGQ. Geologists record their descriptions of lithological units, alteration, structures, veins and mineralization in GeoticLog software.

The core boxes, up to 30 at a time, are arranged on tables in rows of four or five for core logging. Geologists check the box numbers and the markings on the blocks inserted by the driller helper for any errors in numbering or footage. The core is aligned, and the pieces are fitted together to eliminate gaps. The footage interval of each box is recorded in the log. Lastly, the core is wetted, and a single photograph is taken of each row of boxes.

RQD and the core recovery are calculated for mineralized zones and their wall rocks (over a 15-m core length on each side of the mineralized zone). RQD is calculated by measuring each section of core 10 cm or longer. These sections are summed within each interval of 3 m, the distance between two blocks of wood (i.e., a drilled interval) and represented as a percentage. Core recovery is also calculated as a percentage. Recovery of 100% means that 3 m of core has been placed into the box between the two blocks of wood representing a 3-m run.

10.3.1 Core storage

The technician attaches a Dymo-embossed aluminum tag to the front of each box containing core of interest (mineralization and/or characteristic stratigraphy typical of the sector) the remaining core boxes are properly disposed. The aluminum tag displays the drill hole number, box number and from-to interval. After each drilling program, all boxes of barren core (no significant gold values) or core of no interest to the current drilling objective are placed on securely wrapped and tied wooden pallets and stored outdoors on the premises of MNG Services Ltd ("MGN") (Val-d'Or) temporarily. MNG is free to discard these core boxes at any time and retain the pallets for future use.

Boxes containing core of interest (numbered boxes with aluminum tags) are stacked on other pallets, wrapped, tied and placed in medium- to long-term storage inside the MNG facility. Cartier employee writes (with a permanent black marker) the drill hole ID and/or the pallet number on the pallet in order to quickly track it down if needed for review. The best gold-bearing sections are kept inside Cartier's core shack for quick and easy access as needed.

10.4 2016-2020 Drill Programs

Cartier initiated its first drilling program on November 1, 2016 and has drilled 124 holes since then for a total of 58,053 m and 21,865 samples (Table 10.1 and Figure 10.1). Drilling was divided into four phases to test the deep geometric extensions of the Property's three gold corridors. The objective was to expand the known gold zones and enhance the discovery potential for new gold zones.

Table 10.2 presents the significant results of the 2016-2020 Drill Programs.

Figure 10.2 shows a cross-section of selected DDH on the South, Central and North corridors.

Table 10.1 – Summary of the 2016-2020 Drill Programs

Phase	Year	Nbr of holes	Total length (m)	Nbr of samples for gold analysis (excl. QA/QC)	Corridor
1	2016-18	72	34,332	13,776	North, Central and South
2	2018-19	33	13,248	4,502	North, Central and South
3a	2019	4	1,663	707	North and Central
3b	2019-2020	15	8,810	2,880	North and Central
Total	**2016-19**	**124**	**58,053**	**21,865**	

Table 10.2 – Significant results of the 2016-2020 Drill Programs

<table>
<tr><th>Gold Corridor</th><th>Gold Structure</th><th>Gold Zone</th><th>Drill Hole</th><th>From (m)</th><th>To (m)</th><th>Core Length (m)</th><th>Au (g/t)</th></tr>
<tr><td rowspan="4">North</td><td rowspan="2">2</td><td rowspan="2">2B</td><td>CH16-01</td><td>279.0</td><td>286.0</td><td>7.0</td><td>8.2</td></tr>
<tr><td>incl.</td><td>280.0</td><td>282.0</td><td>2.0</td><td>25.5</td></tr>
<tr><td rowspan="2">3</td><td rowspan="2">3E</td><td>CH19-50</td><td>453.3</td><td>458.3</td><td>5.0</td><td>5.0</td></tr>
<tr><td>incl.</td><td>457.3</td><td>458.3</td><td>1.0</td><td>11.8</td></tr>
<tr><td rowspan="11">Central</td><td rowspan="3">5B</td><td>5B</td><td>CH17-46BE1</td><td>1235.6</td><td>1253.0</td><td>17.4</td><td>1.4</td></tr>
<tr><td rowspan="2">5B4</td><td>CH19-55B</td><td>1361.0</td><td>1377.0</td><td>16.0</td><td>6.7</td></tr>
<tr><td>incl.</td><td>1371.0</td><td>1375.0</td><td>4.0</td><td>20.8</td></tr>
<tr><td rowspan="3">5C</td><td>5C</td><td>CH17-47E</td><td>1474.0</td><td>1480.0</td><td>6.0</td><td>2.7</td></tr>
<tr><td rowspan="2">5CE</td><td>CH19-54D</td><td>1137.0</td><td>1155.0</td><td>18.0</td><td>2.7</td></tr>
<tr><td>incl.</td><td>1153.0</td><td>1155.0</td><td>2.0</td><td>20.4</td></tr>
<tr><td rowspan="4">5M</td><td rowspan="2">5M</td><td>CH17-46AE1</td><td>1148.0</td><td>1165.0</td><td>17.0</td><td>2.5</td></tr>
<tr><td>incl.</td><td>1162.0</td><td>1164.5</td><td>2.5</td><td>12.2</td></tr>
<tr><td rowspan="2">5M2</td><td>CH17-46A</td><td>1102.0</td><td>1110.0</td><td>8.0</td><td>3.9</td></tr>
<tr><td>incl.</td><td>1108.0</td><td>1110.0</td><td>2.0</td><td>14.6</td></tr>
<tr><td>5N</td><td>5NE</td><td>CH18-52A1E</td><td>698.0</td><td>755.0</td><td>57.0</td><td>2.5</td></tr>
</table>

Gold Corridor	Gold Structure	Gold Zone	Drill Hole	From (m)	To (m)	Core Length (m)	Au (g/t)
			incl.	702.0	708.0	6.0	10.6
	6N1	6N1	CH18-48A	959.0	979.1	20.1	2.5
			incl.	975.5	979.1	3.6	7.7
South	6	6	CH19-59	211.6	232.5	20.9	1.2
	6B	6B	CH19-61	675.0	690.0	15.0	1.4

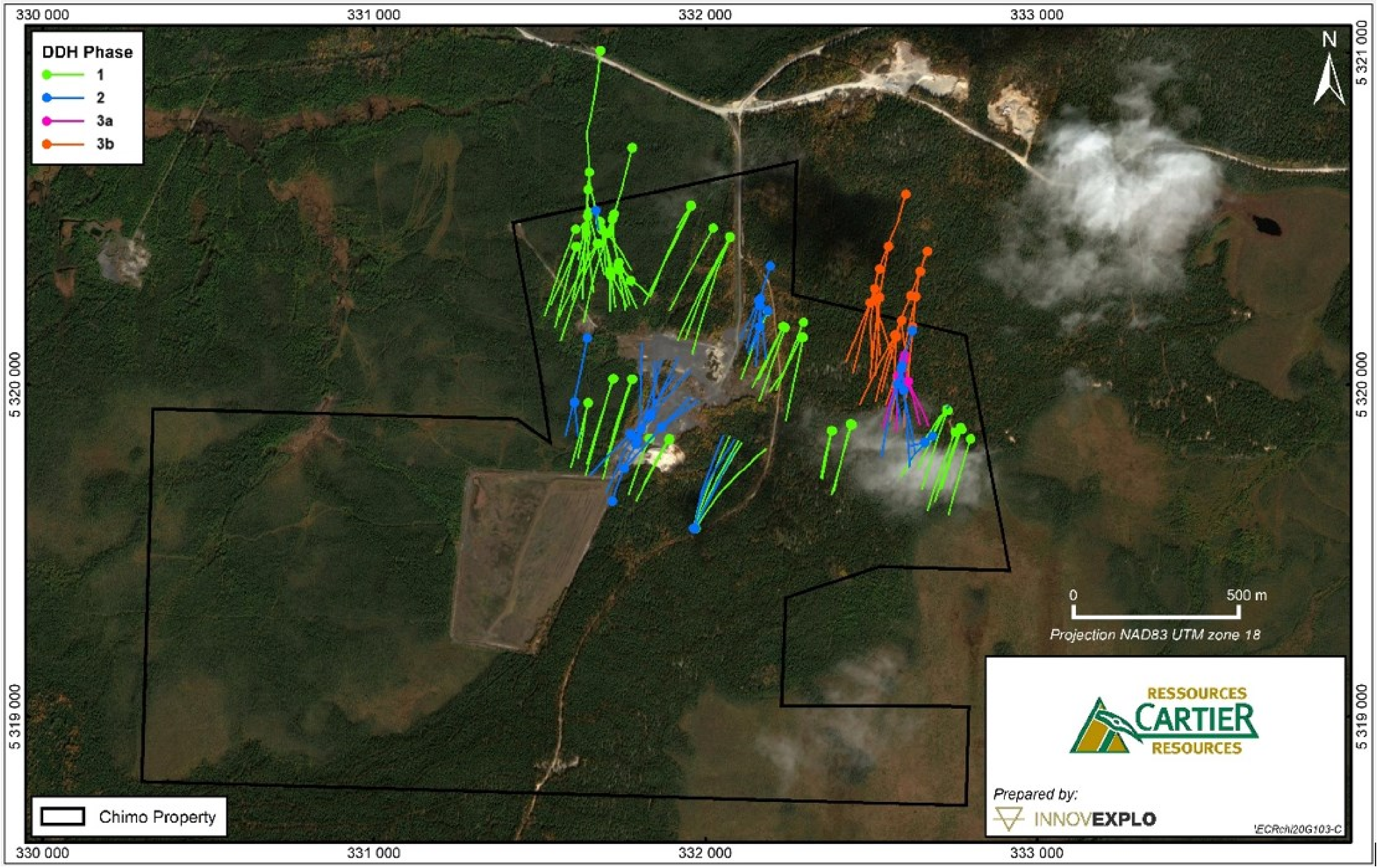


Figure 10.1 – Surface map of drill holes on the Chimo Mine Property

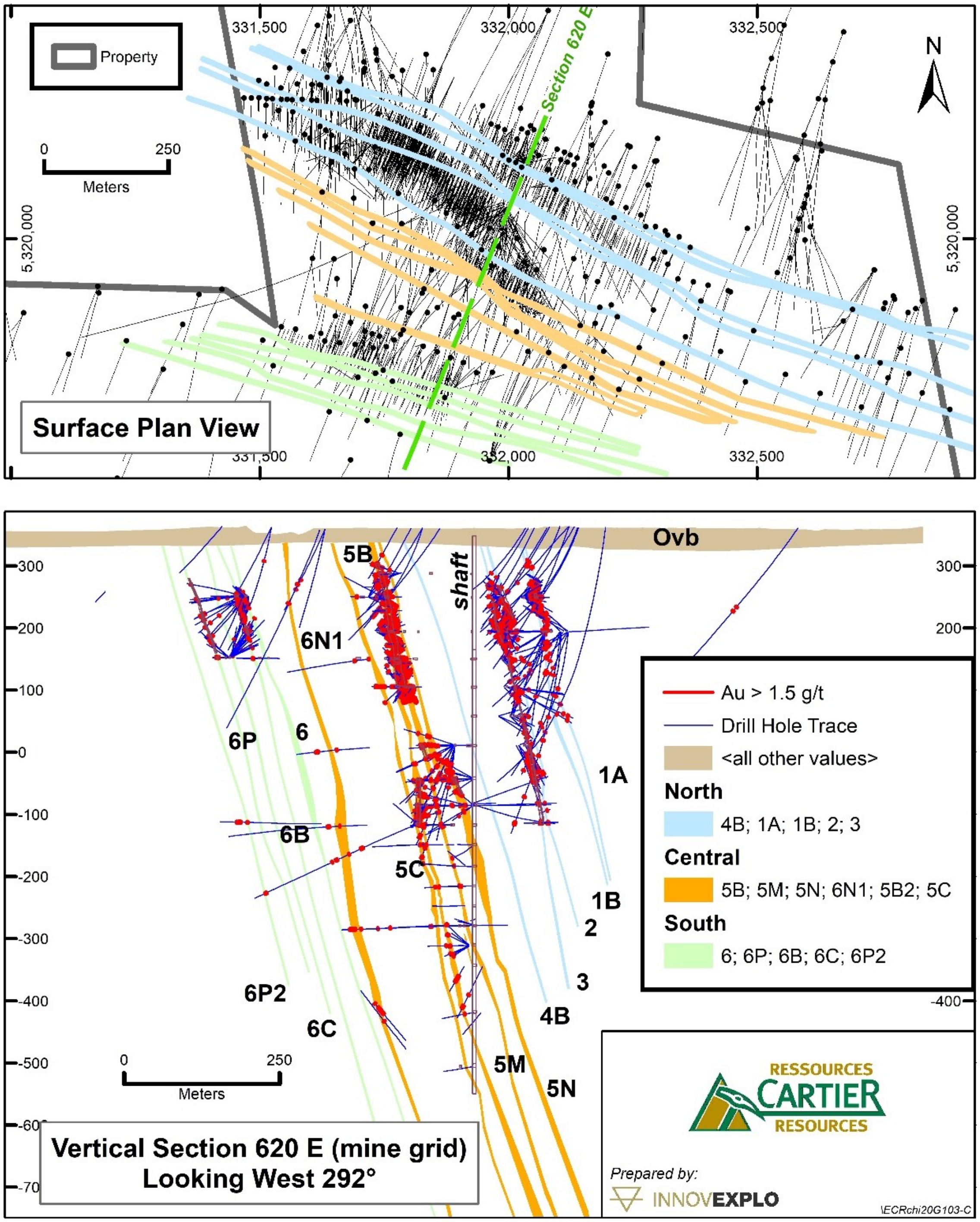


Figure 10.2 – Cross-section (looking west 292) of the main gold areas in the South, Central and North Gold Corridors

Phase 1, completed between November 1, 2016, and August 21, 2018, consisted of 72 holes totalling 34,332 m. The first objective was to test the geometric extensions of zones 5B, 5B2, 5C, 5M, 5M2 and 5N (structures 5B, 5B2, 5C, 5M, 5M2 and 5N of the Central Corridor) below the old Chimo mine between depths of 900 and 1,500 m. Holes CH17-

46 and CH17-47 account for a third (10,113 m) of Phase 1 drilling. The second objective was to delineate the geometric extensions of the satellites zones 2, 2B, 2W, 3, 3W, 3E, 4B and 4B2 between depths of 200 and 700 m (structures 2, 3 and 4B of the North Corridor), zones 5B3, 5B4, 5M3, 5M4, 5NE and 6N1 between depths of 200 and 500 m (structures 5B, 5M, 5N and 6N1 of the Central Corridor) and zones 6, 6B, 6P and 6P2 between depths of 300 and 600 m (structures 6, 6B, 6P and 6P2 of the South Corridor).

Phase 2, which took place between July 26, 2018, and February 26, 2019, consisted of 33 holes totalling 13,248 m. The objective, was to expand the geometry of zones 2B and 3E between depths of 400 and 600 m (structures 2 and 3 of the North Corridor), zones 5B4, 5M4, 5NE and 6N1 between depths of 600 and 1,100 m (structures 5B, 5M, 5N and 6N1 of the Central Corridor), and Zone 6P2 between depths of 300 and 700 m (structure 6P2 of the South Corridor).

Phase 3a was conducted from February 28 to May 22, 2019, and consisted of four (4) holes totalling 1,663 m. The objective was to test, in the East Sector of the Property, the geometric extensions of zones 5B4, 5M4 and 5NE between depths of 600 to 800 m (structures 5B, 5M and 5N of the Central Corridor). At the same time, the holes crossed and tested the northern Corridor.

Phase 3b, conducted from November 19, 2019 to June 27, 2020, consisted of 15 holes totalling 8,810 m. The holes were drilled in the East Sector of the Property and demonstrate the continuity of mineralization in zones 5B4, 5M4 and 5NE over a depth of 1.3 km. Drilling also led to the discovery of Zone 5CE and revealed the potential to add resources in this part of the property.

The best gold values are grouped by gold corridor. The Central Corridor, containing zones 5B, 5M, 5B4, 5NE and 6N1 (structures 5B, 5M, 5N and 6N1), appears to have the best potential for delineating significant gold resources and the most promise for discovering new zones.

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

This item describes the issuer's sample preparation, analysis and security procedures for the 2016-2020 diamond drilling campaigns (the "2016-2020 Drill Programs") including the QA/QC procedures and results. The issuer's geology team provided the information discussed below. The information presented in this item is based on Savard and D'Amours (2020) and was reviewed and validated by InnovExplo.

11.1 Core Handling, Sampling and Security

The drill core was boxed and sealed at the drill rigs and driven daily to the logging facility in Val-d'Or, where a technician took over the core handling. The drill core was logged and sampled by professional geologists or under their direct supervision by a geologist-in-training.

After logging the core, it was marked with a red grease pencil for metal assaying. As a general rule, only mineralized zones were sampled. To be as representative as possible, the sample intervals respected lithological and/or alteration contacts.

The sample length was 0.5 to 1.0 m in mineralized structures and 1.0 to 1.5 m in wall rocks. Sample intervals were recorded in the GeoticLog software, as well as in the sample tag notebook. Each sample ticket consisted of three sections (tags). The first records the sampled interval, project name, drill hole number, date and type of analysis required; the second records the sampled interval and type of analysis required; and the third records the type of analysis required. The first tag stayed in the notebook as a reference, while the other two were detached and placed in the core boxes at the beginning of each sample. As samples were removed, the second tag was stapled in the bottom of the box to act as a reference or control, while the third tag was placed in the sample bag along with the sample for shipment to the laboratory.

For lithogeochemical sampling (major and trace elements), the core was marked with a blue grease pencil. The length of lithogeochemical samples was always 0.2 m. The rest of the procedure was exactly the same as the metal assay sampling procedure.

QA/QC sample tags were also placed in the core boxes. Once core sampling was complete, the sampling technician would add the corresponding barren ("blanks") and standard samples (certified reference materials or "CRMs") to the shipments. For each shipment of 100 samples, no less than five (5) blanks and five (5) CRMs were included with the core samples.

After the geologist marks the samples, the core boxes are sent to the core sawing room. Sawing is carried out by qualified technicians or day labourers under the supervision of the geologist responsible for the core logging, who is also responsible for overseeing and ensuring that the protocols are followed.

The core is broken into portions that will fit into the rock saw operated by a pneumatic pump. The whole core is then sawn down the long axis along the red line previously marked by a geologist. Once the core is completely sawn, one half, along with the third section of the sample tag, is placed in a clear plastic bag on which the technician wrote the sample number beforehand with a permanent marker. The sample number corresponds to the one written on the sample tag by the geologist. The other half of the sawed core is left in the box and can be used as a reference (witness core) if a review is necessary. The second section of the tag is stapled in the bottom of the box and thus marks the beginning of each sample.

The technician then seals the plastic bag with staples, and once seven (7) samples have been sawed, they are placed in a polypropylene bag on which the company name, sample intervals and number of samples are indicated with a permanent black marker.

A shipping form is filled out by the project geologist, providing information on sample numbers, the number of samples, the type of analysis required and the turnaround time (in working days).

For Phase 1 (2016), a carrier picked up the samples and delivered them to the laboratory. Samples from Phase 2, 3a and 3b (2017-2019) were delivered by the technician.

When the samples are received at one of the laboratories, a laboratory employee verifies the compliance of the shipment and sends the Cartier project geologist a LIMS (Laboratory Information Management System) file that contains a confirmation of the order and the analytical requirements.

Once the results of the tests are received and the final certificate has been signed by the chemist, all pulps sent back by the laboratory are automatically brought to an eco-centre in accordance with municipal regulations on waste disposal. Analytical rejects are also discarded, except those for samples from mineralized (gold-bearing) zones. These rejects are placed on wooden pallets, numbered with a permanent black marker, wrapped, tied and stored indoors at MNG for the duration of the project.

11.2 Laboratory Accreditation and Certification

Samples from Phase 1 of the 2016-2020 Drilling Programs were sent to Accurassay Laboratories Ltd. (“Accurassay”) in Rouyn-Noranda for sample preparation and analysis. The Phase 2, 3a and 3b samples were sent to Activation Laboratories Ltd (“Actlabs”) in Val-d’Or for sample preparation, and then to Ste-Germaine-Boulé facility for analysis.

Accurassay and Actlabs facilities have received ISO/IEC 17025 accreditations through the SCC. They are commercial laboratories independent of the issuer and have no interest in the Project.

In 2017, AGAT Laboratories Ltd (“AGAT”) acquired Accurassay in Rouyn-Noranda.

11.3 Laboratory Preparation and Assays

Accurassay (now AGAT)

- Samples are sorted, bar-coded and logged into Accurassay’s LIMS program. They are then placed in the sample drying room.
- Samples are crushed to 85% passing 10 mesh (2 mm) or less (1.7 mm), and split using a Jones riffle splitter. A 250-g split is pulverized to 85% passing 200 mesh (0.07 mm). Only 50 g of this 250 g will be used for the analysis (ALP1). The remaining 200 g were returned as pulp to the issuer office, along with the reject from the original sample.
- Gold analysis is performed on a 50 g pulp using the fire assay method (ALFA2) and measuring the concentration by atomic absorption (“AA”). Samples with a value between 1.0 and 5.0 g/t Au are re-analyzed by atomic absorption

(ALFA2) and those with a value greater than 5.0 g/t Au are reanalyzed with a gravity finish (ALFA7). For samples containing visible gold, 1,000 g of rock is directly analyzed by the metallic sieve method (ALPM1). Finally, all samples with a gold content of 1.0 g/t or more are analyzed at least twice.

Actlabs

- Samples are sorted, bar-coded and logged into the Actlabs LIMS program. They are then placed in the sample drying room and dried at 60°C.
- Samples are crushed to 80% passing 8 mesh or less (2.36 mm) and split using a Jones riffle splitter. A 500-g split is pulverized to 90% passing 200 mesh (0.07 mm). Only 50 g of this 500 g is used for the analysis itself (RX-1: 500). The remaining 450 g are returned as pulp to the issuer's office, along with the reject from the original sample.
- Gold analysis is performed on a 50 g pulp using the fire assay method (1A2-50) and measuring the concentrations by AA. Samples with a value between 1.0 and 5.0 g/t Au are re-analyzed by AA (1A2-50), and those with a value greater than 5.0 g/t Au are reanalyzed with a gravity finish (1A3-50). For samples containing visible gold, 1,000 g of rock is directly analyzed by the metallic sieve method (1A4). Finally, all samples with a gold content of 1.0 g/t or more are analyzed at least twice.

11.4 Quality Assurance and Quality Control

As part of the issuer's QA/QC program, Cartier closely monitors the test results sent from the laboratory for evidence of contamination or error in the analytical process.

The QA/QC program includes insertion of blanks and standards (CRMs) in the flow stream of daily core samples. One (1) blank and one (1) CRM are inserted by professional geologists for each batch of 20 samples. There is no systematic insertion of duplicates, but the analytical protocol ensures that all samples that assay 1.0 g/t or more are re-analyzed at least once and, depending on the result, up to four times. In 2017, Cartier selected 31 samples for verification at a second laboratory (AGAT) using rejects. According to the current database, no QA/QC samples were added until 2016. From 2016 to 2020, Cartier analyzed 1,199 blanks, and 1,191 CRM standards.

According to Cartier's protocol, each certificate of analysis is carefully checked as soon as it is received. The acceptability limit for a blank is three times the detection limit (i.e., 15 ppb Au for Accurassay and 24 ppb Au for Actlabs). If a blank returns a value beyond this threshold, the entire batch containing the blank is re-analyzed at no cost to Cartier. However, if a high value precedes the failed blank or if the following analyses do not contain high values a greater tolerance is permitted, and the batch does not necessarily require re-analysis. Cartier has a similar protocol for monitoring standards. The acceptability limit is three times the standard deviation ("3SD"). If a standard returns a value beyond this threshold, the entire batch containing the failed standard is re-analyzed at no cost to Cartier. However, if samples that precede or follow the failed standard have not returned an anomalous gold value, re-analysis is not required.

In the data from 2016 to 2020, Cartier identified some anomalies in both blanks and standards, but in each case, the geologist did not consider it appropriate to request re-assays after considering the results before and after the failed QA/QC sample.

By the end of 2016, the high failure rate of standards prompted Cartier to request a meeting with Accurassay managers. Following this meeting, Cartier concluded that a personnel problem was at the root of these analytical errors. This lack of rigour led Cartier to terminate the analytical contract with Accurassay immediately. Following a call for tenders in 2017, Actlabs was selected to prepare and analyze samples for future drilling programs on the Property.

11.4.1 Certified reference materials (standards)

Accuracy and Actlabs were monitored by inserting CRMs from Ore Research at a ratio of one for every 20 samples (1:20). The definition of a QC failure is when an assay result falls outside 3SD. Gross outliers are excluded from the standard deviation calculation.

For the 2016-2020 Drill Programs, a total of 1,190 standards were assayed using 12 different CRMs. The grades of the standards ranged from 0.504 g/t to 14.18 g/t for gold. A total of 11 standards returned results outside 3SD, for an overall success rate of 98.7% (Table 11.1). For standards with less than 25 samples, the relative standard deviation from Ore Research was used. In the case where a gross outlier was identified, the issuer took actions to explain the cause of the abnormal value (e.g., incorrect submissions to the laboratory or sequencing issues).

Overall, the results exhibit a slight negative bias in terms of accuracy with an average of -2.51% for representative standards. The overall precision for the CRMs is between 2.2% and 10.4%. Four (4) CRMs show an accuracy above 5% and a negative bias, however these CRMs represent only very limited data making it difficult to draw any conclusions.

The QPs are of the opinion that the QA/QC results for the standards used during the issuer's 2016-2020 Drill Programs are reliable and valid.

Table 11.1 – Results of standards used in the 2016-2020 Drill Programs

CRM	CRM Value (g/t Au)	Quantity Inserted	Average (g/t Au)	Accuracy %	Precision %	Outliers	Gross Outliers	% passing Outlier
AU_LG1	0.514	20	0.4447	-13.5	10.4	0	0	100.0
AU_LG	0.504	8	0.5098	1.2	6.3	2	1	75.0
AU_MG	1.062	367	1.0671	0.5	3.5	3	0	99.2
AU_MG1	1.559	18	1.3851	-11.0	8.4	0	0	100.0
AU_MG2	1.58	8	1.4543	-8.0	7.8	0	0	100.0
AU_MG3	3.54	74	3.5738	1.0	3.9	0	0	100.0
AU_MG4	5.45	59	5.3564	-1.7	4.6	0	0	100.0
AU_MG5	6.66	255	6.7147	0.8	2.6	3	0	98.8
AU_HG	10.5	10	9.7020	-7.6	5.8	1	1	90.0
AU_HG1	11.95	53	11.9116	-0.3	4	1	0	98.1
AU_HG2	12.11	261	12.1546	0.4	2.2	3	0	98.9
AU_HG3	14.18	57	13.7877	-2.8	5.5	0	0	100.0

11.4.2 Blanks

Contamination is monitored by the routine insertion of a barren sample (blank) that goes through the same sample preparation and analytical procedures as the core samples. The Issuer arbitrarily acceptability set the limit was arbitrarily (by the issuer) set at five times the detection limit (green line). In the graphs, this is shown as a green line and the red line indicates 10 times the detection limit.

A total of 1,199 blanks were inserted in the batches from the 2016-2020 Drill Programs.

Figure 11.1 shows the results of the 2016 blanks sent to Accurassay and Figure 11.2 shows the results of the 2017-2020 blanks sent to Actlabs.

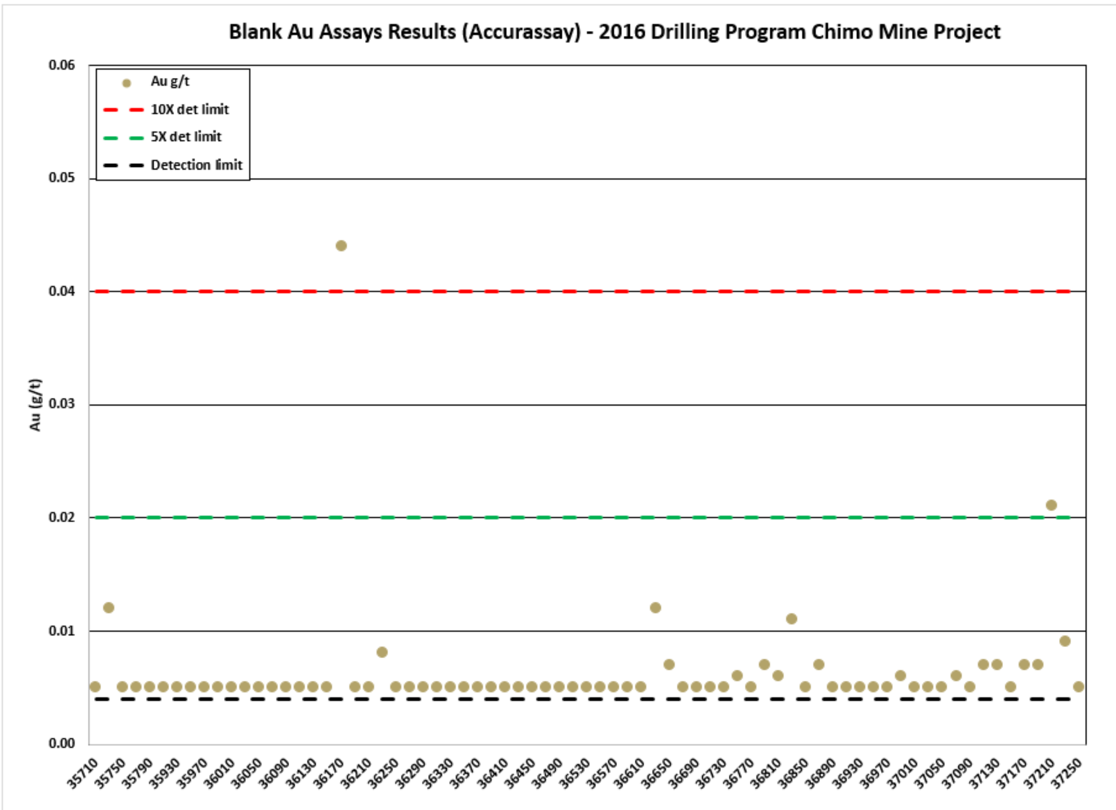


Figure 11.1 – 2016 results for blanks (n=73) assayed by Accurassay

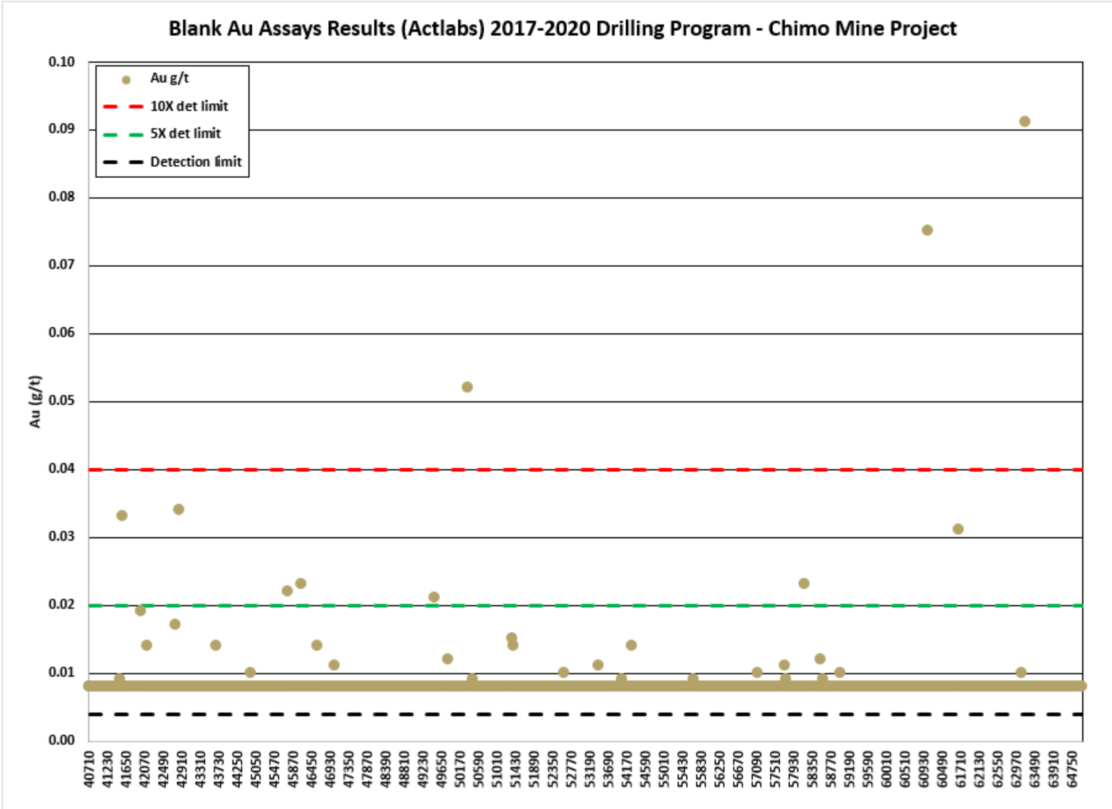


Figure 11.2 – 2017-2020 results for blanks (n=1126) assayed by Actlabs

No blanks failed the QC procedure, but 12 samples returned grades higher than 5 times the detection limit, representing less than 1.0% of all blanks. In 2016, sample 36170 (Figure 11.1) was inserted among samples from a mineralized zone. A deficiency in the cleaning procedure can reasonably be claimed. In 2018 (Figure 11.2), however, it is difficult to explain the anomaly of the 50370 sample. A cleaning problem may explain sample 61030 on the same graph as it was included in a batch of samples from a high-grade zone. In 2019, however, it is difficult to explain the anomaly of the 63190 sample, it was included in a batch of samples from a waste zone.

The author is of the opinion that the cleaning procedures of both laboratories are appropriate and well adapted to the needs of the Project.

11.4.3 Duplicates

The issuer’s QA/QC procedure does not include systematic duplicate assays.

11.5 Conclusion

The author is of the opinion that the sample preparation, security, analysis and QA/QC protocols for the 2016-2020 Drill Programs followed generally accepted industry standards, and that the data is valid and of sufficient quality for a mineral resource estimation.

12. DATA VERIFICATION

This item covers the authors' data verification for the 2021 MRE. Data verification included site visits and a review of drill core geological descriptions.

12.1 Site Visits

The data verification performed by Claude Savard (P.Geo.) on February 24 and 25, 2020, included a check of collar locations, a visual inspection of surface drill pads, a visual assessment of access roads, a review of selected drill core from the North and South Gold corridors, independent sampling, a review of the QA/QC program, and database validation (including the collars, downhole survey data and assays for Cartier's holes). Ms. Savard also reviewed the QA/QC program and the descriptions of lithologies, alteration and mineralization.

The data verification performed by Christine Beausoleil (P.Geo.) on April 7 and 23, 2021, included a check of collar locations, a general assessment of the access roads and infrastructure layout, and a review of selected drill core from the Central Gold Corridor (including the new holes).

Both QPs were accompanied by Gaétan Lavallière, Cartier's VP Exploration, during the property visit, and by Ronan Déroff, Cartier's Senior Geologist Project Manager, for the tour of the core shack. The core boxes are stored at a facility in Val d'Or belonging to MNG Services Ltd ("MGN") and transported to the transmitter's core shack

12.2 Core Review

Ms. Savard (2020) and Ms. Beausoleil (2021) reviewed selected core intervals onsite. The core boxes were stored on indoor racks at Cartier's core shack in Val-d'Or and moved to MNG Services inc. facility also in Val-d'Or. Cartier kept the mineralized core from 80 of the 124 holes drilled (including wedges). The core from the non-mineralized intervals and all the core from the other holes have been discarded. Ms. Savard examined mineralized intervals from the North and South Gold Corridors, whereas Ms. Beausoleil focused on the Central Gold Corridor, including selected new holes.

The core boxes were found to be in reasonably good order (Figure 12.1) and clearly identified by permanent marker. Sample tags were still present in the boxes (Figure 12.1 C and D), as were the wooden blocks placed at the beginning and end of each drill run (Figure 12.1 D). The numbering on the wooden blocks matched the indicated footage on each box. The sample numbers were validated, and the presence of mineralization was confirmed in the referenced half-core samples. Cartier's established QA/QC protocols include the insertion of standards and blanks. The authors believe these protocols are adequate.

A) Logging facility; B) Core storage; C) Box identified by marker and laboratory sample tags; D) Wooden blocks; and E) Core sawing area

Figure 12.1 – Cartier's core shack photographs taken during the 2020 site visits

12.3 Drill Hole Database

The authors reviewed and validated all drilling information used for the 2021 MRE. Basic cross-check routines were performed between the 2020 and 2021 resource databases.

Since the 2020 MRE was published (Savard and D'Amours, 2020), Cartier has drilled another 15 holes. The 2020 holes continue to confirm the geological and grade continuities that were demonstrated in the 2020 MRE and extended the mineralization at depth.

The 2021 validation included all aspects of the drill hole database (i.e., collar locations, drilling protocols, down-hole surveys, logging protocols, sampling protocols, QA/QC protocols, validation sampling, density measurements and checks against assay certificates).

12.4 Drill Hole Locations

It was not possible to locate historical (pre-2016) holes in the field. Instead, Ms. Savard ran a check on 5% of the collar location coordinates to validate the correspondence between the original paper logs and the database.

Corrections were made to the elevation data for the surface drill holes, except for eight (8) holes from 1993 that were drilled where there is now a quarry. The collars of these holes were projected onto the 2017 Lidar topographic surface and validated with GPS field data. All drill holes with corrected elevation data are identified in the database.

Ms. Savard was able to validate the locations of holes from the 2016-2019 programs during her site visit. The 2020 hole's locations were validated by Ms. Beausoleil. The identification tags were found attached to the casings. InnovExplo recorded the locations of selected collars using a portable GPS (Figure 12.2) and compared them to the original logs. All results had acceptable precision.

Project coordinates are in UTM NAD83 Zone 18.

The collar surveys are considered adequate for the purpose of a resource estimate. Still, it is recommended that all collars be professionally surveyed.

12.5 Downhole Survey

Downhole surveys were conducted on the majority of holes. The following methods and instruments were used for the surveys: Acid, Pajari, Reflex and Reflex SS for historical holes, and EZ-Gyro for the 2016-2020 drill programs. The downhole survey information was verified for 5% of the holes included in the 2021 MRE. Minor errors of the type normally encountered in a project database were identified and corrected. The variations for two (2) of the holes were deemed significant but immaterial to the resource estimate, and the holes were kept in the model. The issuer's database was immediately corrected.

12.6 Assays

InnovExplo had access to Cartier's assay certificates for the 2016-2020 programs and to logs in PDF format for the historical holes. The reviewed holes represent 5% of the holes in the database for the Property. All holes from the 2016-2020 programs were verified using the original certificates.

The assays in the database were compared to the original laboratory certificates provided by the laboratory.

Cartier receives the results from the laboratory via e-mail. Cartier's protocol of electronic transfer into the database allows for immediate error detection and prevents typing errors.

The Project database is considered to be valid, reliable and of good overall quality.

12.7 Conclusion

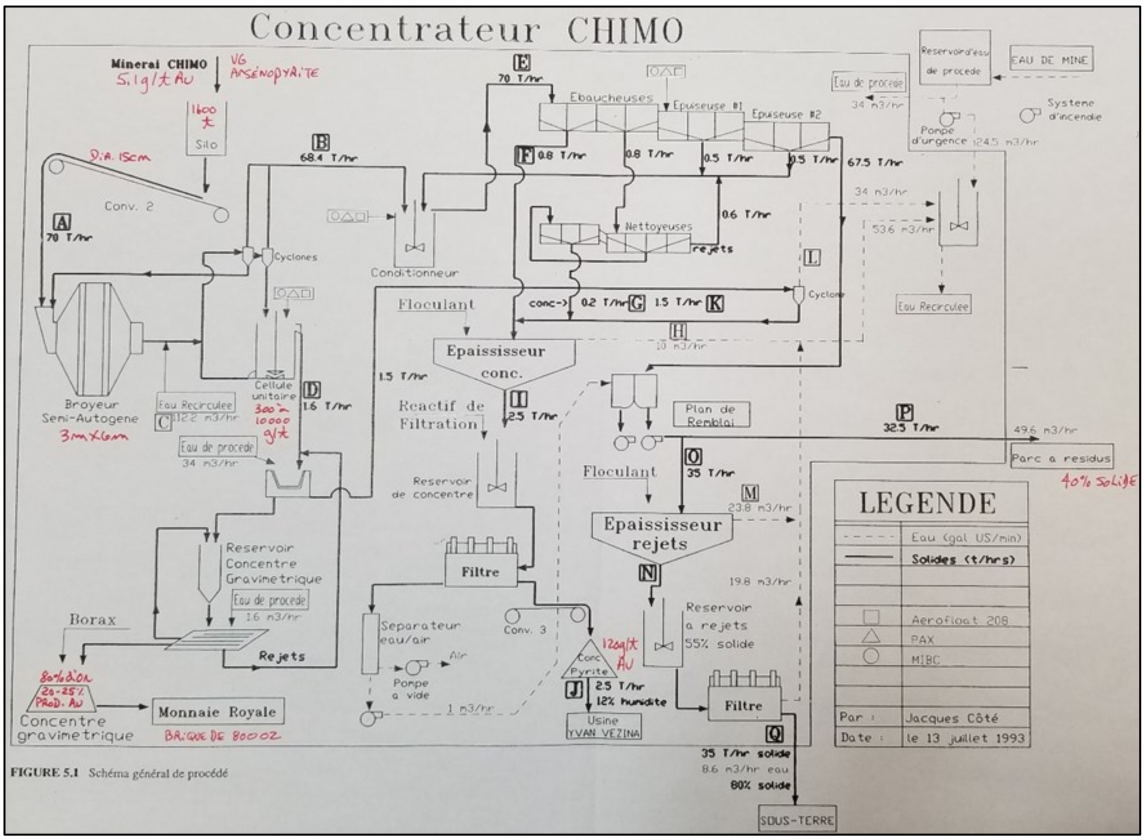
Overall, the authors are of the opinion that the data verification process demonstrates the validity of the data and protocols for the Project. The authors consider the database for the Project to be valid and of sufficient quality to be used for the mineral resource estimate herein.

Figure 12.2 – Drill collar inspection during the 2020 (A) and 2021 (B) site visits

13. MINERAL PROCESSING AND METALLURGICAL TESTING

The information presented in this item is based on D'Amours (2019). Other references are duly indicated where applicable.

The Property was in production from 1966 to 1967 under Chimo Gold Mines Ltd, from 1984 to 1988 under Louvem Mines Inc., and from December 1989 to January 1997 under Cambior Inc. Between December 1989 and July 1993, Cambior processed the Chimo ore using the concentrator at the Lucien-Béliveau mine at a rate of 220 tpd (July 1993, Figure 13.1). The information presented in this item is an accurate portrait of Chimo ore processing between December 1989 and July 1993 (Vachon et al., 1993).



(Vachon et al., 1993)

Figure 13.1 – General ore processing flow sheet for the Chimo mine material

Upon entering the mill, the average diameter of the ore was 15 cm. Gold was observed as visible gold in veins of smokey to milky quartz. Gold was also present as fine grains associated with arsenopyrite and quartz. The ore was composed of an average 25% quartz and silica and 4% arsenopyrite (Table 13.1).

Table 13.1 – Chemical and mineralogical compositions of the Chimo mine ore

Parameters	Concentration	Minerals	Concentration (%)
SiO_2	55.1%	Sphalerite	0.0%
Al_2O_3	13.1%	Pyrite-pyrrhotite	4.1%
Fe_2O_3	10.6%	Magnetite	7.0%
MgO	2.9%	Hornblende	13.2%
CaO	6.3%	Mica	4.5%
Na_2O	5.1%	Quartz	25.4%
K_2O	0.5%	Plagioclase	34.1%
TiO_2	1.1%	Potassic feldspar	3.2%
MnO	0.2%	Apatite	0.4%
P_2O_5	0.2%	Calcite-dolomite	5.9%
PAF	4.0%		
Ag	1 ppm		
Co	38.0 ppm		
Cu	211 ppm		
Ni	65 ppm		
Pb	3 ppm		
Zn	321 ppm		
C total (CO_2)	3.5%		
S total	2.2%		
TOTAL	**99.0%**		**97.7%**

The gravity circuit recovered 20-25% of the mine's gold production. After it passed through the semi-autogenous grinder (SAG) mill circuit, the ore was transported to cyclones to produce a 300 g/t Au concentrate, which was then transported to the Knelson concentrator to produce a 5,000 to 10,000 g/t Au concentrate. This concentrate was processed on shaking tables to produce a final concentrate composed of 80% gold, which was then melted in the refinery furnace to produce 800-oz gold bricks.

The flotation system recovered the portion not collected by the gravity circuit, producing an arsenopyrite concentrate of 100 to 120 g/t Au. Approximately 25 t of ore were required to produce one tonne of concentrate, which was shipped at the rate of two trucks per day over a distance of 220 km to the Yvan Vézina mine in Destor to complete the treatment. At this stage, the concentrate, with a moisture content of 12%, was composed of 23% arsenopyrite and 14% quartz and silica (Table 13.2). The tailings, which consisted of 27% quartz and silica and 0.9% arsenopyrite (Table 13.3), were transported to the tailings pond (46%), and the other 50% was sent to the paste backfill plant where it was mixed with cement to backfill underground stopes. The residual portion, representing 4% of the initial ore, consisted of gravity concentrate and arsenopyrite concentrate.

Table 13.2 – Chemical and mineralogical composition of the Chimo mine concentrate

Parameters	Concentration	Minerals	Concentration (%)
SiO_2	32.0%	Sphalerite	0.1%
Al_2O_3	8.2%	Pyrite-pyrrhotite	22.5%
Fe_2O_3	31.5%	Magnetite	23.2%
MgO	1.8%	Hornblende	5.1%
CaO	5.5%	Mica	4.8%
Na_2O	3.2%	Quartz	14.4%
K_2O	0.3%	Plagioclase feldspar	21.1%
TiO_2	0.8%	Potassic feldspar	1.9%
MnO	0.1%	Apatite	0.5%
P_2O_5	0.2%	Calcite-dolomite	8.2%
PAF	12.5%		
Ag	6 ppm		
Co	177.0 ppm		
Cu	593 ppm		
Ni	285 ppm		
Pb	17 ppm		
Zn	1,300 ppm		
C total (CO_2)	4.7%		
S total	12.0%		
TOTAL	**95.8%**		**101.9%**

Table 13.3 – Chemical and mineralogical composition of the Chimo mine tailings

Parameters	Concentration	Minerals	Concentration (%)
SiO_2	59.0%	Sphalerite	0.0%
Al_2O_3	13.8%	Pyrite-pyrrhotite	0.9%
Fe_2O_3	7.0%	Magnetite	4.1%
MgO	3.2%	Hornblende	15.2%
CaO	6.3%	Mica	2.5%
Na_2O	5.6%	Quartz	27.3%
K_2O	0.5%	Plagioclase	37.0%
TiO_2	1.1%	Potassic feldspar	3.4%
MnO	0.2%	Apatite	3.0%
P_2O_5	0.1%	Calcite-dolomite	5.8%
PAF	3.8%		
Ag	0 ppm		

Parameters	Concentration	Minerals	Concentration (%)
Co	8.0 ppm		
Cu	33 ppm		
Ni	21 ppm		
Pb	4 ppm		
Zn	147 ppm		
C total (CO_2)	3.4%		
S total	0.5%		
TOTAL	**100.6%**		**96.6%**

Chimo mine ore processing statistics for the period from December 1989 to January 1997 show a gold recovery rate at the mill ranging from 85.8% to 91.4%, for an average of 89.2% over 80 months of production (Table 13.4).

Table 13.4 – Mill processing statistics for the Chimo mine from 1989 to 1997

Period	Grade (Au g/t) Mill Entrance	Recovery (%) Mill Exit
December 1989	4.00	85.8
1990 (12 months)	4.79	87.2
1991 (12 months)	4.21	89.5
1992 (12 months)	4.55	90.8
1993 (6 months)	4.64	91.3
1994 (12 months)	2.89	84.3
1995 (12 months)	3.53	90.6
1996 (12 months)	3.34	91.8
January 1997	3.71	91.4

Acid generation predictive tests on the ore yielded concentrations ranging from 1.68 to 2.35% sulphur, demonstrating that it was non-acid generating material.

Although gold is associated with concentrations of arsenopyrite (Table 13.5), at least for some of the ore, the cumulative annual concentration of 0.04 mg arsenic per litre in the final effluent from the tailings pond is very low and below the maximum limits of current requirements of 0.2 mg/l for a monthly average with an acceptable peak for one sample at 0.4 mg/l (Directive 019 pertaining to the Mining Industry, March 2012, MDDEPQ).

Table 13.5 – Metal analysis results of the ore, concentrate and tailings from the Chimo mine

Parameters	Concentrations (ppm)		
	Ore	Concentrate	Tailings
Aluminum	0.91%	0.43%	0.71%
Antimony	<5	<5	15
Arsenic	8,800	>9,999	530
Barium	23	18	66
Beryllium	<1	<1	<1
Bismuth	5	<5	15
Boron	<10	<10	<10
Cadmium	<1	<1	<1
Calcium	2.40%	2.50%	2.40%
Chromium	62	33	36
Cobalt	<1	<1	3
Copper	190	310	31
Iron	4.30%	12%	2.50%
Lead	<1	22	<1
Magnesium	0.82%	0.55%	0.82%
Manganese	460	370	440
Molybdenum	10	<2	<2
Nickel	59	180	16
Phosphorus	400	520	370
Scandium	7	3	6
Silver	<1	3	<1
Sodium	0.14%	0.02%	0.02%
Strontium	22	20	19
Thallium	870	240	760
Tin	<10	10	<10
Tungsten	<10	<10	<10
Vanadium	74	30	64
Yttrium	15	8	10
Zinc	210	950	80
Zirconium	13	10	9

14. MINERAL RESOURCE ESTIMATES

The updated mineral resource estimate for the Project (the “2021 MRE”) was prepared by Christine Beausoleil, P.Geo. of InnovExplo, using all available information.

The 2021 MRE comprises a review and update of the 2020 MRE for the combined Central, North and South Gold corridors (Savard and d’Amours, 2020).

The close-out date for the database is September 1, 2020.

The effective date is March 22, 2021.

14.1 Methodology

The Project covers a strike length of 2.0 km ESE-WNW, a width of 1.0 km, and a vertical depth of 1.7 km below the surface.

The Project’s resource block model was prepared using GEOVIA GEMS software v.6.8.2 (“GEMS”). Cartier provided the drilling database in Geotic format (v. 8.0.10), as well as the 3D modelling of topographic and bedrock surfaces, the underground openings and the interpretation of gold-bearing structures built in GeoticMine software (v. 1.2.14). Each structure has been defined by individual solids. GEMS was used for the resource estimation, consisting of 3D block modelling and interpolation using the ordinary kriging (“OK”) method. Leapfrog Geo 5.4 software was used to review and validate the mineralized solids generated by the GeoticMine intersects. Statistical studies and variography were done using Snowden Supervisor v.8.13 software (“Supervisor”). Capping and several validations were carried out in Microsoft Excel and Supervisor.

The main steps in the methodology were as follows:

- Review and validation of the diamond drill hole database.
- Validation of the topographic and bedrock surfaces, the geological model, and the interpretation of the mineralized structures based on historical and recent work (i.e., LIDAR survey).
- Perform a capping study on assay data for each structure.
- Grade compositing.
- Geostatistics (spatial statistics).
- Grade interpolation.
- Validation of the grade interpolation.
- Resource classification.
- Assessment of resources with “reasonable prospects for economic extraction” and selection of appropriate cut-off grade and constraining volume for an underground scenario.
- Mineral resource statement.

14.2 Drill Hole Database

The issuer provided a Geotic-MS Access database for the Project on September 01, 2020, including all completed diamond drill holes. It contains 3,685 DDH (surface and underground drill holes) totalling 296,999 m, including 83,192 assays representing 89,805 m of sampled drilled core or 30% of the total drilled length.

The resource database ("GEMS database") contains a subset of 3,658 DDH drilled in the resource volume area. It includes 241 historical holes (Figure 14.1). The holes were generally drilled at a regular spacing of 30 m along one main perpendicular orientation.

Both databases include gold assay results as well as lithological, alteration and structural descriptions taken from drill core logs.

In addition to the basic tables of raw data, the database includes tables of the drill hole composites and wireframe solid intersections required for statistical evaluation and resource block modelling.

14.3 Geological Model

The QP reviewed and validated the 2020 geological model provided by Cartier's senior geologist, Mr. Ronan Déroff (P.Geo.) for the Central Gold Corridor, and InnovExplo's 2020 Leapfrog model for the North and South Gold corridors. Deroff's geological interpretation used historical and recent drilling information, as well as historical mining data from the former Chimo mine. InnovExplo's 2020 mineralized structures were modelled using the vein modelling module in Leapfrog using an automatic interval selection based on intercepts (intercepts determined by Cartier but reviewed and validated by InnovExplo) using a minimum thickness to 2.4 m.

A total of 17 mineralized structures were modelled: seven (7) in the Central Gold Corridor (structures 5B, 5B2, 5C, 5M, 5M2, 5N and 6N1), five (5) in the North Gold Corridor (structures 1A, 1B, 2, 3 and 4B), and five (5) in the South Gold Corridor (Structures 6, 6B, 6C, 6P and 6P2) (Figure 14.2).

Mineralization is associated with quartz and arsenopyrite minerals into fractured zones. Structures in the North Corridor (1A, 1B and 2) are characterized by semi-massive sulphide veins associated with iron formations.

Two surfaces were created to define the topography and bedrock (Figure 14.3). The topography was created using data from a 2017 LIDAR survey. The bedrock surface was generated using casing depths. The solids for the mineralized structures were clipped to the bedrock surface.

14.4 Voids Model

D'Amours (2019) modelled the stopes and drift of the Project to subtract them from the remaining resources. Figure 14.4 shows the gold structures and underground workings on the Property, reviewed and validated by InnovExplo, that were used to deplete the final resource model.

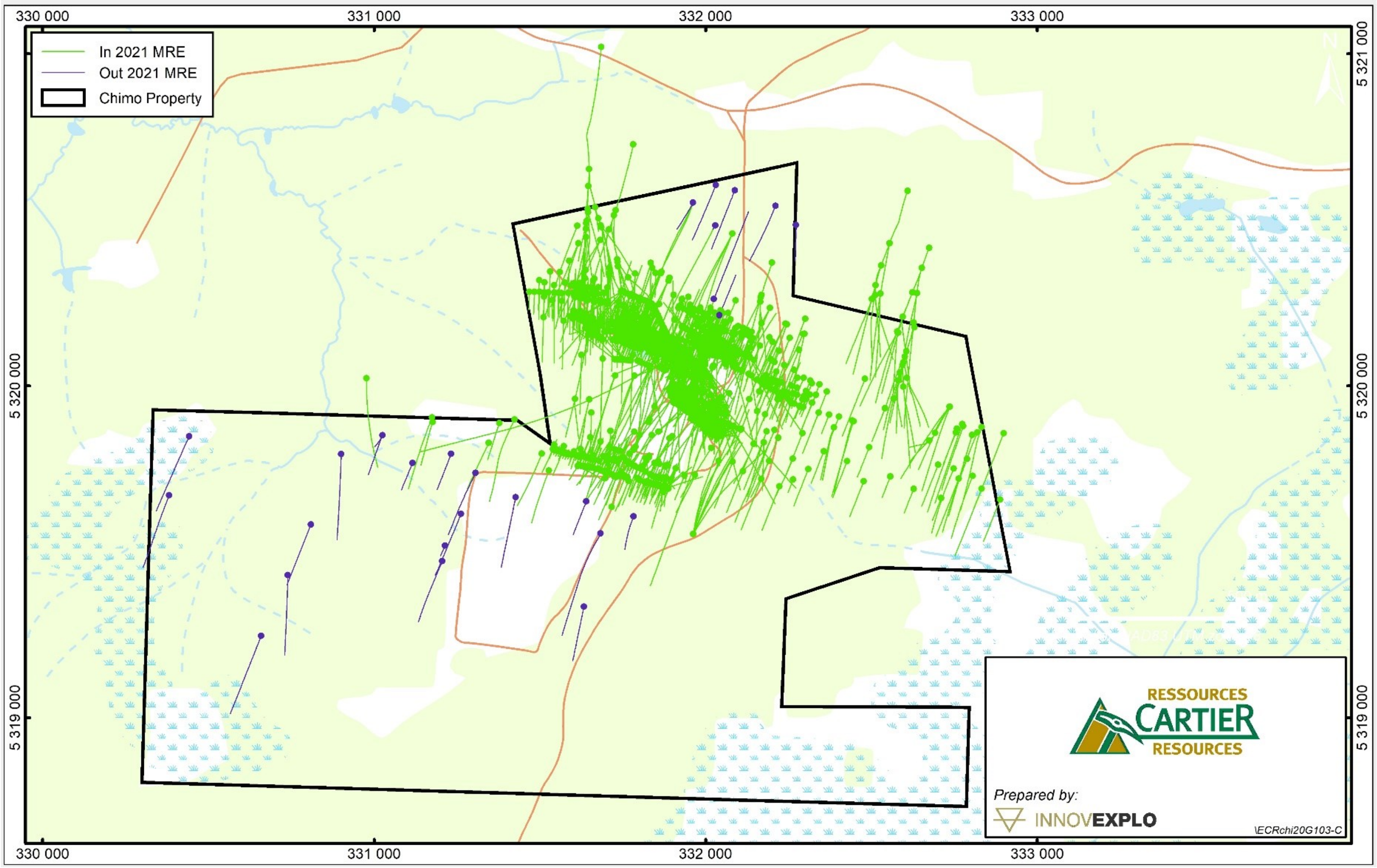


Figure 14.1 – Validated drill holes used for the 2021 MRE

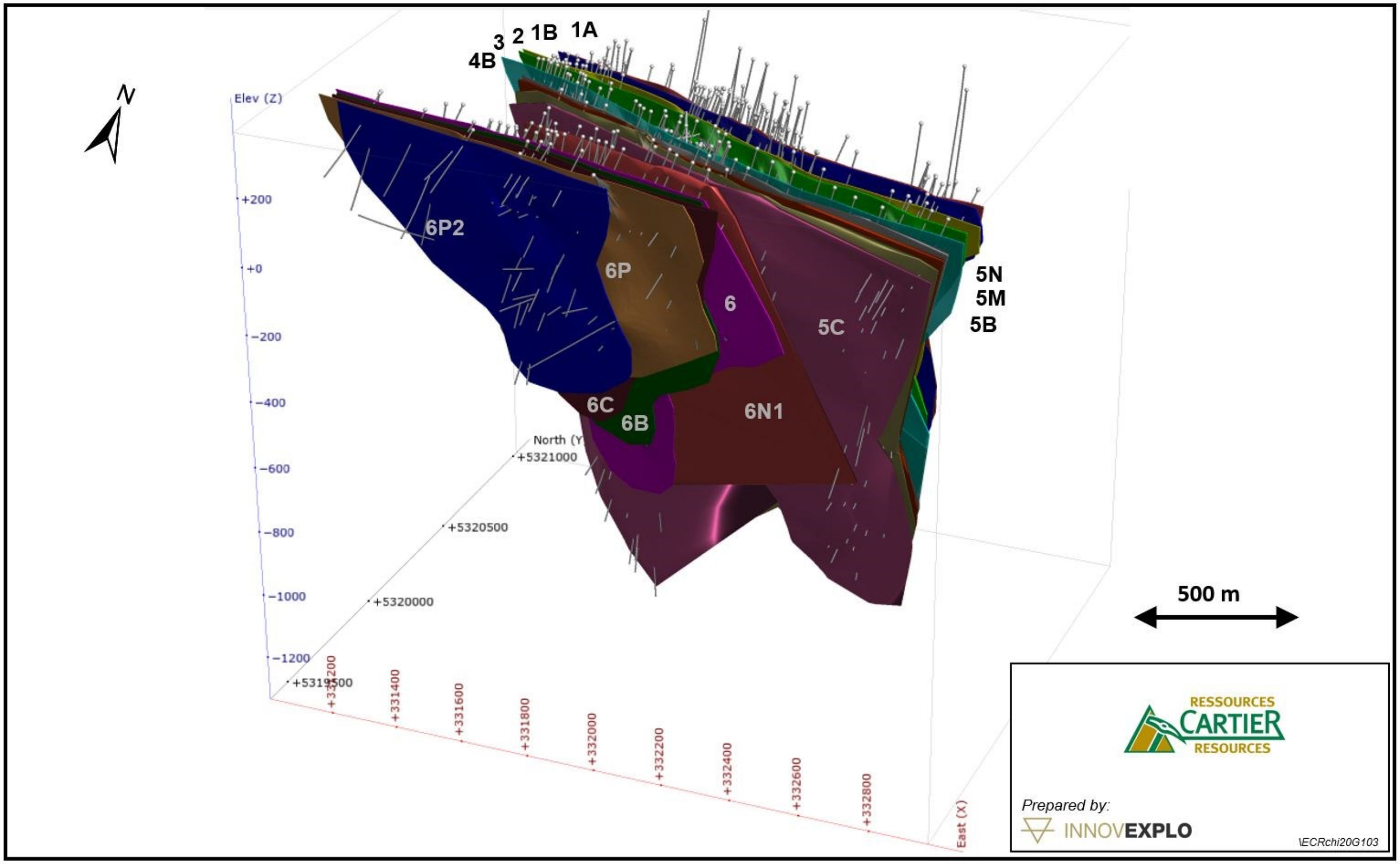
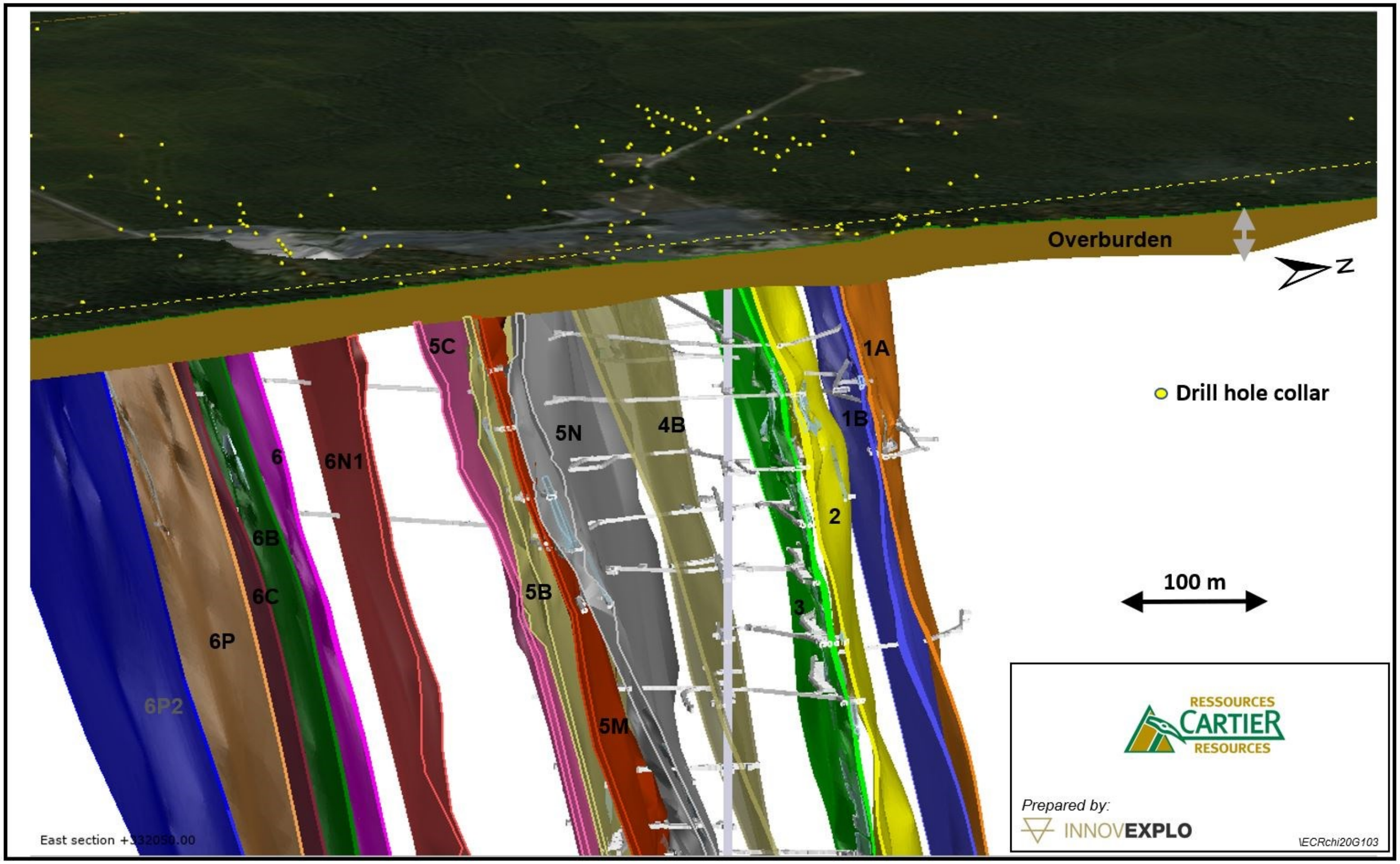


Figure 14.2 – Isometric view of the structures on the Chimo Mine Project



(2017 LIDAR topographic surface [2.0 m resolution; Elevation grid Tif 32C03 SE + SW])

Figure 14.3 – Isometric view of the topographic surface of the Chimo Mine Project

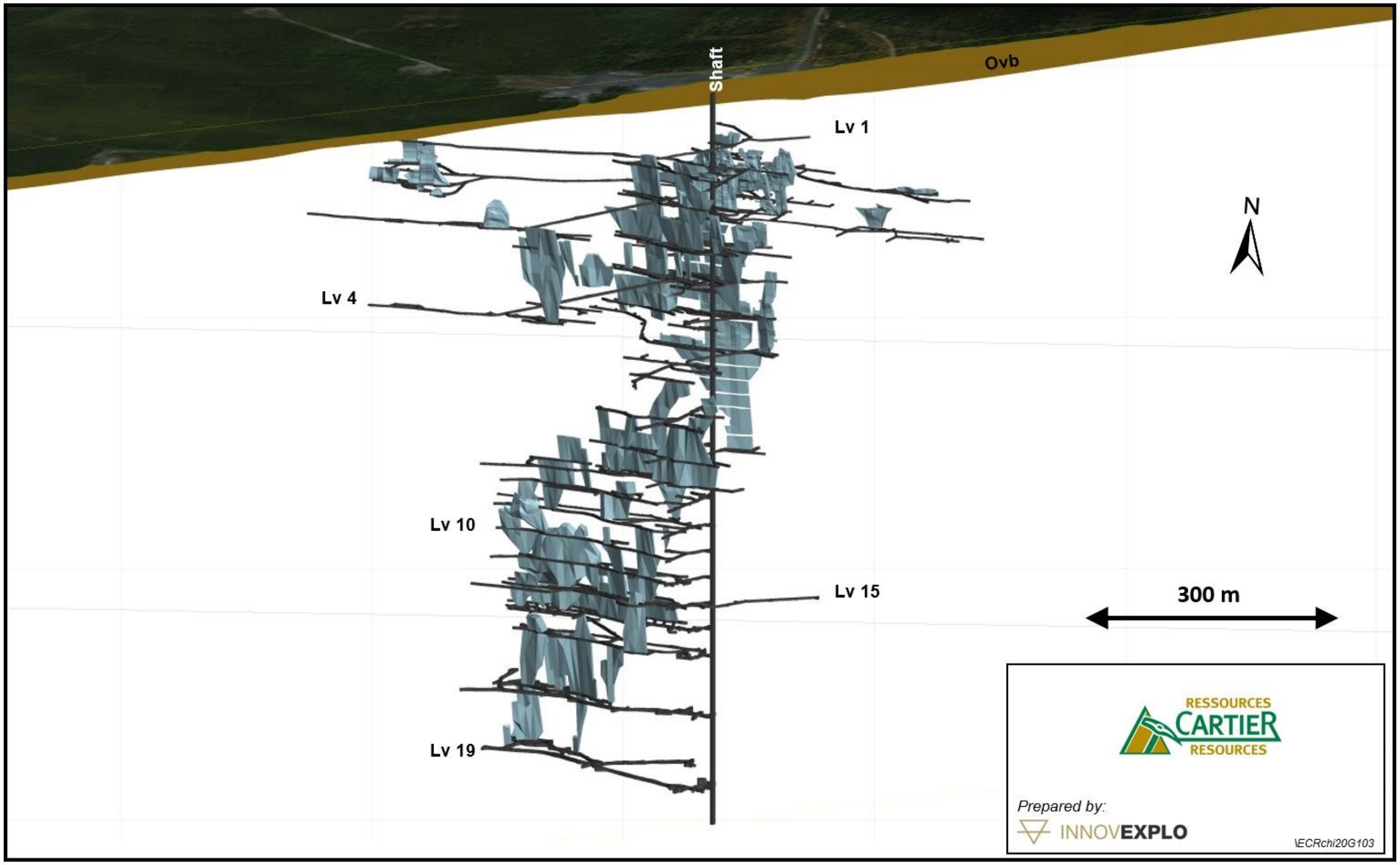


Figure 14.4 – Isometric view of the voids for the Chimo Mine Project

14.5 High-Grade Capping

Basic univariate statistics were completed on all individual structures. Capping was applied to raw assays. Capping values were selected by combining the dataset analysis (COV, decile analysis, metal content) with the probability plot and log-normal distribution of grades. Table 14.1 presents a summary of the statistical analysis for each structure. Figure 14.5 shows an example of graphs supporting the capping value for the 5B structure.

Table 14.1 – Summary statistics for the DDH raw assays

Corridor – Structure Name	No. of samples	Max (g/t Au)	Uncut Mean Au (g/t)	COV uncut	Capping (g/t Au)	No. of samples cut	Samples cut (%)	Cut Mean (g/t Au)	COV cut	Metal loss factor (%)
North – 1A	567	31.70	2.72	1.67	-	-	-	-	-	-
North – 1B	705	76.11	3.02	1.90	36	2	0.28%	2.91	1.59	1.97%
North – 2	1,225	488.66	6.75	3.54	120	7	0.57%	6.02	2.33	4.03%
North – 3	1,354	550.60	6.71	3.89	120	12	0.89%	5.79	2.65	6.14%
North – 4B	1,212	93.64	2.92	1.89	35	3	0.25%	2.81	1.50	3.95%
Central – 5B	22,541	438.80	3.53	2.51	120	12	0.05%	3.47	2.08	1.31%
Central – 5B2	873	44.50	1.57	1.78	-	-	-	-	-	-
Central – 5C	1,270	43.90	1.98	2.19	-	-	-	-	-	-
Central – 5M	5,273	223.70	2.52	2.66	55	11	0.21%	2.42	2.06	3.77%
Central – 5M2	853	240.10	4.01	3.12	55	7	0.82%	3.65	2.38	7.02%
Central – 5N	4,084	181.60	2.24	2.92	65	7	0.17%	2.16	2.44	3.84%
Central – 6N1	836	127.08	1.62	3.87	30	5	0.60%	1.39	2.40	8.62%
South – 6	1,257	226.62	2.92	3.12	55	4	0.32%	2.70	2.12	4.30%
South – 6B	674	110.60	3.21	2.43	55	3	0.45%	3.04	1.97	7.02%
South – 6C	288	108.90	1.58	4.24	55	1	0.35%	1.39	2.76	5.19%
South – 6P	493	109.90	2.68	3.7	55	4	0.81%	2.30	2.75	10.73%
South – 6P2	219	55.14	1.88	2.58	55	1	0.46%	1.88	2.58	0.03%

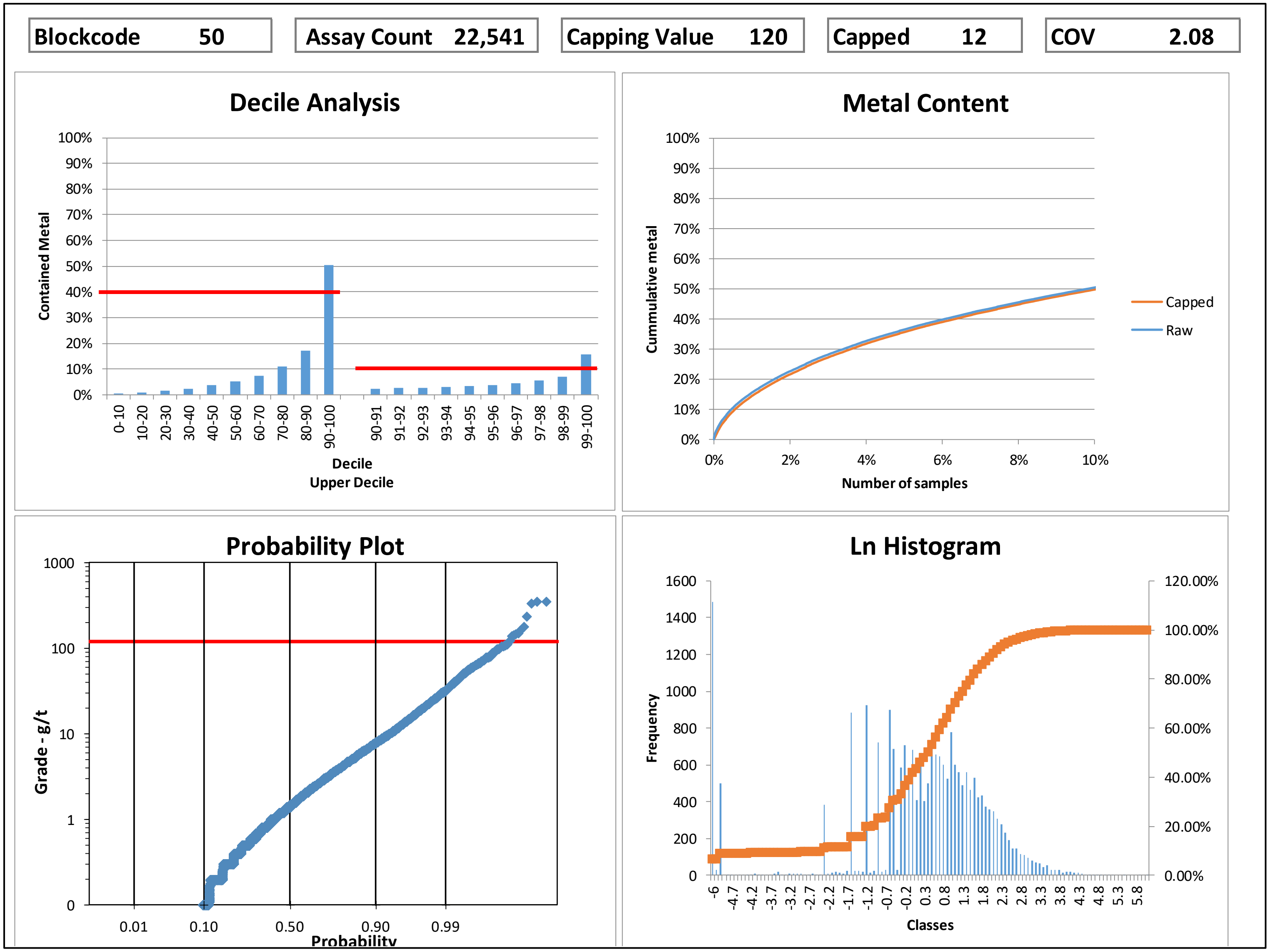


Figure 14.5 – Example of graphs supporting a capping value of 120 g/t Au for the 5B structure

14.6 Compositing

To minimize any bias introduced by the variable sample lengths, the gold assays of the DDH data were composited to 1-m lengths in each of the mineralized structures. The thickness of the mineralized structures, the proposed block size and the original sample lengths were considered when determining the composite length. Tails measuring >0.25 m were equally distributed. A grade of 0.00 g/t Au was assigned to missing sample intervals. A total of 67,328 composites were generated in the mineralized structures.

Table 14.2 shows the basic statistics for the composites of each structure. It illustrates the effect of capping and compositing on the COV of the capped data.

Table 14.2 – Summary statistics for the DDH composites

Corridor – Structure Name	Cut Assays		Composite			
	Mean (g/t Au)	COV	No. of Cmp.	Max (g/t Au)	Mean (g/t Au)	COV
North – 1A	2.72	1.67	1,310	31.70	1.01	2.58
North – 1B	2.91	1.59	1,543	39.85	1.02	2.42
North – 2	6.02	2.33	3,296	183.21	2.36	3.31
North – 3	5.79	2.65	2,896	163.45	2.39	3.03
North – 4B	2.81	1.50	2,107	86.40	1.31	2.08
Central – 5B	3.47	2.08	27,844	120.00	2.76	1.95
Central – 5B2	1.57	1.78	2,180	43.52	0.67	2.67
Central – 5C	1.98	2.19	2,966	38.42	0.86	3.09
Central – 5M	2.42	2.06	7,712	55.00	1.70	2.14
Central – 5M2	3.45	2.28	1,837	55.00	1.62	3.18
Central – 5N	2.15	2.41	7,945	62.89	0.97	2.98
Central – 6N1	1.39	2.41	1,088	30.00	0.91	2.55
South – 6	2.70	2.12	1,706	92.40	1.83	2.03
South – 6B	3.04	1.97	1,228	92.34	1.31	2.84
South – 6C	1.39	2.76	844	25.00	0.34	3.25
South – 6P	2.30	2.75	532	58.80	1.56	2.56
South – 6P2	1.88	2.58	294	38.50	1.33	2.58

14.7 Bulk Density

Bulk densities are used to calculate tonnage from the estimated volumes in the resource-grade block model.

A density study on half-core samples from 12 mineralized structures was carried out in 2012. A total of 47 bulk specific gravity ("SG") measurements were taken on half-core samples and integrated into the database. SG was determined using the standard water immersion method. The samples were from recent (2016 to 2019) drill holes. The SG data is summarized in Table 14.3 for each mineralized structure.

The mean of 2.86 g/cm^3 is based on a small sample population but is close to the historical value. InnovExplo concluded that 2.90 g/cm^3 would be a reasonable value for the 2021 MRE. However, a density of 3.10 g/cm^3 was used for the gold structures 1A and 1B associated to the iron formation unit. A density of 2.00 g/cm^3 was assigned to overburden.

Table 14.3 – Mean specific gravity by structure

Structure	No. of Measurements	Calculated SG Mean
5	2	2.807
5B	5	2.782
5C	6	2.824
5M	5	2.952
5M2	2	2.921
5N	5	2.894
6N1	5	2.871
Structure 2	5	2.907
Structure 3	3	2.852
Structure 4B	2	2.767
Structure 6	1	2.717
Structure 6N1	1	2.877
Structure 6P	1	2.886
Structure 6P2	2	2.852
Others	2	2.837
Total / Global Mean	**47**	**2.859**

14.8 Block Model

The 2021 MRE block model corresponds to a multi-folder percent block model in GEMS, rotated 22° clockwise (Y-axis oriented at N022 Az). It covers the entire drilled area and a wide buffer zone. All blocks with more than 0.001% of their volume falling within a selected solid were assigned the corresponding solid block code in their respective folder. A percent block model was generated, reflecting the proportion of every block inside each type of solid: individual mineralized structures, overburden and waste.

The block model origins correspond to the lower-left corner. Block dimensions reflect the sizes of mineralized structures and plausible mining methods.

Table 14.4 shows the properties of the block model.

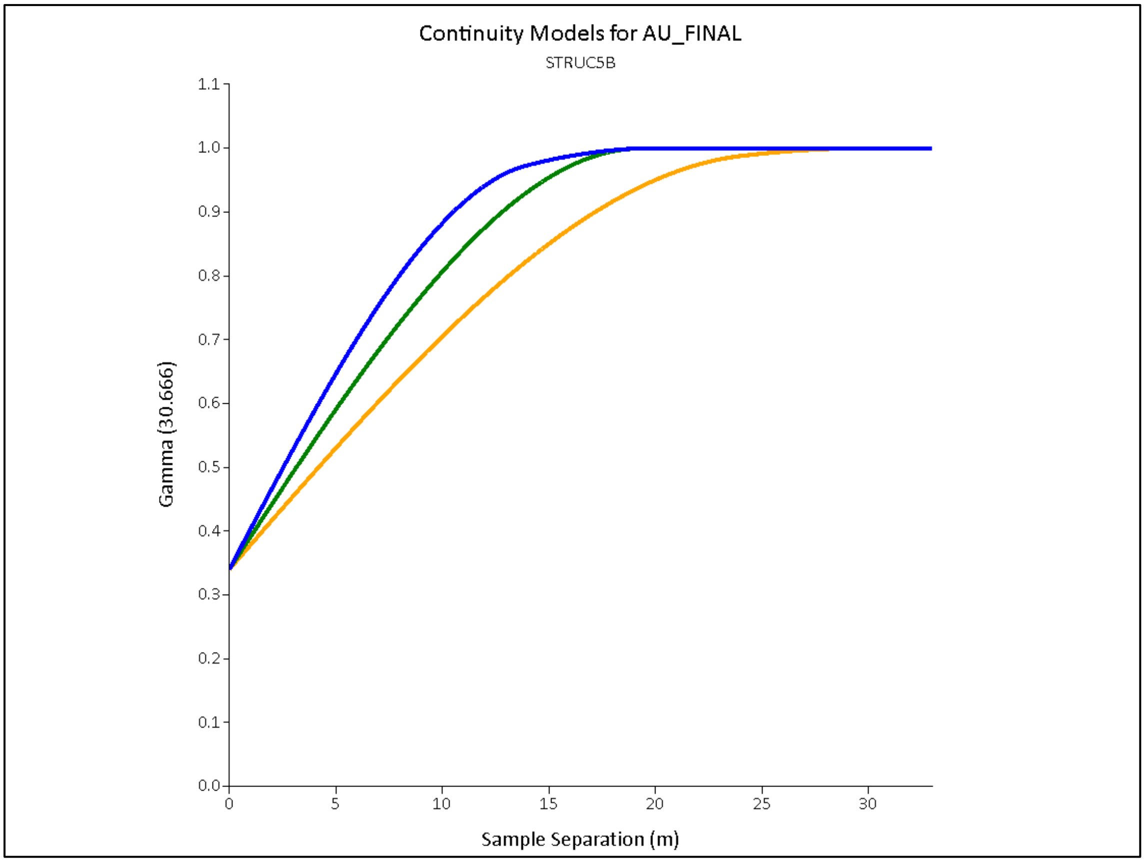
Table 14.4 – Block model properties

Properties	X (Columns)	Y (Columns)	Z (Columns)
Number of blocks	399	96	345
Block size (m)	5	5	5
Block extent (m)	1,995	480	1,725
Rotation	-22°		

14.9 Variography and Search Ellipsoids

3D variography, carried out in Snowden Supervisor v.8.13, yielded a best-fit model along an orientation that roughly corresponds to the strike and dip of the mineralized structures. This best-fit model was adjusted to fit the mean orientation (azimuth and dip) of each mineralized structure.

Figure 14.6 shows an example of the variography study for structure 5B. Figure 14.7 presents an example of the search ellipse according to the composite data points and blocks for the same structure.



Continuity of the major axis (orange); intermediate axis (green); and minor axis (blue)

Figure 14.6 – Example of continuity models for the 5B search ellipsoids

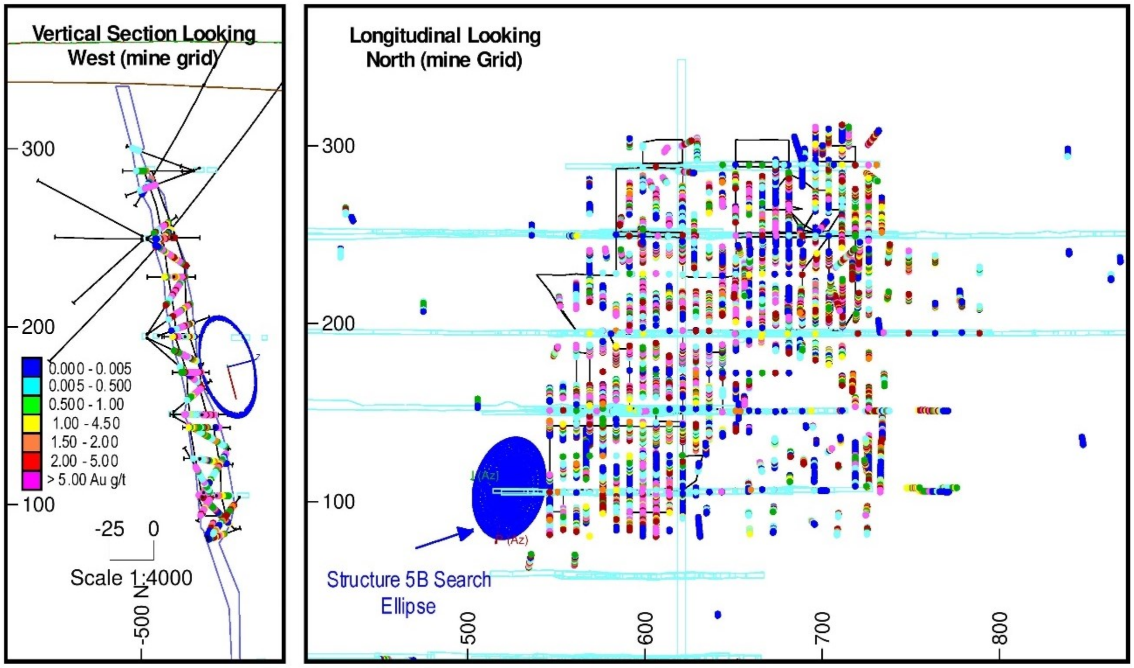


Figure 14.7 – Section view (vertical and longitudinal) of the search ellipsoid used for structure 5B during the first pass

14.10 Grade Interpolation

The interpolation profiles were customized for the mineralized structures using hard boundaries.

The variography study provided the parameters used to interpolate the grade model using the composites. The interpolation was run on a point area workspace extracted from the composite dataset in GEMS. A three-pass strategy was used with uncapped composites and a restricted high-grade search for the first pass and capped composites for the second and third passes. The high-grade restricted search used 15 m x 12.5 m x 7.5 m ranges in the X-Y-Z directions and the high-grade capping value established in Section 14.5.

The OK method was selected for the final resource estimate as it better honours the grade distribution for the deposit.

The parameters for the grade estimation specific to GEMS are summarized in Table 14.5.

Table 14.5 – Search ellipsoid parameters by structure

Structure	Pass	Min Cmp.	Max Cmp.	Max Cmp./DDH	Min DDH	GEMS Rotation			Ranges			High-grade restricted search		
						Az	Dip	Az	X (m)	Y (m)	Z (m)	X (m)	Y (m)	Z (m)
1A/ 1B / 6 / 6B / 6C / 6P / 6P2	1	6	18	4	2	315	-70	295	50	20	10	15	12.5	7.5
	2	4	18	0	1				100	40	20			
	3	2	12	0	1				150	60	30			
2 / 3	1	6	18	4	2	305	-70	295	50	20	10	15	12.5	7.5
	2	4	18	0	1				100	40	20			
	3	2	12	0	1				150	60	30			
4B	1	6	18	4	2	320	-70	295	50	20	10	15	12.5	7.5
	2	4	18	0	1				100	40	20			
	3	2	12	0	1				150	60	30			
5B / 5B2 / 5C / 5C / 5M / 5M2 / 5N / 6N1	1	5	12	4	2	338	-70	288	30	20	15	15	12.5	7.5
	2	4	12	0	1				60	40	30			
	3	2	12	0	1				120	80	60			

14.11 Block Model Validation

Block model grades, composite grades and assays were visually compared on sections, plans and longitudinal views for both densely and sparsely drilled areas. No significant differences were observed. A generally good match was noted in the grade distribution without excessive smoothing in the block model.

The block models were validated visually and statistically. The visual validation confirmed that the block model honours the drill hole composite data (Figure 14.8).

Table 14.6 compares the global block model mean for three (3) interpolation scenarios and the composite grades for each mineralized structure at zero cut-off for Inferred and Indicated blocks.

Cases in which the composite mean is higher than the block mean are often a consequence of clustered drilling patterns in high-grade areas, mostly in the Central area.

The comparison between composite and block grade distribution did not identify significant issues. As expected, block grades are generally lower than composite grades.

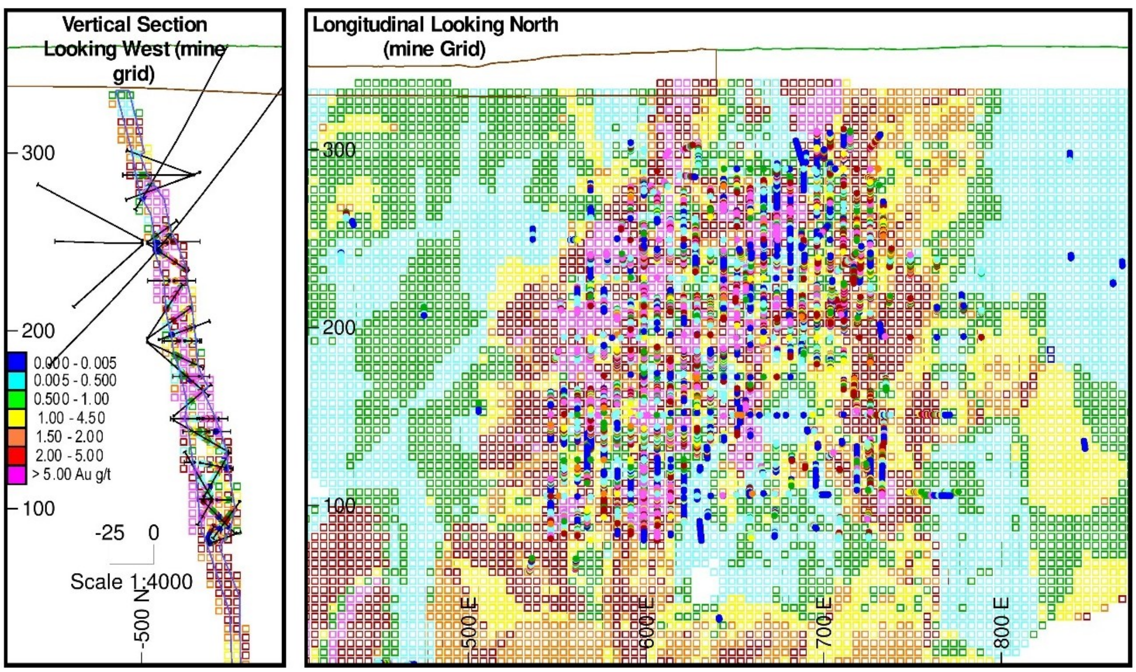


Figure 14.8 – Validation of the interpolated results for the 5B structure

Table 14.6 – Comparison of the mean grades for blocks and composites

Structure	Number of composites	Composite grade (g/t Au)	Number of blocks	OK Model (g/t Au)	ID2 Model (g/t Au)	NN Model (g/t Au)
North – 1A	1,310	1.01	26,318	0.62	0.60	0.66
North – 1B	1,543	1.02	29,517	0.49	0.47	0.58
North – 2	3,296	2.36	39,251	1.01	0.97	1.03
North – 3	2,896	2.39	44,482	1.09	1.02	1.15
North – 4B	2,107	1.31	50,158	0.44	0.43	0.41
Central – 5B	27,844	2.76	93,908	1.59	1.58	1.68
Central – 5B2	2,180	0.67	5,633	0.33	0.34	0.32
Central – 5C	2,966	0.86	66,188	0.39	0.38	0.41
Central – 5M	7,712	1.70	67,828	0.80	0.77	0.84
Central – 5M2	1,837	1.62	12,002	1.01	1.02	1.01
Central – 5N	7,945	0.97	75,960	0.54	0.51	0.56
Central – 6N1	1,088	0.91	44,373	0.77	0.69	0.89
South – 6	1,706	1.83	33,762	1.00	0.94	1.15
South – 6B	1,228	1.31	25,852	0.93	0.82	1.18
South – 6C	844	0.34	19,557	0.55	0.49	0.72
South – 6P	532	1.56	22,162	1.20	1.12	1.18
South – 6P2	294	1.33	15,244	1.34	1.17	1.42

14.12 Mineral Resource Classification

The Project comprises Indicated and Inferred resources. The categories were prepared using a series of outline rings (clipping boundaries), taking into account the following criteria (see text below for details):

- Interpolation pass
- Distance to closest information
- Number of drill holes used to estimate the block's grade

No measured resource was defined.

The Indicated category was assigned to blocks estimated in the first pass with a minimum of three (3) drill holes in areas where the drill spacing is less than 25 m and there is reasonable geological and grade continuity.

The Inferred category is defined for blocks estimated in the second pass with a minimum of two (2) drill holes in areas where the drill spacing is less than 65 m in the principal ellipsoid axis and there is reasonable geological and grade continuity.

14.13 Economic Parameters and Cut-Off Grade

Given the physical properties of the mineralized rock (colour and arsenopyrite), it is reasonable to anticipate a 35% reduction in milling and transportation fees if rock sorting takes place on the site. The selection of reasonable prospective parameters, which assume that some or all of the estimated resources could potentially be extracted, is based on an underground bulk mining scenario (2,000 to 3,000 tpd) combined with material sorting at the surface before transportation.

The estimation of the cut-off grade ("COG") was based on the parameters presented in Table 14.7.

The cut-off grade must be re-evaluated in light of prevailing market conditions and other factors, such as gold price, exchange rate, mining method, related costs, etc.

Table 14.7 – Input parameters used for the cut-off grade estimation

Parameters	Unit	Value	
		Central Corridor	North and South corridors
Gold price	CAD/oz	1,612	
Exchange rate	USD:CAD	1.34	
Royalty	%	1.00	
Royalty	CAD/oz	21.60	
Refinery cost	CAD/ox	5.00	
Sell cost	CAD/oz	26.60	
Mining cost	CAD/t mined	50.75	75.50
G&A cost	CAD/t milled	12.00	
Definition drilling	CAD/oz	3.00	6.00
Ore transportation	CAD/t milled	9.80	
Environment	CAD/oz	0.75	1.50
Processing cost	CAD/t milled	17.00	
Mill recovery	%	90	
Mine recovery	%	100	
Calculated cut-off grade	g/t Au	1.51	1.97
Underground cut-off grade (rounded)	**g/t Au**	**1.50**	**2.00**

Metal prices and the exchange rate are based on an 18-month average as of October 2020.

A constraining volume was produced with the Deswik Stope Optimizer ("DSO") using a minimum mining shape of 10 m along the strike of the deposit, a height of 10 m and a width of 2 m. The maximum shape measures 15 m x 20 m x 100 m. Stope optimization used cut-off grades of 1.50 g/t Au for the Central Corridor and 2.0 g/t Au for the North and South corridors for both Indicated and Inferred resources.

The DSO results were used for the resource estimate statement.

14.14 Mineral Resource Estimate

The QP is of the opinion that the current mineral resource estimate can be classified as Indicated and Inferred mineral resources based on geological and grade continuity, data density, search ellipse criteria, drill hole spacing and interpolation parameters. The QP is also of the opinion that the requirement of a reasonable prospect for an eventual economic extraction is met by having a minimum modelling width for the mineralized structures, a cut-off grade based on reasonable inputs and a constraining volume (minable shapes) that are amenable to a potential underground extraction scenario.

The 2021 MRE is considered reliable and based on quality data and geological knowledge. The estimate follows CIM Definition Standards.

The Figure 14.9 shows the classified mineral resources within the constraining volume for the 5B structure.

Table 14.8 displays the results of the 2021 MRE for the Chimo Mine Project at the official cut-off grades of 1.5 and 2.0 g/t Au for an underground scenario.

Table 14.9 shows the cut-off grade sensitivity analysis of the 2021 MRE. The reader should be cautioned that the figures provided should not be interpreted as a mineral resource statement. The reported quantities and grade estimates at different cut-off grades are presented for the sole purpose of demonstrating the sensitivity of the resource model to the selection of a reporting cut-off grade.

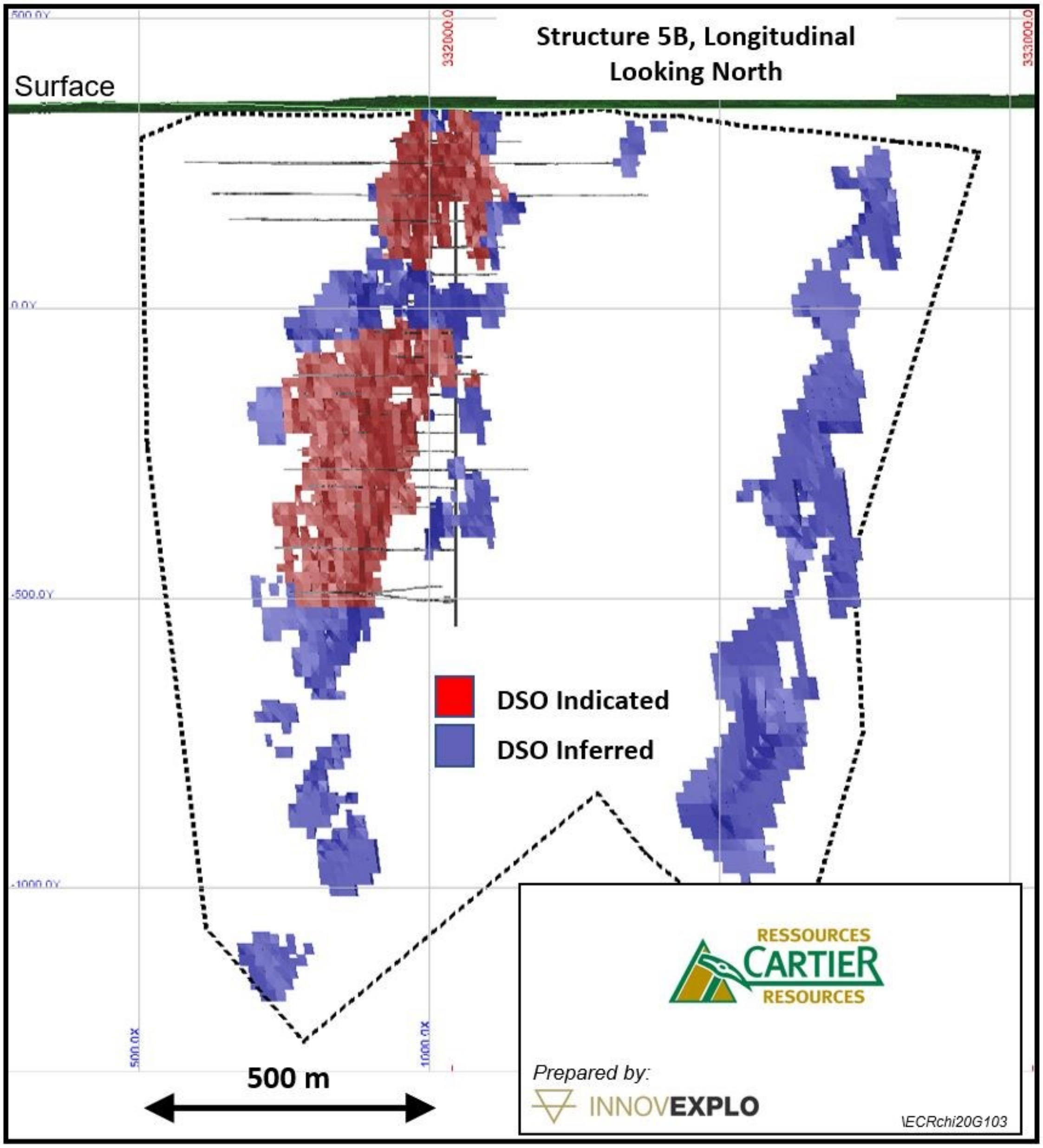


Figure 14.9 – Classified mineral resources within the constraining volume for the 5B structure

Table 14.8 – 2021 Mineral Resource Estimate for the Chimo Mine Project

Corridor	INDICATED			INFERRED		
	Tonnes	Grade (g/t Au)	Gold Ounces	Tonnes	Grade (g/t Au)	Gold Ounces
North Gold (>2.0)	1,119,000	3.85	139,000	1,563,000	3.54	178,000
Central Gold (>1.5)	5,053,000	3.03	493,000	11,728,000	2.55	963,000
South Gold (>2.0)	444,000	3.61	52,000	1,949,000	3.47	217,000
Total	6,616,000	3.21	684,000	15,240,000	2.77	1,358,000

Mineral Resource Estimate notes:

1. The independent and qualified person, as defined by NI 43-101, is Christine Beausoleil, P.Geo. (InnovExplo Inc.). The effective date is March 22, 2021;
2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The mineral resource estimates follow CIM Definition Standards and Guidelines.
3. Seventeen (17) structures were modelled: five (5) for the North Gold Corridor; five (5) for the South Gold Corridor with a minimum true thickness of 2.4 m; and seven (7) structures for the Central Gold Corridor with an average thickness of 7.42 m.
4. A density value of 2.90 g/cm^3 or 3.10 g/cm^3 (supported by measurement) was applied to all structures.
5. High-grade capping supported by statistical analysis was carried out on assay data and established on a per-structure basis for gold varying from 30 to 120 g/t Au prior to compositing at 1 m using the grade of the adjacent material when assayed, or a value of zero when not assayed.
6. The reasonable prospect for an eventual economical extraction is met by having used reasonable cut-off grades for underground scenarios, a minimum width and constraining volumes (Deswik shapes). The estimate is reported for a potential underground scenario at a cut-off grade of 1.5 g/t Au Central gold corridor and 2.0 g/t Au for the North and South Gold corridors. The COG reflects the geometry and the true width of each corridor. The cut-off grade was calculated using a gold price of US$1,612 per ounce, a USD:CAD exchange rate of 1.34; a mining cost of $50.75/t (Central) and $75.50/t (North and South); definition drilling $3/t (Central) and $6/t (North and South); transport cost of $9.80/t; environment cost of $0.75/t (Central) and $1.50/t (North and South); a processing cost of $17/t; and G&A of $12/t. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.).
7. Resources were estimated using GEOVIA GEMS software v.6.8.2 using hard boundaries on composited assays. The OK method was used to interpolate a block model (block size = 5 m x 5 m x 5 m).
8. The resource estimate is classified as Indicated and Inferred. The indicated category is defined by a minimum of three (3) drill holes within a closest distance of 25 m, and inferred with a minimum of two (2) drill holes within a closest distance of 65 m and where there are reasonable geological and grade continuities.
9. Results are presented in-situ. Ounce (troy) = metric tons x grade / 31.10348. The number of tonnes and ounces was rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects; rounding followed the recommendations as per NI 43-101.
10. The qualified person is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issue that could materially affect the mineral resource estimate.

Table 14.9 – Cut-off grade sensitivity analysis for the Chimo Mine Project

COG	North Gold Corridor			Central Gold Corridor			South Gold Corridor		
	Tonnes	Grade (Au g/t)	Ounces	Tonnes	Grade (Au g/t)	Ounces	Tonnes	Grade (Au g/t)	Ounces
Indicated Resources									
1.0	2,291,000	2.65	195,000	6,802,000	2.57	562,000	843,000	2.61	71,000
1.5	1,604,000	3.23	166,000	**5,053,000**	**3.03**	**493,000**	630,000	3.04	62,000
2.0	**1,119,000**	**3.85**	**139,000**	3,596,000	3.54	410,000	**444,000**	**3.61**	**52,000**
2.5	785,000	4.53	114,000	2,588,000	4.07	338,000	293,000	4.25	40,000
3.0	551,000	5.33	94,000	1,846,000	4.62	274,000	216,000	4.78	33,000
3.5	410,000	6.03	79,000	1,318,000	5.22	221,000	156,000	5.39	27,000
4.0	311,000	6.79	68,000	979,000	5.80	182,000	117,000	5.95	22,000
Inferred Resources									
1.0	3,779,000	2.29	279,000	18,102,000	2.10	1,220,000	4,830,000	2.24	348,000
1.5	2,386,000	2.89	222,000	**11,728,000**	**2.55**	**963,000**	2,897,000	2.90	271,000
2.0	**1,563,000**	**3.54**	**178,000**	7,334,000	3.02	712,000	**1,949,000**	**3.47**	**217,000**
2.5	1,145,000	3.98	147,000	4,741,000	3.44	525,000	1,351,000	3.97	172,000
3.0	814,000	4.47	117,000	2,822,000	3.93	356,000	903,000	4.57	133,000
3.5	581,000	4.98	93,000	1,713,000	4.43	244,000	518,000	5.53	92,000
4.0	432,000	5.41	75,000	956,000	5.03	155,000	335,000	6.53	70,000

15. MINERAL RESERVE ESTIMATES

Not applicable at the current stage of the Project.

16. MINING METHODS

Not applicable at the current stage of the Project.

17. RECOVERY METHOD

Not applicable at the current stage of the Project.

18. PROJECT INFRASTRUCTURE

Not applicable at the current stage of the Project.

19. MARKET STUDIES AND CONTRACTS

Not applicable at the current stage of the Project.

20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

Not applicable at the current stage of the Project.

21. CAPITAL AND OPERATING COSTS

Not applicable at the current stage of the Project.

22. ECONOMIC ANALYSIS

Not applicable at the current stage of the Project.

23. ADJACENT PROPERTIES

As of the effective date of this Technical Report, the GESTIM database shows the Chimo Mine Property surrounded by the East Cadillac Property belonging to Chalice Gold Mines (Quebec) Inc., a subsidiary of O3 Mining Inc. The East Cadillac Property includes an option on the Nordeau blocks (Nordeau and Nordeau West deposits), owned by Globex Mining Enterprises Inc. The Nordeau West deposit is located immediately east of the Chimo Mine Property (Figure 23.1).

MRB & Associates prepared a 43-101 technical report for the Nordeau West deposit (Langton et al., 2019). The 2019 mineral resource estimate comprises:

- Indicated resources of 226,000 t at 4.19 g/t Au for 30,400 ounces of gold
- Inferred resources of 1,271,900 t at 4.14 g/t Au for 169,400 ounces of gold

The authors have not verified this mineral resource estimate or the published geological information pertaining to other adjacent properties. The information about mineralization on adjacent properties is not necessarily indicative of mineralization on the Chimo Mine Property.

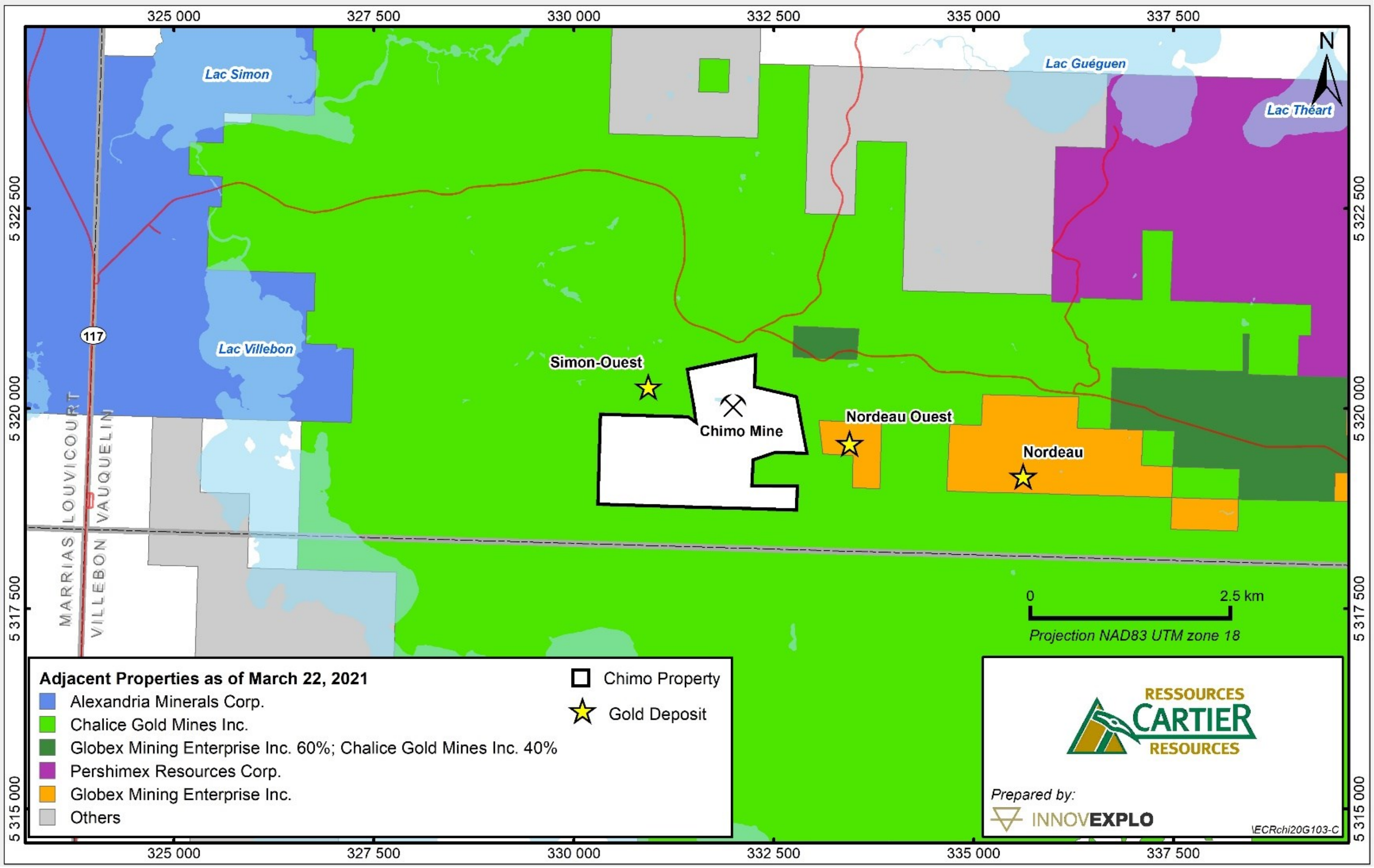


Figure 23.1 – Adjacent properties to the Chimo Mine Property

24. OTHER RELEVANT DATA AND INFORMATION

The QPs are not aware of any other relevant data and information that could have a significant impact on the interpretation and conclusions presented in this report.

25. INTERPRETATIONS AND CONCLUSIONS

The objective of the mandate assigned to InnovExplo was to produce an updated mineral resource estimate for the Chimo Mine Project (the “2021 MRE”) and to prepare a supporting Technical Report.

The QPs from InnovExplo conducted site visits that included, among other things, a review and validation of the data used for the 2021 MRE, as well as validation of the geology and mineralization and the procedures and processing methods. The QPs also validated the geological information provided by the issuer or obtained from public sources.

Cartier created a mineralization and alteration-structural model for structures using all available geological and analytical information. To provide accurate resource modelling of the deposit, the QPs based their wireframe model of mineralized structures on the drill hole database and on the interpretation provided by Cartier’s geologists.

The authors believe that the information presented in this report provides a fair and accurate picture of the Property's potential.

The Property is located in the Val-d’Or mining camp, a 50 km drive east of Val-d’Or. Mining infrastructure is still present at the site and could facilitate the transition to a more advanced stage of exploration.

The authors conclude the following:

- The database supporting the 2021 MRE is complete, valid and up to date.
- The geological and grade continuity of gold mineralization is demonstrated and supported by historical past production, underground exposures and by a densely drilled area (15-30 m drill hole spacing).
- The Project contains an estimated Indicated Resource of 6,616,000 tonnes grading 3.21 g/t Au for 684,000 ounces of gold and an estimated Inferred Resource of 15,240,000 tonnes grading 2.77 g/t Au for 1,358,000 ounces of gold.
- The 2021 MRE was prepared for a potential underground scenario at a cut-off grade of 1.5 g/t Au for Central gold corridor and 2.0 g/t Au for the North and South Gold corridors.
- It is likely that additional diamond drilling at depth would increase the Inferred Resource tonnage and upgrade some of the Inferred Resources to the Indicated category;

Table 25.1 identifies important internal risks, potential impacts and possible risk mitigation measures that could affect the economic outcome of the Project. It does not cover the external risks that apply to all mining projects (e.g., changes in metal prices, exchange rates, availability of investment capital, change in government regulations, etc.). Significant opportunities that could improve the economics, timing and permitting of the Project are also identified in this table. Further information and evaluation are required before these opportunities can be included in the project economics.

Table 25.1 – Risks and opportunities for the Chimo Mine Project

RISKS	Potential Impact	Possible Risk Mitigation
Inaccurate density	Bias in tonnage estimate.	Add to the sampling protocol test the density measurement of each structure and various host rocks.
Potentially poor social acceptability	Social acceptability is an inherent risk for all mining projects. It can affect permitting and the Project's development schedule.	Maintain and continue with the pro-active and transparent strategy to identify all stakeholders and maintain the communication plan with host communities.
Old mine	Rehabilitation work needed to restart operations.	Possible limited access to some of the resources.
Inadequacies in existing infrastructure	Cost of infrastructure upgrade.	Limits the ability to increase production capacity (tpd).
OPPORTUNITIES	**Explanation**	**Potential benefit**
Onsite rock sorting	Given the physical properties of the mineralized rock (colour and arsenopyrite content), it is reasonable to anticipate that onsite rock sorting would yield a reduction in milling and transportation fees.	Increases the economic value of the mining project by lowering the construction and operating costs (and lowering the COG).
Bulk mining scenario	Current resources and mineralization would allow this type of mining.	Maximizes production and reduces operating cost.
Existing infrastructure	Significant savings for infrastructure development	Significant reduction in time and cost for infrastructure development.

26. RECOMMENDATIONS

Based on the results of the 2021 MRE, the authors recommend that the Project move to an advanced phase of exploration and an initial economic study. A two-phase work program is recommended, where Phase 2 is conditional upon the positive conclusions of Phase 1.

In Phase 1, the authors recommend using the results from the updated MRE and internal studies as a basis for a Preliminary Economic Assessment ("PEA"):

- Continue and complete the metallurgical, rock sorting and internal mining engineering studies.
- Initiate environmental and hydrogeological characterization testing.
- Initiate a rock mechanics studies for potential stope optimization.
- In support to the PEA study, complete an updated NI 43-101 Technical Report.

In Phase 2, the authors recommend to:

- Define and complete a PFS study in accordance with the PEA results and recommendations.
- In support to PFS study, complete an updated NI 43-101 Technical Report.

Another general technical recommendation is to increase the accuracy of some collar locations. The collar surveys are considered adequate for the purpose of a resource estimate. Still, the collars should be professionally surveyed to increase the accuracy of the elevation data for the historical holes.

Finally, in any future drilling program, specific gravity (density) measurements should continue to be taken with the objective of refining the density values for each structure and host rock.

The authors have prepared a cost estimate for the recommended two-phase work program to serve as a guideline for the Project. The budget for the proposed program is presented in Table 26.1. Expenditures for Phase 1 are estimated at C$805,000 (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at C$1,150,500 (incl. 15% for contingencies). The grand total is C$1,955,000 (incl. 15% for contingencies). Phase 2 is contingent upon the success of Phase 1.

Table 26.1 – Estimated Cost for the Recommended Work Program

Phase 1 - Activity	Cost ($)
Continue the metallurgical, rock sorting and internal engineering studies	200,000
Complete a PEA and an updated NI 43-101 Technical Report	500,000
Contingencies (15%)	105,000
Total (Phase 1)	805,000
Phase 2 - Activity	**Cost ($)**
Complete a PFS and an updated NI 43-101 Technical Report	1,000,000
Contingencies (15%)	150,000
Total (Phase 2)	1,150,000
Total (Phase 1 and 2)	**1,955,000**

The authors are of the opinion that the recommended work programs and proposed expenditures are appropriate and well thought out. The authors believe that the proposed budget reasonably reflects the type and amount of the contemplated activities.

27. REFERENCES

Ayer, J., Amelin, Y., Corfu, F., Kamo, S., Ketchum, J. F., Kwok, K., Trowell, N. F. (2002): Evolution of the Abitibi Greenstone Belt based on U-Pb Geochronology: Autochthonous Volcanic Construction followed by Plutonism, Regional Deformation and Sedimentation. Precambrian Research, v. 115, p. 63–95.

Bateman, R., Ayer, J. A., Dubé, B. (2008): The Timmins-Porcupine Gold Camp, Ontario: Anatomy of an Archean Greenstone Belt and Ontogeny of Gold Mineralizations. Economic Geology, v. 103, p. 1285–1308.

Beauregard, A. J., Gaudreault, D. (2014): NI 43-101 Technical Report on the Sleepy Lake Property, Province of Québec, Canada. Prepared by Geological Groupe – Conseil for Alexandria Minerals Corporation, 76 p. Sedar website.

Beauregard, A. J., Gaudreault, D., D’Amours, C. (2012): NI 43-101 Technical Report on the Akasaba Property, Province of Québec, Canada as of May 1, 2012. Prepared by Geological Groupe – Conseil for Alexandria Minerals Corporation, 161 p. Sedar website.

Beausoleil, C., Pelletier, C., Faure, S., Noël, G. (2019): NI 43-101 Technical Report and Mineral Resource Estimate for the Kiena Mine Complex, Québec. Prepared for Wesdome, 183 p.

Benn, K., Miles, W., Ghassemi, M. R., Gillet, J. (1994): Crustal Structure and Kinematic Framework of the North-Western Pontiac Subprovince, Québec: An Integrated Structural and Geophysical Study. Canadian Journal of Earth Sciences, Vol. 31, p. 271-281.

Benn, K., Peschler, A. P. (2005): A Detachment Fold Model for Fault Zones in the Late Archean Abitibi Greenstone Belt. Tectonophysics, v. 400, p. 85–104.

Berclaz, A. (1993): Étude métamorphique de la région du Front de Grenville à l'est de Louvicourt, Abitibi, Québec. Thèse de maîtrise, Université Laval, 244 p.

Buchan, K. L.; Ernst, R. E. (2004): Essaims de dykes de diabase et unités apparentées au Canada et dans les régions avoisinantes. Geological Survey of Canada, "A" Series Map No. 2022A.

Campiglio, C. (1977): Batholite de Bourlamaque, ES-26, Ministère des Richesses naturelles du Québec, 211 p.

Card, K. D., Ciesielski, A. (1986): DNAG No.1 – Subdivisions of the Superior Province of the Canadian Shield. Geoscience Canada, v13, p.5-13.

Colvine, A.C., Fyon, J. A., Heather, K. B., Marmont, S., Smith, P. M., Troop, D. G. (1988): Archean lode Gold Deposits in Ontario. Ontario Geological Survey, Miscellaneous paper 139, 136 p.

Daigneault, R., Mueller, W. U., Chown, E. H. (2004): Abitibi Greenstone Belt Plate Tectonics: The Diachronous History of Arc Development, Accretion and Collision. In Eriksson, P. G., Altermann, W., Nelson, D. R., Mueller, W. U., Catuneanu, O. (Eds.). The Precambrian Earth: Tempos and Events, Series: Developments in Precambrian geology, vol. 12, Elsevier, p. 88-103. Couture, J. P., Pilote, P., Machado, N., and Desrochers, J., P. (1994): Timing of Gold Mineralization in the Val-d'Or District, Southern Abitibi Belt: Evidence for two Distinct Mineralizing Events. Economic Geology, v. 89, p. 1542-1551.

D'Amours, C. (2019). NI 43-101 Technical Report and Mineral Resource Estimate Chimo Mine Project, Central Gold Corridor. Prepared for Cartier Resources Inc, 124 p.

Davis, D. W. (2000): Report on U-Pb Geochronology of Rocks from Québec, March 11 2000. Ministère des Ressources naturelles, Québec. Rapport interne 5 p., 12 figures.

Dimroth, E, Imrech, L., Rocheleau, M., Goulet, N. (1983): Evolution Oof the Southcentral Part of the Archean Abitibi Belt, Québec. Part III: Plutonic and Metamorphic Evolution and Geotectonic Model. Canadian Journal of Earth Sciences, Vol. 20, pages 1374-1388.

Dubé, B., Gosselin, P. (2007): Greenstone-Hosted Quartz–Carbonate Vein Deposits. In Goodfellow, W. D. (Ed). Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, The Evolution of Geological Provinces, and Exploration Methods.

Eisenlohr, B. N., Groves, D. I., Partington, G. A. (1989): Crustal-Scale Shear Zones and their Significance to Archean Gold Mineralization in Western Australia. Mineralium Deposita, V. 24(1), Pp.1–8.

Faure, S. (2015): Le segment volcanique Taschereau-Amos-Senneterre (Abitibi) et son potentiel métallogénique pour l'or et les métaux de base. Projet 2015-01, Consorem, 58 p.

Gaudreau, R., Lacoste, P and Rocheleau, M. (1986): Géologie et gitologie du secteur de Louvicourt-Vauquelin, Abitibi. Ministère de l'Énergie et des Ressources du Québec, Report MB 86-67.

Goutier, J., Melançon, M. (2007): Compilation géologique de la Sous-province de l'Abitibi (version préliminaire): Ministère des Ressources naturelles et de la Faune du Québec.

Groves, D.I., Goldfarb, R.J., Gebre-Mariam, M., Hagemann, S.G. and Robert, F. (1998): Orogenic Gold Deposits - A Proposed Classification in the Context of their Crustal Distribution and Relationship to Other Gold Deposit Types. Ore Geology Reviews 13, 7-27.

Hagemann, S.G. and Cassidy, K.F. (2000): Archean Orogenic Lode Gold Deposits: Society of Economic Geologists Reviews, v. 13, p. 9-68.

Houle, N. (1995): Projet Chimo, Campagne de sondage 1995, Canton Vauquelin, SNRC 32C03, 303 p.

Jolly, W.T. (1978): Metamorphic History of the Archean Abitibi Belt, In Fraser, J.A. and Heywood, W.W., Eds., Metamorphism in the Canadian Shield, Geological Survey of Canada, Paper 78-10.

Langton, J., Jourdain, V. (2019): NI 43-101 Technical Report and Mineral Resource Estimate for the East Cadillac Gold Project, Québec. Prepared for Chalice Gold Mines Ltd, 204 p.

Monecke, T., Mercier-Langevin, P., Dubé, B. (2017): Chapter 1. Geology of the Abitibi Greenstone Belt: Reviews in Economic Geology, vol. 19.

Moorhead, J., Vorobiev, L., Tremblay, A. (2000): Caractéristiques lithogéochimiques et corrélations lithostratigraphiques des roches volcaniques du secteur du canton Vauquelin, Sous-province de l'Abitibi, Québec, MB 2000-16, 60 p.

Mueller, W. U., Donaldson, J. A. (1992): Development of Sedimentary Basins in the Archean Abitibi Belt, Canada: An Overview. Can. J. Earth Sci. 29, 2249–2265.

Powell, W. D., Carmichael, D. M., Hodgon, C. J. (1993): Thermobarometry in a Subgreenschist to Greenschist Transition in Metabasite of the Abitibi Greenstone Belt, Superior Province, Canada. Journal of Metamorphic Geology, Vol. 11, p. 165-178.

Plouffe, C. (1990): Analyse structural et contrôles de la minéralisation aurifère de la Mine Chimo, Canton de Vauquelin, Abitibi, Québec. Mémoire de maîtrise, Université du Québec à Montréal, Montréal, 152 p.

Racine, M. (1989): La Zone Tectonique de Cadillac à l'est de Val-d'Or: Exemple du complexe structural de Trivio, Canton Vauquelin. Thèse de maîtrise non publiée, Université Laval, 79 p.

Rafini, S. (2015): Assurance et contrôle de la qualité (QA/QC) en exploration minérale: synthèse et évaluation des usages. Projet 2013-05, Consorem, 52 p.

Richard, P. L., Athurion, C. (2019): NI 43-101 Technical Report and Mineral Resource Estimate for the Bonnefond South Intrusive Project, Québec. Prepared for QMX Gold Corp., 172 p.

Robert, F. (1990): Structural Setting and Control of Gold-Quartz Veins of the Val-d'Or Area Southeastern Abitibi Subprovince, in Ho, S. E., Robert, F., Groves, D. I., eds., Gold and Base-Metal Mineralization in the Abitibi Subprovince, Canada, with Emphasis on the Québec Segment. University of Western Australia, Short Course Notes, v. 24, p.167-210.

Robert F., Brommecker R., Bourne B. T., Dobak P. J., McEwan C. J., Rowe R. R., Zhou X. (2007): Models and Exploration Methods for Major Gold Deposit Types; in, Proceedings of Exploration 2007: Fifth Decennial International Conference on Mineral Exploration, ed. B. Milkereit (Vol. 7, pp. 691-711).

Rocheleau, M., Gaudreau, R., Sauvé, P., Perrier, B. (1988): Géologie des gisements aurifères de Chimo et de Nordeau, Région de Val-d'Or; Université Laval IREM-MERI, MRN QC, MB 88-14, 53 p.

Rocheleau, M., Hébert, R., Lacoste, P., Racine, M., Gaudreau, R., St-Julien, P. (1997): Synthèse stratigraphique, paléogéographique et gitologique: cantons Vauquelin, Pershing, Haig et parties des cantons de Louvicourt, Pascalis et Denain. Gouvernement du Québec, Ministère des Ressources naturelles, Secteur des mines, MB97-11, 224 p., 6 maps.

Sauvé, P., Blanchet, P., Blouin, J. Y., Champage, M., Leclerc, A. (1987): Géologie de la mine d'or Chimo – Région de Val-d'Or; Gouvernement du Québec, Ministère des Ressources naturelles, Secteur des mines, MB 87-05, 75 p.

Savard, C., Carrier, A., Durieux, G. (2018): NI 43-101 Technical Report and Updated Mineral Resource Estimate for the Orenada zones 2 and 4 project, Orenada Group Porperties, Québec. Prepared for Alexandria Minerals Corporation, 176 p.

Savard, C., D'Amours, C. (2020): NI 43-101 Technical Report and Mineral Resource Estimate for the Central, North and South Gold Corridors on the Chimo Mine Project, Québec, Canada. Prepared for Cartier Resources Inc., 153 p.

Stanley, C.R., and Lawie, D 2007, Average Relative Error in Geochemical Determination: Classification, Calculationand Plea for Concistency Exploration and Mining Geology, V16, P.267-275.

Taner, M. F. (1996): The East Sullivan Stock and its Gold-Copper Potential, Val-d'Or, Québec, Canada. Exploration Mining Geology, Vol. 5, No.1, pp. 45-60.

Thurston, P. C., Chivers, K. M. (1990): Secular Variation in Greenstone Sequence Development Emphasizing Superior Province, Canada: Precambrian Research, v. 46, p. 21–58.

Vachon, A., Aubé, F., Casault, N., Cyr, R., Marchand, S. and Rood, M. (1993): Déménagement du concentrateur Lucien C. Béliveau à la mine Chimo et disposition des résidus minier. Demande de certificat d'autorisation, ROCHE Ltée, No. projet: 15193, préparé pour CAMBIOR, 73 p.

Vallières, D., (1996): Rapport annuel 1996 de la mine Chimo (CAMBIOR), 52 p.