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NI 43-101 TECHNICAL REPORT AND PRELIMINARY ECONOMIC ASSESSMENT FOR THE CHIMO MINE AND WEST NORDEAU GOLD DEPOSITS, CHIMO MINE AND EAST CADILLAC PROPERTIES, QUEBEC, CANADA

Prepared for

CARTIER RESOURCES

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

Project Location
Latitude: 48°00' North; Longitude: 77°06' West
Province of Quebec, Canada

Prepared by:

Marc R. Beauvais, P.Eng.
Vincent Nadeau-Benoit, P.Geo.
Alain Carrier, P.Geo., M.Sc.
Gail Amyot, P.Eng.

InnovExplo Inc.
Val-d'Or (Québec)

Jean-Louis Roberge, Eng.

Responsible Mining Solutions Corp.
Sudbury (Ontario)

Florent Baril, P.Eng.

Bumigeme Inc.
Montreal (Québec)

Effective Date: April 13, 2023
Signature Date: May 26, 2023

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SIGNATURE PAGE – INNOVEXPLO

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Effective Date: April 13, 2023

(Original signed and sealed)

Signed in Val-d'Or on May 26, 2023

Marc R. Beauvais, P.Eng.
InnovExplo Inc.
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Signed in Val-d'Or on May 26, 2023

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Alain Carrier, P.Geo., M.Sc.
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Signed in Val-d'Or on May 26, 2023

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Gail Amyot, P.Eng.
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BUMIGEME inc.

SIGNATURE PAGE – BUMIGEME INC.

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Effective Date: April 13, 2023

(Original signed and sealed)

Florent Baril, P.Eng.
Bumigeme Inc.
Montréal (Quebec)

Signed in Montreal on May 26, 2023

SIGNATURE PAGE – RESPONSIBLE MINING SOLUTIONS CORP.

NI 43-101 TECHNICAL REPORT AND PRELIMINARY ECONOMIC ASSESSMENT FOR THE CHIMO MINE AND WEST NORDEAU GOLD DEPOSITS, CHIMO MINE AND EAST CADILLAC PROPERTIES, QUEBEC, CANADA

Prepared for

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

Project Location
Latitude: 48°00' North; Longitude: 77°06' West
Province of Quebec, Canada

Effective Date: April 13, 2023

(Original signed and sealed)

Jean-Louis Roberge, P.Eng.
Responsible Mining Solutions Corp.
Sudbury (Ontario)

Signed in Sudbury on May 26, 2023

CERTIFICATE OF AUTHOR – MARC R. BEAUVAIS

I, Marc R. Beauvais,P.Eng., (OIQ No. 108195, PEO No. 100061114), do hereby certify that:

1. I am currently employed as a senior mining engineer with InnovExplo Inc., Consulting Firm in Mines and Exploration, 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 Preliminary Economic Assessment for the Chimo Mine and West Nordeau Gold Deposits, Chimo Mine and East Cadillac Properties, Quebec, Canada" (the "Technical Report") with an effective date of April 13, 2023, and a signature date of May 26, 2023, prepared for Cartier Resources Inc. (the "issuer").
3. I have practiced my profession in mining operation, construction and management for more than 30 years. I have experience in gold, base metals and diamonds. I founded and operated my own consulting firm (Promine Consultant Inc.) from 2001 to 2005. I have been a Business Associate of Genivar Inc. from 2005 to 2009. I have been assigned to various projects owned by foreign mining companies in Azerbaijan, Colombia, Peru, Philippines, Kazakhstan, and Tanzania between 1999 to 2010. In 2012, I founded and managed Minrail Inc, which developed a patented, fully integrated mining system designed specifically to extract the mineralised material from shallow-dipping deposits in underground mines. I have multiple specializations in computer modelling, mine planning and construction.
4. I am a member in good standing of the Ordre des Ingénieurs du Québec (OIQ No. 108195) and the Professional Engineers of Ontario (PEO No. 100061114).
5. I graduated in 1991 from Laval University in Ste-Foy (Québec) with a B.Sc. in Mining Engineering.
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 visited the property on November 11, 2022, for the purpose of the Technical Report.
8. I am responsible for the overall supervision of the Technical Report. I am the author of and responsible for items 1-3, 16, 19, 21 and 22. I am a co-author of and share responsibility for the executive summary (Item 1) and items 18 and 24-27.
9. I have had prior involvement with the project that is the subject of the Technical Report by overseeing previous engineering studies.
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 items 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 26th day of May 2023 in Val-d'Or, Quebec, Canada.

(Original signed and sealed)

Marc R. Beauvais, P.Eng.
InnovExplo Inc.
marcr.beauvais@innovexplo.com

CERTIFICATE OF AUTHOR – VINCENT NADEAU-BENOIT

I, Vincent Nadeau-Benoit, P.Geo. (OGQ No. 1535, EGBC No. 54427, NAPEG No. L4154), do hereby certify that:

1. I am a professional geoscientist, employed as Senior Geologist in Mineral Resources Estimation for InnovExplo Inc. at 560, 3e Avenue, Val-d'Or, Quebec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Preliminary Economic Assessment for the Chimo Mine and West Nordeau Gold Deposits, Chimo Mine and East Cadillac Properties, Quebec, Canada" (the "Technical Report") with an effective date of April 13, 2023, and a signature date of May 26, 2023, prepared for Cartier Resources Inc. (the "issuer").
3. I graduated with a bachelor's degree in Earth and Atmospheric Sciences (Geology) from Université du Québec à Montréal (Montreal, Quebec) in 2010.
4. I am a member in good standing of the Ordre des Géologues du Québec (OGQ licence No. 1535), the Association of Professional Engineers and Geoscientists of British Columbia (EGBC, No. 54427) and the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG No. L4154).
5. I have practiced my profession continuously as a geologist for a total of 10 years since graduating from university. During that time, I have been involved with mineral exploration and mine geology projects for precious and base metal properties in Canada. I acquired my expertise with Royal Nickel Corporation and Glencore and have been a consulting geologist for InnovExplo Inc. since August 2018.
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 visited the property on August 16 and 17, 2021, for the purpose of this Technical Report.
8. I am a co-author of the executive summary (Item 1) and items 4-12, 14 and 23-27 of the Technical Report.
9. I have not had any prior involvement with the project that is the subject of the 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 items 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 26th day of May 2023 in Val-d'Or, Quebec, Canada.

(Original signed and sealed)

Vincent Nadeau-Benoit, P.Geo.

InnovExplo Inc.

vincent.nadeau-benoit@innovexplo.com

CERTIFICATE OF AUTHOR – ALAIN CARRIER

I, Alain Carrier, P.Geo., M.Sc. (OGQ No. 281, PGO No. 1719, NAPEG No. L2701), do hereby certify that:

1. I am a professional geoscientist, employed as Co-President Founder of InnovExplo Inc., located at 560, 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Preliminary Economic Assessment for the Chimo Mine and West Nordeau Gold Deposits, Chimo Mine and East Cadillac Properties, Quebec, Canada" (the "Technical Report") with an effective date of April 13, 2023, and a signature date of May 26, 2023, prepared for Cartier Resources Inc. (the "issuer").
3. I am a member in good standing with the Ordre des Géologues du Québec (OGQ No. 281), the Association of Professional Geoscientists of Ontario (PGO No. 1719), Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG No. L2701), the Canadian Institute of Mines, Metallurgy and Petroleum (CIM No. 91323), and the Society of Economic Geologists (SEG No. 132243). I graduated with a mining technician degree in geology (1989) from Cégep de l'Abitibi-Témiscamingue (Rouyn-Noranda, Quebec) and with a Bachelor's degree in Geology (1992; B.Sc.) and a Master's in Earth Sciences (1994; M.Sc.) from Université du Québec à Montréal (Montreal, Quebec). I initiated a PhD in geology at INRS-Géoressources (Sainte-Foy, Quebec), for which I completed the course program but not the thesis.
4. I have practiced my profession continuously as a geologist for a total of twenty-seven (27) years, during which time I have been involved in mineral exploration, mine geology, mineralised material control and resource modelling projects for gold, copper, zinc, silver, nickel, lithium, graphite and uranium properties in Canada and internationally.
5. I have read the definition of a qualified person ("QP") 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 NI 43-101.
6. I visited the Properties on July 27, 2022, for the purpose of the Technical Report.
7. I am a co-author of items 4 to 12, 14, 20 and 23-27 of the report.
8. I have had prior involvement with the project that is the subject of the Technical Report by overseeing previous mandates and reports.
9. I am independent of the issuer in accordance with the application of section 1.5 of NI 43-101.
10. 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.
11. 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 26th day of May 2023 in Val-d'Or, Quebec, Canada.

(Original signed and sealed)

Alain Carrier, P.Geo, M.Sc.

InnovExplo Inc.,

alain.carrier@innovexplo.com

CERTIFICATE OF AUTHOR – GAIL AMYOT

I, Gail Amyot (P.Eng.), do hereby certify that:

1. I am employed by InnovExplo Inc. located at 560, 3e Avenue, Val-d'Or, Quebec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "Ni 43-101 Technical Report and Preliminary Economic Assessment for the Chimo Mine and West Nordeau Gold Deposits, Chimo Mine and East Cadillac Properties, Quebec, Canada" (the "Technical Report") with an effective date of April 13, 2023, and a signature date of May 26, 2023, prepared for Cartier Resources inc. (the "issuer").
3. I graduated with a Bachelor's degree in Geological Engineering from Laval University (Québec City,Québec) in 1977..
4. I am a member of the Ordre des ingénieurs du Québec (OIQ No. 31050).
5. I have worked as a geological engineer for a total of thirty-seven (37) years since graduating from university. My expertise was acquired while working as a consulting engineer with Roche et Ass., GEA Inc., Qualitas Environnement and Genivar and as Environmental Engineer at Cambior Inc. and Vice-president Environmental Health and Safety at Canadian Royalties Inc.
6. I have read the definition of a qualified person ("QP") set out in Regulation 43 101/National Instrument 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 QP for the purposes of NI 43 101.
7. I have not visited the property for the purpose of the Technical Report.
8. I am responsible for the preparation of section 20. I am also co-author of and share responsibility for sections 1, 25, 26 and 27.
9. I am independent of the issuer applying all the tests in section 1.5 of NI 43 101.
10. I have not had prior involvement with the property that is the subject of the Technical Report.
11. I have read NI 43-101 and Form 43-101F1, and the items 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 26th day of May 2023 in Quebec, Quebec, Canada.

(Original signed and sealed)

Gail Amyot, ing. (OIQ No. 31050)

InnovExplo Inc.

gailamyot848@gmail.com.

CERTIFICATE OF AUTHOR – FLORENT BARIL

I, Florent Baril (P.Eng.), do hereby certify that:

1. I reside at 624, Jean Deslauriers, Condo 17, Boucherville, Quebec, J4B 8P5.
2. I am a graduate of Laval University (Quebec) with a B.Sc. degree in Metallurgy (1954), and I have practiced for over 50 years.
3. I am a member of the Ordre des Ingenieurs du Quebec (No. 6972).
4. I am the owner and president of Bumigeme Inc., a firm of consulting engineers incorporated in 1994.
5. This certificate applies to the report entitled “NI 43-101 Technical Report and Preliminary Economic Assessment for the Chimo Mine and West Nordeau Gold Deposits, Chimo Mine and East Cadillac Properties, Quebec, Canada” (the “Technical Report”) with an effective date of April 13, 2023, and a signature date of May 26, 2023, prepared for Cartier Resources Inc. (the “issuer”).
6. I have not visited the property and the region in preparation of the report.
7. I have read the definition of a qualified person (“QP”) set out in National Instrument/Regulation 43-101 (NI 43-101) and certify that as a result 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 QP for the purposes of NI 43-101. I have been involved in mining operations, engineering, construction and development, financial evaluation and senior management in the mineral industry and engineering for over fifty years.
8. I have no personal knowledge as of the date of this certificate of any material fact or change which is not reflected in this report.
9. I am the author of items 13 and 17 of the Technical Report and collaborated on the executive summary (Item 1) and items 21 and 25-27.
10. Neither I nor any affiliated entity of mine is, at present, under an agreement, arrangement or understanding or expects to become an insider, associate, affiliated entity or employee of the issuer or any associated or affiliated entities.
11. Neither I nor any affiliated entity of mine directly or indirectly own or expect to receive any interest in the properties or securities of the issuer or any associated or affiliated companies.
12. As of the date of this certificate, to the best of my knowledge, information, and belief, the sections of the Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 26th day of May 2023 in Montreal, Quebec, Canada.

(Original signed and sealed)

Florent Baril, P.Eng. (OIQ No. 6972)

Bumigeme Inc.

fbaril@bumigeme.com

CERTIFICATE OF AUTHOR – JEAN-LOUIS ROBERGE

I, Jean-Louis Roberge (P.Eng.), do hereby certify that:

1. I am employed by Responsible Mining Solutions at 531 Notre Dame Avenue, Sudbury, Ontario, Canada, P3C 5L1.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Preliminary Economic Assessment for the Chimo Mine and West Nordeau Gold Deposits, Chimo Mine and East Cadillac Properties, Quebec, Canada" (the "Technical Report") with an effective date of April 13, 2023, and a signature date of May 26, 2023, prepared for Cartier Resources Inc. (the "issuer").
3. I graduated with a Bachelor's degree in Chemical Engineering from Laurentian University (Sudbury, Ontario) in 2015.
4. I am a member of the Ordres des ingénieures du Québec (OIQ No. 6045586).
5. I have worked as a process engineer for a total of eight (8) years since graduating from university. My expertise was acquired while working as a consultant for mine backfill and tailings management.
6. I have read the definition of a qualified person ("QP") set out in Regulation/National Instrument 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 QP for the purposes of NI 43-101.
7. I have not visited the property for the purpose of the Technical Report.
8. I am the author and responsible for the content relating to tailings dewatering and tailings disposal in Item 18. I am also a co-author of and share responsibility for the executive summary (Item 1) and items 21, 25, 26 and 27.
9. I am independent of the issuer applying all the tests in section 1.5 of NI 43-101.
10. I have not had prior involvement with the property that is the subject of the Technical Report.
11. I have read NI 43-101, and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 26th day of May 2023 in Sudbury, Ontario, Canada.

(Original signed and sealed)

Jean-Louis Roberge, ing. (OIQ No 6045586)

Responible Mining Solutions

jlroberge@rmscorp.ca.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. SUMMARY

1.1 Introduction

Cartier Resources Inc. (the "issuer" or "Cartier") owns the Chimo Mine and East Cadillac properties which included West Nordeau Deposit (the "Properties" or the "Project") which is located 45 km east of the Val-d'Or mining camp. Cartier commissioned InnovExplo Inc (InnovExplo) to complete a Preliminary Economic Assessment (PEA) for the potential re-opening of the Chimo mine.

In 2022, InnovExplo prepared the "NI 43-101 Technical Report and Mineral Resource Estimates for the Chimo Mine and West Nordeau Gold Deposits, Chimo Mine and East Cadillac Properties, Quebec, Canada" with an effective date of October 2, 2022, and signature date of October 12, 2022.

InnovExplo is an independent consulting firm in geology and mining engineering with offices in Val-d'Or, Longueil and Quebec City (Québec, Canada).

This Technical Report summarizes the results of the 2023 PEA study and was prepared following the guidelines of NI 43-101.

All currency in this report is Canadian dollars (CAD$), unless stated otherwise. Metric units are used and defined as required.

This PEA is preliminary in nature and includes the use of Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the results of the PEA will be realized.

1.2 Report responsibility and qualified person

The compilation of this PEA technical report was undertaken by Mr. Marc R. Beauvais, P. Eng, of InnovExplo. By virtue of his education, membership to a recognized professional association, and relevant work experience, Mr. Beauvais is an independent qualified person (QP) as defined by NI 43-101.

In accordance with NI 43-101 guidelines, the following professionals, designated as QP for the purpose of this technical report, have provided contributions as authors for certain sections of this report related to their areas of expertise. General areas of responsibility are listed here, with detailed lists of responsibility provided in Table 1 and the QP certificates.

Table 1-1 – Qualified Persons and Responsible Report Sections

Qualified Person	
Marc R. Beauvais	Sections 1-3, 16, 18, 19, 21, 22; co-responsible for executive summary (ES) and Sections 24-26
Vincent Nadeau-Benoit	co-responsible for ES and Sections 4-12, 14, 23-26
Alain Carrier	co-responsible for ES and Sections 4-12, 14, 23-26
Gail Amyot	Sections 20; co-responsible for ES and Sections 24
Florent Baril	Sections 13, 17; co-responsible for ES and Sections 21, 24-26
Jean-Louis Roberge	co-responsible for Sections 18, for ES and Sections 21, 24-26

1.3 Property Description and Location

The Chimo Mine and East Cadillac Properties (together, the "Properties") are located in the province of Quebec (Canada) in the administrative region of Abitibi-Témiscamingue. The Properties lie 50 km east of the city of Val-d'Or, the closest major urban centre, and about 12 km southeast of the municipality of Louvicourt. They are accessible year-round via paved roads and secondary gravel roads.

The Properties overlie parts of Vauquelin, Pershing, Denain and Villebon townships at the eastern end of the Val-d'Or gold mining camp and overlap NTS Map sheets 32C/02, 32C/03, 32N/14 and 32N/15.

The approximate centre of the Properties has Universal Transverse Mercator (UTM) coordinates 343353.07 East, 5318434.03 North, in Zone 18 of the 1983 North American Datum (NAD83) geoid, equivalent to 48°00' latitude and 77°06' longitude.

All mining titles for the Chimo Mine and the East Cadillac Properties are registered to Cartier Chimo Mine mining titles consist of twelve (12) contiguous claims for a total area of 334.4 ha. East Cadillac mining titles consist of 539 contiguous claims for a total area of 26,431.1 ha.

Some areas of the Properties are subject to the following royalties payable to various stakeholders: Chimo Mine Property: 1% NSR; East Cadillac Property: 1% to 2% NSR and 2% to 3% GMR.

To the authors' knowledge, there are no significant factors, risks, or legal issues that may affect access, title, or the right or ability to perform fieldwork or mineral resource estimation work on the Properties.

1.4 Geology

The Properties underlain by rocks of the southern Abitibi Greenstone Belt and the Pontiac Subprovince, separated from one another by the crustal-scale Larder Lake Cadillac Fault Zone. To the north of the Larder Lake Cadillac Fault Zone, the Abitibi Greenstone Belt - related rocks comprise the mafic to intermediate Val-d'Or Formation and the felsic-dominated Héva Formation (of the Louvicourt Group), intruded by the granitic to granodioritic Pershing-Manitou pluton.

Two gold deposits and several occurrences are known on the Properties: the historic Chimo mine and the West Nordeau Deposit. The Chimo mine operated from 1966 to 1997 and produced 379,012 oz Au (2.4 Mt @ 4.8 g/t Au). The West Nordeau Deposit lies 1.5 km east of the Chimo mine.

Gold mineralization in the area is typically concentrated along the Larder Lake Cadillac Fault Zone and related secondary structures. This is evident at the closed Chimo Mine and the West Nordeau Deposit, where gold occurs with quartz and arsenopyrite in longitudinal high-strain (“shear”) zones within the mafic volcanic rocks and in bands of semi-massive arsenopyrite and pyrrhotite associated, in the north part of the Chimo Mine Property with banded magnetite iron formation units (Sauvé et al., 1987).

1.5 Mineral Resource Estimates

The 2022 MRE was prepared by Vincent Nadeau-Benoit (P.Geo.), Alain Carrier (P.Geo.) and Marc R. Beauvais (P.Eng.) using all available information. The databases supporting the 2022 MRE are complete, valid and up to date.

The Chimo Mine Gold System 2022 MRE combines the updated mineral resource estimates for the Chimo Mine and West Nordeau Deposits. The following Table displays the results of the 2022 MRE at the official cut-off grades of 1.5 and 2.0 g/t Au for an underground scenario.

Chimo Mine Gold System 2022 Mineral Resource Estimate (combined Chimo Mine and West Nordeau gold deposits)

Gold Corridor Cut-off Grade (g/t Au)	Indicated Mineral Resources			Inferred Mineral Resources		
	Metric Tons (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Metric Tons (t)	Grade (g/t Au)	Gold Ounces (oz Au)
North (>2.0)	1,119,000	3.85	139,000	1,714,000	3.54	1,950,00
Central (>1.5)	5,565,000	2.96	529,000	14,812,000	2.56	1,221,000
South (>2.0)	444,000	3.61	52,000	1,949,000	3.47	217,000
Total	7,128,000	3.14	720,000	18,475,000	2.75	1,633,000

Mineral Resource Estimates notes:

1. The independent and qualified persons, as defined by NI 43-101, are Vincent Nadeau-Benoit, P.Geo., Alain Carrier, M.Sc., P.Geo., and Marc R. Beauvais, P.Eng. (InnovExplo). The effective date is August 22, 2022.
2. The mineral resources are not mineral reserves as they do not have demonstrated economic viability. The mineral resource estimates follow CIM Definition Standards and CIM Best Practice Guidelines.
3. For the Chimo Mine Deposit, seventeen (17) structures were modelled using a minimum true thickness of 2.4 m: five (5) for the North Gold Corridor; five (5) for the South Gold Corridor; and seven (7) for the Central Gold Corridor. For the West Nordeau Deposit, eight (8) structures were modelled using a minimum true thickness of 2.4 m: five (5) for the North Gold Corridor; and three (3) for the Central Gold Corridor.
4. A density value of 2.90 g/cm^3 or 3.10 g/cm^3 (supported by measurements) 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 before 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 economic 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 for the Central Gold Corridor and 2.0 g/t Au for the North and South Gold Corridors. The cut-off grade reflects the geometry and 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, mining cost of CAD$50.75/t (Central) and CAD$75.50/t (North and South), definition drilling cost of CAD$3/t (Central) and CAD$6/t (North and South), transport cost of CAD$9.80/t; environment cost of CAD$ 0.75/t (Central) and CAD$1.50/t (North and South); processing cost of CAD$17/t; and G&A of CAD$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. For the Chimo Mine Deposit, the mineral resources were estimated using GEOVIA GEMS software v.6.8.2 from capped and composited assays constrained by the modelled structures. The ordinary kriging method was used to interpolate a block model (block size = 5 m x 5 m x 5 m). For the West Nordeau Deposit, the mineral resources were estimated using Leapfrog Edge software v.2021.2.5 from capped and composited assays constrained by the modelled structures. The ordinary kriging method was used to interpolate a sub-blocked model (parent block size = 5 m x 5 m x 5 m).
8. The resource estimates are 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. The inferred category is defined by 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 (tonnes) 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.

The independent and qualified persons for the 2022 MRE are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially affect the mineral resource estimate.

1.6 Mining

The Chimo Mine Project will involve an underground operation with a mining method optimized to the deposit geometry, with longitudinal long-hole retreat as a preferred mining method. Mining will take place around the historic Chimo mine in the renamed Chimo Mine Main zone, in addition to three new mining sectors to the east and in-depth: East Chimo Mine, Chimo Mine Extension and West Nordeau. Mining and development will take advantage of the rehabilitated shaft, which will be used for material and supplies handling, in addition to a new portal to access the top of Main zone.

The current mine plan will sustain a production of 4,500 t/d while in production, with a three-year pre-production period. Additional objectives of the project are the reduction of CO_2 emissions and environmental footprint of mine tailings by employing appropriate technologies, mining strategies and practices. The Chimo underground mine is designed to create a safe working environment and reduce consumption of non-renewable energy using electric and high-efficiency technologies. The project intends to take advantage of supplementary technological advances, including ventilation-on-demand and high-efficiency fans, to reduce power requirements, as they become available.

1.7 Mineral processing

No metallurgical test work was performed for this Preliminary Economic Assessment (PEA). The process flowsheet and design criteria are derived from the historical metallurgical test work performed at Lakefield Research (SGS Lakefield) and CRM (now COREM) in the nineties. Test work at Lakefield included flotation and cyanidation of the flotation concentrates whereas CRM test work focused on gravity concentration and flotation for investigating low gold recoveries in the plant. Recent test work at COREM focused on mineralized material sorting for producing a preconcentrate of the underground mineralized material. Material will be sorted using automated sensor-based sorting technology with an expected concentration ratio of 1.85 and a recovery rate of 91.9%. The Mineralized Material Sorter (MMS) will be installed on surface.

Mineralized material produced at the mine site is crushed underground using a jaw crusher. The crushed mineralized material will be hoisted to the surface with the use of a vertical conveyor and stored in a 2,400 t silo. The preconcentrated mineralized material is transported to a crushing plant housing a tertiary cone crusher operated in closed circuit with a double deck vibrating screen. The mineralized material will then be concentrated using a gravity separator followed by a carbon-in-leach process with a capacity of 3,000 tpd for an estimated recovery rate of 93.1%.

The milling circuit consists of a ball mill operated with cyclones. A gravimetric separator followed by an intensive leach reactor ILR or Acacia recovers free gold from the cyclone underflow. The cyclone overflow is thickened in a thickener to a density of 45-50% solids and leached in a CIL circuit. Gold is recovered by electrowinning cells for producing the bullion. The plant includes a reagent preparation and distribution system. The CIL tails are dewatered and pumped to the thickened tailings facility.

1.8 Infrastructure

Chimo Mine Project is serviced via a 11 km unpaved road accessed from the provincial Highway 117. The planned mine site infrastructure will be able of support efficiently all the underground operation, administration activity, equipment maintenance, mineral processing, water management and tailings facility management.

Surface infrastructure will be composed of rehabilitated existing elements like the main shaft, the existing powerline and the former tailing impoundment to which newly constructed buildings and various other elements will be constructed as required.

1.9 Capital and Operating costs

The capital and operating cost estimates presented in this feasibility study for the Chimo Mine Project (the "Project") are based on the construction of an underground mine, process plant and tailings facility designed for an average mining throughput of 4,500 tpd and 3,000 tpd mineralized material processing over the life of mine ("LOM"). The plant site is located in close proximity to an industrial urban setting. Acquisition of non-domestic capital items, or operating consumables, assumes the exchange rates listed in Chapter 22.

The project total capital costs are estimated at CAD$508.4 million ($M), including pre-production capital expenditures and sustaining capital expenditures. The operating cost estimates for the Project are based on InnovExplo database of benchmarked data, with similar activities as that of the proposed mines. The average operating cost per tonne milled for Chimo Mine Project is estimated at 119.61 $/t.

1.10 Economic Analysis

A cash flow model was developed to perform economic analysis for the project. The cash flow predictions were done on a monthly basis and in accordance with the project development and production schedule. The analysis was performed on a constant dollar basis and takes into consideration capital cost estimates, operating cost estimates, closure cost and salvage value provisions, working capital requirements and taxation obligations. The economic analysis results present net present value ("NPV"), internal rate of return ("IRR") and payback period on a pre-tax and post-tax basis. A sensitivity analysis was performed on key parameters.

1.11 Interpretation and Conclusions

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 project development. The authors believe that the information presented in this report provides a fair and accurate.

The Chimo Mine Project contains 7,1 million tonnes at an average grade of 3.14 g/t Au for 0.7 million ounces of gold in the Indicated category and 18,5 million tonnes at an average grade of 2.75 g/t Au for 1,6 million ounces of gold in the Inferred category.

The results of the PEA indicate that the integrated project including re-opening of the proposed Chimo Mine has financial merit at the base case assumptions considered. The results are considered sufficiently reliable to guide Cartier's management in a decision to advance the project to a prefeasibility study.

The PEA base case is based on construction of a new concentrator at the Chimo Mine site to process Chimo mineralization. The new concentrator will have a capacity of 3,000 t/d and employ a direct cyanidation technology to produce gold dorés.

The process flowsheet selected for the study is based on the historical metallurgical test work conducted at SGS (former Lakefield Research) and at COREM (former CRM). Material will be sorted using automated sensor-based sorting technology with an expected concentration ratio of 1.85 and a recovery rate of 91.9%. Based on the historical metallurgical test work, projected metallurgical recoveries for the proposed flowsheet are around 93%.

1.12 West Nordeau Deposit West Nordeau Deposit

Based on the results of the 2023 PEA, the authors recommend that the Project move to a more advanced phase of exploration, further drilling and initial economic studies. 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 further drilling and studies:

- Continue drilling to potentially increase mineral resources for the overall Project. Phase 1 drilling is expected to focus on three areas: the West Nordeau Deposit, the East Chimo area (located between the old Chimo Mine and West Nordeau), and the fringes immediately east and west of the old Chimo Mine. A drilling program on those target areas has been initiated by Cartier in August 2022 (i.e., the 2022-23 program).
- Complete a Preliminary Economic Assessment ("PEA") based on the updated 2022 MRE to address potential economic viability and guide future work programs that will be required to advance the Project.
- Evaluate the mineral potential of the recently acquired East Cadillac Property. More specifically, in the short to medium term, this would focus on the potential of the gold intersections discovered to date peripheral to the Chimo Mine Gold System over a length of 10 km along the Larder Lake Cadillac Fault Zone.
- Complete more recommendations, such as: integration and analysis of industrial sorting results and additional testing; verification of local accuracy and refinement of historical mine openings (when possible); further documentation of bulk densities of mineralization and its host rocks; testwork for environmental and hydrogeological characterization; and initiation of a rock mechanics studies for potential stope optimization.

In Phase 2, the authors recommend the following:

- Incorporate the Phase 1 drilling program into a new mineral resource update for the Chimo Mine Gold System. In this update, the two current block models (for the Chimo Mine and West Nordeau Deposits) should be integrated into a single model. Incorporating the historical results to the west of the former

Chimo mine (West Simon deposit area) is also recommended for a future mineral resource update.

- Keep a budget provision for internal engineering studies and for updating economic studies at the PEA and/or pre-feasibility ("PFS") level.
- Complete additional drilling with the aim of increasing mineral resources. Drilling should focus on the extensions at depth under the Chimo Mine Sector, the East Chimo Mine Sector and the West Nordeau Sector as well as in the West Simon deposit and Portal Areas.
- Conduct a drilling program to potentially convert inferred mineral resources in the vicinity of planned mining infrastructures (based on the completed PEA)
- Complete exploration drilling at the local and regional scale on areas of interest within the new East Cadillac Property.

As a guideline, the authors have prepared a cost estimate for the recommended two-phase work program. The budget for the proposed program is presented at the end of the report in section 26. Expenditures are estimated at CAD$ 29,375,000. Contingencies are included in the budget of each activity. 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 Introduction

The Chimo Mine and East Cadillac properties (the "Properties") are located in the Abitibi region of Quebec, 50 km east of the city of Val-d'Or.

InnovExplo Inc. ("InnovExplo") prepared this NI 43-101 compliant report (the "Technical Report") for Cartier Resources Inc. (the "issuer" or "Cartier"). It includes the mineral resource estimate filed on October 12, 2022, and the full content of the preliminary economic assessment ("PEA") completed in May 2023 for the Chimo Mine Project (the "Project"), which addresses the potential re-opening of the past-producing Chimo mine to exploit sectors of the Chimo Mine and West Nordeau gold deposits.

InnovExplo is a Canadian independent geology and mining engineering consulting firm based in Val-d'Or (Quebec), with offices in Quebec City and Longueuil. InnovExplo also employs professional consultants in Trois-Rivières (Quebec), Sudbury (Ontario) and Vancouver (British Columbia).

2.2 Preliminary Economic Assessment (PEA) Report

After completing the October 2022 mineral resource technical report, Cartier contracted InnovExplo to complete a NI 43-101 compliant PEA and supporting technical report (this report). The PEA is based on the assumption that the Chimo Mine Project will be put into production at a rate of 4,500 tonnes per day over a period of 10 years. An on-site concentrator with direct cyanidation processing is included in the study.

Production will come strictly from an underground operation accessible from a main ramp for personnel and material transport, but the existing shaft will be recommissioned and equipped with a vertical conveyor for mineralized material hoisting. One proposed mining method for underground production uses the Longitudinal Long-Hole Retreat approach. The economic results are presented as an annual cash flow with NPV discounted at 5.0%. A sensitivity analysis, IRR and payback period are also presented. This Technical Report is scheduled to be filed at the beginning of the second quarter of 2023.

2.3 Issuer

Founded in 2006, Cartier is a Canadian exploration company focused on advancing the development of its flagship Chimo Mine Project. Cartier is a junior exploration company listed on the Toronto Venture Exchange ("TSXV") under the symbol ECR.

Cartier's head office and exploration office are at:

> 1740, chemin Sullivan, Suite 1000
> Val-d'Or, J9P 7H1, Quebec, Canada
> Telephone: 1-877-874-1331

2.4 Terms of reference

The Chimo Mine and East Cadillac Properties form a consolidated gold exploration project in the Abitibi region in the province of Quebec, Canada, about 50 km east of the city of Val-d'Or. The Chimo Mine and the East Cadillac properties are 100% owned by Cartier.

2.5 Report Responsibility and Qualified Persons

Mr. Marc R. Beauvais, P.Eng., of InnovExplo was responsible for compiling this Technical Report. By virtue of his education, membership to a recognized professional association, and relevant work experience, Mr. Beauvais is an independent qualified person ("QP") as defined by NI 43-101.

In accordance with NI 43-101 guidelines, the following professionals, designated as QPs for the purpose of the Technical Report, contributed as authors for certain sections of this report related to their areas of expertise. Their general areas of responsibility are listed here, with detailed lists of responsibility provided in Table 2.1 and the QP certificates.

Preliminary Economic Assessment

The qualified persons independent of the issuer, responsible for the Preliminary Economic Assessment (this report), within the meaning of NI 43-101, are Mr. Marc R. Beauvais, P.Eng. of InnovExplo, Mr. Florent Baril of Bumigeme et Mr. Jean-Louis Roberge, Eng. of Responsible Mining Solutions. Mr. Beauvais, Hinton, Baril and Roberge declare that they have read this press release and that the scientific and technical information relating to the resource estimate presented therein is correct.

The QPs do not have, nor have they previously had, any material interest in the issuer or its related entities. The relationship with the issuer is solely a professional association between the issuer and the independent consulting firm. The Technical Report was prepared in return for fees based upon an agreed commercial rate, and the payment of these fees is in no way contingent on the results of the Technical Report.

Table 2-1 – Qualified Persons and Item Responsibility

Qualified Person	
Marc R. Beauvais	Items 1-3, 16, 19, 21, 22; co-responsible for the executive summary (ES) and items 18, 24-26
Vincent Nadeau-Benoit	Co-responsible for the ES and items 4-12, 14, 23-26
Alain Carrier	Co-responsible for the ES and items 4-12, 14, 23-26
Florent Baril	Items 13, 17; co-responsible for the ES and items 21, 24-26
Jean-Louis Roberge	Co-responsible for the ES and items 18
Gail Amyot	Item 20; co-responsible for the ES and items 24

Additional contributions to Technical Report were provided by:

- Mr. Constant Noutchogwe, P.Eng. (InnovExplo): Chimo Mine Project design and planning;
- Mr. Jean-Olivier Brassard, P.Eng. (InnovExplo): Chimo Mine Project stope design and scheduling;
- Mr. Sebastian Ibarra, PhD, P.Eng. (InnovExplo): Chimo Mine Project geotechnical, ground control assessment and backfill requirements.
- Mr. Eric Hinton, P.Eng. of A-Z Mining Professionals: surface infrastructure
- MM. Gaétan Lavallière, P.Geo., Ph.D, Cartier's Vice- President and Ronan Déroff, P.Geo, M.Sc., Cartier's Senior Geologist, Project Manager and Geomatician, geology and mineral resource estimation review.

2.6 Site visits

In accordance with NI 43-101 guidelines, the following bulleted list describes which QPs visited the site(s), on which date(s), and the general objective(s) of the visit(s).

- Mr. Carrier and Mr. Nadeau-Benoit visited the Properties and Cartier's core shack on July 27, 2022. The site visit focused on the mineralized structures of the Central, North and South gold corridors. Field data verification included a visual inspection of surface drill pads, a verification of drill collar location coordinates, and a visual assessment of access roads. The QPs examined selected core intervals and reviewed the QA/QC program, downhole survey data, and the descriptions of lithologies, alteration and mineralization and conducted some independent re-sampling of selected core intervals.
- Mr. Beauvais carried out a field visit to the former Chimo mine site on November 11, 2022. The aim was to assess the condition of the overburden composition near the proposed portal and potential mine pad locations and review the general conditions of the land, the existing surface infrastructure and the main site accesses.

2.7 Effective Date

For the 2022 MRE, the close-out date of the Chimo Mine Deposit drill hole database is September 1, 2020. The close-out date of the West Nordeau Deposit drill hole database is July 12, 2022.

For the 2023 PEA, the effective date of the technical information included in the study is April 13, 2023, and the signature date of the supporting Technical Report is May 26, 2023.

2.8 Sources of Information

This report is based partly on internal company reports, maps, government reports and public information, as listed in Item 27, *References*. Sections taken from other reports are indicated in the text.

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

- Technical discussions with Cartier management and personnel;
- Visit to the Properties by QPs;
- Geotechnical tests and investigations; drill program logs, sampling and field observations;
- Chimo Mine Project resource block model and estimate provided by InnovExplo effective as of August 22, 2022;
- Process flowsheets developed by Bumigeme based on historical processing reports and similar operations;
- Multiple quotations, internal and commercially available databases and cost models;
- Various reports covering site hydrology, hydrogeology, geotechnical, and rock mechanics;
- Internal unpublished reports, trade-off studies and documentation received from the issuer;
- Additional information from public domain sources.

The authors reviewed and appraised the information used to prepare this Technical Report, including the conclusions and recommendations, 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 the conclusions and recommendations made in this Technical Report.

2.9 Currency, Units of Measure, and Acronyms

All currency amounts are stated in Canadian dollars ($ or CAD$).

Metric units are used throughout the Technical Report, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area, grams per metric ton (g/t) for gold grades and troy ounces (oz) for total contained gold.

A list of the abbreviations, acronyms and units used in this Technical Report are provided in Table 2-2 and Table 2-3

Abbreviation	Term
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Quebec)
AA	Atomic Absorption
Ai	Abrasion index
AMIS	Abandoned Mines Information System
ASTM	American Society for Testing and Materials
APR	Annual percentage rate
ASX	Australian Securities Exchange
BAPE	Bureau d'audience publique sur l'environnement (Quebec's Office of Environmental Public Hearings)
BWI	Bond work index
CofA	Certificate of authorization
CA	Core angle

Abbreviation	Term
CAD:USD	Canadian-American exchange rate
CNSC	Canadian Nuclear Safety Commission
CAPEX	Capital expenditure
CDC	Name for a map-designated claim after November 22, 2000
CDPNQ	Centre de données sur le patrimoine naturel du Québec (Quebec's Centre of Natural Heritage Data)
CEAA 2012	Canadian Environmental Assessment Act (2012)
CEAAg	Canadian Environmental Assessment Agency
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIM Definition Standards	2014 CIM Definition Standards for Mineral Resources and Mineral Reserves
CL	Core length
CMS	Cavity monitoring system
CoG	cut-off grade
CoV	Coefficient of variation
CRM	Certified reference material
CSA	Canadian Securities Administrators
CSS	Contact support services
cWi	Crusher work index
DEM	Digital elevation model
DDH	Diamond drill hole
DMS	Dense Medium Separation
Directive 019	Directive 019 sur l'industrie minière
EA	Environmental assessment
EBITDA	Earnings before interest, taxes, depreciation and amortization
ECA	Environmental Compliance Approval
ECCC	Environment and Climate Change Canada
EDO	Effluent discharge objectives
EEM	Environmental Effects Monitoring
EGBC	Engineers and Geoscientists British Columbia
EIA	Environmental impact assessment
EIS	Environmental impact study
EM	Electromagnetic
HEM/HLEM	Electromagnetic horizontal loop
EPCM	Engineering, procurement, construction, management
EQA	Environment Quality Act
ESA	Environmental site assessment
ESIA	Environmental and social impact assessment

Abbreviation	Term
EV	Electric vehicle
F_{100}	100% passing–- Feed
F_{80}	80% passing–- Feed
FA	Fire Assay
FEGB	Frotet-Evans greenstone belt
FIFO	Fly in fly out
FOB	Freight on board
FS	Feasibility study
FWR	Fresh water reservoir
G&A	General and administration
GESTIM	Gestion des titres miniers (the MRNF's online claim management system)
GHG	Greenhouse gas
GOR	Gross Overriding Revenue
GPR	Ground penetrating radar
GSC	Geological Survey of Canada
HLS	Heavy liquid separation
ICP-MS	Inductively Coupled Plasma - Mass Spectrometry
ICP-AES	Inductively Coupled Plasma – Atomic Emission Spectroscopy
ICP-OES	Induced Coupled Plasma – Optical Emission Spectrometry
ID2	Inverse distance squared
ID3	Inverse distance cubed
ID6	Inverse distance power six
IDW	Inverse distance weighting
IEC	International Electrotechnical Commission
IP	Induced Polarization
IRR	Internal rate of return
ISA	Inter-ramp slope angle
ISO	International Organization for Standardization
ISRM	International Society for Rock Mechanics
IT	Information technology
JBNQA	James Bay and Northern Quebec Agreement
JORC	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Mineralised material Reserves
JV	Joint venture
JVA	Joint venture agreement
LCT	Lithium-cesium-tantalum
LCT	Locked-Cycle Flotation Tests

Abbreviation	Term
LLC	Limited liability company
LLCDZ	Larker Lake–Cadillac Deformation Zone
LOM	Life of mine
LOMP	Life of mine plan
LUP	Land Use Permit
MACRS	Modified accelerated cost recovery system
MAG	Magnetics (or magnetometer)
MCC	Ministère de la Culture et des Communications du Québec (Quebec's former Ministry of Culture and Communications)
MCCCF	Ministère de la Culture, des Communications et de la Condition féminine du Québec (Quebec's current Ministry of Culture and Communications)
MDDELCC	Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques du Québec (Quebec's former Ministry of Sustainable Development, Environment and the Fight Against Climate Change)
MDI	Mineral Deposit Inventory
MELCCFP	Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs du Québec (Quebec's current Ministry of Environment, the Fight Against Climate Change, Wildlife and Parks)
MERN	Ministère de l'Énergie et des Ressources Naturelles (Quebec's former Ministry of Energy and Natural Resources)
mesh	US mesh
MFFP	Ministère des Forêts, de la Faune et des Parcs (Quebec's former Ministry of Forests, Wildlife and Parks)
MIK	Multiple indicator kriging
MLO	Mining Licence of Occupation
MMER	Metal mining effluent regulations
MNDM	Ontario Ministry of Northern Development and Mines
MNR	Ontario Ministry of Natural Resources
MRC	Municipalité régionale de comté (Regional county municipality in English)
MRE	Mineral resource estimate
MRNF	Ministère des Ressources naturelles et des Forêts (Quebec's current Ministry of Natural Resources and Forests)
MRNFP	Ministère des Ressources naturelles, de la Faune et des Parcs (Quebec's former Ministry of Natural Resources, Wildlife and Parks)
MRN	Ministère des Ressources naturelles (Quebec's former Ministry of Natural Resources)
MRMR	Mineral resources and mineral reserves
MSHA	Mine Safety & Health Administration
MSO	Mineable Shape Optimizer
MTMD	Ministère des Transports et de la Mobilité durable (Quebec's current Ministry of Transport and Sustainable Mobility)

Abbreviation	Term
MTSMTE	Ministère des Transports, de la Mobilité durable et de l'Électrification des transports (Quebec's former Ministry of Transport, Sustainable Mobility and Transport Electrification)
MWMP	Meteoric water mobility potential
n/a	Not applicable
N/A	Not available
NAD	North American Datum
NAD 27	North American Datum of 1927
NAD 83	North American Datum of 1983
NAPEG	Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists
nd	Not determined
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Quebec)
NN	Nearest neighbour
NPI	Net profits interest
NPV	Net present value
NRC	Natural Resources Canada
NSR	Net smelter return
NTS	National Topographic System
NYF	Niobium - Yttrium - Fluorine
OER	Objectifs environnementaux de rejet (Quebec's Environmental Discharge Objectives)
OGQ	Ordre des Géologues du Québec (Quebec's Order of Geologists)
OIQ	Ordre des Ingénieurs du Québec (Quebec's Order of Engineers)
OK	Ordinary kriging
OP	Open pit
OPEX	Operational expenditure
P_{80}	80% passing–- Product
P_{100}	100% passing–- Product
PAG	Potentially acid generating
P.Eng.	Professional engineer
PFS	Prefeasibility study
P.Geo.	Professional geologist
PGO	Professional Geoscientists Ontario
PM	Particulate matter
PMF	Probable maximum flood
PMP	Probable maximum precipitation
POF	Probability of failure

Abbreviation	Term
Q	Value expressing quality of rock mass (Q-system for rock mass classification)
QA	Quality assurance
QA/QC	Quality assurance/quality control
QBBA	Quebec Breeding Bird Atlas
QC	Quality control
QP	Qualified person (as defined in National Instrument 43-101)
R&D	Research and development
RBQ	Régie du Bâtiment du Québec
RC	Reverse circulation (drilling)
Regulation 43-101	National Instrument 43-101 (name in Quebec)
RMR	Rock mass rating
ROM	Run of mine
RPEEE	Reasonable prospects of eventual economic extraction
RQD	Rock quality designation
RQI	Rock quality index
RWI	Rod work index
SABC	Comminution circuit consisting of a SAG mill, ball mill and pebble crusher
SAG	Semi-autogenous-grinding
SARA	Species at Risk Public Registry
SCC	Standards Council of Canada
SD	Standard Deviation
SDBJ	Société de Développement de la Baie-James
SF	Safety factor
SG	Specific gravity
SIGÉOM	Système d'information géominière (the MRNF's online spatial reference geomining information system)
SLDZ	Sunday Lake Deformation Zone
SMC	SAG mill comminution
SMU	Selective mining unit
SPLP	Synthetic Precipitation Leaching Procedure
TCLP	Toxicity characteristic leaching procedure
TDS	Total dissolved solids
TMF	Tailings management facility
TSP	Total suspended particulate matter
uCoG	Underground cut-off grade
UCS	Uniaxial compressive strength
UG	Underground

Abbreviation	Term
USD:CAD	American-Canadian exchange rate
UTM	Universal Transverse Mercator coordinate system
VLF	Very low frequency
VMS	Volcanogenic massive sulphide
VOD	Ventilation on demand
WBS	Work breakdown structure
WSR	Water storage reservoir

Table 2-3. Wherever applicable, imperial units have been converted to the International System of Units (SI units) for consistency (Table 2-4).

Table 2-2 – List of Abbreviations

Abbreviation	Term
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Quebec)
AA	Atomic Absorption
Ai	Abrasion index
AMIS	Abandoned Mines Information System
ASTM	American Society for Testing and Materials
APR	Annual percentage rate
ASX	Australian Securities Exchange
BAPE	Bureau d'audience publique sur l'environnement (Quebec's Office of Environmental Public Hearings)
BWI	Bond work index
CofA	Certificate of authorization
CA	Core angle
CAD:USD	Canadian-American exchange rate
CNSC	Canadian Nuclear Safety Commission
CAPEX	Capital expenditure
CDC	Name for a map-designated claim after November 22, 2000
CDPNQ	Centre de données sur le patrimoine naturel du Québec (Quebec's Centre of Natural Heritage Data)
CEAA 2012	Canadian Environmental Assessment Act (2012)
CEAAg	Canadian Environmental Assessment Agency
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIM Definition Standards	2014 CIM Definition Standards for Mineral Resources and Mineral Reserves
CL	Core length
CMS	Cavity monitoring system
CoG	cut-off grade

Abbreviation	Term
CoV	Coefficient of variation
CRM	Certified reference material
CSA	Canadian Securities Administrators
CSS	Contact support services
cWi	Crusher work index
DEM	Digital elevation model
DDH	Diamond drill hole
DMS	Dense Medium Separation
Directive 019	Directive 019 sur l'industrie minière
EA	Environmental assessment
EBITDA	Earnings before interest, taxes, depreciation and amortization
ECA	Environmental Compliance Approval
ECCC	Environment and Climate Change Canada
EDO	Effluent discharge objectives
EEM	Environmental Effects Monitoring
EGBC	Engineers and Geoscientists British Columbia
EIA	Environmental impact assessment
EIS	Environmental impact study
EM	Electromagnetic
HEM/HLEM	Electromagnetic horizontal loop
EPCM	Engineering, procurement, construction, management
EQA	Environment Quality Act
ESA	Environmental site assessment
ESIA	Environmental and social impact assessment
EV	Electric vehicle
F_{100}	100% passing–- Feed
F_{80}	80% passing–- Feed
FA	Fire Assay
FEGB	Frotet-Evans greenstone belt
FIFO	Fly in fly out
FOB	Freight on board
FS	Feasibility study
FWR	Fresh water reservoir
G&A	General and administration
GESTIM	Gestion des titres miniers (the MRNF's online claim management system)
GHG	Greenhouse gas
GOR	Gross Overriding Revenue

Abbreviation	Term
GPR	Ground penetrating radar
GSC	Geological Survey of Canada
HLS	Heavy liquid separation
ICP-MS	Inductively Coupled Plasma - Mass Spectrometry
ICP-AES	Inductively Coupled Plasma – Atomic Emission Spectroscopy
ICP-OES	Induced Coupled Plasma – Optical Emission Spectrometry
ID2	Inverse distance squared
ID3	Inverse distance cubed
ID6	Inverse distance power six
IDW	Inverse distance weighting
IEC	International Electrotechnical Commission
IP	Induced Polarization
IRR	Internal rate of return
ISA	Inter-ramp slope angle
ISO	International Organization for Standardization
ISRM	International Society for Rock Mechanics
IT	Information technology
JBNQA	James Bay and Northern Quebec Agreement
JORC	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Mineralised material Reserves
JV	Joint venture
JVA	Joint venture agreement
LCT	Lithium-cesium-tantalum
LCT	Locked-Cycle Flotation Tests
LLC	Limited liability company
LLCDZ	Larker Lake–Cadillac Deformation Zone
LOM	Life of mine
LOMP	Life of mine plan
LUP	Land Use Permit
MACRS	Modified accelerated cost recovery system
MAG	Magnetics (or magnetometer)
MCC	Ministère de la Culture et des Communications du Québec (Quebec's former Ministry of Culture and Communications)
MCCCF	Ministère de la Culture, des Communications et de la Condition féminine du Québec (Quebec's current Ministry of Culture and Communications)
MDDELCC	Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques du Québec (Quebec's former Ministry of Sustainable Development, Environment and the Fight Against Climate Change)

Abbreviation	Term
MDI	Mineral Deposit Inventory
MELCCFP	Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs du Québec (Quebec's current Ministry of Environment, the Fight Against Climate Change, Wildlife and Parks)
MERN	Ministère de l'Énergie et des Ressources Naturelles (Quebec's former Ministry of Energy and Natural Resources)
mesh	US mesh
MFFP	Ministère des Forêts, de la Faune et des Parcs (Quebec's former Ministry of Forests, Wildlife and Parks)
MIK	Multiple indicator kriging
MLO	Mining Licence of Occupation
MMER	Metal mining effluent regulations
MNDM	Ontario Ministry of Northern Development and Mines
MNR	Ontario Ministry of Natural Resources
MRC	Municipalité régionale de comté (Regional county municipality in English)
MRE	Mineral resource estimate
MRNF	Ministère des Ressources naturelles et des Forêts (Quebec's current Ministry of Natural Resources and Forests)
MRNFP	Ministère des Ressources naturelles, de la Faune et des Parcs (Quebec's former Ministry of Natural Resources, Wildlife and Parks)
MRN	Ministère des Ressources naturelles (Quebec's former Ministry of Natural Resources)
MRMR	Mineral resources and mineral reserves
MSHA	Mine Safety & Health Administration
MSO	Mineable Shape Optimizer
MTMD	Ministère des Transports et de la Mobilité durable (Quebec's current Ministry of Transport and Sustainable Mobility)
MTSMTE	Ministère des Transports, de la Mobilité durable et de l'Électrification des transports (Quebec's former Ministry of Transport, Sustainable Mobility and Transport Electrification)
MWMP	Meteoric water mobility potential
n/a	Not applicable
N/A	Not available
NAD	North American Datum
NAD 27	North American Datum of 1927
NAD 83	North American Datum of 1983
NAPEG	Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists
nd	Not determined
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Quebec)
NN	Nearest neighbour

Abbreviation	Term
NPI	Net profits interest
NPV	Net present value
NRC	Natural Resources Canada
NSR	Net smelter return
NTS	National Topographic System
NYF	Niobium - Yttrium - Fluorine
OER	Objectifs environnementaux de rejet (Quebec's Environmental Discharge Objectives)
OGQ	Ordre des Géologues du Québec (Quebec's Order of Geologists)
OIQ	Ordre des Ingénieurs du Québec (Quebec's Order of Engineers)
OK	Ordinary kriging
OP	Open pit
OPEX	Operational expenditure
P_{80}	80% passing–- Product
P_{100}	100% passing–- Product
PAG	Potentially acid generating
P.Eng.	Professional engineer
PFS	Prefeasibility study
P.Geo.	Professional geologist
PGO	Professional Geoscientists Ontario
PM	Particulate matter
PMF	Probable maximum flood
PMP	Probable maximum precipitation
POF	Probability of failure
Q	Value expressing quality of rock mass (Q-system for rock mass classification)
QA	Quality assurance
QA/QC	Quality assurance/quality control
QBBA	Quebec Breeding Bird Atlas
QC	Quality control
QP	Qualified person (as defined in National Instrument 43-101)
R&D	Research and development
RBQ	Régie du Bâtiment du Québec
RC	Reverse circulation (drilling)
Regulation 43-101	National Instrument 43-101 (name in Quebec)
RMR	Rock mass rating
ROM	Run of mine
RPEEE	Reasonable prospects of eventual economic extraction

Abbreviation	Term
RQD	Rock quality designation
RQI	Rock quality index
RWI	Rod work index
SABC	Comminution circuit consisting of a SAG mill, ball mill and pebble crusher
SAG	Semi-autogenous-grinding
SARA	Species at Risk Public Registry
SCC	Standards Council of Canada
SD	Standard Deviation
SDBJ	Société de Développement de la Baie-James
SF	Safety factor
SG	Specific gravity
SIGÉOM	Système d'information géominière (the MRNF's online spatial reference geomining information system)
SLDZ	Sunday Lake Deformation Zone
SMC	SAG mill comminution
SMU	Selective mining unit
SPLP	Synthetic Precipitation Leaching Procedure
TCLP	Toxicity characteristic leaching procedure
TDS	Total dissolved solids
TMF	Tailings management facility
TSP	Total suspended particulate matter
uCoG	Underground cut-off grade
UCS	Uniaxial compressive strength
UG	Underground
USD:CAD	American-Canadian exchange rate
UTM	Universal Transverse Mercator coordinate system
VLF	Very low frequency
VMS	Volcanogenic massive sulphide
VOD	Ventilation on demand
WBS	Work breakdown structure
WSR	Water storage reservoir

Table 2-3 – List of Units

Symbol	Unit
%	Percent
% solids	Percent solids by weight
$, CAD$, CAD	Canadian dollar

Symbol	Unit
$/t	Dollars per metric ton
°	Angular degree
ø	Diameter
°C	Degree Celsius
µm	Micron (micrometre)
µS/cm	Micro-siemens per centimetre
A	Ampere
A$, AUD	Australian Dollar
avdp	Avoirdupois
Btu	British thermal unit
cfm	Cubic feet per minute
cfs	Cubic feet per second
cm	Centimetre
cm^2	Square centimetre
cm^2/d	Square centimetre per day
cm^3	Cubic centimetre
cP	Centipoise (viscosity)
d	Day (24 hours)
dm	Decametre
ft	Foot (12 inches)
g	Gram
G	Billion
Ga	Billion years
gal/min	Gallon per minut
g-Cal	Gram-calories
g/cm^3	Gram per cubic centimetre
g/L	Gram per litre
g/t	Gram per metric ton (tonne)
GW	Gigawatt
h	Hour (60 minutes)
ha	Hectare
hp	Horsepower
Hz	Hertz
in	Inch
k	Thousand (000)
ka	Thousand years
kbar	Kilobar

Symbol	Unit
kg	Kilogram
kg/h	Kilogram per hour
kg/t	Kilogram per metric ton
kj	Kilojoule
km	Kilometre
km^2	Square kilometre
km/h	Kilometres per hour
koz	Thousand ounces
kPa	Kilopascal
kW	Kilowatt
kWh	Kilowatt-hour
kWh/t	Kilowatt-hour per metric ton
kV	Kilovolt
kVA	Kilo-volt-ampere
L	Litre
lb	Pound
lb/gal	Pounds per gallon
lb/st	Pounds per short ton
L/h	Litre per hour
L/min	Litre per minute
lbs NiEq	Nickel equivalent pounds
M	Million
m	Metre
m^2	Square metre
m^3	Cubic metre
m/d	Metre per day
m^3/h	Cubic metres per hour
m^3/min	Cubic metres per minute
m/s	Metre per second
m^3/s	Cubic metres per second
Ma	Million years (annum)
masl	Metres above mean sea level
Mbgs	Metres below ground surface
Mbps	Megabits per second
mBtu	Million British thermal units
mi	Mile
min	Minute (60 seconds)

Symbol	Unit
Mlbs	Million pounds
ML/d	Million litres per day
mm	Millimetre
mm^2	Square millimetres
mm Hg	Millimetres of mercury
mm WC	Millimetres water column
Moz	Million (troy) ounces
mph	Mile per hour
MPa	Megapascal Pressure
Mt	Million metric tons
MW	Megawatt
ng	Nanogram
NiEq	Nickel equivalent
oz	Troy ounce
oz/t	Ounce (troy) per short ton (2,000 lbs)
ppb	Parts per billion
ppm	Parts per million
psf	Pounds per square foot
psi	Pounds per square inch
rpm	Revolutions per minute
s	Second
s^2	Second squared
scfm	Standard cubic feet per minute
st/d	Short tons per day
st/h	Short tons per hour
t	Metric tonne (1,000 kg)
T	Temperature
ton	Short ton (2,000 lbs)
tpy	Metric tons per year
tpd	Metric tons per day
tph	Metric tons per hour
US$, USD	American dollar
µm	Micrometre
usgpm	US gallons per minute
V	Volt
vol%	Percent by volume
wt%	Weight percent

Symbol	Unit
y	Year (365 days)
yd^3	Cubic yard

Table 2-4 – Conversion Factors for Measurements

Imperial Unit	Multiplied by	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 QPs have relied on reports and opinions from the experts listed below for information that is not within their fields of expertise, including:

- Mr. Hugues Lachance, CPA, Partner, Canadian Corporate Tax of KPMG, federal and provincial tax calculations.
- Mr. Stephen Coates, P.Eng., Partner at Evomine Inc., financial analysis.
- Alexandre Burelle, P.Eng., Partner at Evomine Inc., tax calculations and financial analysis.

The QPs relied on information provided by the issuer concerning mining titles, option agreements, royalty agreements, consultation with Indigenous peoples, environmental liabilities and permits. Neither the QPs nor InnovExplo are qualified to express any legal opinion concerning property titles, current ownership or possible litigation. Assistance with data compilation and validation was provided by InnovExplo employee Zsuzsanna Tóth, PhD, P.Geo.

Comments on the state of environmental conditions, liability, and estimated costs of closure and remediation have been made where required by NI 43-101. In this regard, the QPs have relied on the work of other experts they understand to be appropriately qualified and offer no opinion on the state of the environment on the properties. Statements are provided for information purposes only.

Marc R. Beauvais, P.Eng. (OIQ No. 108195), of InnovExplo, supervised the assemblage of the Technical Report.

InnovExplo used the services of Venetia Bodycomb, M.Sc., of Vee Geoservices Inc., for editing a draft of the Technical Report.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Chimo Mine and East Cadillac Properties (together, the “Properties”) are located in the province of Quebec (Canada) in the administrative region of Abitibi-Témiscamingue (Figure 4-1). The Properties lie 50 km east of the city of Val-d’Or, the closest major urban centre, and about 12 km southeast of the municipality of Louvicourt. They are accessible year-round via paved roads and secondary gravel roads.

The Properties overlie parts of Vauquelin, Pershing, Denain and Villebon townships at the eastern end of the Val-d’Or gold mining camp and overlap NTS Map sheets 32C/02, 32C/03, 32N/14 and 32N/15 (see Figure 4-2).

The coordinates of the approximate centre of the Properties are (UTM, Zone 18, NAD83) 343353.07 East, 5318434.03 North, equivalent to 48°00’’ latitude and 77°06' longitude.

The limits of the Properties have not been legally determined by surveying. Mining title outlines were obtained from GESTIM Plus, the online mining title management system of the Ministry of Energy and Natural Resources of Quebec (“MERN”): https://mern.gouv.qc.ca/english/mines/rights/rights-gestim.jsp.

4.2 Mining Rights in the Province of Quebec

In Quebec, the *Mining Act* governs the management of mineral resources and the granting of mineral exploration rights (http://legisquebec.gouv.qc.ca/en/ShowTdm/cs/M-13.1). The *Mining Act* also specifies the rights to use mineral substances during the mining phase. Finally, it sets out the rights and obligations of title holders in line with the government’s mandate to develop Quebec's mineral resources (https://mern.gouv.qc.ca/english/publications/online/mines/claim/index.asp).

4.3 Mining Title Status

InnovExplo verified the status of the mining titles constituting the Properties in GESTIM Plus (https://gestim.mines.gouv.qc.ca/MRN_GestimP_Presentation/ODM02101_login.aspx).

As of May 11, 2023, all mining titles are registered to Cartier Resources Inc. (title holder number: 80277) (Figure 4-2, Figure 4-3 and Appendix I). The Chimo Mine Property comprises twelve (12) contiguous claims for a total area of 334.4 ha. The East Cadillac Property comprises 539 contiguous claims for a total area of 29,189 ha (Figure 4-2, Figure 4-3 and Appendix II).

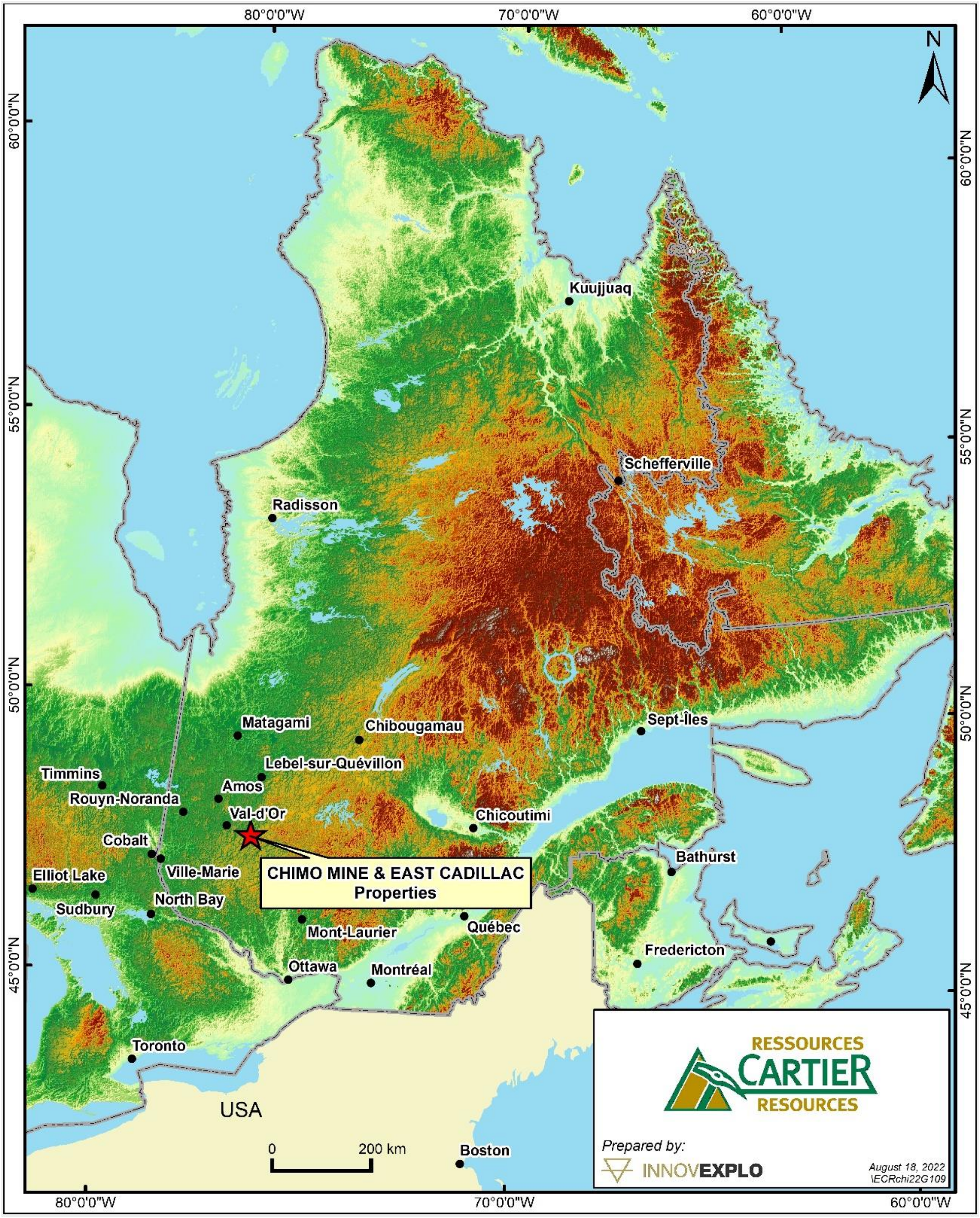

Figure 4-1 – Provincial map showing the location of the Properties

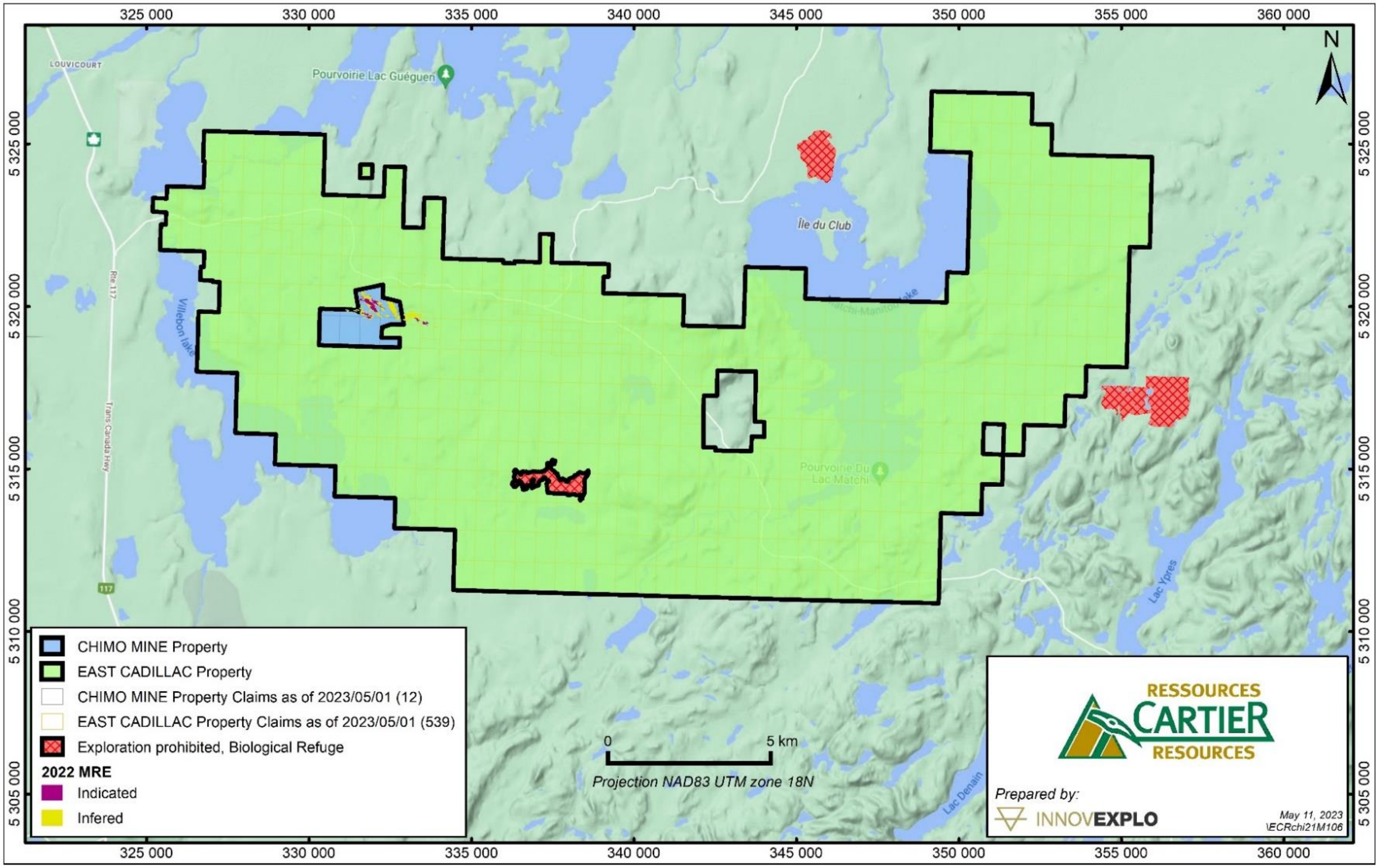

Figure 4-2 – Regional basemap showing the location of the Chimo Mine and East Cadillac properties

4.4 Acquisition of the Chimo Mine and East Cadillac Properties

On April 7, 2022, Cartier announced the execution of a definitive share purchase agreement with O3 Mining Inc. ("O3 Mining") under which Cartier acquired all issued and outstanding shares of Chalice Gold Mines (Québec) Inc., a wholly-owned subsidiary of O3 Mining that held a 100% interest in the East Cadillac Property (Cartier press release of April 7, 2022). On May 6, 2022, Chalice Gold Mines (Québec) Inc., which became a wholly-owned subsidiary of Cartier under the share purchase agreement, changed its name to Chimex Resources Inc. (https://opengovca.com/corporation/9221042). On September 15, 2022, the ownership rights of the 587 mining claims on the East Cadillac Property were transferred to Cartier. Since the initial acquisition in 2022, Cartier chose to retract 48 of its initial 587 claims in the winter of 2023, for a total of 539 claims.

4.5 Mineral Royalties

The Properties are subject to the following royalties payable to various stakeholders (Figure 4-4):

Chimo Mine Property:

1% NSR – Triple Flag Precious Metals

East Cadillac Property:

1% NSR – Chalice Gold Mines (Ontario) Inc.
1% NSR – Daniel St-Pierre
1% NSR – Glenn Griesbach
1% NSR – Marc De Keyser
1% NSR – Marc De Keyser & Raymond Chartrand
2% GMR – Globex Mining Enterprises Inc.
2% NSR – Canadian Mining House & Victor Cantore
2% NSR – Dean Boudrias
2% NSR – Gilbert Lamothe & Victor Cantore
2% NSR – Michel Roby & Gaétan Roby
2% NSR – Harfang Exploration Inc.
2% NSR – Verenus Metal Corp.
3% GMR – Globex Mining Enterprises Inc.

4.6 Permits

Permits are required to conduct exploration programs (e.g., diamond drilling) and for most associated environment-altering work (e.g., watercourse diversion, water crossings, clear-cutting). Cartier must file the permit applications for these activities with the appropriate government departments in a timely fashion, allowing for a processing period of 6 to 8 weeks.

Cartier has obtained all the necessary authorizations to conduct surface drilling on the Properties.

In Quebec, forest management permits are required before trees can be felled when building access roads and drill sites. These permits are issued by the Ministry Natural Resources and Forests. The delay in obtaining this type of permit is usually 2 to 4 weeks. The permit number, currently in effect from April 1, 2023 to March 31, 2024, is 3030857.

In Quebec, authorizations are required before being able to access wetlands to carry out drilling work. These permits are issued by the Ministry of the Environment and the Fight Against Climate Change. The delay in obtaining this type of authorization is usually 4 weeks. The authorization number, currently in effect from June 20, 2022 to May 20, 2024, is 200796548-4938.

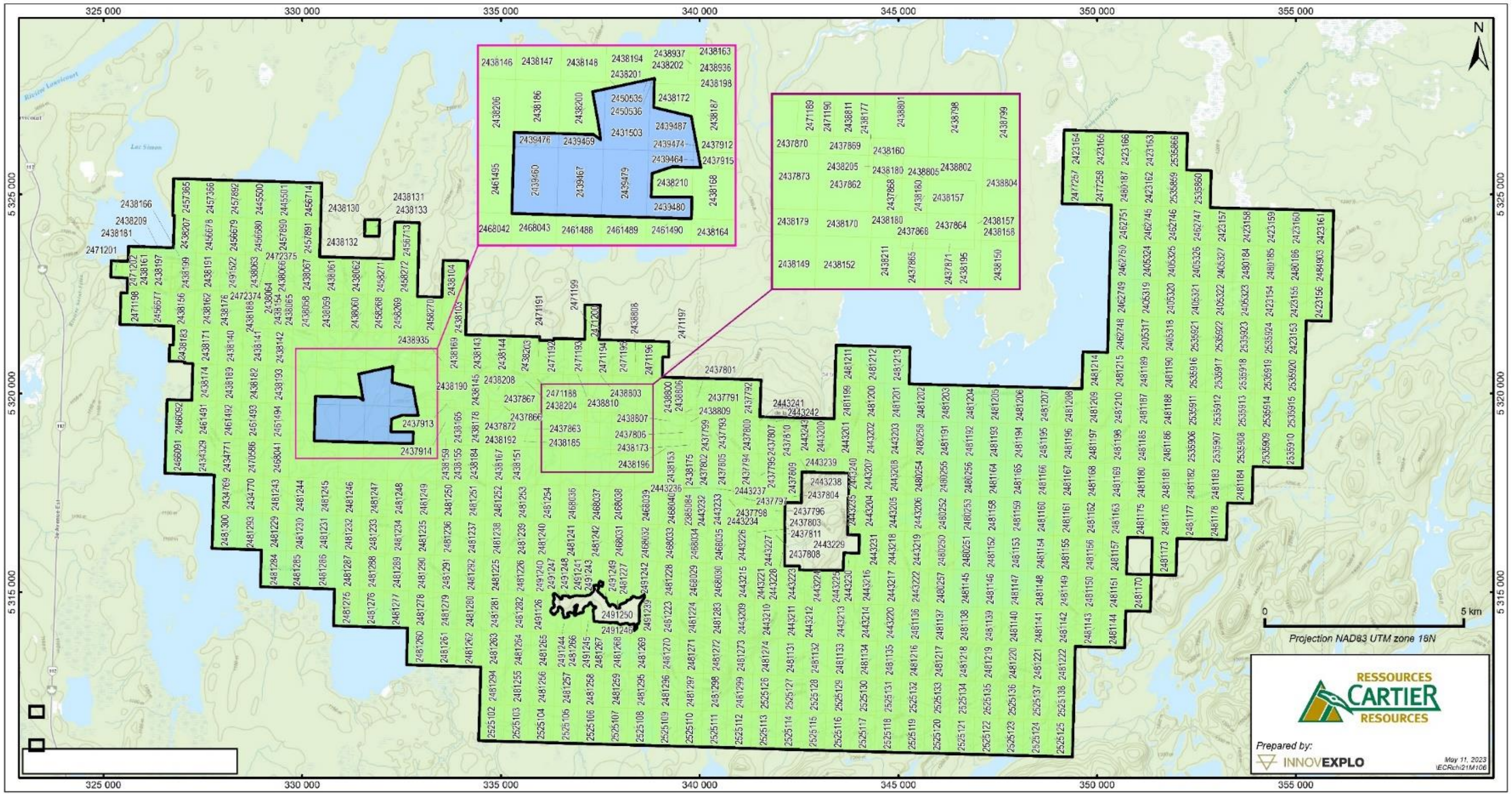

Figure 4-3 – Mining title map of the Chimo Mine and East Cadillac Properties

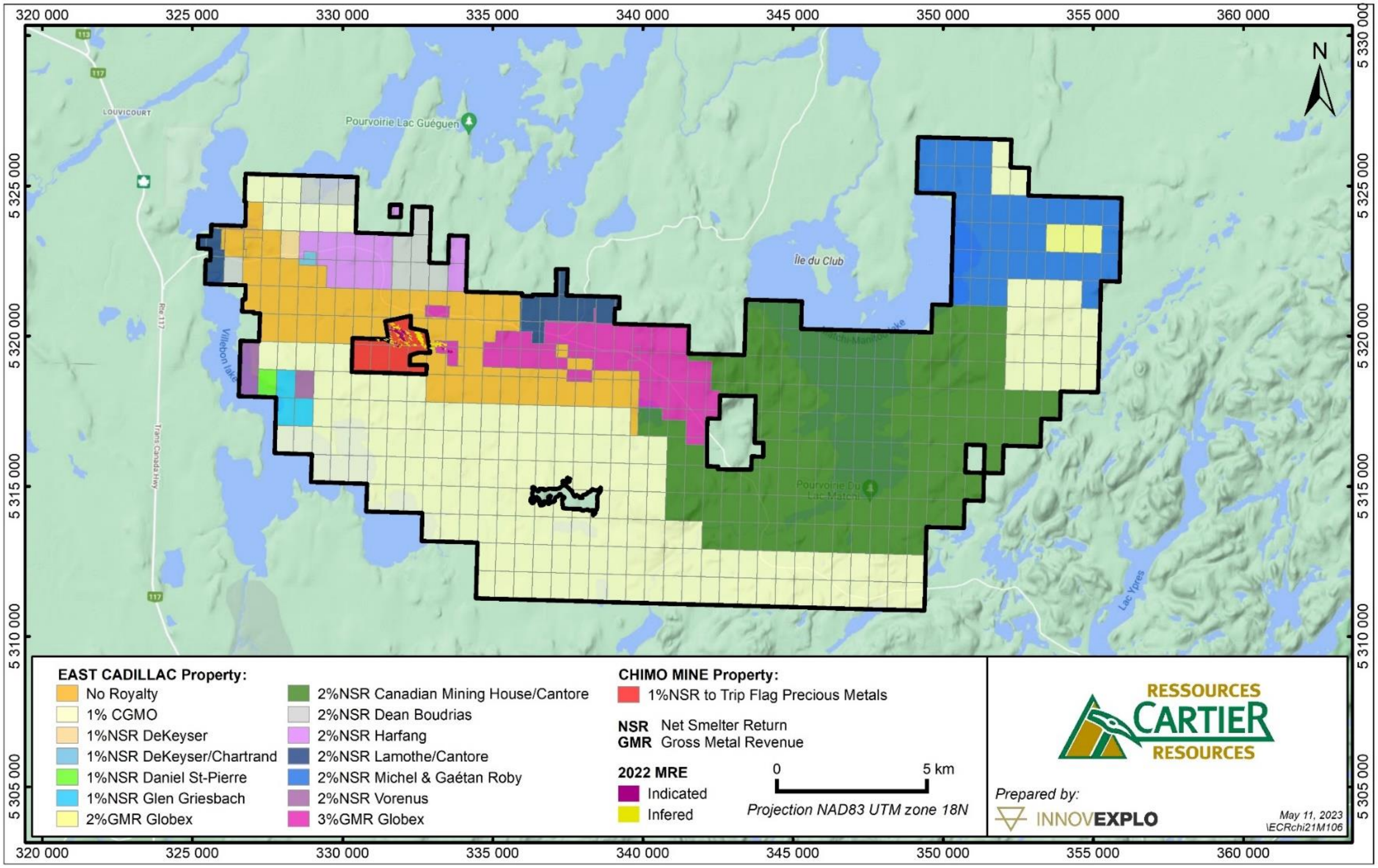

Figure 4-4 – Royalty map of the Chimo Mine Property (red) and East Cadillac Property (other colours)

4.7 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 to 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, and remain committed to the e3 Plus principles;

Preventive Health & Safety: apply Cartier's rigorous preventive health and safety procedure (IPDE: Inspection, Planning, Decision and Execution).

In 2011, Cartier received the AEMQ e3 Plus Award, recognizing the company's high level of environmental and social responsibility and responsible mineral development.

The tailings pond on the Chimo Mine Property, restored by Cambior Inc. ("Cambior"), 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) confirmed the property's compliance with the applicable standards.

No environmental permits are currently issued to the East Cadillac Property for exploitation purposes. Environmental permit(s) may be required at a later date to fulfil environmental requirements to return the land to a use whose value is at least equal to its previous value and to ensure the long-term ecological and environmental stability of the land and its watershed; however, no environmental liabilities were inherited with any of the claims on the property, and there are no environmental requirements needed to maintain any of the claims in good standing.

4.8 Other Relevant Factors

To the authors' knowledge, there are no significant factors, risks, or legal issues that may affect access, title, or the right or ability to perform fieldwork or mineral resource estimation work on the Properties.

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

The following description for the Chimo Mine and East Cadillac Properties (together, the “Properties”) is taken from Langton and Jourdain (2019) and Savard and D’Amours (2021) unless indicated otherwise.

5.1 Accessibility

The Properties are easily accessed from the city of Val-d’Or by driving about 40 km east along the paved Trans-Canada Highway 117, the main route between Val-d’Or and Mont-Laurier (Quebec), then heading east on Chimo Road, an all-season gravel road that leads to the former Chimo mine and continues to the Lake Machi-Manitou sport fishing area (*Pourvoirie du Lac Matchi-Manitou*). The Chimo Road junction is about 6 km south of the village of Louvicourt on highway 117. A multitude of secondary gravel roads and forestry trails off Chimo Road allow year-round access to most parts of the Project. (Figure 5-1)

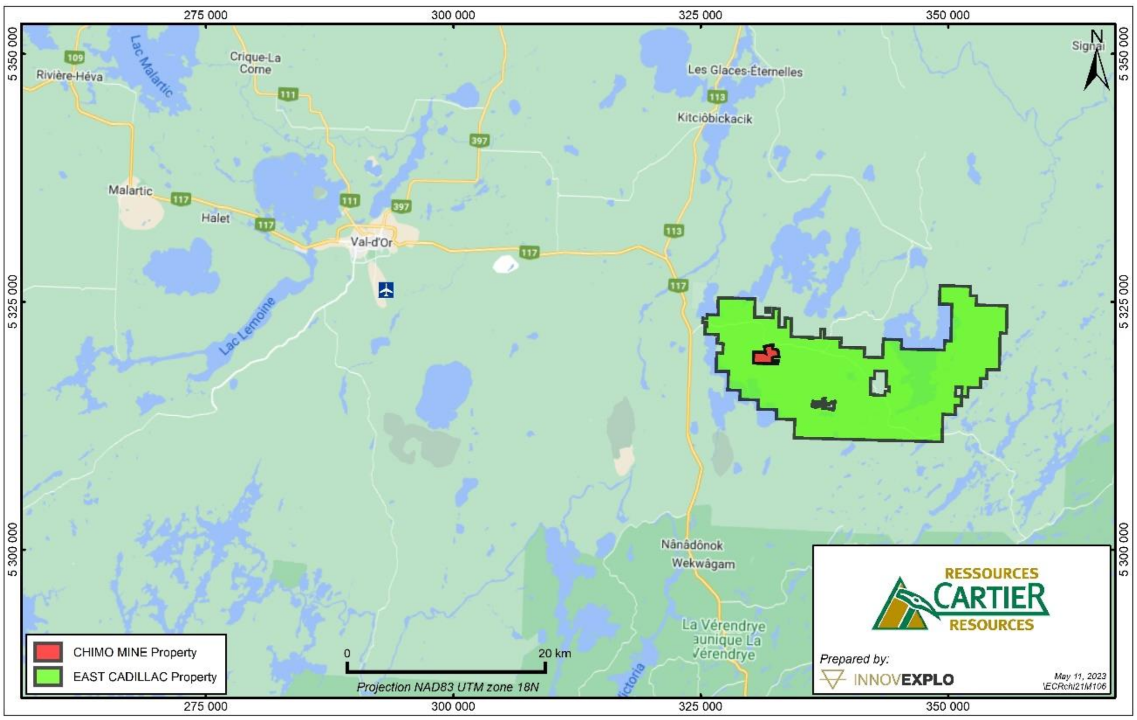

Figure 5-1 – Regional overview map of the Chimo Mine Property (red) and East Cadillac Property (green)

Val-d’Or Airport (IATA: YVO, ICAO: CYVO) serves as a point of call for air carriers offering scheduled passenger flights. Private or commercial fixed-wing aircraft and helicopter operators are located on-site. According to the National Airports Policy, the airport is classified in the Regional/Local category. Local air services connect to Trudeau International Airport in Montreal and surrounding communities. Vehicle rentals are available on-site.

5.2 Physiography

The physiography of the area is fairly flat, with gently rolling topography and large areas of muskeg and bog. The average altitude is around 360 to 380 masl. The area has very few bedrock exposures as it is mostly underlain by glacial sand and gravel deposits 20 to 50 m thick. Vegetation is boreal, consisting mostly of black spruce, jack pine, poplar and birch trees, and various shrubs, mosses and lichen.

5.3 Local Resources

Val-d'Or lies about 50 km west of the Properties and is a comprehensive mining center supplying personnel, contractors, equipment and supplies to mining and exploration operations in the area. Electricity is relatively inexpensive and is maintained by Hydro-Quebec. A high-voltage power line that served the past producing Chimo Mine is still in place. There is ample local water supply for potable or industrial (mineralized material processing) purposes.

A skilled and experienced workforce in mineral exploration and mining is available in the region. The city also offers a multitude of services and many mining-related companies: analytical laboratories, drilling and surveying companies, consulting and engineering firms, construction and mining contractors, and service and equipment suppliers.

5.4 Climate

The area has a typical continental boreal climate. Snow stays on the ground from mid-November, and the ice typically leaves the lakes around early-mid May. Winters can be bitterly cold, with temperatures averaging -15°C in January and February. The ground is frost free from May to October. Summers are warm and relatively dry, with a mean temperature of 22°C. Precipitation is moderate, ranging from 200 to 500 mm annually, with half of it arriving as snow. Exploration operations can be carried out year-round, though the wetland areas are better accessed during winter when the ground is frozen.

5.5 Infrastructure

Underground mine workings comprise 7 km of drifts distributed over 19 main levels connected by a 3-compartment shaft of 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, the length of the long-hole production holes and the vertical dimension of the stopes. This spacing decreases to 65 m between levels 17 and 18 and 35 m between levels 16 and 17. The other upper levels are spaced 30 m apart, and the sublevels are spaced between 10 and 20 m, depending on the zone being mined. In the fourth quarter of 1996, more than 1,500 t were hoisted per day using the equipment in place at the time (skips, cable, hoist and headframe) (Vallières, 1996).

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

Cartier's office and fully equipped core shack are in Val-d'Or, providing easy access and logistics for all exploration work on the Properties.

There is sufficient space and access to surface rights for exploration work, mining operations, tailings storage, waste disposal, and processing plants.

6. HISTORY

The current Chimo Mine and East Cadillac Properties cover and overlap many historical mining and exploration properties. The boundaries and names of those properties have evolved following changes in ownership, option agreements, or land packages as claims were abandoned or added.

The following is taken from Savard and D'Amours (2020) for the Chimo Mine Property (Section 6.1) and Langton and Jourdain (2019) for the East Cadillac Property (Section 6.2) unless indicated otherwise.

Both properties and the surrounding area have been the subject of exploration activity since the 1930s, before the discovery of gold-bearing lenses in the mid-1940s near the past-producing Chimo mine. Exploration companies discovered many more gold-bearing structures during the 1950s and 1960s while investigating the potential for iron mineralized material in sedimentary iron formations.

6.1 Chimo Mine Property

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

The bedrock rarely crops out near the Chimo Mine Deposit, which was discovered by drilling magnetic anomalies. Prospecting had previously revealed gold showings, which stimulated interest in the area. The mine property was subject to several phases of exploration, mineral resource estimation and production. Historical production from the former mine is summarized in Table 6-1.

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

6.1.1 Quemartic Mines – 1936 to 1938

The area of the future Chimo mine site and property was staked in the fall of 1936. It was 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 deposit). Two (2) exploration drill holes totalling 336 m did not encounter mineralization of economic interest, and the claims were eventually abandoned.

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

The land was staked again in 1943 and purchased in 1945 by Chimo Gold Mines Ltd ("Chimo Gold Mines"). A magnetometric survey was carried out, and 45 holes (5,800 m) were drilled between 1945 and 1947. The first drill holes, located near the original discovery, were disappointing, but encouraging results were obtained further south, where six (6) 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 ("Mag") survey and an airborne electromagnetic ("EM") 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 Zone 2 and Zone 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 historical reserves had been depleted. The mineralized material was transported to the Bevcon Mill, which Chimo Gold Mines had purchased. Table 6-1 shows historical production from 1964-1967.

6.1.3 SOQUEM / Louvem – 1978 to 1989

Société Québécoise d'Exploration Minière ("SOQUEM") acquired the property in 1978 and proceeded to carry out Mag and EM 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. That same year, 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 work in the old areas was suspended 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 zone extensions 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 1984-1989.

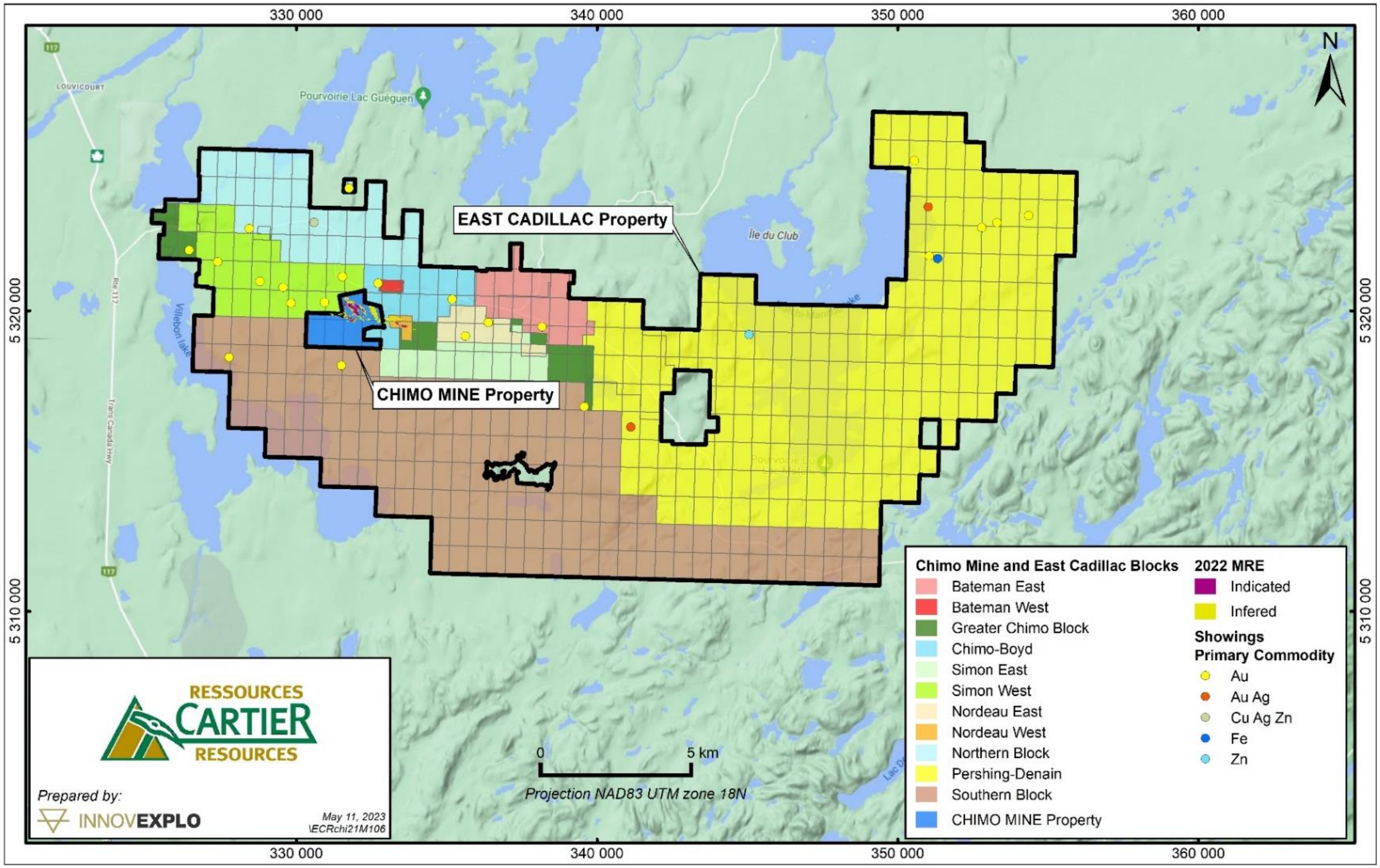

Figure 6-1 – Claim blocks and sub-blocks of the Chimo Mine and East Cadillac Properties

6.1.4 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 from 1989 to 1997 consisted mainly of construction, production and development. The shaft was deepened to 920 m, and two additional levels were developed (18 and 19). In addition, the concentrator was relocated from the Lucien Béliveau Mill to the Chimo mine, and a paste backfill plant and administrative office were constructed. 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.

6.1.5 South-Malartic Exploration, X-Mineralised material Resources and Blue Note Mining – 2001 to 2013

On January 24, 2001, South-Malartic Exploration Inc. purchased all mineral rights to the Chimo and Nova properties. On April 24, 2007, the company changed its name to X-Mineralized material Resources, which was later amalgamated with Blue Note Mining Inc. 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.

6.1.6 Cartier Resources – since 2013

Items 9 and 10 summarize the issuer's exploration and drilling results on the Chimo Mine Property since 2013.

A mineral resource estimate (MRE1) was completed by D'Amours in 2019 on the Central Gold Corridor (D'Amours, 2019). Savard and D'Amours completed another mineral resource update (MRE2) in 2020 for the Central, North and South gold corridors (Savard and D'Amours, 2020). Another mineral resource update (MRE3), was completed by Beausoleil and Savard in 2021, also encompassed the Central, North and South gold corridors (Beausoleil and Savard, 2021). The most recent MRE (MRE4) was completed in 2022 by Vincent Nadeau-Benoit, P.Geo., Alain Carrier, P.Geo., M.Sc. and Marc R. Beauvais, P.Eng.

6.2 East Cadillac Property

6.2.1 Greater Chimo Block

The claims of the Greater Chimo Block include claims in the Chimo Gold Project area, as formerly defined by Monarch Gold Corporation, and the Western Block, as formerly defined by Chalice Gold Mines (Québec) Inc. ("Chalice") (Langton and Jourdain, 2019). These claims are situated in the west-central part of the current East Cadillac Property, in the vicinity of the Chimo Mine, the Nordeau Block and the Bateman Block.

In 1937, Raymond Tiblemont Mines Ltd drilled ten (10) holes on the Bluegrass Option, west of the Chimo Mine and north of the Insmill occurrence, the historical target name for the current West Simon sub-block (Dallaire, 1937). Quemartic Mines Ltd also drilled two (2) holes on the Bluegrass Option. Drill hole logs are included in the report; however, the hole locations are imprecise (Quemartic Mines Ltd, 1937).

In 1944 and 1945, Raymond Tiblemont Mines Ltd drilled six (6) holes (2B to 7B) on their Bluegrass Option. One hole yielded visible gold (Ingham et al., 1945).

In 1945, Moss Lake Development Inc. drilled eleven (11) diamond drill holes (C01-C10) in the West Simon Block (Insmill area) (Gledhill, T.R. 1976). Visible gold was observed in several places in the drill core, and samples returned gold grades up to 4.1 oz/t.

In 1946 and 1947, Chimo Gold Mines completed a 35-hole drilling campaign on the West Simon sub-block. Zones characterized by quartz-tourmaline veins and pyrite-pyrrhotite-arsenopyrite mineralization are commonly accompanied by appreciable gold grades (Hoiles, 1947).

In 1949, Quebec Explorers Ltd drilled four (4) holes on the claim block. The logs are included in their submitted reports; however, their locations are imprecise. The program was designed to test magnetic anomalies determined during a magnetometer survey completed in 1949 (Oakley and Honsberger, 1949).

In 1957, Nordeau Mining Co. Ltd completed a 26-hole drill campaign totalling 15,381 ft (4,688 m). The collar locations are poorly defined in the report, but they are all located within the Greater Chimo Block (Honsberger and Leclerc, 1957).

In 1958, Monor Mining Company Ltd completed a diamond drill program on the current claims. Only three drill logs (holes 2, 3 and 4) are available (Leclerc, 1958).

In 1966, Raymond Tiblemont Gold Mines Ltd drilled seven (7) holes totalling 3,000 ft (915 m) on the central part of the Lac Simon sub-block to test for a western extension of the Chimo Mine mineralization. No economically notable intervals were encountered (Booth, 1964).

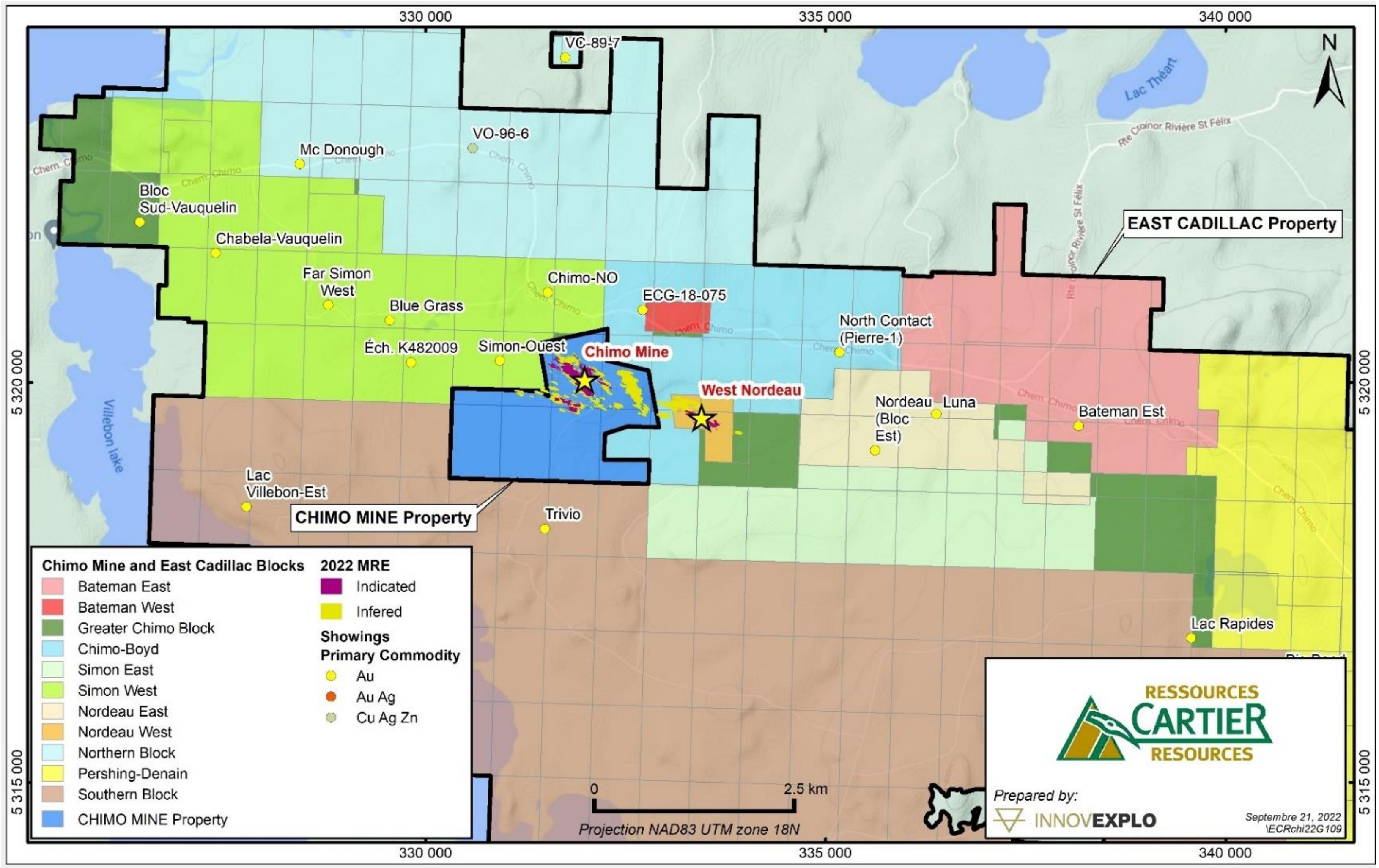

Figure 6-2 – Claim blocks and sub-blocks in the western part of the of the Chimo Mine and East Cadillac Properties

In 1969, Kerr Addison Mines carried out a Mag-EM survey over the western part of the Lac Simon sub-block. They drilled four (4) holes for 1,329 ft (405 m) to test several conductive anomalies. Graphite-rich slates with disseminated and locally massive sulphides accounted for the anomalies. Up to 20% pyrite, 10% pyrrhotite and trace chalcopyrite were intersected (Hendrick, 1969).

In 1972, SOQUEM drilled three (3) holes totaling 1,422 ft (433 m) to test EM and gravity anomalies on the West Simon sub-block and assayed for copper, zinc, lead and silver (Hora et al., 1972). Only minor grades were encountered.

In 1975, Spanex Resources completed a ground Mag survey over a previously drilled area north of the Chimo Mine (Gledhill, 1975). Further drilling was recommended to test the east-west extension of a defined magnetic response anomaly.

Between 1975 and 1976, Moss Lake Development Co. acquired a number of claims on Lac Simon claim sub-block, west of and contiguous with the Chimo Mine Property. A report authored by Gledhill (1975) comprises a compilation of previous work on the area, including drill logs, drill sections and plan maps. A 4-hole, 1,655.3-ft (505-m) follow-up diamond drilling program intersected 0.32 oz/t over 1 ft (~11.0 g/t Au over 0.30 m) in hole MV-1 (Gledhill, 1976).

In 1976, Spanex Resources Ltd drilled four (4) holes (SV-1 to SV-4) north of the Chimo Mine. The following best results were obtained from hole SV-1: 0.22 oz/t Au over 0.7 ft (424.7 to 425.4 ft down-hole); and 0.03 oz/t Au over 0.7 ft (429.8 to 430.5 ft down-hole) (Gledhill and Roeder, 1976b).

Between 1979 and 1983, SOQUEM carried out Mag and EM surveys (Lebel, 1979a-b; Laverdure, 1981; Glass, 1981; Blanchet and Gagnon, 1981b; St-Hilaire, 1982a; St-Hilaire, 1983b) that covered the southeastern part of the claim block. They also drilled three (3) holes on the East Simon sub-block in 1980. Work included a geological compilation of previous work and the location of posited mineralized zones (Lebel, 1979a,c), including the eastern part of the claim block. Geological and lithogeochemical surveys followed (Blanchet and Gagnon, 1981a).

In 1981, following a structural mapping campaign completed in the summer of 1981 and a compilation of statutory work citing very good gold values from earlier drilling and native gold reported in a few trenches, SOQUEM carried out a 9-hole diamond drill campaign totalling 1,311m (Blanchet, 1982) near the Bluegrass occurrence in the western part of the claim block. Minor sulphide mineralization was encountered, but no gold value of economic interest was noted.

In 1982, SOQUEM completed detailed trench work on their Leonard project (10-938), located in the north to northeastern part of the claim block, and later drilled one (1) hole (82-1) in the same location. The drilling results were disappointing (Gagnon, 1983).

In December 1983, Louvem drilled twelve (12) holes totaling 2,969 m in the vicinity of the West Simon occurrence, approximately 1 km west of the Chimo Mine (Blanchet, 1983). Numerous auriferous intervals were encountered. The best results are shown in Table 6-2.

Table 6-2 – Selected results from Louvem's 1983 drilling program, West Simon occurrence

Drill hole	From (m)	To (m)	Core length (m)	Au (g/t)
07-83-01	193.30	193.90	0.60	11.48
	199.44	200.18	0.74	3.80
07-83-02	199.82	200.62	0.80	3.65
07-83-03	176.62	177.54	0.92	3.12
07-83-04	87.30	89.43	2.13	5.56
	140.20	141.50	1.30	3.91
	252.56	253.58	1.02	4.90
	252.56	254.55	1.99	3.85
07-83-08	128.47	129.68	1.21	6.40
07-83-09	88.53	93.28	4.75	7.13
07-83-12	401.39	403.68	2.29	3.32

In 1984, Exploration Kerr Addison Inc. completed a 6-hole drill campaign in the northwest part of the claim block. A feldspar porphyry was encountered down-hole, and only trace values of gold were reported (Parise, 1984).

In 1984 and 1985, Golden Pond Resources acquired ground north of the Chimo Mine and West Nordeau area. They drilled fourteen (14) holes totaling 27,619 ft (8,418 m) on the Chimo-Boyd and Chimo sub-blocks to test various magnetic and conductive anomalies outlined by previous exploration (Campbell, 1985). Geophysical (VLF-EM) surveys and geological mapping were also carried out (Scodnick, 1985). A new zone of arsenopyrite mineralization with low but continuous gold values was intersected at the surface in hole VE-5 (Scodnick, 1985).

In 1985, Chabela Minerals Inc. ("Chabela") completed a 7-hole drill program in the northwestern part of the claim block (Reukl, 1986a). In January and February 1986, Chabela drilled 3,380 ft (1,030 m) in seven (7) diamond drill holes in the vicinity of the Chabela-Vauquelin occurrence (Reukl, 1986a-b). Only trace amounts of gold were noted in the assayed core samples. In January 1987, Chabela drilled 5816 ft (1,773 m) in ten (10) diamond drill holes in the vicinity of the occurrence (D'Silva, B.,1987a-b). No mineralized intervals of note were intersected.

In the summer of 1987, Louvem began constructing an access ramp on the West Simon sub-block, approximately 1 km west of the Chimo Mine (Rocheleau et al., 1988). This east-dipping ramp was driven 583 m along the contact between the Chimo volcanic band and the central band sedimentary rocks. It was designed to intersect mineralized zones #4 and #3 West at the 125 level of the Chimo Mine (aka the Insmill zones), located approximately 1 km east. No further information on this venture was found in the available literature. Historical reserves were estimated at West Simon (Racicot, 1988).

From 1987 to 1988, Monicor Exploration Inc. ("Monicor") completed surface drilling and underground exploration programs on the West Simon sub-block. The underground program failed to confirm the extent of mineralization (SNC Inc., 1990). In 1988, Monicor completed a 4-hole drill campaign on the East Simon sub-block. Two types of gold mineralization were identified: 1) hosted in mafic volcanic rocks at a stratigraphic position comparable to the mineralized zones at the Chimo Mine and West Simon; and 2) in sedimentary rocks to the south, associated with pyrite (Landry, 1988a). In the same year, Monicor also completed a 6-hole drilling program totaling 1,197m. The program identified a shear zone invaded by arsenopyrite- and gold-bearing quartz (Landry, 1988b). This same report mentioned a magnetometer survey completed in 1946 by Unigo Mines on the Chimo-Centre property. Inspiration Mining and Development Co. ("Inspiration Mining") optioned the property from Unigo and completed a drill program comprising eight (8) holes. The logs and assay results from the 1946 program are not available online.

In the first quarter of 1988, Barexor Minerals Inc. drilled 6,585 ft (2,007 m) in ten (10) diamond drill holes in the extreme northwestern part of the Chimo-Boyd sub-block, north of the Chabela-Vauquelin occurrence (Whitfield and Simoneau, 1986). No notable amounts of gold were noted from their assayed core samples.

Cambior acquired a group of claims comprising most of the Lac Simon and the eastern part of the Southern Block claims in 1988. Cambior conducted a comprehensive overburden reverse-circulation ("RC") drilling and heavy mineral geochemical sampling program (MacNeil and Averill, 1988). According to the report's author, the RC drilling results indicate that rocks of the turbidite-dominated Pontiac Group underlie the property, not the Trivio Group, as was popularly believed. This interpretation dictated that the Cadillac Fault Zone, a regional structure that separates the Pontiac Group and the Trivio Group, must pass through the northern part of the property, not to the south, as some workers had previously suggested. In 1989, Cambior reported results from a 16-hole diamond drilling program totaling 5,457.5 m in 1987-88 (Lortie, 1989). These drill holes were concentrated in three areas of the current Lac Simon claims and targeted anomalous gold concentrations in glacial overburden determined from an earlier basal till sampling program. A total of 1,359 core samples with a cumulative interval length of 1,959 m were collected and analyzed for gold content.

Sulphide mineralization (trace to 5%), comprising mainly pyrite, arsenopyrite, pyrrhotite and chalcopyrite, was found in association with quartz and carbonate veins and veinlets in the drill holes southwest of the Chimo Mine Deposit (Lac Simon sub-block). No significant results were obtained from the holes drilled on the claim block. Gold specks and arsenopyrite were observed in two quartz-carbonate veinlets associated with a fault crossing Chimo horizon volcanic rock. The best results from the diamond drilling program were obtained from holes NOV87-06: 6.1 g/t Au over 0.6 m (84.9 m to 87.5 m); 1.3 g/t Au over 4.3 m (91.0 m to 95.3 m); and from hole NOV87-08: 1.6 g/t Au over 3.7 m (74.8 m to 78.5 m); 1.8 g/t Au over 2.7 m (151.9 m to 154.6 m); 3.5 g/t Au over 3.2 m (301.5 m to 304.7 m).

In 1989 and 1990, Vauquelin Mines expanded the area of geophysical coverage that was started by Bateman Bay Mining Co. in 1988 and defined east to southeast-trending exploration targets on the eastern part of the Lac Simon sub-block, north of the West Nordeau area (Lambert and Turcotte, 1988, 1990). Subsequently, an induced polarization ("IP") survey and a 15-hole (1,557.22 m) diamond drilling program were conducted to test a number of the geophysical anomalies (Perron, 1988). No significant mineralized intervals were encountered from holes drilled on this part of the project.

In 2003, Mirabel Resources Inc. acquired a small group of claims in the western part of the Lac Simon sub-block and drilled ten (10) shallow holes totaling 431.2 m (Bourgoin, 2004). The diamond drill holes intercepted the targeted mineralized zone, but only one interval of 3.26 g/t Au over 0.65 m in hole FV-03-03 (26.75 m to 27.4 m) was noteworthy.

6.2.2 Nordeau Block (East Nordeau and West Nordeau areas)

In 1946 and 1947, Oneonta Pershing Mines Ltd ("Oneonta Pershing") completed geological and geophysical (Mag) surveys. Eight (8) holes were drilled on their West Nordeau claims, which were under option at that time to Inspiration Mining. The holes encountered the first gold mineralization in the immediate area.

In 1948 and 1949, Oneonta Pershing drilled 27 holes, totaling 3,400 m, on their West Nordeau claims. Visible gold was reported in five of the holes along the iron formation (Oakley and Honsberger, 1949; Ingham, 1950a).

In 1949, Quebec Explorers Ltd drilled four (4) holes on the claim block. The logs are included in their submitted reports; however, their locations are imprecise. The program was designed to drill-test magnetic anomalies determined by a Mag survey completed in 1949 (Oakley and Honsberger, 1949).

In 1957 and 1958, Nordeau Mining Co. Ltd completed a 24-hole program (4,530 m) that led to the discovery of gold-bearing lenses No.1, 2 and 3 in the East Nordeau area (Leclerc, 1957).

In 1962, Vauquelin Iron Mines Ltd (Mines de Fer Vauquelin Ltée; "Vauqelin Iron Mines") was incorporated. The company acquired the Nordeau claims (contiguous at the time) and drilled fourteen (14) holes (1,150 m) designed to test the potential for iron mineralised material in the sedimentary iron formations (Langevin, 1962). Between 1963 and 1965, Vauquelin did sporadic work, including an EM survey (Dumont, 1965), and drilled five (5) holes with a total length of 700 m (Vauquelin Iron Mines, 1965a,b). In 1974, Vauquelin compiled a summary report with drill hole sections for their West Nordeau and East Nordeau claims (Dumont, 1974; Langevin, 1974).

Between 1979 and 1983, SOQUEM optioned the properties and carried out Mag and EM surveys (Laverdure, G., 1981; St-Hilaire, C., 1982a; Lebel, 1979a; Amboise et al., 1980; Glass, 1981; St-Hilaire, 1982b; St-Hilaire, 1983; Gagnon, 1983), along with geochemical surveys (Blanchet and Gagnon, 1981a), followed by diamond drilling on their West Nordeau and East Nordeau claims (Savard and Leonard, 1980; Blanchet and Gagnon, 1981b; Blanchet, 1982). A total of 41 holes (6,640 m) were drilled.

By this time, the information gathered on the gold zones delineated on the properties was such that a preliminary mineral resource estimation was produced on the West Nordeau and East Nordeau occurrences (Gagnon and Gagnon, 1982).

In 1983, the property option was transferred to Louvem, who completed an IP survey before drilling twelve (12) holes totaling 2,608 m (Blanchet, 1983; Louvem, 1983) and updating the historical reserve estimate on the West Nordeau gold zones. Louvem completed an additional 21 holes totaling 4,867 m on the East Nordeau area in 1984.

In 1987, Cambior flew a regional VLF-EM and Mag survey that covered the area in the vicinity of the Cadillac Fault Zone from east of Val-d'Or to Machi-Manitou Lake (approximately 40 km) and outlined numerous anomalies, including strong magnetic trends underlying much of the east-west extent of the current East Cadillac Property (Podolsky, 1987).

Vauquelin Mines regained the property in 1987 and, following recommendations by Roche Ltd Consulting Group ("Roche"), drilled 24 holes for 4,721 m on West Nordeau and 30 holes for 5,889 m on East Nordeau (Beullac, and Slivitzky, 1987). Roche used the results to estimate the mineral reserves in the West Nordeau and East Nordeau areas (Perron, 1988; Tremblay, 1988a and 1989).

In January and February 1988, Monicor Exploration Corp. ("Monicor") drilled six (6) holes totaling 1,194 m in the area between the West Nordeau and East Nordeau occurrences (Landry, 1988b). These holes intersected gold-bearing zones in sequences of mafic volcanics, epiclastic sedimentary rocks and iron formations. The iron formations occur immediately north of the mafic volcanic rocks, whereas the southern contact zone of the mafic rocks is characterized by shearing and folded deformation zones comparable to the West Nordeau Deposit sequence. The best results from this campaign are shown in Table 6-3.

Table 6-3 – Selected results from Monicor's 1988 drilling program – West Nordeau occurrence (Landry, 1988b)

Drill hole	From (m)	To (m)	Core length (m)	Au (g/t)
88-01	110.85	111.25	0.40	3.20
88-05	45.20	45.50	0.30	22.50
	70.55	71.15	0.60	4.80
	110.30	110.60	0.30	6.50

In February 1988, Monicor drilled four (4) holes (724 m) in the immediate vicinity of the East Nordeau occurrence (Landry, 1988a). This drilling intersected mineralized grey quartz veins and veinlets (up to 5% arsenopyrite and pyrrhotite) and some veinlets of massive arsenopyrite. The best results are shown in Table 6-4.

Table 6-4 – Selected results from Monicor's 1988 drilling program – East Nordeau occurrence (Landry, 1988a)

Drill hole	From (m)	To (m)	Core length (m)	Au (g/t)
88-03	86.65	86.95	0.30	3.90
	88.25	88.55	0.30	3.10
	90.80	92.30	1.50	3.30

In 1988, Vauquelin Mines drilled four (4) holes for 1,279 m on West Nordeau to test the projected down-dip continuation of mineralization. No significant results were reported (Champagne, 1985). In 1990, Vauquelin Mines resumed drilling to test the West Nordeau structure at depth below any existing intersection. Of the seven (7) holes drilled (3,471 m), five (5) intersected the targeted gold-bearing structure. Hole W-90-06 returned 5.4 g/t Au over 17.8 m, and hole W-90-07 carried 3.6 g/t Au over 6.6 m (at ±490 m and ±675 m depth, respectively).

After reviewing the West Nordeau database for Gestion Minière Explomine Ltd ("Explomine"), Jean (1990) concluded that the former mineral reserve estimate was based on erroneous assumptions, particularly in connecting laterally and vertically selected assays or groups of assays. The "mineralized material-grade intersections" were determined to be randomly distributed within a sheared and altered mineralized structure, possibly greater than 20 m thick. The longitudinal section produced in 1988 should therefore have been considered a composite longitudinal section. Furthermore, it was determined that the statistical methods used to determine the average assay grades were, in some instances, incorrectly applied. Therefore, Explomine produced a historical resource estimate for the West Nordeau zones that were modelled on the concept of a mineralized shear zone hosting several en-echelon gold-bearing lenses.

In 1990, Vauquelin Mines and Louvem completed their last reported exploration program on West Nordeau. Their work involved surveying some of the previous holes and drilling four (4) holes (1,942 m) near the intersections of W-90-06/-07 (2 were wedged from existing holes). All four holes intersected the targeted mineralized structure; however, assay results were reported to be disappointing (Boulianne, 1991).

In 1994, Vauquelin Mines completed a ground Mag-EM survey on part of the East Nordeau Block (Deragon, 1994). Six individual iron formation bands and three distinct shear zones were identified. The zones were tested with six (6) drill holes (619.1 m) in February of 1994 (Blanchet, 1994). Gold-bearing horizons were intersected with grades of 1.48 g/t over 1.52 m (hole 94-2, 30.73 m to 32.25 m) and 4.85 g/t over 1.34 m (hole 94-5, 59.79 m to 61.13 m). These intervals were in contact with iron formations and associated with quartz veins and silicified zones mineralized with massive and semi-massive sulphides (pyrrhotite, pyrite and arsenopyrite).

On May 24, 2006, Plato Gold Corporation ("Plato") optioned the property from Globex Mining Enterprises ("Globex"). Plato completed a 7,363-m surface diamond drilling program between October 2006 and March 2007. The objective of this initial program was to do first-pass drilling over the recently optioned Nordeau and Bateman blocks and determine the best targets for future exploration. Detailed results of the program are provided in Bourgoin and Castonguay (2007).

Positive results prompted Plato to acquire additional ground in the area and begin a concerted effort to expand the known gold resources in the immediate vicinity. Although all four mineral properties yielded encouraging gold values, the West Nordeau area was prioritized for future exploratory work.

In December 2007, Plato commissioned MRB & Associates ("MRB") to complete a detailed digital compilation of all historical exploration results on the West Nordeau area and to provide recommendations for further exploration. MRB subsequently incorporated all historical diamond drilling work into database format and forwarded it to A. S. Horvath Engineering Inc. ("Horvath Engineering") of Ottawa, Ontario, who used GEMCOM® Resource Modelling software to design and recommend a drilling program.

Between January and September of 2008, following the recommendations of Horvath Engineering, Plato completed a 14-hole (8,555 m) diamond drilling program on the West Nordeau area, successfully intersecting the main zone to a depth of 700 m and demonstrated good grade and continuity over a strike (east-west) of 550 m (Table 6-5). Some of the 2008 holes were collared off the property (with permission). It was interpreted that the down-dip projection of the main zone continued outside the northern boundary of the West Nordeau area into ground not held by Plato at a depth of approximately 1000 m. Following the completion of the 2008 diamond drilling program, an updated NI 43-101 mineral resource estimate was published (Langton and Horvath, 2009).

Table 6-5 – Selected results from the 2008 drilling program

Drill hole	Au (g/t)	From-to (m)	Core length (m)
NW-08-04	0.77	548.45-567.40	18.95
NW-08-05	1.00	393.65-401.70	8.05
NW-08-06	5.66	553.80-562.30	8.50
NW-08-07	4.28	567.00-575.05	8.05
NW-08-08	1.90	452.05-457.90	5.85
NW-08-10	5.54	589.95-592.95	3.00

From October to December 2009, Plato completed 4,699 m of diamond drilling on the East Nordeau area (11 holes) and 834 m in three (3) holes in the East Bateman area. The drilling program was designed to test the along-strike and down-dip continuation of mineralization zones previously identified in the West Nordeau and East Nordeau areas (Kromo and Langton, 2010). Two mineralized zones were intersected at East Nordeau (Table 6-6).

Table 6-6 – Selected results from the 2009 drilling program – East Nordeau

Drill hole	From-to (m)	Au (g/t)[1]	Au (g/t)[2]	MS (g/t)[3]	Au Final (g/t)[4]	Core length (m)
NE09-01	294.00-295.50	1.10	3.15		2.13	1.50
	295.50-296.40	57.10		74.70*	74.70	0.90
	296.40-297.00	0.08	0.06		0.07	0.60
	297.00-298.00	6.30	6.72		6.51	1.00
	298.00-299.50	1.23	1.37		1.30	1.50
Interval	294.00-299.50				14.35	5.50
NE09-02	223.30-224.40	0.76	0.59		0.68	1.10
	224.40-225.40	43.10		34.40*	34.40	1.00
	225.40-226.40	18.65		14.95*	14.95	1.00
	226.40-227.40	0.62	0.40		0.51	1.00
	227.40-228.90	0.39	0.58		0.49	1.50
	228.90-230.00	2.01	2.18		2.10	1.10
Interval	223.30-230.00				8.01	6.70

1. Initial fire assay;
2. Check fire assay;
3. Total metallic sieve + fire assay of coarse crush reject;
4. Au Final is the average of the two fire assays or the metallic sieve result, when available. *Visible gold noted within sample interval during drill core logging

The 2010 drilling campaign by Plato (Langton and Pacheco, 2011) began on May 27, 2010, and was completed on June 2, 2010. It comprised three (3) drill holes on East Nordeau, totaling 836 m.

A diamond drilling campaign by Plato (Langton and Pacheco, 2011) was carried out on the East Nordeau and East Bateman areas between January 25, 2011, and May 15,

2011. It comprised 27 drill holes, totaling 11,966 m. Seventeen (17) holes aggregating 8,758 m were completed on the East Nordeau area (Table 6-7). The remaining holes were drilled on the East Bateman area (Table 6-8).

Table 6-7 – Selected results from the 2011 drilling program – East Nordeau (Langton and Pacheco, 2011)

Drill hole	Au (g/t)	From-to (m)	Core length (m)
NE-11-01	1.57	199.10-203.90	4.80
	1.36	237.55-240.60	3.05
NE-11-02	3.01	330.00-331.50	1.50
NE-11-06	1.89	492.00-495.00	3.00
NE-11-09	6.15	426.00-427.00	1.00
NE-11-10	4.47	516.00-517.00	1.00
NE-11-11	6.04	404.40-405.00	0.60
NE-11-15	5.39	479.00-480.00	1.00
NE-11-17	4.53	84.00-87.00	3.00
	4.76	302.55-304.35	1.80

Table 6-8 – Selected results from the 2011 drilling program – East Bateman (Langton and Pacheco, 2011)

Drill hole	Au (g/t)	From-to (m)	Core length (m)
BE-09-02	8.01	223.30-230.00	6.70
BE-11-02	1.62	208.30-209.00	0.70
	3.05	210.20-210.75	0.55
BE-11-03	0.54	119.70-120.00	0.30
	1.80	121.00-122.00	1.00
	2.29	122.00-123.00	1.00
	4.82	126.50-128.00	1.50

On April 26, 2013, Globex recovered 100% of the rights to the Nordeau Project claims that had been optioned to Plato. In June 2014, Globex carried out a sampling campaign on drill core from work completed by Plato between 2006 and 2011. This sampling aimed to test previously unsampled, potentially mineralized areas and verify the feasibility of tracing mineralization zones across non-sampled areas near auriferous zones (Manon and Pierre, 2014). Most of the sampling was concentrated on drill core from the West Nordeau area, where 1,198 samples (1,482.85 m) from 22 drill holes were collected and re-analyzed. Forty-five (45) drill core samples (52.6 m) were taken from three holes drilled in the East Nordeau area. An additional 27 samples (33.3 m) were collected from three holes in the East Bateman area. The best results of the re-sampling program are presented in Table 6-9.

Table 6-9 – Selected results from Globex re-sampling program

Drill hole	Au (g/t)	From-to (m)	Core length (m)
PG-06-06	3.45	271.60-272.85	1.25
PG-06-08	2.23	169.50-171.00	1.50
	3.33	234.00-235.50	1.50
PG-06-09	3.57	294.80-296.00	1.20
	8.13	297.00-298.00	1.00
PG-06-21	1.50	351.20-363.00	11.80
	1.13	376.00-385.00	9.00

Following their 2016 acquisition of the Nordeau project from Globex, Chalice commissioned MRB to complete an updated NI 43-101 mineral resources estimate for the property (Langton and Ladidi, 2017).

6.2.2.1 Bateman Block

The Batemen Block includes the claims covering the East and West Bateman areas. The West Bateman area includes the Eastern Block claims as defined by Chalice (Langton and Jourdain, 2019)

In 1946 and 1947, Mining Corp. of Canada covered the southeastern part of the area with a ground Mag survey (Britton, 1946) and geological mapping (MacDonald, 1947). Strong southeast-trending magnetic anomalies were noted and tested with four (4) drill holes totaling 3,176 ft (1,500 m). The locations of the drill holes are shown, but no logs are included in the report. None of the holes were drilled on the Bateman Block.

In 1949, Oneonta Pershing intersected a graphitic sulphide-rich horizon in one (1) hole drilled on the southeast part of their Bateman property.

In 1954, Malartic Gold Fields Ltd completed an airborne survey covering the Machi-Manitou Lake area, which included parts of the Bateman Block (Malartic Gold Fields Ltd, 1955a; Parkinson, 1955). As a follow-up, geochemical and EM surveys were done on the eastern part of the property (Wilton, 1955; Malartic Gold Fields Ltd, 1955b). During the same year, the eastern part of the property was covered by Mag and IP surveys conducted on behalf of Newkirk Mining Corp. Ltd (Graham, 1955).

In 1970, UMEX Inc. completed Mag and EM surveys over the southeastern part of their Bateman property.

Between 1979 and 1982, SOQUEM optioned the properties and carried out Mag and EM surveys (Laverdure, 1981; St-Hilaire, 1982a; Lebel, 1979a; Amboise et al., 1980), covering much of the Bateman Block.

From 1981 to 1982, Wescap Energy Corp. Ltd covered the Bateman Block with Mag and EM surveys (Bergmann, 1981; Bergmann, 1982).

Between 1983 and 1985, Bateman Bay Mining Co. (“Bateman Bay”) carried out a Mag-EM survey over the east part of the block, revealing several southeast-trending anomalies (Bergmann, 1983). A geochemical (humus) survey by Bateman Bay covered part of the block (Marchand, 1986), returning anomalous values of gold and arsenic.

In 1988, Bateman Bay completed a Mag survey (total field and vertical gradient) and an IP survey on two parts of the property, outlining several anomalous axes.

From 1989 to 1990, Vauquelin Mines expanded the area of geophysical coverage started by Bateman Bay in 1988, defining additional east- to southeast-trending exploration target anomalies (Lambert and Turcotte, 1988, 1990). There followed an IP survey and a 15-hole (1,557.22 m) diamond drilling program to test a number of the geophysical anomalies (Perron, 1988). The drilling program encountered significant gold-bearing intervals in hole BA-88-14 on the Bateman Block: 3.9 g/t Au (high assay cut to 34.3 g/t) over 5.05 m (66.25 m to 71.30 m), with some visible gold, including 9.11 g/t Au over 0.55 m (hole BA-88-14, 66.25 m to 66.8 m); 7.83 g/t Au over 2.00 m (hole BA-88-14, 69.3 m to 71.3 m); and 2.06 g/t Au over 0.40 m (hole BA-88-14, 76.05 m to 76.45 m).

In 1990, Monicor employed Geokemex Inc. to conduct a geochemical (humus sampling) survey over the property, revealing a few anomalous areas (Geokemex Inc., 1990). Vauquelin Mines drilled 23 holes (3,095 m) to test the lateral extension of the interval encountered in hole BA-88-14 (Perron, 1988) and various other geophysical targets (Boulianne, 1990). This drilling defined two parallel mineralized gold zones (some 10 m apart) that were traced for more than 100 m laterally and to a depth of 50 m. Selected best results from the 1988 and 1990 drilling programs are summarized in Table 6-10.

Table 6-10 – Selected results from Bateman Bay's 1988 and 1990 drilling programs (Boulianne, 1990)

Drill hole	Au (g/t)	From-to (m)	Core length (m)	Mineralization
BA90-08	2.2	143.00 – 143.50	0.50	Qz – Py – Mo?
	8.0	156.98 – 157.28	0.30	Qz – Py – Mo?
BA90-09	(5.7) 9.6*	29.65 – 34.15	4.50**	S4Gp – Qz – As – Au
		45.75 – 47.80	2.50**	S4Gp – Qz – As
BA-90-10	1.4	52.95 – 53.25	0.30	S4Gp – Qz – As – Mu
	2.0	143.30 – 144.20	0.90	S4Gp – S3 – Qz – As
	3.9	150.15 – 151.40	1.25	S4Gp – S3 – Qz – As – Po
BA90-11	1.0	46.85 – 48.65	1.80**	S4Gp – S3 – Qz – As-Po-Au
	2.3	56.20 – 61.10	4.90**	S4Gp – Qz – As – Au-Po
BA-90-12	1.3	40.75 – 41.25	0.50	S3 – Qz – Po – Py
	3.1	45.50 – 47.95	2.45**	S4Gp – Qz – As – Po – Py
	(9.7) 10.0	61.90 – 63.80	1.90**	S4Gp – Qz – As – Po-Au
BA-90-13	7.4	53.80 – 56.30	2.50	S3 – S4Gp – Qz -As-Po-Cp
	2.9	62.95 – 63.45	0.50	S3 – S4 – W^+-Si^+ - Po
BA-90-15	1.2	70.90 – 71.90	1.00	S3 – Qz – As
	1.0	86.55 – 86.90	0.35	S4Gp – Qz – As
BA-90-16	1.1	13.00 – 14.20	1.2	S3 – Qz – Mu – As
	3.4	112.20 – 114.90	2.7**	S4Gp – S3 – Qz -As-Po-Au
BA-90-21	1.0	76.53 – 78.03	1.5	S3 – Qz

Drill hole	Au (g/t)	From-to (m)	Core length (m)	Mineralization
BA-88-14	(3.9) 12.8	66.25 – 71.30	5.05	S3 – S4 – Qz -To?-Au
	2.1	76.05 – 76.45	0.40	S3 – S4Gp – Qz – As

Qz= Quartz, As = Arsenopyrite, Py = Pyrite, Po = Pyrrhotine, Cp = Chalcopyrite, Mo=Molybdenite, Au = visible gold, Mu = Muscovite, To = Tourmaline, S3 = Siltstone, S4 = Argilite, S4Gp = Graphitic shale, W^+ = Amphibolitization, Si^+ = Silicification; ** Well-defined mineralized zone * (5.7) = Cut to Au 34.3 g/t

In late 2009, Plato completed two (2) holes totaling 802 m on the East Bateman area. A third hole was abandoned after 31 m. Hole BE09-03 intersected a weakly auriferous zone (1.19 g/t Au over 2.8 m) in quartz stringers mineralized with pyrite (1%) and arsenopyrite (2%) within sheared graphitic shale at 194.4 m down-hole (Kromo and Langton, 2010).

A diamond drilling campaign by Plato was carried out between January and May 2011 (Langton and Pacheco, 2011). A total of 3,208 m in ten (10) holes were completed on the East Bateman area of the Bateman Block. The program was designed to investigate the historical Bateman mineralized zones and to evaluate previously untested zones believed to have potential for gold mineralization.

Holes BE-11-01, BE-11-02, BE-11-05 and BE-11-08 intersected gold-bearing mineralization. The best results (4.82 g/t Au over 1.5 m) were obtained from 126.5 m to 128.0 m in Hole BE-11-03 (Table 6-11).

The 2011 drill holes outlined two subparallel, stratiform iron formation (“IF”) horizons with associated gold-bearing mineralization similar to those discovered in the East Nordeau area. The more southerly IF hosts the historical “East Bateman Mineral Resource”. The previously unknown northerly IF was intersected by Holes BE09-02, BE09-03 and BE09-04 and Holes BE11-01 through BE11-05. A new gold zone associated with the northerly IF is now defined over 1,650 m along strike and between 10 m and 215 m vertically.

Table 6-11 – Selected drilling results from the 2011 drilling program – East Bateman Area (Langton and Pacheco, 2011)

Drill hole	Au (g/t)	From-to (m)	Core length (m)
BE-09-02	8.01	223.30-230.00	6.70
	3.05	210.20-210.75	0.55
BE-11-03	2.29	122.00-123.00	1.00
	4.82	126.50-128.00	1.50

6.2.2.2 Pershing-Denain Block

The Pershing-Denain Block comprises a contiguous group of 268 claims in Denain and Pershing townships, which overlie most of the eastern half of the property. The Pershing Block refers to the claims along the eastern part of Matchi-Manitou Lake. The Denain Block denotes the claims located on the lake’s western shore.

6.2.2.3 Pershing Block

In 1945 and 1946, Packard Pershing Mines Ltd carried out the earliest notable work on the Pershing Block by completing a ground Mag survey and a 2-hole diamond drilling campaign totaling 350 m (Malouf, P.M. 1945; Packard Pershing Mines Ltd, 1946; Landry, 1988c). In 1951, East Sullivan Mines Limited bored a single hole on the Pershing Block (Robertson, 1951).

In 1963, Syndicat Minier Pershing ("Pershing Syndicate") completed a Mag survey, followed in 1964 by a 2-hole drill program totaling 288 m (Leclerc, 1964; Landry, 1988c). In 1966, Pershing Syndicate carried out a 3-hole diamond drilling program totaling 224 m (Landry, 1988c).

In 1973, D'Quincy Explorers drilled five (5) diamond drill holes with 164 m total depth on the western shore of Matchi-Manitou Lake (Boissoneault, 1973).

In 1974, Pershing Syndicate commissioned a report to examine the economic potential of iron mineralized material on the Pershing Block (Leclerc, 1974).

Between 1982 and 1983, SOQUEM completed a 3-hole diamond drill program (totaling 505 m), a Mag survey, and a detailed structural analysis on the claims of the Denain-Pershing project claims, referred to as the Simon Project by SOQUEM (Britt et al., 1983 a,b). No notable results were reported.

In 1988, Louvem completed a surface exploration and diamond drilling program. A 630-m^2 area of bedrock was stripped and mapped in detail. Following this, approximately 595 m were drilled (Landry, 1988c). A detailed summary of Louvem's 1988 exploration program is included in Frederic (1997), which also summarizes the work done on the claims northeast of Matchi-Manitou Lake.

Additionally, Exploreco conducted a VLF-EM and ground Mag survey in 1988. Seven anomalies were identified (Coda and Frederic, 1989). Subsequently, three (3) diamond drill holes (P-89-1 to P-89-3) were completed (Frederic, 1989). This drilling mostly intersected greywacke interbedded with iron-rich layers (Frederic, 1997).

From 1996 to 1997, 2946-2983 Quebec Inc. conducted ground geophysical surveys on the Pershing Block. These surveys included Mag, IP-resistivity and VLF-EM. In 1997, 7 drill holes were completed to test anomalies identified during the geophysical surveys. Iron formations were identified as the source of the anomalies (Frederic, 1997).

In 2000 and 2001, Montigua Resources Inc. ("Montigua") conducted an exploration program that included diamond drilling (3 holes) and geophysical surveys such as Mag, IP and HLEM (Procyshyn, 2001a,b).

In 2002 and 2003, Montigua continued to drill the claims near the northeastern shore of Matchi-Manitou Lake (Procyshyn, 2003). Drill logs are available, along with geological maps that include the exact locations of the drill holes (S09, S10, S11, S13, S14). Continuing their exploration of the property, Montigua conducted another drilling program in the summer of 2006. Five (5) drill holes were completed for a total of 910 m. The objective was to identify the potential for iron formation-hosted gold mineralization on the property (Pelletier, 2006).

In 2010, ForestGate Energy Inc. ("ForestGate") acquired the Pershing property from Montigua. In the spring of 2011, ForestGate performed a diamond drilling program totaling 1,583 m, comprising five (5) drill holes. The ensuing report by Ciesielski (2011) presented a detailed summary of lithologies and geochemical insights. ForestGate commissioned a heliborne Mag and TDEM survey over the Pershing property in 2011 (Desaulniers, 2011).

In 2017, Renforth Resources acquired the Pershing property from two private vendors and completed an airborne Mag survey in January 2018. By this time, their property included part of the Denain Block on the southwest side of Matchi-Manitou Lake (Eagle Geophysics, 2018).

6.2.2.4 Denain Block

In 1946, Monor Mining Corp. ("Monor Mining") completed a geological and geophysical (Mag) survey with a follow-up 4-hole diamond drill program in the northwestern part of the Denain Block (Chainey, 1996).

In 1946 and 1947, Mining Corp. of Canada covered the central part of the Denain Block with a ground Mag survey (Britton, 1946) and geological mapping (MacDonald, 1947). Strong southeast-trending magnetic anomalies were noted and tested with four (4) drill holes totaling 3,176 ft (1,500 m), one of which was drilled on the Pershing-Denain Block. The locations of the drill holes are shown on the map, but no logs are included in the report.

In 1954, Malartic Gold Fields Ltd completed an airborne survey covering the Matchi-Manitou Lake area (Malartic Gold Fields Ltd, 1955a; Parkinson, 1955). As a follow-up, geological, geochemical and EM surveys were done on the area of the Bateman claims (Wilton, 1955; Malartic Gold Fields Ltd, 1955b). During the same year, the southern part of the property was covered by Mag and IP surveys on behalf of Newkirk Mining Corp. Ltd.

In 1955, Americ Mines and Minerals Ltd conducted a geological survey, followed by an EM survey in 1957. This survey covered the southwestern part of the Denain Block (Blanchet and Gagnon, 1982).

In 1958, the eastern part of the property was covered with a Mag survey done by Monor Mining (Dumont, 1958) and an EM survey run by Continental Mining Exploration Ltd (Szetu, 1958).

In 1960, Alsab Mines Ltd completed three (3) diamond drill holes, a geological survey and a Mag survey. This program concluded with no significant gold values (Pudifin, 1960; Blanchet and Gagnon, 1981a).

In 1965, a diamond drilling program was carried out by Chimo Gold Mines Ltd. Two (2) holes were drilled within the Denain Block on the southwestern shore of Matchi-Manitou Lake. No gold values were recorded. Geologic maps and hole locations are included in the report authored by Honeyman (1965).

Between 1979 and 1982, SOQUEM optioned the northwestern part of the Denain Block and carried out Mag and EM surveys (Laverdure, 1981; St-Hilaire, 1982a; Glass, 1981) that covered much of the Pershing-Denain Block. Geological and lithogeochemical surveys followed (Blanchet and Gagnon, 1981a). In 1980 and 1981, SOQUEM carried out a diamond drilling campaign that was part of the larger Simon Project (Britt et al., 1983a). In 1982, SOQUEM continued their exploration with a geological survey that included a detailed structural analysis, geochemical sampling of humus and one additional drill hole (Blanchet and Gagnon, 1981a; Britt et al., 1983b).

In 1981, a VLF-EM survey by Lynx Canada-Americ-Sparton that covered the central part of the Denain block (Larouche, 1982) outlined several anomalies coincident with mapped occurrences of magnetic iron formation.

In 1984, Concho Ressources Limited was exploring the western shore of Matchi-Manitou Lake, while SOQUEM was exploring the eastern shore. Concho Ressources completed six (6) drill holes (599 m in total). No significant precious or base metal findings were encountered (Gosselin, 1984).

In 1985, SOQUEM entered an option agreement with Louvem. In the fall of 1986, exploration included a geochemical interpretation carried out by Geokemex. In December 1986, three (3) drill holes were completed totaling 989 m. In 1987, Mr Girard of Louvem published a geologic report detailing work completed in 1986 on the Lac Rapides Block. This report also provides a concise summary of historical work up until 1983 on the claims surrounding Lac Rapides (Girard, 1987).

Between 1986 and 1988, a geochemical (humus) survey was carried out over the northern part of the Denain Block by P. Dumont Consulting. Several weakly anomalous assay results were obtained (Dumont, 1986; Dumont, 1988a). This work was followed up with a ground geophysical (Mag) survey (Dumont, 1988b).

In 1995, Ressources Orient Inc. acquired the Lac Rapides claims. From 1995 to 1996, they completed three (3) diamond drilling holes totaling approximately 400 m. This exploration also included Mag, EM and VLF-EM surveys (Chainey, 1996; Boileau and Lapointe, 1996).

In 2017, Renforth Resources acquired the Denain property and commissioned Eagle Geophysics to perform a helicopter-borne gradient Mag survey over the property. In January 2018, Renforth consolidated two major exploration regions within the current claim boundary, including the Denain and Pershing properties (Eagle Geophysics, 2018).

6.2.2.5 Southern Block

In 1939, Inspiration Mining carried out trenching and channel sampling and 1,200 ft (366 m) of diamond drilling in twelve (12) holes on their McKinnon property in the western part of the Southern Block. The discovery trench exposes quartz lenses, sparingly mineralized with disseminated cubic pyrite, cutting silicified amphibolite schist (Ross and Silver, 1939).

In 1946 and 1947, Mining Corp. of Canada covered the eastern part of the property with a ground Mag survey (Britton, 1946) and geological mapping (MacDonald, 1947). Strong southeast-trending magnetic anomalies were noted and tested with four (4) drill holes totaling 3,176 ft (1,500 m). Locations of the drill holes are shown, but no logs are included in the report. Three of the holes were drilled on the claim block.

In 1949, four (4) holes (holes #1 to #4) were drilled on the so-called Dean property in the Southern Claim Block. Pyrrhotite is reported in the logs. A trench is located near drill collars #2 and #3, along with a series of N-S trenches that extend laterally from holes #2 and #3. No assay results were included, and no company name was attached to the report (Ingham and Johnston, 1945).

In 1954, Malartic Gold Fields Ltd completed an airborne survey covering the Machi-Manitou Lake area, which included parts of the Southern Block (Malartic Gold Fields Ltd, 1955a; Parkinson, 1955; Malartic Gold Fields Ltd, 1955b). During the same year, the east part of the property was covered by Mag and IP surveys run for Newkirk Mining Corp. Ltd (Graham, 1955).

In 1958, the eastern part of the property was covered with a Mag survey done by Monor Mining Co. Ltd (Dumont, 1958). Three diamond drill holes totalling 1,353 ft (412.4 m) were drilled on the magnetic anomalies (Monor Mining Company, 1958; Dumont, 1959). Another EM survey was carried out by Continental Mining Exploration Ltd (Szetu, 1958).

In 1962, Moneta Porcupine Mines Ltd conducted a 7-hole drilling campaign to explore geophysical anomalies. Only hole #7 is located within the property boundary. The logs and a vague location map are included in the report authored by Taylor (1962).

Between 1962 and 1965, Monor Mining Co. Ltd carried out a (Mag) survey over the northern part of the claim clock. Three strong anomalies were noted (Dumont, 1962). A subsequent Mag survey was completed in 1963 (Dumont, 1963), and an EM survey followed in 1965 (Dumont, 1965).

In 1965, 2 holes were drilled by Villebon Prospecting Syndicate. The logs do not contain assay results (Dumas, 1965).

In 1965, Inco Ltd also completed a drill program of five (5) holes, three (3) of which fall within the Southern Claim Block. In the drill logs, minor pyrite and pyrrhotite mineralization are associated with veining and a graphite layer. No gold values are recorded (Canadian Nickel Co, 1965).

In 1965, Black River Mining Ltd carried out a ground Mag-EM survey in the northern part of the claim block, outlining a strong conductor tested by diamond drilling and determined to be due to uneconomic sulphide mineralization (Bergmann, 1965).

In 1979, Mines Patino (Quebec) Ltée and UMEX Inc. conducted a 3-hole drill campaign. Hole depths vary from 500 to 600 ft. Brecciated zones and pyrite, pyrrhotite and chalcopyrite mineralization are reported. Gold values are mostly trace to nil, with a few 0.01 oz/t (Coda and Patel, 1979).

Between 1979 and 1983, SOQUEM carried out Mag and EM surveys (Laverdure, 1981; Lebel, 1979a,b; Amboise et al., 1980; Glass, 1981; St-Hilaire, 1983b) that covered the southeastern part of the claim block. Work included a geological compilation of previous work and the location of posited mineralized zones (Lebel, 1979a,c). Geological and lithogeochemical surveys followed (Blanchet and Gagnon, 1981a).

In 1981 and 1982, Wescap Energy Corp. Ltd covered the eastern part of the claim block with a Mag-EM survey (Bergmann, 1981; Bergmann, 1982).

In 1983, Bateman Bay carried out a Mag-EM survey covering the eastern part of the claim block (Bergmann, 1983). The survey outlined several southeast-trending anomalies.

In 1983-84, SOQUEM acquired 108 additional claims (Nova claim block of Langton and Ladidi, 2017) and carried out geological mapping, geochemical (humus) and geophysical surveys (Mag, EM, IP), and diamond drilling (5 holes, 739 m) on these new claims (Britt, 1983; Boudreault, 1984a).

In 1984, SOQUEM drilled three (3) diamond drill holes (332 m) on the newly acquired claims (Boudreault, 1984b) to evaluate a small gold-bearing porphyritic intrusion known to host sulphide-bearing (py-asp-po-gold) quartz-tourmaline veins. An associated porphyry dyke, transected by arsenic-bearing faults, hosts the Marilyne gold showing. The veins and mineralization observed in the drill core were similar to those already observed on surface and in earlier drill holes. A total of 63 core samples were collected and analyzed. Best results were 0.72 g/t Au over 15 cm (hole 958-84-6; 8.60 m to 8.75 m) and 0.62 g/t Au over 0.50 m (hole 958-84-8; 74.95 m to 75.45 m).

In 1989 and 1990, Vauquelin Mines expanded the area of geophysical coverage begun in 1988 by Bateman Bay and defined additional east- to southeast-trending exploration targets on the eastern part of the claim block (Lambert and Turcotte, 1988, 1990). Subsequently, an IP survey and a 15-hole diamond drilling program totaling 1,557.22 m were conducted to test a number of the geophysical anomalies (Perron, 1988). No significant mineralized intervals were encountered from holes drilled on this part of the project.

6.2.2.6 Northern Block

Early exploration in the northern block was prompted by the discovery of surface gold by McDonough Mining Syndicate Limited in 1937. Following this discovery, the newly founded Miniwaki Mines Limited took over exploration in the area leading to extensive exploration campaigns, including excavations and diamond drilling.

In 1946, the Russian Kid Mining Company Ltd, partly in collaboration with Simon Lake Mines Ltd, completed a diamond drilling program totaling 6,318 m in 59 holes, twelve (12) of which fall within the current property boundary. Quartz-carbonate-tourmaline veining with carbonate-pyrite-sericite alteration zones were intersected (Fillingham et al., 1946; Flaherty and Ingham, 1946).

In 1969, Tin Mines Ltd conducted Mag and EM surveys over the central part of the Northern Claim Block (Howe, 1969). A total of 33 EM anomalies and 16 VLF-EM anomalies were defined. A single magnetic anomaly that coincides with EM anomaly #1 was rated as a prime drill target. Further work was recommended because the type of mineralization common to the area is not necessarily zones composed of magnetic pyrite, chalcopyrite and sphalerite.

In 1981, Ross d'Or Claims continued work on what is historically referred to as the McDonough gold showing in the centre of the Northern Claim Block, near Chimo Road (Pudifin, 1981). Mag and EM surveys were conducted over this area. Gold mineralization at the McDonough Showing occurs in a band of tuff containing sparsely-distributed fragments of andesitic material. The main fracture is mineralized with quartz, tourmaline and some pyrite, chalcopyrite, sphalerite and ankerite, over a width of up to 2 ft. Gold also occurs in sheared porphyry and dacite on the south shore of Simon Lake, about 800 m east of the mouth of Villebon River. Results of the Mag survey and EM survey are plotted on accompanying maps.

In 1982, geophysical surveys were carried out by Camchib Resources Inc. (Bergmann, 1982) in the Northern Claim Block. The report describes the geophysical surveys and includes survey anomaly maps. The surveys outlined nine conductive zones. Three of these zones were previously tested by diamond drilling, and two showed sulphide mineralization.

In 1984, Paul Boyd property reported three conductors after VLF-EM surveys were completed in the winter of 1983 (Larouche, 1984). Two of the identified conductors trend NW-SE, subparallel to the area's stratigraphy, whereas the third conductor has a cross-cutting NE-SW trend. The results of the geophysical surveys are compiled on accompanying geological maps.

In 1984, Kerr Addison Exploration Inc. ("Kerr Addison") also carried out VLF and HEM surveys, combined with a Mag survey, to detect conductive zones which may be produced by economic minerals (Lavoie, 1984). The Mag survey was performed to determine the geological structure and to detect a possible association with conductive zones. 48 anomalies were detected with VLF-EM, but only one (1) coincides with an HEM anomaly.

Following the geophysical surveys, Kerr Addison drilled seven (7) holes (KV-84-1A & KV-84-1B to KV- 84-6), totaling 728 m (Parise, 1984). The best analytical results were:

- 0.01 oz/t Au (0.34 g/t) Au over 5.5 ft (261.5 – 267.0 ft) in hole KV-84-2;
- 0.01 oz/t Au (0.34 g/t) Au over 4.0 ft (200.0 – 204.0 ft) in hole KV-84-6;
- 0.01 oz/t Au (0.34 g/t) Au over 5.0 ft (209.0 – 214.0 ft) in hole KV-84-6;
- 0.01 oz/t Au (0.34 g/t) Au over 5.0 ft (233.5 – 238.5 ft) in hole KV-84-6.

In 1987, Rosenbaum-Lehman Syndicate conducted geophysical surveys comprising 37.6 line-miles of Mag and VLF-EM data (Campbell, 1986) on the Northern Block. The Mag survey provides information which helps define the underlying geological structures and identifies any potential economic concentrations which may contain variations in accessory minerals. The VLF-EM survey helps define conductive zones, which may represent shear zones and/or metallic sulphide deposits containing gold mineralization. It was successful in helping outline the underlying geology and delineating conductive zones on the Rosenbaum-Lehman property. There is a good correlation between this survey and the results of past ground geophysical surveys. Their report also includes three attached maps of the surveys.

Also, in 1987, Norwood Exploration Inc. completed a geophysical survey (Mag: 26.5 km, EM: 22.5 km and IP: 13.7 km) and two (2) diamond drill holes (VQ-87-1 and VQ-87-2) totaling 358.5 m. No significant gold assays were obtained from the drill core, with only one of the 73 samples (from hole VQ-87-1) returning a value of 465 ppb over 0.8 m, from 181.7 to 182.5 m down-hole (Boisvert and Khobzi, 1987).

In 1987-88, Norwood Exploration identified fourteen (14) anomalies believed to represent semi-massive to disseminated sulphides or concentrations of magnetite based on the IP survey completed as part of the geophysical exploration program. A 5-hole drilling program tested the anomalies (470-01-87 to 470-05-87). Gold results were not significant but yielded the best result of 0.145 g/t Au over 3.9m (from 172.9 to 176.8 m down-hole) in drill hole 470-04-88, 400 ppb Au over 1.5 m in a sheared and breccia zone (124.1 to 125.6 m down-hole in drill hole 470-03-87), and 0.14 g/t Au over 4.5m (52.5 to 56.7 m down-hole) in a semi-massive pyrite zone in hole 470-04-88 (Perron and Morin, 1988).

In 1988, Minerals Barexor Inc. performed a drill program south of Norwood Inc.'s drill holes. Minerals Barexor Inc. drilled four (4) holes (BV-88-07 to BV-88-10). Each hole intersected quartz-tourmaline veins with low gold values (highest value: 0.01 oz/t Au locally; Whitfield and Simoneau, 1988).

6.3 Chalice Gold Mines Exploration Programs – 2016-2019

6.3.1 Surface exploration

In October 2016, Chalice optioned the Nordeau and Bateman claims and the northwestern part of the Pershing-Denain block from Globex Mining Enterprises. Chalice conducted a wide range of surface exploration programs and drilling campaigns. The work helped build a comprehensive geochemical database to better define potential exploration targets. The components included:

- Extensive Mobile Metal Ion ("MMI") soil-sampling campaigns (2016, 2017, 2018) covering various areas across the project;
- Biogeochemical (black spruce bark) sampling campaigns (2017, 2018);
- Regional mapping/rock sampling surveys (2016, 2017, 2018), with lithological samples subjected to a range of tests, including multi-element analytical procedures, whole-rock analysis, and analysis by short-wave infrared spectrometry ("SWIR"); and
- Core-interval sampling of 26 historical drill holes and SWIR measurements of 34 historical holes drilled by Plato during its 2006-2011 exploration campaigns.

Additionally, the claims were covered by ground and airborne geophysical surveys and an airborne LiDAR survey. The geophysical surveys include:

- Airborne VLF-EM surveys;
- An airborne Mag survey yielding the following data types: Total Magnetic Intensity ("TMI"), Vertical Magnetic Gradient ("VGRAD"), In-line Magnetic Gradient ("IGRAD"), cross-line Magnetic Gradient, Horizontal Magnetic Gradient, and Magnetic Tilt-Derivative; and
- An OreVision IP survey.

The details of the various exploration programs are described in Scott et al. (2017a), Dallmeier et al. (2018) and Letwinetz et al. (2018a,b).

6.3.2 Drilling programs

Between September 23, 2017, and March 2019, Chalice cored 97 NQ-diameter diamond drill holes, totaling 33,632 m (including wedged holes) on the optioned claim blocks. The programs tested gold targets along the strike of the Larder Lake–Cadillac Fault Zone ("LLCFZ") on the West Simon and West Nordeau claim blocks, as well as numerous geochemical and geophysical targets identified by Chalice's surveys.

The 2017 program focused on the projected WNW extension of mineralized horizons underlying the West Nordeau claims. The best results from the 2017 holes are summarized in Table 6-13.

In March 2017, four (4) holes (1,005 m) were drilled to test the projected on-strike extension of mineralized horizons underlying the West Nordeau claims. A total of 656 core samples were collected for multi-element and fire assay analysis: 125 for SWIR scanning, 10 for whole-rock analysis, and 12 for petrographic study (Scott et al., 2017).

The September to November 2017 campaign comprised seven (7) holes (4,164.4 m) near the earlier (March 2017) holes. A total of 1,947 core samples were collected for multi-element and fire-assay analysis and 11 for petrographic study (Scott et al., 2017). SWIR data were collected from 1,292 samples. No whole-rock analyses were performed. The results from the 2017 holes drilled near the West Nordeau Deposit were integrated into the updated 2019 NI 43-101 MRE and published in a technical report by Langton and Jourdain (2019).

In December 2017, five (5) holes (1,829 m) were collared south of the Chimo Mine Property in a sequence comprised mainly of greywacke and mafic volcanic rocks. A total of 539 core samples were collected for multi-element and fire assay analysis. No significant gold grades were encountered in these holes (Scott et al., 2017).

Table 6-12 – Selected results from the 2017 drilling program on the West Nordeau Deposit

Drill hole	From (m)	To (m)	Core length (m)	Au (g/t)
ECG_17_005	607.7	610.7	3.1	4.74
ECG_17_006A	501.3	503.3	2.0	2.68
	812.8	823.0	10.2	2.78
	812.8	815.3	2.5	9.72
	841.2	844.2	3.0	2.21
ECG_17_007W1	292.0	293.0	1.0	4.83
	607.3	608.3	1.0	3.08
	690.7	691.4	0.7	7.84
ECG_17_009	134.5	136.0	1.5	4.49
	521.4	541.4	20.0	0.93
	536.6	541.4	4.8	2.04
	593.3	594.1	0.8	25.80

In 2018, 63 holes were drilled for 20,321 m. A total of 9,551 core samples were collected and sent to ALS Laboratories for multi-element ICP and fire assay gold analysis. Samples for whole rock and petrographic studies were also collected. Along with testing several known gold occurrences, the 2018 drilling program intersected several new gold-mineralized zones, notably Lac Rapides, South Nordeau, North Contact and Far West Simon (Figure 6-3).

The **Lac Rapides Zone** was discovered by a 6-hole campaign in 2018 designed to test Au-Ag-As in-soil anomalies spatially associated with a deflection in the LLCFZ southwest of Lac Rapides. Gold mineralization is hosted in what was originally logged as a biotite-rich intermediate tuff unit; however, its geochemical interpretation suggests that this unit is a strongly deformed lamprophyre dyke. The best results from the Lac Rapides Zone are summarized in Table 6-13.

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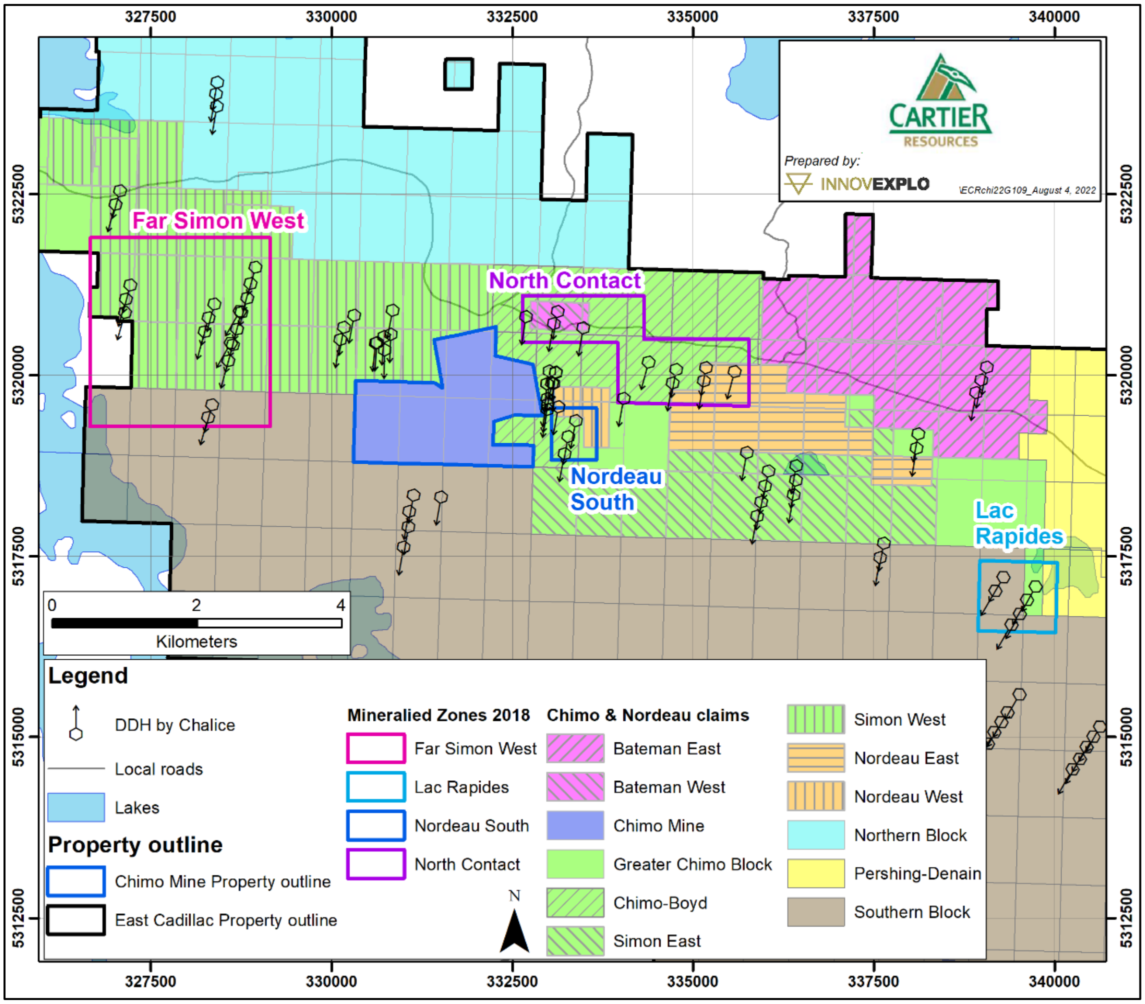


Figure 6-3 – Main mineralized zones defined by 2018 drilling (from Cornick et al., 2019a)

Three (3) drill holes were designed to intersect gold mineralization targets in the South Nordeau area, south of the West Nordeau mineral resource (Figure 6-3). The target area is underlain by intermediate to ultramafic volcanic rocks with minor clastic sedimentary rocks, iron formation and felsic to intermediate intrusive rocks. The volcanic units vary between massive, porphyritic, pillowed flows and mafic tuff. The mineralization is localized along the contact between a porphyritic felsic dyke and an ultramafic volcanic unit which is affected by strong shearing and chlorite-talc alteration. According to Cornick et al. (2019), geophysical and RC drilling data indicate that the immediate area may host up to five (5) other similar felsic dykes, which are untested by diamond drilling. The best results from the South Nordeau Zone are summarized in Table 6-13.

Table 6-13 – Selected results from the Lac Rapides and South Nordeau zones

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
Lac Rapides Zone				
ECG_18_049	316.7	337.5	20.8	0.74
including	323.1	326.2	3.1	4.27
South Nordeau Zone				
ECG_18_030	37.6	39.1	1.5	1.43
	248.0	249.0	1.0	0.55
ECG_18_032	143.2	174.5	31.4	0.17
including	144.8	145.8	1.0	1.37
including	155.7	156.7	1.0	0.98
ECG_18_032	262.0	267.3	5.3	0.28

The **North Contact** is located northeast of the Chimo Mine Property, approximately 1 km north of the LLCFZ. The current interpretation suggests that the North Contact is a secondary fault parallel to the LLCFZ. Ten (10) diamond drill holes targeted the northern contact between the sedimentary package and the underlying volcanic rocks to the north. Ag-Bi-Sb in-soil anomalies supported the targeting work. The North Contact area is underlain by intermediate to mafic volcanics and clastic sedimentary rocks. Numerous graphite beds were recognized in the core and were found to be more common at this location than elsewhere on Chalice's optioned property. Logging and geochemical discrimination showed that lithologies correlated well between holes in the eastern part of the zone. The westernmost hole (ECG_18_075) intersected a gold-bearing zone consisting of a wide, low-grade zone with a narrow, higher-grade core. Gold was associated with quartz-carbonate-tourmaline veins along graphitic units occupying fault planes. Gold mineralization was traced along the North Contact for over 1 km (between holes ECG_18_073, 071, 024 and 072). The best results from the North Contact Zone are summarized in Table 6-14.

Table 6-14 – Selected results from the North Contact Zone

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
ECG_18_024	157.0	163.5	6.5	1.77
including	160.0	163.5	3.5	2.10
ECG_18_025	46.2	50.4	4.2	0.14
	67.0	69.6	2.6	0.26
ECG_18_070	206.5	208.5	2.0	0.12
ECG_18_071	31.0	32.0	1.0	0.54
	74.2	80.1	5.9	0.25
	82.0	83.3	1.3	1.99
	96.2	98.4	2.2	0.22
	109.9	114.0	4.1	0.53

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
ECG_18_072	116.2	120.2	4.0	0.34
	134.3	138.0	3.7	0.30
	156.0	163.8	7.8	0.60
including	159.1	160.0	0.9	3.47
ECG_18_072	180.5	204.0	23.5	1.12
including	198.3	200.3	2.0	6.86
including	201.3	202.3	1.0	5.71
ECG_18_073	127.0	128.0	1.0	0.15
	158.9	173.2	14.3	0.26
including	166.2	167.7	1.5	0.72

The Far West Simon Zone is in the western part of the West Simon sub-block, straddling the LLCFZ. The exploration drilling program comprised seventeen (17) holes designed to test an Au-Ag-As-Sb-Bi-W in-soil anomaly and to test for the projected western extension of the mineralization associated with the LLCFZ. The Far West Simon area is underlain by mafic to intermediate volcanic rocks and clastic sedimentary rocks with minor iron formations and mafic to ultramafic intrusions. The intermediate to mafic volcanic rocks are massive or tuffaceous. The clastic sedimentary rocks comprise massive to finely bedded greywacke, with conglomerate and argillite. The area's lithologies were distinguished through a combination of core logging, thin section studies and geochemical analysis.

Drilling intersected three (3) mineralized zones delineated by anomalous gold results. Gold is associated with arsenopyrite-rich quartz-carbonate veins in shear zones hosted by intermediate to mafic volcanic rocks. Mineralization is typically hosted in the immediate wall rock around quartz-carbonate veins and occurs as wide, low-grade zones. The best results are summarized in Table 6-15.

Table 6-15 – Selected results from the Far West Simon Zone

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
ECG_18_016	38.0	43.8	5.8	1.62
including	39.8	40.8	1.0	3.72
ECG_18_016	110.9	120.4	9.5	0.42
including	117.7	118.9	1.2	1.06
ECG_18_016	251.0	261.8	10.8	0.99
including	259.0	260.3	1.3	3.11
ECG_18_037	125.8	138.8	13.0	0.58
including	129.8	136.8	7.0	0.74
including	130.8	131.8	1.0	1.17
ECG_18_037	153.8	156.5	2.7	1.28
including	155.8	156.5	0.7	3.00

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
ECG_18_037	214.6	220.0	5.4	0.77
including	214.6	216.0	1.4	2.44
ECG_18_039	183.0	194.0	11.0	1.55
including	184.0	188.0	4.0	3.18
including	185.0	186.0	1.0	6.15
ECG_18_039	264.0	269.0	5.0	2.14
including	265.0	268.0	3.0	3.32
ECG_18_065	156.8	161.1	4.3	0.52
including	156.8	158.1	1.3	1.56
ECG_18_065	277.2	290.0	12.8	0.16
including	286.9	288.8	1.9	0.70
ECG_18_065	321.0	331.7	10.7	0.66
including	325.1	330.0	4.8	1.23
including	325.1	325.7	0.6	5.34
ECG_18_066	99.1	106.6	7.5	0.61
including	103.1	104.1	1.0	1.87
ECG_18_067	29.0	39.2	10.2	1.02
including	35.5	38.2	2.7	1.79
ECG_18_067	196.0	197.0	1.0	6.49
ECG_18_068	256.1	268.5	12.4	0.71
including	257.6	261.5	3.9	1.83
including	259.1	260.0	0.9	3.02
ECG_18_068	279.9	281.4	1.5	7.42

Other holes drilled in 2018 tested various targets generated from MMI in-soil anomalies, IP chargeability anomalies, and aeromagnetic anomalies. The best results from these holes are summarized in Table 6-16.

Table 6-16 – Selected results from other reconnaissance holes drilled by Chalice

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
ECG_18_018	441.0	442.0	1.0	9.00
	538.5	544.5	6.0	1.55
including	538.5	540.5	2.0	3.18
ECG_18_019	249.6	250.6	1.0	12.50
	332.7	333.3	0.6	1.14
ECG_18_020	368.5	369.4	0.9	3.44
	564.3	566.5	2.2	1.47
ECG_18_021	74.4	76.0	1.6	1.21

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
	235.9	247.7	11.9	3.25
including	244.0	245.6	1.6	18.52
ECG_18_021	430.0	434.2	4.2	3.63
including	431.5	432.7	1.2	6.34
ECG_18_021	442.2	444.6	2.4	1.57
	489.0	490.0	1.0	3.04
	499.5	500.0	0.5	2.42
	534.2	536.4	2.2	1.47
	561.8	564.8	3.0	1.49
	580.0	582.3	2.3	1.79
	641.7	644.7	3.0	1.52
ECG_18_029	76.5	77.8	1.3	2.35
	204.0	205.0	1.0	7.80
	236.2	237.2	1.0	1.49
ECG_18_034	62.3	63.3	1.0	1.09
	170.8	172.0	1.2	1.09
	303.5	305.5	2.0	1.32
ECG_18_042	34.0	35.0	1.0	1.27
	138.6	139.1	0.5	1.26
ECG_18_045	30.0	31.0	1.0	1.13
ECG_18_060	148.7	149.4	0.7	2.11
	214.3	214.8	0.5	20.60
	578.0	579.5	1.5	1.51
ECG_18_075	470.0	471.6	1.6	1.62

In 2019, eighteen (18) holes were drilled for 5,313 m, focusing on two target areas: the so-called Anderson area (holes ECG_19_078-080) and the so-called Legrand area (holes ECG_19_081-095) (Figure 6-4). A total of 4,696 core samples were collected and sent to ALS Labs for multi-element ICP and fire assay Au analysis. Samples for whole rock geochemistry (n=13) and petrographic study (n=23) were also collected. SWIR analyses were taken 3 m apart along all the core. The 2019 campaign was designed to test gold-in-soil anomalies outlined by the 2018 surface exploration program.

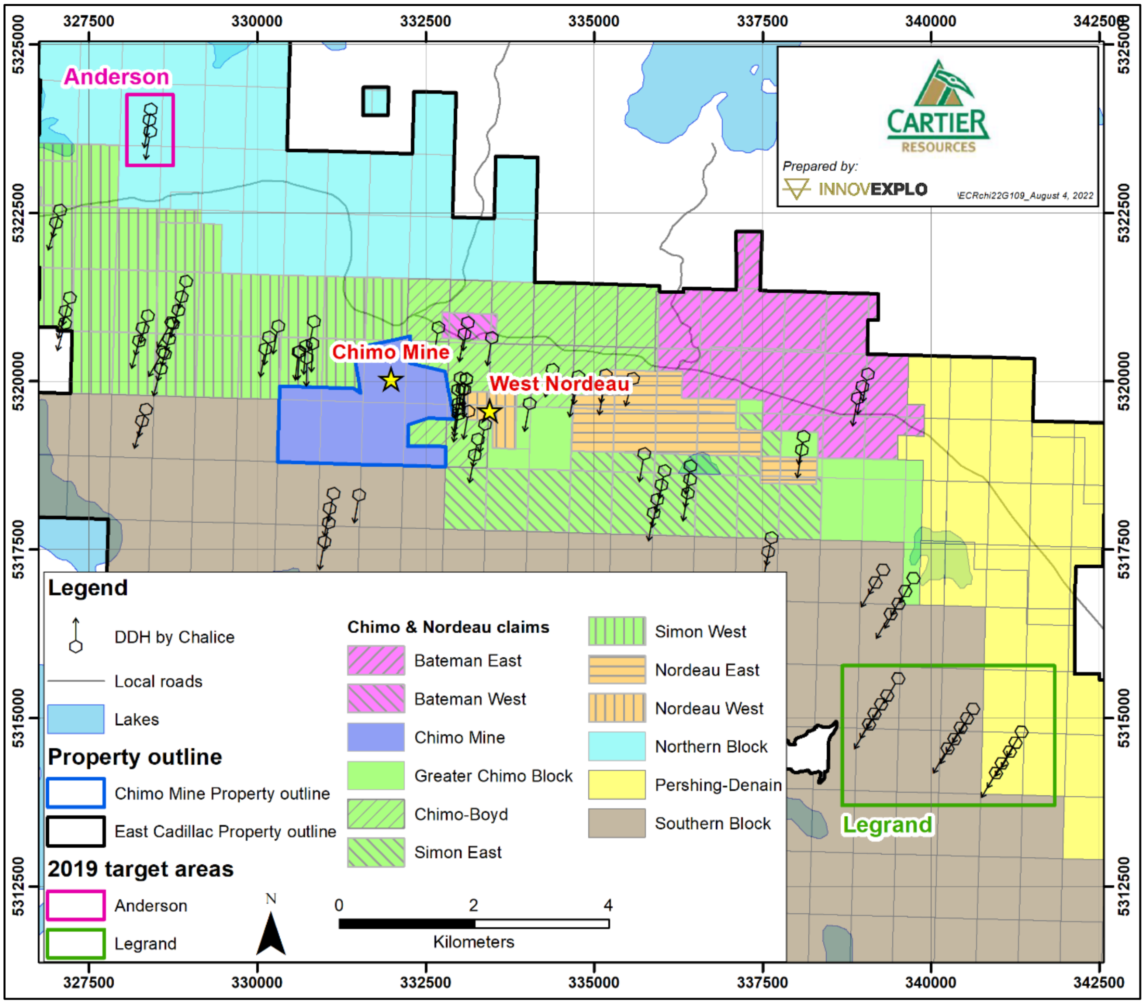


Figure 6-4 – Claim map showing the locations of 2019 diamond drilling targets

<u>Anderson drilling</u>

The Anderson area is located approximately 1 km north of the McDonough gold showing in the Northern claim block. The targeted soil anomaly (Letwinetz et al., 2018) was interpreted to reflect a potential mineralized structure parallel to the structure hosting the McDonough showing. The major lithological units intersected at Anderson comprise felsic to mafic volcanic rocks (tuffs to flows) and felsic to mafic intrusive rocks. Two (2) drill holes intersected a zone of sulphide mineralization and quartz-tourmaline veining with associated anomalous gold grades.

In hole ECG_19_078, the highest Au value is associated with a quartz-carbonate-tourmaline vein with <1% pyrite and minor chalcopyrite along vein edges hosted in chlorite altered mafic tuff. In ECG_19_080, significant Au results are associated with increased quartz veining with pyrite stringers (2%), pyrrhotite stringers (1-10%), disseminated pyrrhotite (1%) and trace blebby pyrrhotite, hosted by silica-albite-biotite-chlorite±hematite altered felsic volcanic rocks. Gold mineralization was also observed in vuggy quartz-carbonate veins with disseminated pyrite (5%) hosted by carbonate-biotite±epidote-albite altered andesitic to basaltic volcanic rocks. Gold mineralization is associated with a brittle shear zone in both ECG_19_078 and ECG_19_080.

The best results from drilling at the Anderson area are summarized in Table 6-17.

Table 6-17 – Selected results from the 2019 drilling program in the Anderson and Legrand areas

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
Anderson Area				
ECG_19_078	135.75	137	1.25	0.73
ECG_19_080	265.0	266.0	1.0	0.71
Legrand Area				
ECG_19_081	139.4	143.2	3.8	0.30
ECG_19_089	302.0	304.7	2.7	0.59
ECG_19_091	61.1	62.1	1.0	0.34
ECG_19_093	69.0	70.0	1.0	0.47

Legrand drilling

The Legrand target is in the Southern and Pershing-Denain claim blocks. Drilling was designed to test a large Au-As-Cs-Tl-W in-soil anomaly (Letwinetz et al., 2018) coincident with a linear magnetic anomaly trending 300°. Preliminary IP results (Phaneuf, 2018) outlined a coincident chargeability anomaly. Field mapping in 2018 identified a polymictic Timiskaming-type conglomerate along the northeastern boundary of the Legrand soil anomaly area that is indicative of proximity to the LLCFZ.

Minor intervals of gold mineralization were returned in four (4) of the fifteen (15) drill holes (Table 6-17).

6.4 O3 Mining exploration programs – 2019 to 2022

O3 Mining Inc. ("O3 Mining") acquired the East Cadillac Property from Chalice in July 2019 and planned a 15,000-m drilling program to follow up on promising historical drill hole intercepts in the West Simon, West Nordeau, East Nordeau, and North Contact zones (O3 Mining press release of January 20, 2020). Forty-six (46) holes were drilled on the West Simon, West Nordeau, Chimo Boyd and East Nordeau claim blocks for a total of 20,889 m (Table 6-18). Of the 19,435 samples collected, 16,805 were analyzed for gold and a multi-element suite. In addition, 721 samples were analyzed to determine their major, trace and rare earth element contents (Ballesteros, 2021). Channel sampling and geophysical surveys were also conducted to complement the drilling campaign, soil sampling survey, and trenching and stripping program.

Table 6-18 – O3 Mining 2020-2021 drilling program

Drill hole	East (UTM NAD83 Z18)	North (UTM NAD83 Z18)	Length (m)	Azimuth	Plunge	Target Area
O3EC-20-001	330637	5320828	574	192.28	-45	West Simon
O3EC-20-002	330470	5320599	402	190.98	-46.5	West Simon
O3EC-20-003	330444	5320378	587.8	188.08	-44	West Simon
O3EC-20-004	330311	5320093	336	191.68	-45	West Simon
O3EC-20-005	335469	5320185	324	199.51	-53.5	North Contact
O3EC-20-006	330264	5319836	354	191.68	-45	West Simon
O3EC-20-007	335598	5320288	417	198.5	-55	North Contact
O3EC-20-008	333826	5319414	384	191.68	-45	West Nordeau
O3EC-20-009	335669	5320164	312	199.62	-53.3	North Contact
O3EC-20-010	333835	5319639	45	187.68	-45	West Nordeau
O3EC-20-010a	333835	5319639	348	187.68	-45	West Nordeau
O3EC-20-011	333348.53	5320349.75	1535.3	198.52	-82	West Nordeau
O3EC-20-012	333851	5319804	450	191.68	-45	West Nordeau
O3EC-20-013	333827	5319152	324	191.68	-45	West Nordeau
O3EC-20-014	333760	5318913	327	191.68	-45	West Nordeau
O3EC-20-015	335655	5319542	459	181.68	-56.1	East Nordeau
O3EC-20-016	335950	5319571	606	182.67	-71	East Nordeau
O3EC-20-017	333673	5320163	954	185.68	-68	West Nordeau
O3EC-20-018	335746.05	5319653	706	182.68	-72	East Nordeau
O3EC-20-019	336136	5319489	617.2	181.68	-65	East Nordeau
O3EC-20-020	334065	5319723	575.2	187.68	-59	West Nordeau
O3EC-20-021	336304.13	5319243.8	543	182.14	-58.8	East Nordeau
O3EC-20-022	333831	5319929	246	174.68	-75	West Nordeau
O3EC-20-023	336384.69	5319606.4	468.5	181.68	-51	Luna
O3EC-20-024	336480.01	5319473.89	363	181.71	-48	East Nordeau
O3EC-20-025	335771.73	5320148.55	330	191.52	-53.2	North Contact
O3EC-20-026	335772.65	5320213.36	459	188.68	-65	North Contact
O3EC-20-027	335374.81	5320206.93	321	189.68	-57	North Contact
O3EC-20-028	335386.76	5320291.28	395.5	187.68	-64	North Contact
O3EC-20-029	335275.71	5320218.08	312	189.68	-56	North Contact
O3EC-20-030	335683.89	5320247.19	384	187.68	-65	North Contact
O3EC-20-031	335683.44	5320302.14	492	185.68	-70	North Contact

Drill hole	East (UTM NAD83 Z18)	North (UTM NAD83 Z18)	Length (m)	Azimuth	Plunge	Target Area
O3EC-20-032	335588.99	5320327.63	492	185.68	-70	North Contact
O3EC-20-033	335486.5	5320277.93	403.5	187.68	-64	North Contact
O3EC-20-034	335491.58	5320334.37	517	186.68	-72	North Contact
O3EC-20-035	335772.65	5320213.36	492	190.68	-78	North Contact
O3EC-20-036	335772.65	5320213.36	600	190.68	-86	North Contact
O3EC-20-037	335772.65	5320213.36	378	189.68	-54	North Contact
O3EC-20-038	335860	5320149	318	185.68	-55	North Contact
O3EC-20-039	335860	5320180	393	182.68	-68	North Contact
O3EC-20-040	335683.44	5320302.14	720	181.68	-83	North Contact
O3EC-20-041	335588.99	5320327.63	549.7	187.68	-72	North Contact
O3EC-21-042	336105.5	5319934.87	368	191.68	-50	North Contact
O3EC-21-043	336365.3	5320014.6	367	207.68	-50	North Contact
O3EC-21-044	336477.71	5319562.21	296.3	181.68	-50	
O3EC-21-045	336389	5319717.83	43	181.68	-53	

A set of five (5) holes was drilled at West Simon to target the western extension of the stacked mineralized zones to the west. Drilling in the West Simon area intersected three mineralized zones hosted in the 'Chimo Basalt' (two zones) and the wacke of the Trivio Structural Complex (one zone). Four (4) holes intercepted promising mineralization and warranted additional drilling to test the lateral and depth extension of the mineralization laterally and at depth. Mineralized drill hole intervals are characterized by disseminated sulphides (arsenopyrite, pyrrhotite pyrite, with or without visible gold) associated with veins of smoky quartz ± tourmaline ± mica ± chlorite (O3 Mining press release of April 9, 2020). The mineralization at the North Zone is associated with dark quartz veins with up to 3% arsenopyrite in clusters and traces of finely disseminated pyrite, pyrrhotite and chalcopyrite. The veins are hosted in a very fine-grained wacke altered mainly in sericite around the mineralized veins. Unlike its counterpart in the Chimo mine, this zone is not hosted by iron formations (Ballesteros, 2021). The Central Zone is hosted by the basalt in the surrounding wackes ("Chimo Basalt") and characterized by quartz-tourmaline-calcite ± albite-biotite veins with arsenopyrite, pyrite, pyrrhotite, chalcopyrite and free gold. The South Zone is located along the lower contact between the Chimo Basalt and wacke, manifesting as quartz-calcite veins with ±tourmaline, albite and chlorite (Ballesteros, 2021).

The North Contact Zone lies along the northern splay of the LLCFZ localized at or near the contact of a small mafic volcanic rock unit with the surrounding wacke of the Trivio Complex. The zone was targeted by 21 diamond drill holes (O3 Mining press release of April 9, 2020). The mineralization is characterized by up to 5% disseminated arsenopyrite, pyrite, pyrrhotite and traces of chalcopyrite and magnetite associated with quartz ± tourmaline-calcite veins (Ballesteros, 2021).

The West Nordeau area hosts mineralization near the northern contact of the same mafic volcanic package found at West Simon. It was tested by ten (10) diamond drill holes. The holes intercepted shear zone-hosted quartz-tourmaline veins associated with trace amounts of disseminated arsenopyrite and pyrrhotite, locally with visible gold hosted by mafic flows of the Trivio Structural Complex that returned good gold grades (O3 Mining Inc. ("O3 Mining") acquired the East Cadillac Property from Chalice in July 2019 and planned a 15,000-m drilling program to follow up on promising historical drill hole intercepts in the West Simon, West Nordeau, East Nordeau, and North Contact zones (O3 Mining press release of January 20, 2020). Forty-six (46) holes were drilled on the West Simon, West Nordeau, Chimo Boyd and East Nordeau claim blocks for a total of 20,889 m (Table 6-18). Of the 19,435 samples collected, 16,805 were analyzed for gold and a multi-element suite. In addition, 721 samples were analyzed to determine their major, trace and rare earth element contents (Ballesteros, 2021). Channel sampling and geophysical surveys were also conducted to complement the drilling campaign, soil sampling survey, and trenching and stripping program.

Table 6-18; O3 Mining press release of April 9, 2020; Ballesteros, 2021).

The East Nordeau area is underlain by the wacke-iron formation succession north of the mafic volcanic package related to the West Simon and West Nordeau zones. Six (6) diamond drill holes targeted the area. Sheared iron formation horizons and neighbouring wacke host gold-bearing intervals. They are characterized by up to 10% sulphide stringers and disseminations (pyrrhotite, pyrite and arsenopyrite) typically surrounding quartz veins (O3 Mining press release of April 9, 2020). Two (2) other holes were drilled between the North Contact and East Nordeau zones.

The Luna target was identified while targeting the easterly continuity of the East Nordeau Zone. Gold mineralization north of the East Nordeau iron formation yielded 46.4 g/t Au (Ballesteros, 2021).

The best drill hole assay results are displayed in Table 6-19.

Table 6-19 – Selected results from O3 Mining's 2020-2021 drilling programs on the East Cadillac Property

Drill hole	From (m)	To (m)	Core length (m)	Au (g/t)
West Simon				
O3EC-20-001	231.9	235.8	3.9	1.96
	408.0	409.5	1.5	3.24
	424.1	424.8	0.7	3.35
O3EC-20-002	161.0	162.8	1.8	9.7
	173.5	174.5	1.0	5.4
O3EC-20-003	392.0	403.5	11.5	2.89
including	402.6	403.5	0.9	26
O3EC-20-003	527.0	529.0	2.0	8.9
including	527.5	528.0	0.5	18.9
O3EC-20-004	173.0	186.5	13.5	1.0
including	177.0	180.5	3.5	2.4

Drill hole	From (m)	To (m)	Core length (m)	Au (g/t)
West Nordeau				
O3EC-20-008	89.0	89.5	0.5	10.2
O3EC-20-011	1139.7	1141.2	1.5	7.84
O3EC-20-012	412.9	413.5	0.6	10.1
O3EC-20-020	188.0	189.5	1.5	16.6
East Nordeau				
O3EC-20-018	342.5	343.0	0.5	29.7
O3EC-20-016	375.5	376.8	1.3	8.3
	365.0	365.7	0.7	9.7
O3EC-20-019	477.6	479.0	1.4	3.6
O3EC-20-015	167.2	168.4	1.2	2.0
	362.0	369.6	7.6	1.31
Luna				
O3EC-20-023	259.3	262.1	2.8	21.88
including	260.0	261.3	1.3	46.4
North Contact				
O3EC-20-005	192.5	193.1	0.6	10.0
O3EC-20-007	319.0	326.0	7.0	3.1
including	319.0	321.9	2.9	4.6
including	324.5	326.0	1.5	5.3
O3EC-20-009	185.0	189.3	4.3	1.8
O3EC-20-025	182.0	183.8	1.8	2.8
O3EC-20-027	130.7	132.4	1.7	2.33
O3EC-20-028	277.0	277.5	0.5	25.0
	296.1	303.4	7.3	1.3
O3EC-20-030	249.8	253.4	3.6	3.1
	271.0	277.3	6.3	0.9
	307.1	317.4	10.3	1.7
O3EC-20-031	382.0	387.4	5.4	1.3
	434.2	435.9	1.7	4.0
	440.5	442.0	1.5	3.7
O3EC-20-032	319.9	321.0	1.1	17.8
	372.8	377.0	4.2	1.5
	394.4	394.9	0.5	16.4
O3EC-20-033	276.0	278.4	2.4	2.9
O3EC-20-034	390.4	391.9	1.5	2.47
O3EC-20-036	528.0	529.0	1.0	4.58

Drill hole	From (m)	To (m)	Core length (m)	Au (g/t)
O3EC-20-037	213.3	214.8	1.5	2.40
O3EC-20-037	264.0	267.9	3.9	4.07
including	266.4	267.0	0.6	8.5
O3EC-20-039	234.0	234.5	0.5	3.9
	294.1	300.5	6.4	2.11
O3EC-20-040	530.6	531.3	0.7	7.39
	668.4	668.9	0.5	5.98
North Contact - East Nordeau transition				
O3EC-20-042	155.2	156.0	0.8	7.23
O3EC-20-043	52.3	53.2	0.9	4.82
	126.0	126.6	0.6	3.07

In October 2020, 94 samples were collected during a soil sampling campaign that covered the area between the North Contact and East Nordeau showings near the LLCFZ (34 samples) and the area surrounding the Big Bend Au-Ag showing (60 samples) in the westernmost part of the Pershing-Denain. All soil samples underwent pH and multi-element analysis (including gold) using MMI extraction following weak acid leaching (Ballesteros, 2021).

Manual stripping and channel sampling were carried out near the North Contact Zone (1 stripping, 51 samples) and near the Big Bend showing (5 strippings, 124 samples). The strippings in the North Contact Zone area are underlain by the northern mafic volcanic rock panel adjacent to the faulted contact with the Pontiac Group. The purpose of these strippings was to validate the geometry of the gold-bearing quartz vein system. The stripped areas on Big Bend exposed the iron formation of the Trivio Structural Complex. The aim was to test its gold potential and assess its continuity across the east-west corridor.

Between October 2020 and March 2021, O3 Mining completed ground Mag and IP surveys covering the northeastern part of the Pershing-Denain Block, which contains seven (7) known Au ± Ag showings. The surveys included 115.575 line-km of Mag surveying and 57.275 line-km of IP surveying. Ten (10) new drill targets were identified (Simard, 2021). This survey can be combined with the geophysical survey conducted by Renforth Resources in early 2018. The two surveys provide detailed geophysical data for approximately 75% of the Pershing-Denain Block.

7. GEOLOGICAL SETTING AND MINERALIZATION

The following description of the geological setting and mineralization of the Chimo Mine and East Cadillac Properties (together, the "Properties") is modified after technical reports authored by Savard and D'Amours (2021), Beausoleil et al. (2019) and Langton and Jourdain (2019) unless indicated otherwise.

7.1 Regional Geology

7.1.1 Abitibi Greenstone Belt

The Abitibi Greenstone Belt (the "AGB") lies in the southern Superior Province (Figure 7-1). It is bounded by the Kapuskasing Structural Zone to the west, the high-grade metamorphic Opatica Subprovince to the north, the Paleoproterozoic Grenville Province to the east-southeast, and the Archean metasedimentary Pontiac Subprovince to the south (e.g. Monecke et al., 2017). The Properties are located a few kilometres northwest of the Grenville tectonic front, in the southeastern part of the AGB of the Archean Superior Province (Figure 7-1 and Figure 7-2).

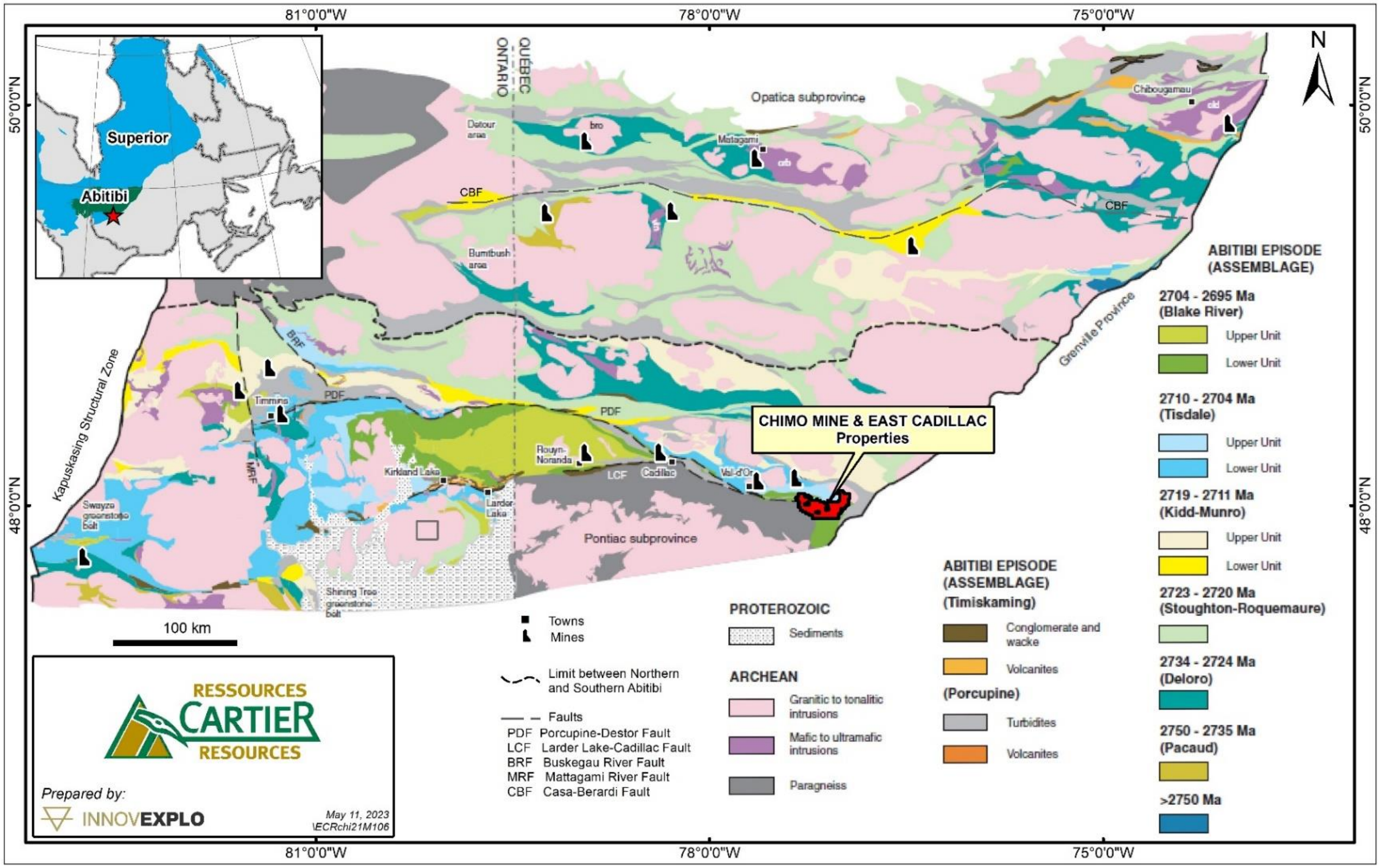
The AGB comprises six metavolcanic and two metasedimentary assemblages intruded by syn-volcanic to post-tectonic intrusions. The AGB formed over an approximately 125 million year timespan between 2795 Ma and 2670 Ma (Figure 7-2; Ayer et al., 2002, 2005; Thurston et al., 2008; Leclerc et al., 2012; Monecke et al., 2017).

The metavolcanic rocks of the AGB comprise, from oldest to youngest, the 2750-2735 Ma Pacaud Assemblage, the 2734-2724 Ma Deloro Assemblage, the 2723-2720 Ma Stoughton-Roquemaure Assemblage, the 2710-2704 Ma Tisdale and the 2704-2695 Ma Blake River Assemblage (Figure 7-2; e.g. Ayer et al., 2005; Monecke et al., 2017). The metavolcanic rocks are unconformably overlain by the ≤2690-≤2685 Ma flysch-like metasedimentary Porcupine Assemblage, which is itself unconformably overlain by the ≤2679 Ma to ≤2669 Ma molasse-like Timiskaming Assemblage (Figure 7-2; e.g. Ayer et al., 2005; Monecke et al., 2017). The fine-grained clastic sedimentary (turbiditic) rocks of the Porcupine Assemblage were deposited in a wide, laterally extensive basin, whereas the coarse alluvial-fluvial sedimentary rocks (and minor volcanic rocks) of the Timiskaming Assemblage were accumulated in extensional basins and are preserved as narrow panels adjacent to major, crustal-scale fault zones (Thurston and Chivers, 1990; Mueller et al., 1992; Ayer et al., 2002; Goutier and Melançon, 2007; Monecke et al., 2017).

Modified after Montsion et al., 2018.

Figure 7-1 – Location of the Abitibi Greenstone Belt within the Superior Province (orange)

The relevant lithological groups, formations and assemblages are presented in Table 7-1. Volcanic and sedimentary packages are generally separated by steep east-trending faults, either tectonic in origin or superimposed on unconformity (Monecke et al., 2017 and references therein). Some of these faults, such as the Larder Lake–Cadillac Fault Zone ("LLCFZ") and the Porcupine-Destor Fault Zone ("PDFZ"), and similar breaks in the northern AGB, transect the entire belt and display evidence of multiple overprinting ductile-brittle deformation events including early thrusting, and later strike-slip and extension (Daigneault et al., 2004; Benn and Peschler, 2005; Bateman et al., 2008). A series of intrusions, ranging in age from pre-Timiskaming, early- to syn-Timiskaming and post-Timiskaming, were emplaced at various stages of the sedimentary and tectonic evolution (Dubé and Mercier-Langevin, 2021).



After Thurston et al., 2008.

Figure 7-2 – Regional geology map of the Abitibi Greenstone Belt showing location of the Properties

Table 7-1 – Regional geological context of the lithological groups and formations on the Properties

Assemblage	Age	Relevant lithological groups on the Properties	Relevant formations on the Properties
Pontiac	~2682 Ma	Pontiac Gp; Trivio Gp	
Timiskaming	≤2679–≤2669 Ma		
Porcupine	≤2690–≤2685 Ma	Garden Island Gp	
Blake River	2704–2695 Ma	Kinojevis Gp; Malartic Gp; Villebon Gp	Val-d'Or Fm.; Héva Fm.
Tisdale	2710–2704 Ma	Malartic Gp	
Kidd-Munro	2720–2710 Ma	Malartic Gp	
Stoughton-Roquemaure	2723–2720 Ma	Kinojevis Gp	
Deloro	2734–2724 Ma		
Pacaud	2750–2735 Ma		

The metamorphic grade varies between the southern and northern AGB based on the volume of intrusive rocks and the variation of exposed crustal levels (Benn and Moyen, 2008). Consequently, the metamorphic grade in the northern AGB ranges from greenschist to amphibolite facies, whereas the southern AGB displays prehnite-pumpellyite to lower greenschist facies metamorphism (Dimroth et al., 1982, 1983b; Powell et al., 1995a).

Over the past century, more than 6,100 t of gold was produced from the AGB from four gold deposit types, including syn-volcanic auriferous sulphide lenses and sulphide veins, sulphide-rich Cu-Au-Ag veins, intrusion-associated stockwork-disseminated, veinlets and replacements, and quartz-carbonate veins (Dubé and Mercier-Langevin, 2021). The most important deposits are concentrated along the LLCFZ and PDFZ (Poulsen, 2017; Dubé and Mercier-Langevin, 2021). The stockwork-style mineralization is associated with alkaline to subalkaline intrusions that were emplaced synchronously with the 2683 Ma to 2670 Ma Timiskaming sedimentation. In contrast, the vein-style mineralization coincides with the 2660 Ma to 2640±10 Ma D_3 deformation event (Dubé and Mercier-Langevin, 2021). The quartz-carbonate vein-type mineralization accounts for approximately 60% of the total gold endowment (5,925 t out of > 9,375 t; Dubé and Mercier-Langevin, 2021).

7.1.2 Pontiac Subprovince

The Pontiac Subprovince is dominated by turbiditic metasedimentary rocks with syn- to post-tectonic plutons and thin ultramafic units. The turbiditic greywacke and conglomerate were deposited synchronously to deformation ≤ 2685 Ma in a foreland basin setting and are manifested as schist and paragneiss due to medium-grade metamorphism (Mortensen and Card, 1993; Davis, 2002). The Pontiac Group consists of a turbiditic greywacke and argillite sequence, with minor monomictic and polymictic conglomerate, iron formation and graphitic schist (Dimroth et al., 1982; Mortensen and Card, 1993). Thin ultramafic to mafic volcanic flows (chemically similar to those of the Dubuisson Formation) are present at or near the inferred base of the sequence (Imreh, 1976; Rocheleau et al., 1990). Rehm et al. (2021) describe similar basaltic-komatiitic volcanic rocks from the NW part of the Pontiac Belt that are synchronous with the deposition of the Pontiac sediments and interpret the volcanic-sedimentary rock contact as concordant, implying that the Pontiac basin formed during extensional tectonic processes. The Pontiac Group sedimentary rocks are characterized by their higher metamorphic grade than the adjacent AGB rocks, increasing in grade southward from the biotite zone of the greenschist facies through to garnet, hornblende, staurolite and sillimanite-kyanite zones of the amphibolite facies (Jolly, 1978). Various studies suggest that Pontiac sediments were derived predominantly from erosion of AGB supracrustal rocks. Still, a smaller portion of the detritus was sourced from older volcano-plutonic rocks, possibly from the NW Superior craton (e.g. Winnipeg River, Marmion, and Opatica subprovinces; Mortensen and Card, 1993; Frieman et al., 2017).

Imreh (1984) believed that the Trivio and Pontiac groups constitute a single sedimentary succession stratigraphically overlying the Abitibi Assemblage. He also correlated the Villebon Group with the Dubuisson Formation, as both comprise a sequence of mafic to ultramafic volcanic rocks. These conclusions are a point of contention, as other workers suggest that the Pontiac Supergroup units are unrelated to the Abitibi Supergroup formations.

Kalliokoski (1987) considers the Pontiac Supergroup a distinct lithological and structural block separate from the Abitibi strata, with the suture zone corresponding to the LLCFZ. Such a scenario suggests that the Pontiac deposits are older than the rocks of the AGB and were metamorphosed before the AGB formed. The Villebon Group, which is south of the LLCFZ and enclosed by Pontiac Group rocks, should consequently be included as part of the Pontiac domain and not correlated with the Dubuisson Formation of the Abitibi Belt.

The exact location of the LLCFZ has not been accurately delineated in the eastern Louvicourt and Vauquelin Townships due to geologic disparities in the literature. It is interpreted by some studies to pass just north of the closed Chimo mine (Gaudreau et al., 1986; Sauvé et al., 1987; MacNeil and Averill, 1988); however, the compilation maps of the Government of Quebec indicate the fault along the boundary between the Val-d’Or/Héva formations and the Trivio sedimentary rocks (Thériault and Beauséjour, 2012; Poulsen, 2017).

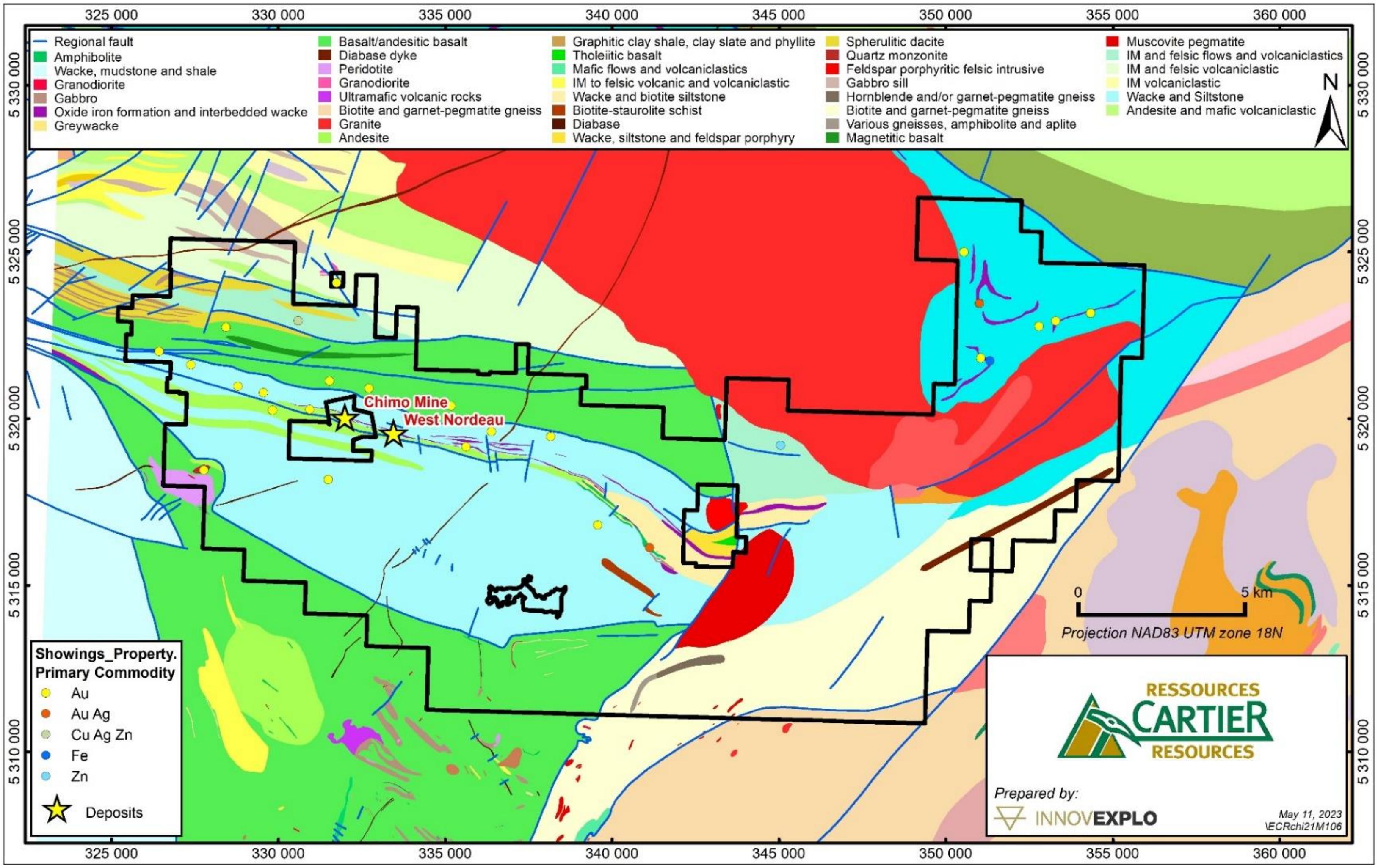
One of the main criteria used to determine the position of the LLCFZ is the metamorphic grade observed in the rocks underlying the Properties. Sharpe (1968) supposed that Trivio Group rocks were deposited on top of the AGB volcanic pile and in apparent conformity with it, whereas the more southerly Pontiac Domain rocks are “*much more metamorphosed than the inter-volcanic sedimentary rocks, and their primary textures are obscured by recrystallization and the imprint of a regional foliation*”. Sharpe (1968) also remarked that, based on lithological, metamorphic and structural information, a major tectonic or stratigraphic discontinuity occurs along the north edge of the Pontiac Domain. Sharpe's map area included the area now covered by the Properties, and drilling by Cambior (Macneil and Averill, 1988) corroborated Sharpe's observations (MacNeil and Averill, 1988) but also showed that Sharpe included in his Trivio Group some Pontiac Group metasediments that were retrograded from amphibolite to greenschist facies.

7.2 Geology of the Properties

The Properties are underlain by rocks of the southern AGB and the Pontiac Subprovince (Figure 7-3), separated by the crustal-scale LLCFZ. To the north of the LLCFZ, the AGB-related rocks comprise the mafic to intermediate Val-d'Or Formation and the felsic-dominated Héva Formation (of the Louvicourt Group), intruded by the granitic to granodioritic Pershing-Manitou pluton. The mafic to intermediate volcanic Villebon Group and the volcano-sedimentary Trivio Group underlies the Properties south of the LLCFZ.

7.2.1 Abitibi Greenstone Belt

The Val-d'Or Formation is a volcano-sedimentary package 3 to 5 km thick consisting of 2704±2 Ma tholeiitic to calc-alkalic massive to pillowed, intermediate to felsic volcanic flows and associated pyroclastic rocks (Figure 7-4; Scott et al., 2002). The 2702±1 Ma Héva Formation consists of mafic and felsic volcanic flows 2-3 km thick and locally reworked volcaniclastic rocks whose accumulation began with an extensive basal dacite unit and culminated in massive to pillowed mafic lava flows accompanied by gabbroic sills and dikes (Figure 7-4; Scott et al., 2002).



After Montsion et al., 2018, Dubé and Gosselin, 2007 and Thériault and Beauséjour, 2012.

Figure 7-3 – Simplified geological map of the Properties

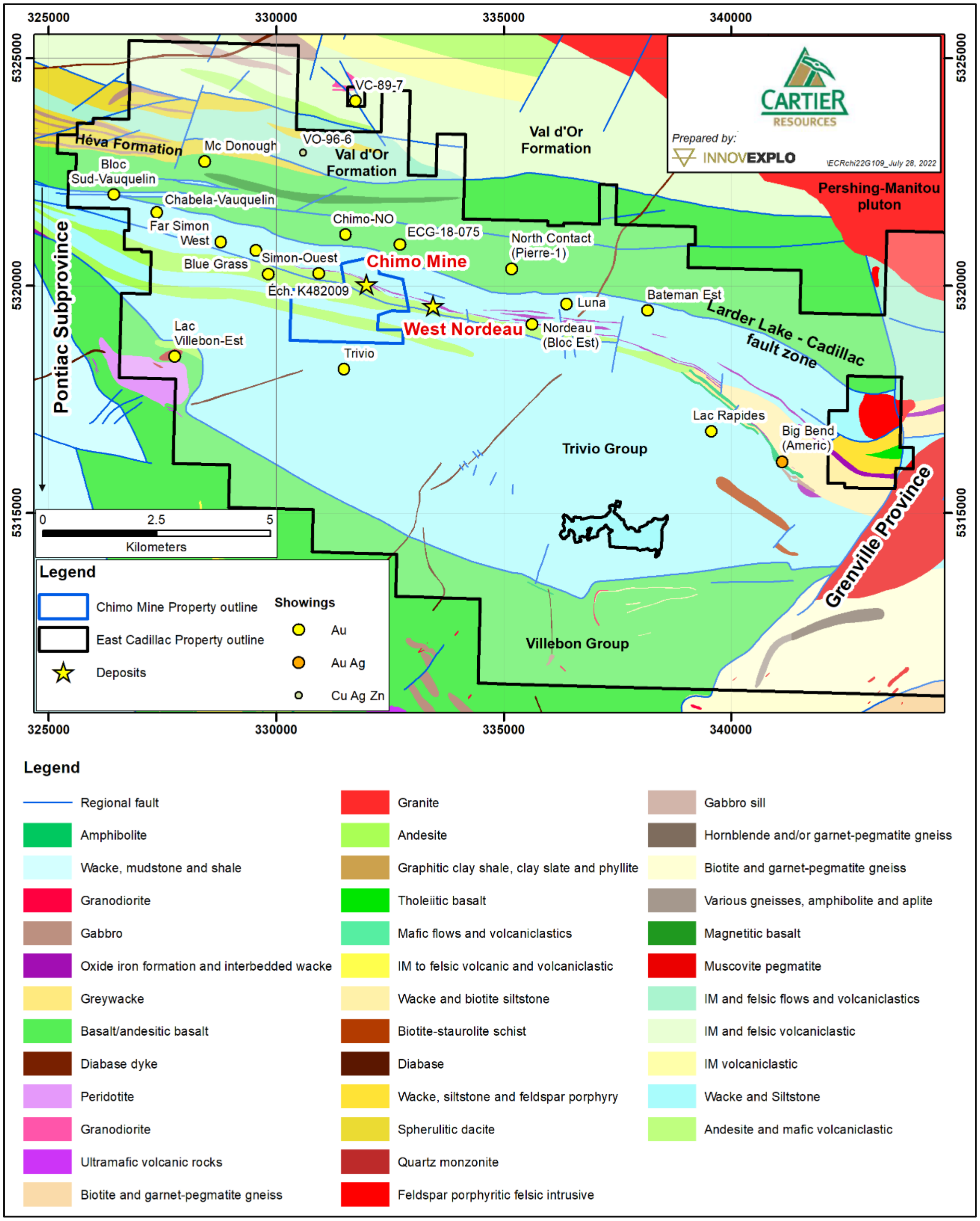
7.2.2 Pontiac Subprovince

The **Trivio Group** comprises a structurally complex sedimentary-volcanic rock assemblage composed of coarse clastic sedimentary rocks, turbidites, tholeiitic and calc-alkaline volcanic flows and pyroclastic rocks. The sedimentary rocks consist of clast-supported polymictic conglomerate, greywacke, mudstone and iron formation, whereas volcanic and pyroclastic rocks consist of massive to pillowed, tholeiitic and andesitic basalts and andesites, graphitic andesitic crystal and lapilli tuff, respectively. Rocheleau et al. (1990) renamed the Trivio Group of Sharpe (1968) as the Trivio Structural Complex ("TSC"), which they characterized as a lithotectonic block based on complex fault contact relations between the various mixed-origin sedimentary and volcanic rocks. Based on similarities with other sedimentary successions in the southern Abitibi and the apparent cartographic continuity with the Pontiac sedimentary Subprovince, the age of the Trivio Complex is interpreted to be ca. 2682 Ma (Mortensen and Card, 1993; Davis, 2002).

Two narrow, lenticular bands of massive and pillowed basaltic lavas, with an apparent thickness of almost 1 km, are interbedded with the sedimentary units showing that volcanism was active during the sedimentation process (Racine, 1989; Rocheleau et al., 1997; Figure 7-4). According to Rocheleau et al. (1988), the northern volcanic band is composed of basalt and magnesian basalt, whereas the southern volcanic band mainly consists of andesitic basalt and interstratified andesite with lenticular zones of crystalline ash tuff, lapilli tuff and felsic blocks and graphitic schists. A gradual increase in pyroclastic facies is observed in the Trivio Group from west to east. The southern volcanic band has been informally named the Chimo volcanic unit by Sauvé et al. (1987) due to its association with gold mineralization in and around the former Chimo mine.

The mafic and intermediate lavas, mainly basalts and andesites, show massive, pillowed and (less commonly) brecciated facies. Massive lavas are generally aphanitic, although locally coarse (1 to 2 mm). The pillowed 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. Some levels are particularly rich in graphite near the Chimo mine. In thin section, the observed mineralogy is similar to the other volcanic rocks: essentially metamorphic mineral assemblages and textures (complete recrystallization). 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.

The most common sedimentary facies is a rhythmic sequence of beds of fine quartzofeldspathic sandstone and siltstone of varying thickness, 5 to 10 cm on average, often showing normal grading, 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.



From SIGEOM Bedrock geology compilation; Dubé and Gosselin, 2007

Figure 7-4 – Detailed geological map of the Properties

A secondary sandy facies consists of coarse 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 comprises fragments of plagioclase (albite) in a matrix similar to the sandstone described above. The matrix is recrystallized as chlorite, biotite and quartz and 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, the matrix appears abundant enough to support the fragments in less deformed areas. 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 mafic 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 quartzofeldspathic sandstone and siltstone facies. These lenticular conglomerate layers are interpreted as filled submarine channels.

The northern sedimentary band (north of the southern basalt band) includes at least three horizons of intensely folded iron formation (“IF”) that vary from 3 m to 70 m in apparent thickness (Figure 7-4). The magnetite-rich IF is traceable on geophysical magnetic-anomaly maps for more than 15 km from the closed Chimo mine to Machi-Manitou Lake to the east, where it has been intersected by drilling. The IF bands consist of beds of intercalated wacke, siltstone, chert and magnetite laminates varying from 0.2 mm to 50.0 mm in thickness, with the amount of magnetite increasing towards the top of the beds. The IF is 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, ferro-hornblende, chlorite and some biotite. Slightly manganiferous almandine garnet was documented in the southern iron formation in the Chimo mine (Sauvé et al., 1987).

The contacts between the volcanic and sedimentary units are generally strongly sheared, as indicated by the common occurrence of talc-chlorite-sericite schist along their contacts, especially near the West Nordeau Deposit.

The southernmost part of the Properties is underlain by the **Villebon Group** that lies south of the TSC, but the stratigraphic relations between them are obscured by the faulted contact (Rocheleau et al., 1990). The Villebon Group comprises predominantly massive, pillowed and brecciated volcanic flows ranging from serpentinized komatiite to Mg-rich (picritic) basalt to tholeiitic basalt and andesite (Gaudreau et al., 1986). It also includes a minor sedimentary component comprising greywacke and minor conglomerate. Rocheleau et al. (1990) classified the Villebon Group as the “Villebon Lithotectonic Domain” and inferred it to lie stratigraphically below the Pontiac Group (Gaudreau et al., 1986).

“Late” diabase dykes cross-cut the Properties. Granodioritic to tonalitic, commonly porphyritic dykes, also cut the rocks of the Trivio domain (Langton and Horvath, 2009). Minor dioritic intrusions and abundant porphyritic dykes intrude the Val-d’Or Formation.

A simplified stratigraphic column for the Properties is shown in Figure 7-5.

The stratigraphy generally strikes E-W, dips steeply to the north, and is overturned. The regional schistosity is sub-parallel to bedding. Mineral lineations and asymmetric fold axes typically plunge steeply to the east (~80°); however, westerly plunges have also been noted. A large portion of the Properties is underlain by rocks of the TSC, a kilometres-wide deformation corridor. Anastomosing deformation corridors characterize the TSC, ranging in thickness and intensity, commonly referred to as “shear zones”, that divide the host rock into hectometric to kilometric “lozenges” of relatively undeformed rock. The shear zones and the secondary fracturing and brecciation that have affected the host rocks are of primary importance to the mineralization as they are interpreted to have acted as the principal pathways for sulphide- and gold-bearing hydrothermal fluids.

The types and ages of rocks on the Properties are largely irrelevant as all gold mineralization in the area is structurally controlled, occurring mainly in association with shear zones. The Authors contend that: 1) the Trivio and Villebon groups are part of the Pontiac Supergroup and lie south of the Abitibi-Pontiac contact (i.e., the LLCFZ); 2) the TSC, which is restricted to Trivio Group rocks in the vicinity of the Properties, is part of a wide deformation corridor associated with LLCFZ, which is the major control on mineralization; and, 3) the so-called Chimo horizon, which transects the Properties, is a major structural discontinuity associated with the LLCFZ, which was a conduit for the precipitation of minerals from auriferous, sulphide-rich hydrothermal fluids.

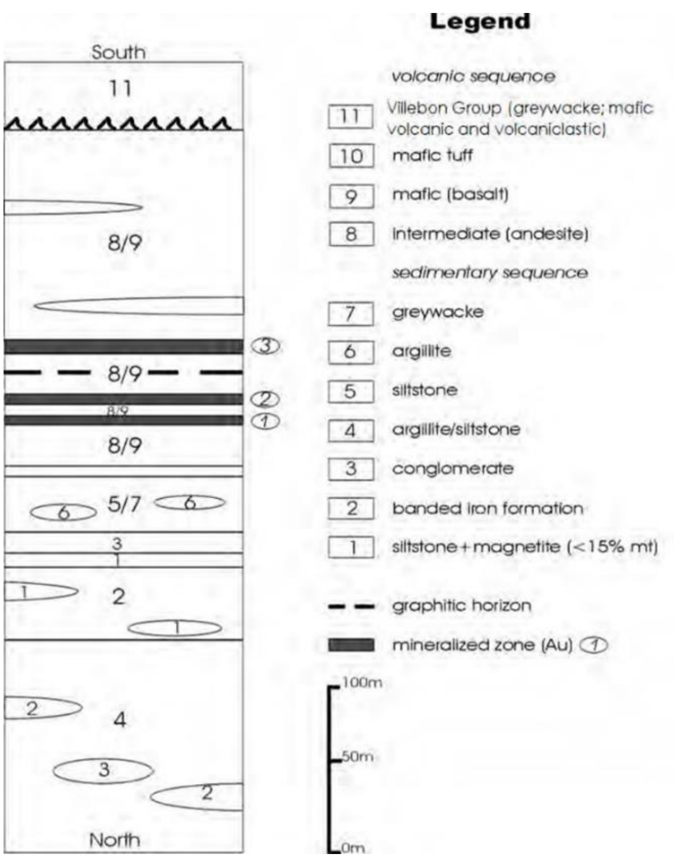


Figure 7-5 – Simplified stratigraphic column of the Properties area

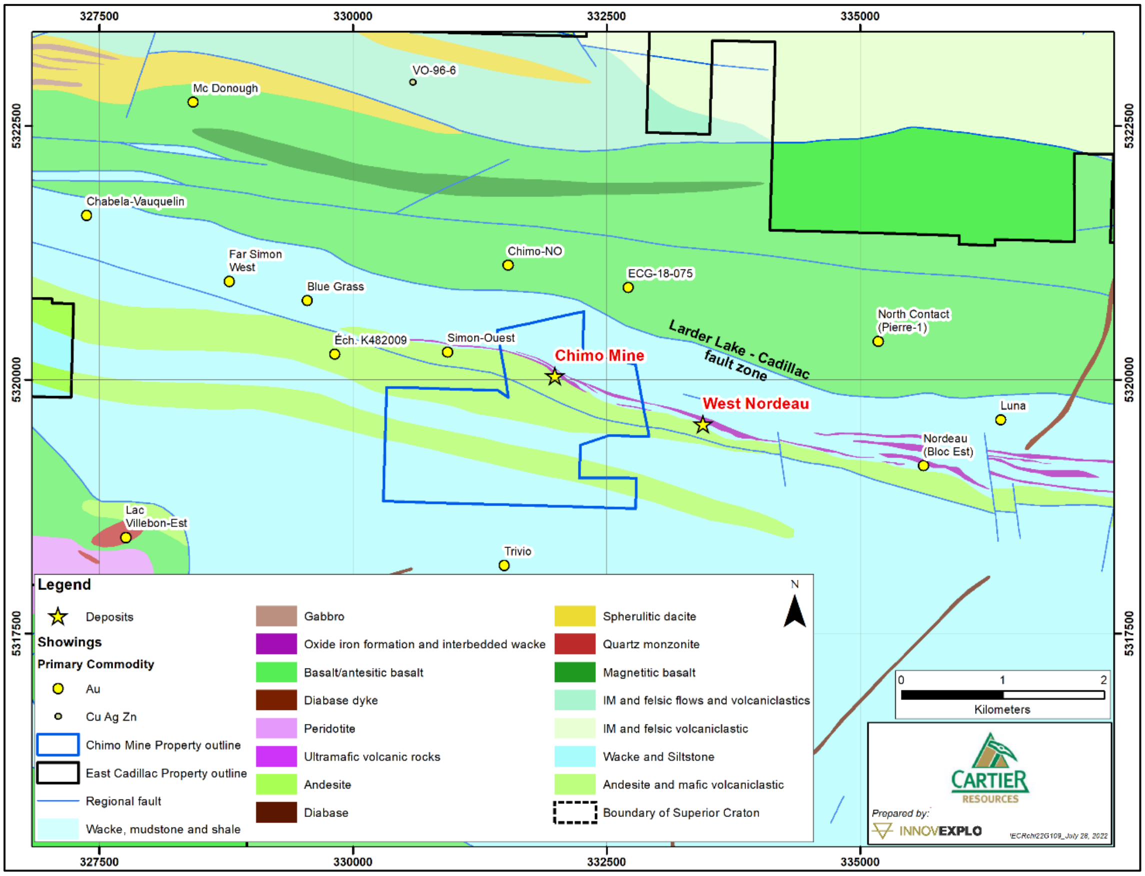
7.3 Mineralization

Two gold deposits and several occurrences are known on the Properties: the historic Chimo mine and the West Nordeau occurrence. The Chimo mine operated from 1966 to 1996 and produced 379,012 oz Au (2.4 Mt @ 4.8 g/t Au). The West Nordeau Deposit lies 1.5 km east of the Chimo mine.

Gold mineralization in the area is typically concentrated along the LLCFZ and related secondary structures. This is evident at the closed Chimo mine and the West Nordeau Deposit, where gold occurs with quartz and arsenopyrite in longitudinal high-strain ("shear") zones within the mafic volcanic rocks and in bands of semi-massive arsenopyrite and pyrrhotite associated with banded magnetite iron formation units (Sauvé et al., 1987).

Gold mineralization on the Properties occurs epigenetically in silicified lodes with disseminated sulphides, spatially related to banded iron formations and altered shear zones with temporally related quartz ± carbonate veins. When related to shear zones, gold typically occurs in volcanic units with disseminated arsenopyrite, pyrite and chalcopyrite. Graphite horizons are also common with this type of mineralization.

Just over a dozen gold occurrences underlie the Project (Figure 7-6). Catalogued by the MRNF, their descriptions and metadata are available online at https://sigeom.mines.gouv.qc.ca/



From the SIGEOM bedrock geology database.

Figure 7-6 – Geological map of the western part of the Properties displaying the location of the Chimo Mine Deposit and other mineral showings

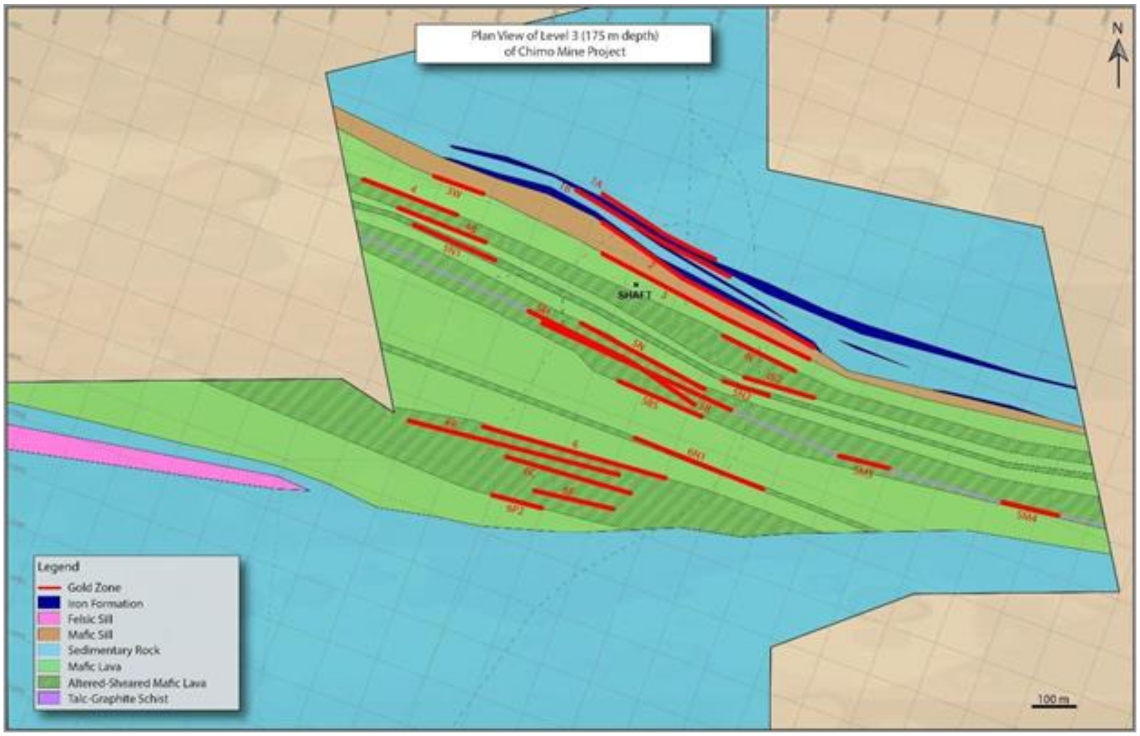
In addition, several new prospective gold zones have been discovered by Chalice Gold Mines Inc. over the course of their surface exploration and diamond drilling programs, namely the South Nordeau, North Contact, Far West Simon and Lac Rapides zones, all of which are roughly parallel to, and closely associated with, the LLCFZ (see Item 6).

7.3.1 Chimo Mine Deposit

The following information is taken from Sauvé et al. (1988), Plouffe (1990), Langton and Jourdain, 2019 and Savard and D'Amours, 2020.

Mineralization at the Chimo Mine Deposit (Figure 7-6) consists of five main mineralized structures (zones 1 to 3 and 5 to 6; Figure 7-7 and Figure 7-8).

Zone 1 generally follows the northernmost iron formation. Mineralization consists mainly of a juxtaposition of centimetric to decimetric veinlets of coarse arsenopyrite. Semi-massive layers of pyrrhotite with minor pyrite are sometimes present, but these sulphides are almost always 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.

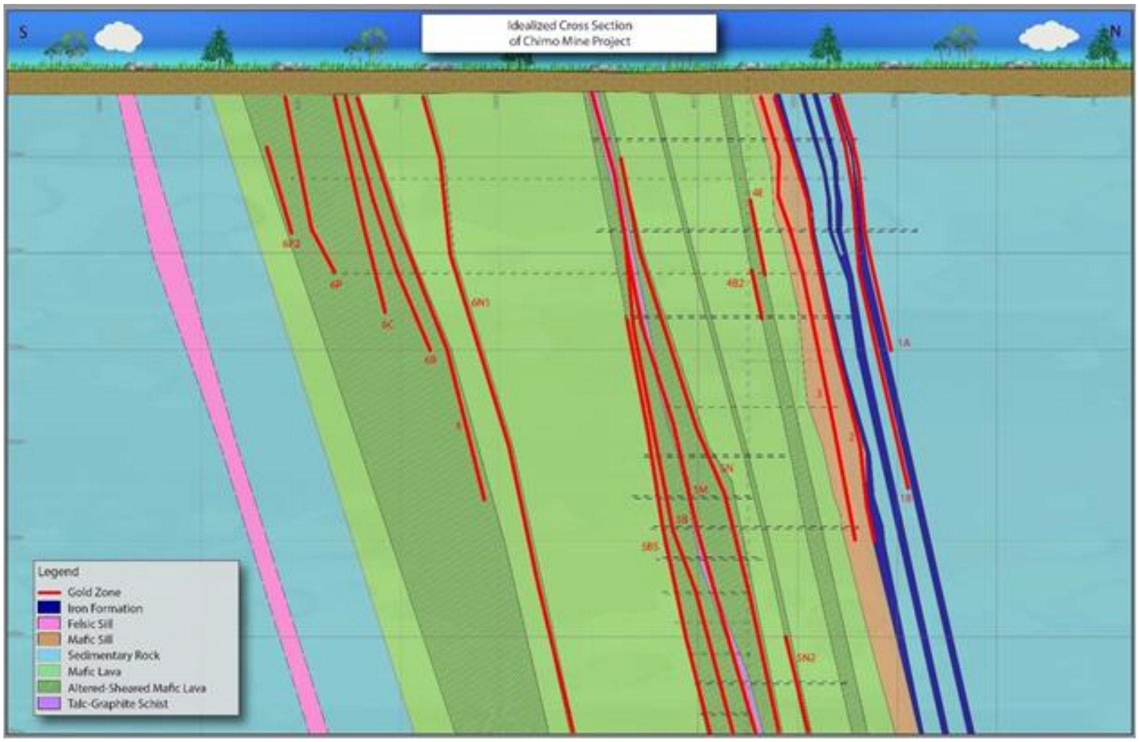


(before the 2019 reinterpretation)

Figure 7-7 – Plan view of level 3 (depth of 175 m) showing the mineralized areas of the Chimo Mine Deposit

Zone 2 roughly follows the contact between the southernmost iron formation layer and a mafic intrusion. Sulphide minerals are found in a brownish-coloured area rich in biotite. Pyrrhotite and coarse 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 with good continuity. The veins show ribboning that may include layers of wallrock containing disseminated sulphides. Sulphides consist mainly of fine arsenopyrite with lesser pyrrhotite and small amounts of pyrite and chalcopyrite. Quartz veins contain plenty of visible gold, especially near their borders, but few sulphides.



(before the 2019 reinterpretation)

Figure 7-8 – Idealized cross-section (looking west) of the mineralized zones on the Chimo Mine Deposit

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 volcanic rocks. 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 disseminated arsenopyrite rims.

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 arsenopyrite have consistently elevated gold grades; however, the grade is much lower when arsenopyrite is disseminated. Massive pyrrhotite and pyrite have negligible gold grades when arsenopyrite is absent.

Quartz veins rimmed 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, except the graphitic quartz veins containing visible gold.

Based on the nature of the host rock in the Chimo Mine Deposit, 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).

These two types of gold mineralization are unlikely to be genetically distinct because they occur together in the Chimo mine and are likely the distinct manifestations of mineralization in different host rocks. 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, thereby promoting the circulation of hydrothermal fluids.

At the former Chimo mine, mineralized zones are accompanied by a variety of hydrothermal alteration types, depending on the host lithology:

- Silicification took place in sedimentary host rocks where iron formations were present. Typically accompanied by chloritization and biotization, it 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, semi-massive horizons, or disseminations in quartz veins and along vein walls. Arsenopyrite replaces pyrite and pyrrhotite.

7.3.2 West Nordeau Deposit

Gold mineralization on the claims in the West Nordeau area (West Nordeau Block in Figure 7-6) occurs in four (4) distinct lenses or zones, known from north to south as North Zone, Zone 1, Zone 2 and Zone 3, in shear zones that transect the mafic volcanic rocks of the Trivio Group. Wall rocks are massive to pillowed or brecciated basalts and andesites with sporadic tuffaceous horizons and minor graphitic schist. Common alteration types in the sheared rocks include silicification, amphibolitization, carbonatization and biotitization.

Gold is found in brecciated zones cemented with grey/smoky quartz lodes, veins or veinlets with brown tourmaline, carbonates and sulphides in an “en échelon” pattern within the wider deformation corridors (Jean, 1990). Arsenopyrite is the major sulphide constituent (3-15%) with some amounts of pyrite, pyrrhotite and traces of chalcopyrite. Gold is locally found as free grains intergrown with arsenopyrite.

All reported structures are more or less embedded into the regional schistosity, which dips 55°-70° towards 010°-020°. Zones 1 and 2 (for which historical reserves have been previously estimated) transect the claims in the West Nordeau area for 600 m along strike and have been intersected to 725 m depth. As pointed out by Jean (1990), the "en echelon" pattern of the lenses raises questions regarding the geological and assay continuity along strike because "mineralised material grade" intersections may appear to be randomly located within the wider deformation corridors. Nevertheless, it is reported that structures occupied by Zones 1 and 2, separated by 25 m of pyroclastic rocks in the eastern part of the Properties, merge into a single structure in the western part of the Properties.

The other mineralized zone, Zone 3 and North Zone are less well understood as they are poorly defined and have irregular continuity and inconsistent gold mineralization. Zone 3, located south of Zone 1 and Zone 2, and 30 m south of a graphitic marker horizon, has been defined along two traces of about 100 m each. Sporadic intersections show that the North Zone occupies a position some 30 m north of structures Zone 1 and Zone 2. Selected best intervals from recent drilling by Plato on the West Nordeau occurrence are included in ***Item 6*** of this report.

7.3.3 East Nordeau

The most significant mineralization underlying the claims in the East Nordeau area (East Nordeau Bloc in Figure 7-6) is found in 3 separate gold structures (1, 2 and 3) related to the upper iron formation of the Trivio Group sedimentary rocks, which consist of interbedded mudstones, siltstones, greywackes and iron formations. The three sub-parallel structures consist of gold-bearing, sulphide-rich quartz veinlets and veins that generally follow the stratigraphy and the well-developed regional E-W schistosity, dipping 50º to 75° north, and have an average true thickness of less than 2.0 m.

The mineralization consists of 1-5% disseminated sulphides or semi-massive sulphide veinlets (pyrite, pyrrhotite, arsenopyrite and traces of chalcopyrite) in association with quartz, chlorite, garnet and gold. Gold is found as free grains in quartz or as inclusions in the sulphide minerals (Rocheleau et al., 1988). Common alteration of wall rocks includes amphibolitization, chloritization, silicification and biotitization.

Zone 1 extends for 450 m laterally, whereas Zone 2, to the south of Zone 1, generally continues east-west for 220 m. Both extend to a ca. 200 m depth. They parallel each other for some 130 m and are stratigraphically less than 30 m apart. Zone 3, which is further east and possibly in a stratigraphic position similar to Zone 1, has been traced for about 240 m laterally and to 150 m depth.

A fourth mineralized structure, underlying the claims in the East Nordeau area, carries erratic, low-grade gold values and occurs in a shear zone that transects mafic volcanic rocks south of the iron formation. This zone contains 1-5% disseminated sulphides in carbonatized and chloritized rocks with well-developed garnets.

7.3.4 East Bateman

The East Bateman occurrence lies 6.2 km east of the historic Chimo mine and 2.5 km east-northeast of the East Nordeau occurrence (Figure 7-6). A 1990 drilling campaign on East Bateman delineated two gold mineralized lenses in the south-central part of the claim group. Both lenses are associated with graphitic shales that are intruded by smoky quartz veins containing 2-5% disseminated arsenopyrite and minor free gold, which occurs as thin inclusions and coatings on the sulphide grains. The two zones are parallel and 10 m apart stratigraphically. They can be traced for about 100 m laterally and to a depth of about 50 m, ranging from 1.2 to 3.9 m thick. See Table 6-19 for the best historical drill hole intercepts from the claims in the East Bateman area. The best intersection was 3.9 g/t Au over 5.05 m, from 66.25 to 71.30 m in hole BA-88-14 (Perron, 1988; Boulianne, 1990).

7.3.5 West Simon

The West Simon occurrence (Figure 7-6) is located approximately 1 km west of the former Chimo mine. It is considered the western extension of the Chimo mine horizons because it exhibits similar geological and mineralogical characteristics. Mineralized zones manifest as gold-bearing sulphide (arsenopyrite) lenses, associated with iron formation within the central sedimentary unit (named Zone B in the Insmill Zone), and as chlorite and carbonate altered, gold-bearing silica-rich lenses in shear zones within the Chimo lavas. Mineralized zones occur as lenses parallel to stratigraphic units and schistosity. Several en-echelon style lenses are interpreted over a strike of approximately 1.2 km. Zone A has been tested to 385 m depth and was intersected in a cross-cut during the 1988 underground program (SNC Inc., 1990). Zone B is mineralized over a 125 m strike length, dips north at 70°, plunges steeply to the west, and has been intersected at 170 m depth (SNC Inc., 1990). Zone C is 50 m below Zone B, within the Chimo lavas. It has been tested to a depth of 170 m and was partly explored by drifting in 1988 (SNC Inc., 1990).

7.3.6 Blue Grass

The Blue Grass occurrence lies 2.5 km west-northwest and along strike of the Chimo Mine Deposit (Figure 7-6). This occurrence comprises quartz veins in a 1.5 m wide shear zone over a strike of approximately 450 m, flanked to the north and the south by volcanic rocks. Greywacke, argillite and conglomerate belonging to the Trivio Group host the mineralization, which consists of arsenopyrite, pyrite and traces of chalcopyrite. Arsenopyrite occurs as fine to coarse disseminations associated with parallel carbonate-altered shear zones injected with quartz. Native gold is reported in drill core and a few trenches (Blanchet, 1983; Vincent, 2015).

7.3.7 McDonough occurrence

The McDonough occurrence lies 4.5 km NW of the Chimo mine (Figure 7-6). It was discovered during a 1936-1937 surface prospecting program. Intermediate volcanic flows and volcaniclastic rocks host the mineralization, a quartz-filled shear zone fracture extending along strike for some 60 m (Lee, 1963). The main fracture is mineralized over a maximum width of 0.61 m (Tolman, 1940). The quartz infill vein contains tourmaline, pyrite, chalcopyrite, sphalerite and ankerite. Visible gold has been recorded in the hanging wall of the shear zone (Tolman, 1940). The altered quartz-carbonate zone enclosing the mineralized zone, 7.6 m wide, slopes 70° towards the north. Historical exploration results suggest that at a depth of 122 m, the zone shallows somewhat to a 60° dip to the north and reaches 10.5 m in width (Lee, 1963).

The main host rock of the mineralization is a coarse tuff that contains relatively large, disseminated fragments of coarse-grained andesite. The rock is generally strongly feldspathic and has undergone intense alteration. Mineralization is associated with the main fracture intersecting the tuffs. A discontinuous, 4.5 m wide lenticular porphyry mass appears parallel to the fracture zone around 9 m to the south. Along the roof of this mineralized fracture, a fairly large number of fractures intersect it and generally have undergone a slight displacement and contain narrow quartz lenses with varying amounts of tourmaline. Both ends of the main fracture appear to divide or branch into similar subsidiary fractures. In addition, there are transverse veins of quartz only a few centimetres wide, typically filled with white quartz and barren of tourmaline. (Tolman, 1940).

7.3.8 South Gold Zone (Venpar, Alsab-2)

This showing is located on a block of nine (9) claims owned by Texas T. Minerals Inc. (15%) and G.E.T.T. Or Inc. (85%), located within the eastern part of the Properties approximately 12 km ESE of the Chimo Mine Deposit. A mineralized E-W shear zone hosts two thin horizons of bedded and foliated sulphides separated by a zone of fractured rock. This assembly can vary from 1.7 m to 20 cm thick. The mineralized horizons are composed of sulphides interbedded with quartz, chert and sericite, imparting a banded appearance. The lithology associated with mineralization, mainly identified by drilling, comprises fragments of various compositions and sizes in a micaceous matrix. The composition of the matrix varies from chlorite to chlorite-amphibole-garnet and finally to biotite-garnet, with or without sulphides (e.g., pyrite, pyrrhotite and chalcopyrite; Lafontaine and Tremblay, 1996). High gold grades are accompanied by significant copper mineralization (Tremblay, 1996). Pyrrhotite is in the form of layers or nodular masses. Pyrite is found as fine cubes, infillings along fracture planes, veins, folded layers near fault planes, and replacement crowns around pyrrhotite nodules. Chalcopyrite is observed within sulphide layers near shear zones and veins intersecting the host rock (Lafontaine and Tremblay, 1996). The mineralized shear zone is cut and displaced by NE and NW faults (Lafontaine and Tremblay, 1996). The Grenville Front is a few kilometres southeast of the deposit.

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 setting promotes hydrothermal fluid flow 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., 1989; Robert, 1990), but are preferentially deposited along second- and third-order structures of the regional fracture/shear network, close 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 assemblages indicative of proximal to distal alteration. These assemblages, composed generally of carbonates (ankerite, dolomite 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 iron-rich host rocks. Greenschist facies alteration of host rocks implies the addition of significant quantities of CO_2, S, K, H_2O, SiO_2, ±Na and light lithophile elements (Groves et al., 1998).

The Chimo Mine and East Cadillac properties have 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 type (Robert et al., 2007).

8.1 Type I: greenstone-hosted quartz-carbonate vein type

Type I gold deposits comprise structurally controlled gold mineralization in altered high-strain ("shear") zones infilled with quartz or quartz-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):

"Greenstone-hosted quartz-carbonate vein 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 types of deposit 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."

"The greenstone-hosted quartz-carbonate vein 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 Type II: BIF-hosted gold mineralization type

Type II gold deposits are hosted in, or spatially associated with, banded iron formation ("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:

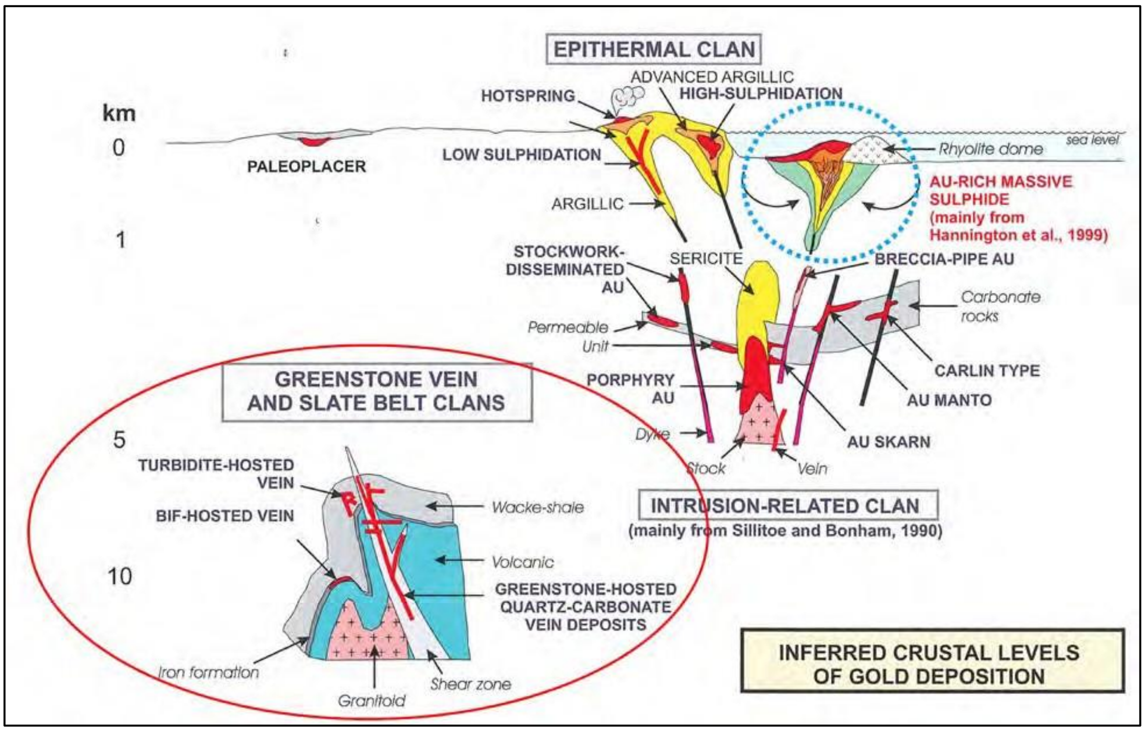
"The deposits consist mainly of sulphidic replacements of Fe-rich layers in magnetite- or silicate-BIF, containing variably-developed quartz veins and veinlets. The intensely mineralized central parts of some deposits consist of nearly continuous wall rock replacements that can obscure their epigenetic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

BIF-hosted deposits occur in greenstone belts that are either volcanic-dominated or sediment-dominated, where they are located stratigraphically near regional volcanic-sedimentary transitions. These types of deposit 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 (Kerswill, 1996).

At the local scale, BIF-hosted 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 of controlling shear zones with 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 Properties consistently occur at or near the contacts of the iron formation; however, the mineralized zones are not present along the entire IF/country rock contact; instead, they appear to cross-cut stratigraphy. It is envisioned that a mineralized hydrothermal "front" cross-cut stratigraphy, depositing gold-bearing sulphides at the iron formation horizons. As it is generally accepted that the fluids that precipitated auriferous, shear zone-associated quartz veins in the Larder Lake–Cadillac Fault Zone 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 Properties is the result of a chemical interaction at the iron-rich horizons rather than the existence of primary auriferous iron formation.

The two described Au-deposit types, which belong to the Greenstone Vein and Slate Belt "clans," are shown in Figure 8-1 at their inferred crustal level of formation. Although sulphides are associated with the gold mineralization on the Properties, the discovery of significant base-metal deposits on the Properties is not likely, as its geological environment appears to be relatively distal to any paleo-volcanic center.



From Dubé and Gosselin, 2007.

Figure 8-1 – Schematic illustration of the various types of gold deposits, shown at their inferred crustal levels of formation

9. EXPLORATION

This item documents the relevant exploration work conducted by the issuer. Item 6 (History) covers the exploration work conducted by previous operators on the Chimo Mine and East Cadillac Properties.

The issuer's exploration activities have consisted almost exclusively of exploration and definition drilling (see Item 10) and drilling-related activities (drill rig access, collar surveying, down-hole surveys, etc.).

In February 2019, Cartier began compiling, interpreting and modelling the mineralized structures on the Chimo Mine Property to build a 3D model using GeoticMine software under the supervision of GéoPointCom.

Gold structures are interpreted and updated based on structural, geological and gold-grade continuities. Important features used during the interpretation are:

- Interfaces of wacke/iron formation, wacke/basalt or iron formation/basalt;
- Graphitic marker horizon;
- Sulphides (mainly arsenopyrite);
- Veins and veinlets of smokey and/or milky quartz;
- Alteration (silica, biotite, chlorite and carbonate);
- Shearing and deformation interfaces.

Since 2019, Cartier's team has been continuously compiling, interpreting and modelling in 3D the different mineralized zones of the Chimo Mine Deposit. This compilation and exploration target generation work continues still and is constantly updated.

Following the recent acquisition of the East Cadillac Property, Cartier's compilation and 3D geological modelling work now includes the West Nordeau Deposit.

10. DRILLING

This item documents the issuer's drilling programs, methodology and results for the Chimo Mine Property. The issuer has not performed any drilling on the East Cadillac Property since its acquisition.

Refer to Item 6 (History) for the drilling results from previous operators on the Chimo Mine and East Cadillac Properties.

10.1 Drilling Methodology

During the planning stage and when monitoring the drilling every 3, 6 or 9 m, Cartier uses the Devisoft software and the Geotic software suite (GeoticLog, GeoticGraph, GeoticCAD and GeoticMine) for all geomatics operations.

Drill collars are positioned using three comparable readings taken with a Garmin 60CSx GPSmap (coordinate system: UTM, NAD 83, Zone 18). The collars are then marked with a wooden stake flagged with fluorescent orange tape inscribed with the hole number and the intended direction and plunge of the hole. A TN14 Gyrocompass from Reflex Instruments is 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 the drift effect.

An old network of forestry trails and roads provides access to some drill sites. These have been restored to a usable 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 are shredded by contractor F. Alarie of Val-d'Or and used as ground cover.

At the end of each drilling program, Cartier closes the drill sites by inspecting the area and removing any waste left behind after the rig is demobilized. Anchor casings are left in place and secured with bolted steel caps to prevent debris from falling inside, except for abandoned holes. Aluminum tags with the engraved hole number are 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 are seeded.

10.2 Drill Hole Deviation

The first deviation measurement in each hole is 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 restarted until the measurement in the bedrock is satisfactory.

Deviation tests are then carried out every 3 m, 6 m or 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. The DeviDrill tests are carried out every 3 m to quickly obtain deviation readings and determine the next action to take.

At the start of each day or when a DeviDrill intervention is underway, the project geologist collects the readings from the drilling foreman. Once filtered and validated, the deviation data are added to the GeoticLog database. Cartier's senior geomatics 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 using the wireline technique. The driller helper removes it from the salvage casing and places it 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 of each row of boxes is taken.

RQD and 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.

10.4 Core Storage

The technician attaches a Dymo-embossed aluminum tag to the front of each box containing any core of interest (mineralization and/or characteristic stratigraphy typical of the sector). The remaining core boxes are properly disposed of. 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 temporarily stored outdoors on the premises of MNG Services Ltd ("MNG") in Val-d'Or. MNG is free to discard these core boxes and retain the pallets for future use.

Boxes containing the 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. A Cartier employee writes (with a permanent black marker) the drill hole ID and/or the pallet number on the pallet 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.

10.5 2016-2020 Drilling Programs – Chimo Mine Deposit and Vicinity

Cartier initiated its first drilling program on November 1, 2016 and finished June 27, 2020. To date, 124 holes have been drilled for a total of 58,053 m, yielding 21,865 samples (Table 10-1 and Figure 10-1). Drilling was divided into four phases to test the deep geometric extensions of the three gold corridors on the Chimo Mine Property. The objective was to expand the known gold zones and enhance the discovery potential for new gold zones.

Table 10-1 – Summary of the 2016-2020 drilling programs

Phase	Year	No. of holes	Total length (m)	No. of samples for gold analysis (excl. QA/QC)	Gold 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	2019-20	15	8,810	2,880	North and Central
Total	**2016-20**	**124**	**58,053**	**21,865**	

Phase 1, completed between October 1, 2016, and August 21, 2018, consisted of 72 holes totaling 34,332 m. The first objective was to test the geometric extensions of Zones 5B, 5B2, 5C, 5M, 5M2 and 5N (the 5B, 5B2, 5C, 5M, 5M2 and 5N structures 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 totaling 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 totaling 1,663 m. The objective was to test, in the eastern part of the Chimo Mine 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 North Corridor.

Phase 3b, conducted from November 19, 2019, to June 27, 2020, consisted of 15 holes totaling 8,810 m. The holes were drilled in the eastern part of the Chimo Mine 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 to this part of the property.

The best gold values are grouped by gold corridor in Table 10-2, Table 10-3 and Table 10-4. 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.

Table 10-2 – Best results in the North Gold Corridor from Cartier's 2016-2020 drilling programs

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
Zone 2B (structure 2)				
CH16-01	279	286	7.0	7.81
including	281	282	1.0	40.56
CH17-15	385.2	395	9.8	2.14
including	392	394	2.0	7.47
CH17-16	312.4	318.9	6.5	9.47
including	314.9	316.9	2.0	25.5
Zone 3 (structure 3)				
CH17-29	666.8	670.8	4.0	6.48
including	666.8	667.8	1.0	24.75
Zone 3E (structure 3)				
CH19-51AE	225.9	231	5.1	4.94
including	230.3	231	0.7	13.84
CH19-50	454.6	458.25	3.65	6.39
including	457.25	457.25	1.0	22.25
CH16-02	328	330	2.0	11.80
CH19-51A	267.2	274	6.8	2.91
including	269	270	1.0	7.38
CH19-51W	221	226	5.0	3.13
including	225	226	1.0	11.74
Zone 4B2 (structure 4B)				
CH16-02	422.5	423.5	1.0	88.58

Table 10-3 – Best results in the Central Gold Corridor from Cartier's 2016-2020 drilling programs

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
Zone 5B (structure 5B)				
CH17-46BE	257	274.3	17.3	2.81
including	258.3	258.9	0.6	30.75
CH17-46C	419	463	44.0	2.20
including	453	456	3.0	14.63
CH17-46BE1	287.6	305	17.4	1.35
including	298	299.9	1.9	5.57
CH17-47BW	203	209	6.0	3.97
including	206.6	208.1	1.5	14.35
CH17-46A	450	464.2	14.2	1.51
including	458.1	462.1	4.0	3.08
Zone 5B4 (structure 5B)				
CH17-12AW	196.1	232.9	36.8	2.13
including	225	230	5.0	5.46
CH17-12A	290.4	318	27.6	1.70
including	299	301	2.0	4.86
CH17-10	417.9	432	14.1	1.98
including	429.8	432	2.2	7.40
CH18-52A1E	183.8	204.6	20.8	2.43
including	183.8	184.5	0.7	32.97
CH17-12	526.9	540.9	14.0	1.41
including	538.5	539.9	1.4	8.91
CH18-52E1	232	239	7.0	2.99
including	232	233	1.0	14
CH18-52A1	330	355.8	25.8	0.99
including	354.5	355	0.5	12.6
Zone 5C (structure 5C)				
CH17-47E	247	253	6.0	2.66
including	248	249	1.0	13.61
Zone 5M (structure 5M)				
CH17-46AE1	200	217	17.0	2.53
including	214	216.5	2.5	12.15
CH17-46B	623.9	641.3	17.4	1.28
including	637.3	638.3	1.0	8.92
CH17-29	837	847	10.0	2.30

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
including	840	843	3.0	3.83
CH18-52E1	217.5	226	8.5	3.04
including	224	226	2.0	8.71
Zone 5M2 (structure 5M2)				
CH17-46A	406	414	8.0	3.92
including	412	414	2.0	14.59
CH17-47AW	272.7	281.5	8.8	3.19
including	276.5	278.5	2.0	7.55
CH17-47A	416.6	426.5	9.95	2.40
including	418.5	421.5	3.0	5.56
CH17-47BW	126.7	133	6.3	2.48
including	131.5	133	1.5	8.24
Zone 5N (structure 5N)				
CH17-27	685.7	690.8	5.1	4.72
including	685.7	686.7	1.0	11.12
Zone 5NE (structure 5N)				
CH16-06	260	275	15.0	3.11
including	270	273	3.0	12.04
CH18-52	757	772.9	15.9	1.62
including	758	759	1.0	10.86
CH18-52A1	258.9	310.5	51.6	1.39
including	276	280	4.0	7.43
CH18-52A1E	104	161	57.0	2.53
including	154	160	6.0	4.18
CH18-52E1	170	198	25.0	3.10
including	180	185	5.0	12.44
CH17-12A	204	226	22.0	0.92
CH17-12AW	92.5	115	22.5	0.79
Zone 6N1 (structure 6N1)				
CH18-48W	277	290	13.0	6.55
including	278	279	2.0	23.29
CH18-48A	302	322.1	20.1	2.50
including	318.5	322.1	3.6	7.72
CH18-48	1140	1155	15.0	2.82
including	1152	1155	3.0	7.94
CH18-48E	348	354	6.0	5.68
including	348	351	3.0	9.90

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
CH18-48B	449.6	475.1	25.5	1.21
including	450.6	451.6	1.0	6.49
CH18-48W2	511	524	13.0	2.01
including	516	517	1.0	6.68
CH18-21A	424.1	438	13.9	2.48
including	424.1	428.8	4.7	5.45
CH18-20	408	421.9	13.9	1.98
including	408	411	3.0	5.41
CH19-61	472.5	492.5	20	0.98
including	473.5	474.0	0.5	13.39

Table 10-4 – Best results in the South Gold Corridor from Cartier's 2016-2020 drilling programs

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
Zone 6 (Structure 6)				
CH19-59	215	225	10.0	1.59
Including	217	218	1.0	4.76
CH18-48	1080	1088	7.1	2.11
Including	1086	1087.5	1.5	8.12
CH18-57	283	288	5.0	3.66
Including	284.5	286.5	2.0	9.04
Zone 6B (Structure 6B)				
CH19-61E	79.5	90	10.5	1.62
Including	89	90	1.0	6.2
CH19-61	675	684	9.0	2.14
Including	675	676	1.0	15.89
CH18-32	319	323	4.0	1.47
Including	321	322	1.0	4.61
Zone 6P (Structure 6P)				
CH18-48W2	12.7	26	13.3	2.19
Including	18	19	1.0	23.84
CH18-35	504	511.5	7.5	1.21
Including	511.0	511.5	0.5	5.6
Zone 6P2 (Structure 6P2)				
CH18-36A	489.1	493	3.9	5.03
including	492	493	1.0	12.02
CH18-37	563	567.8	4.8	1.43

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)
including	567	567.8	0.8	4.79
CH18-39	584.6	588	3.4	3.27
including	586.6	588	1.4	5.5

10.6 Drill Plan and Representative Section – Chimo Mine Deposit

Figure 10-1 shows a surface map of holes drilled by Cartier near or on the Chimo Mine Deposit.

Figure 10-2 shows a cross-section of selected holes drilled in the South, Central and North corridors of the Chimo Mine Deposit.

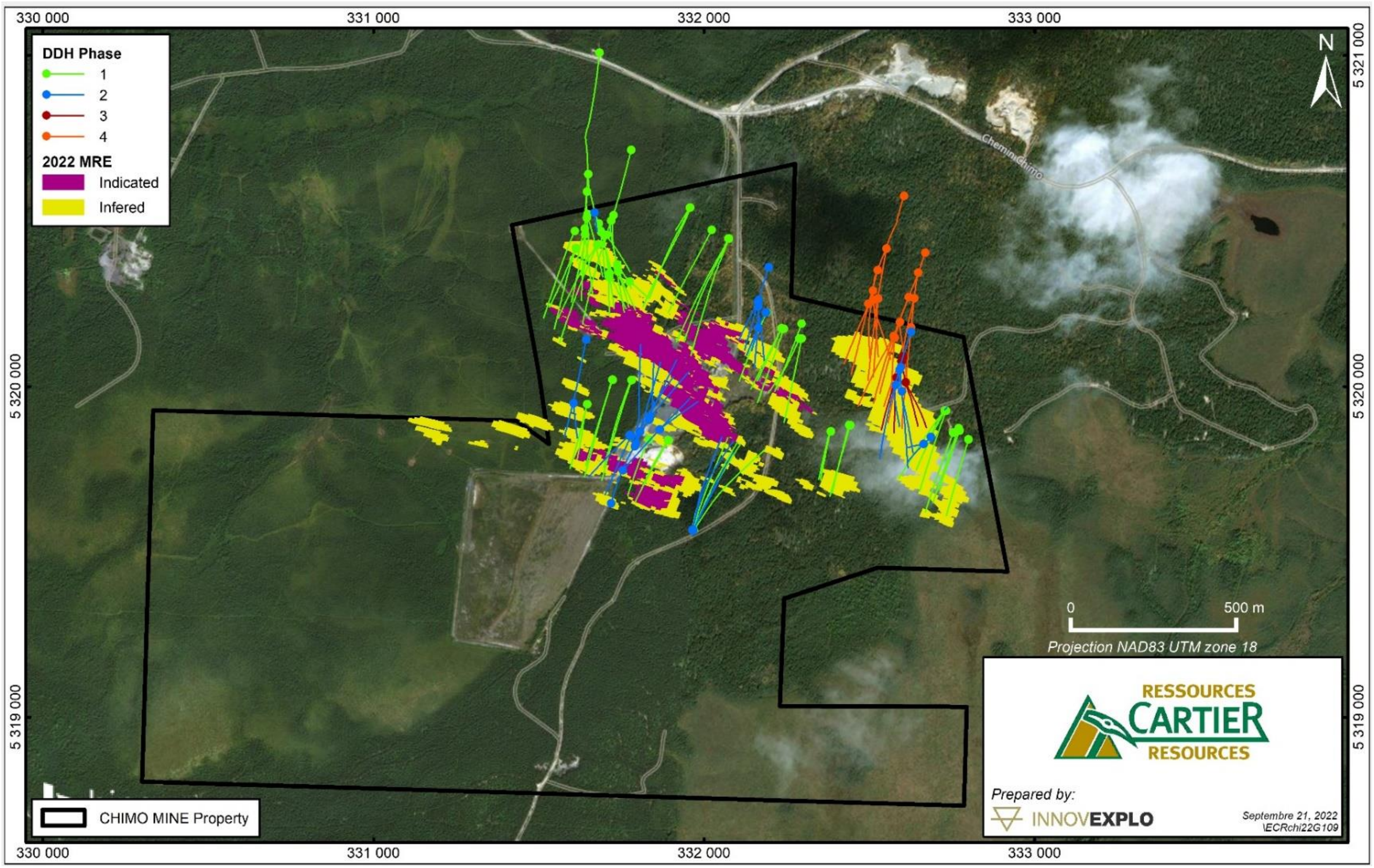


Figure 10-1 – Surface map of Cartier's diamond drill holes on the Chimo Mine Gold Deposit and in its vicinity

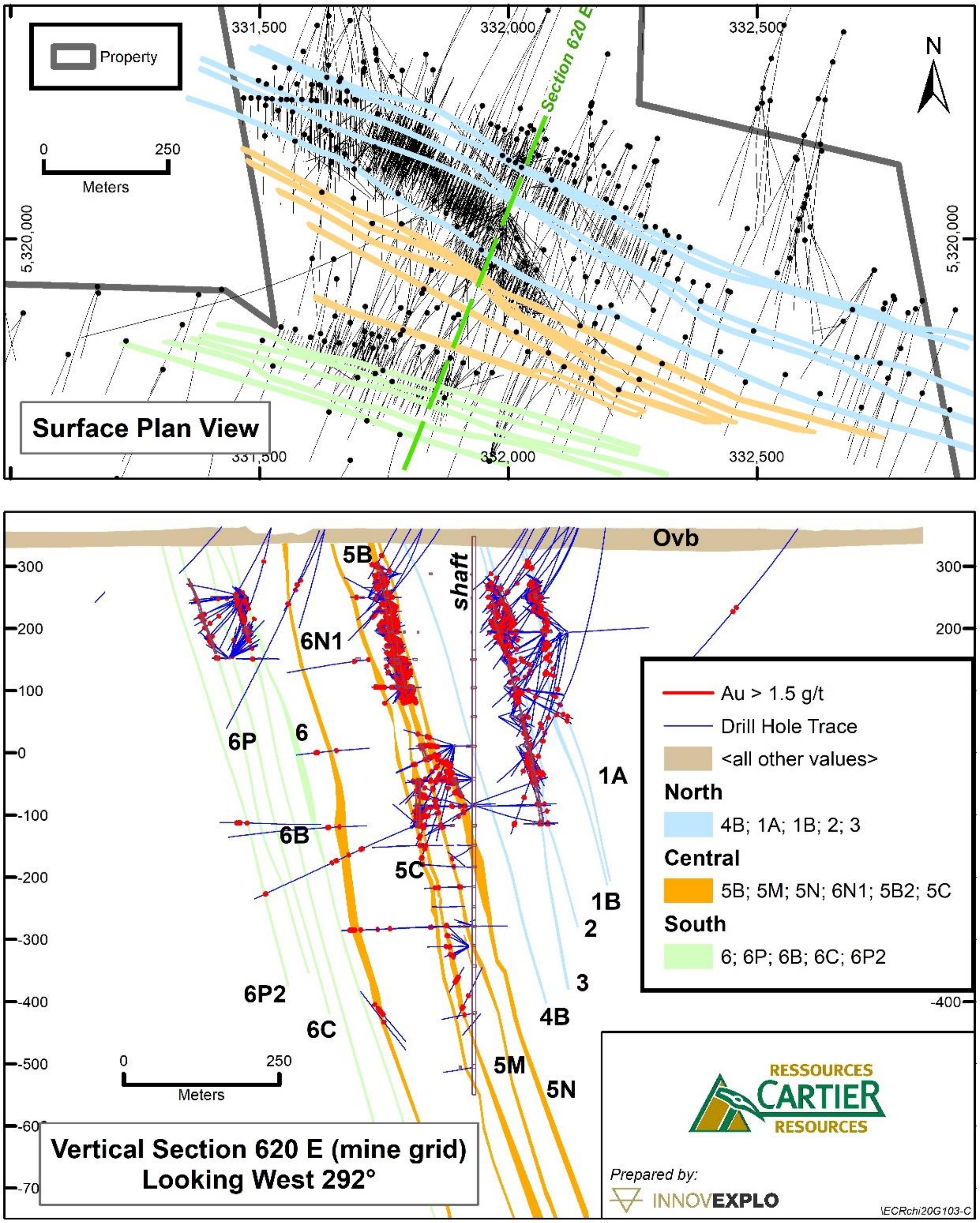


Figure 10-2 – Vertical section (looking west) of drill holes in the main gold areas in the South, Central and North gold corridors of the Chimo Mine Deposit

10.7 Drill Plan and Representative Section – West Nordeau Deposit (MRE4, 2022)

Figure 10-3 shows a surface map of holes drilled near or on the West Nordeau Deposit.

Figure 10-4 shows a cross-section of holes drilled in the Central and North Corridors of the West Nordeau Deposit.

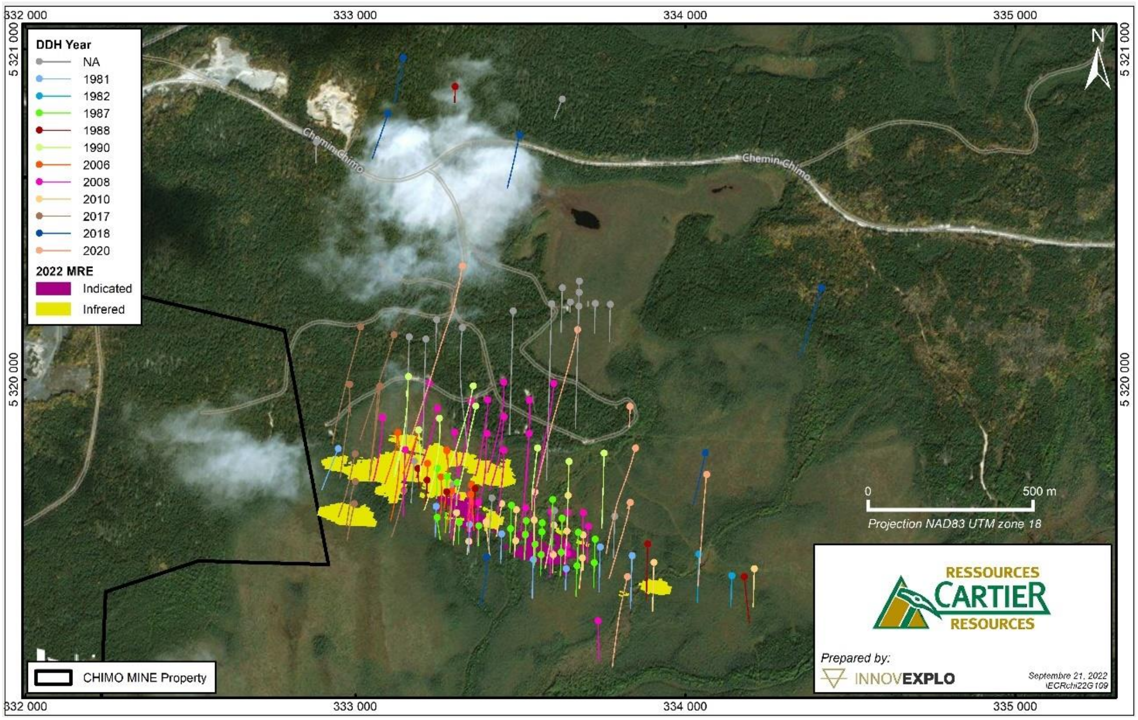


Figure 10-3 – Surface map of diamond drill holes completed by previous operators on the West Nordeau Gold Deposit and in its vicinity

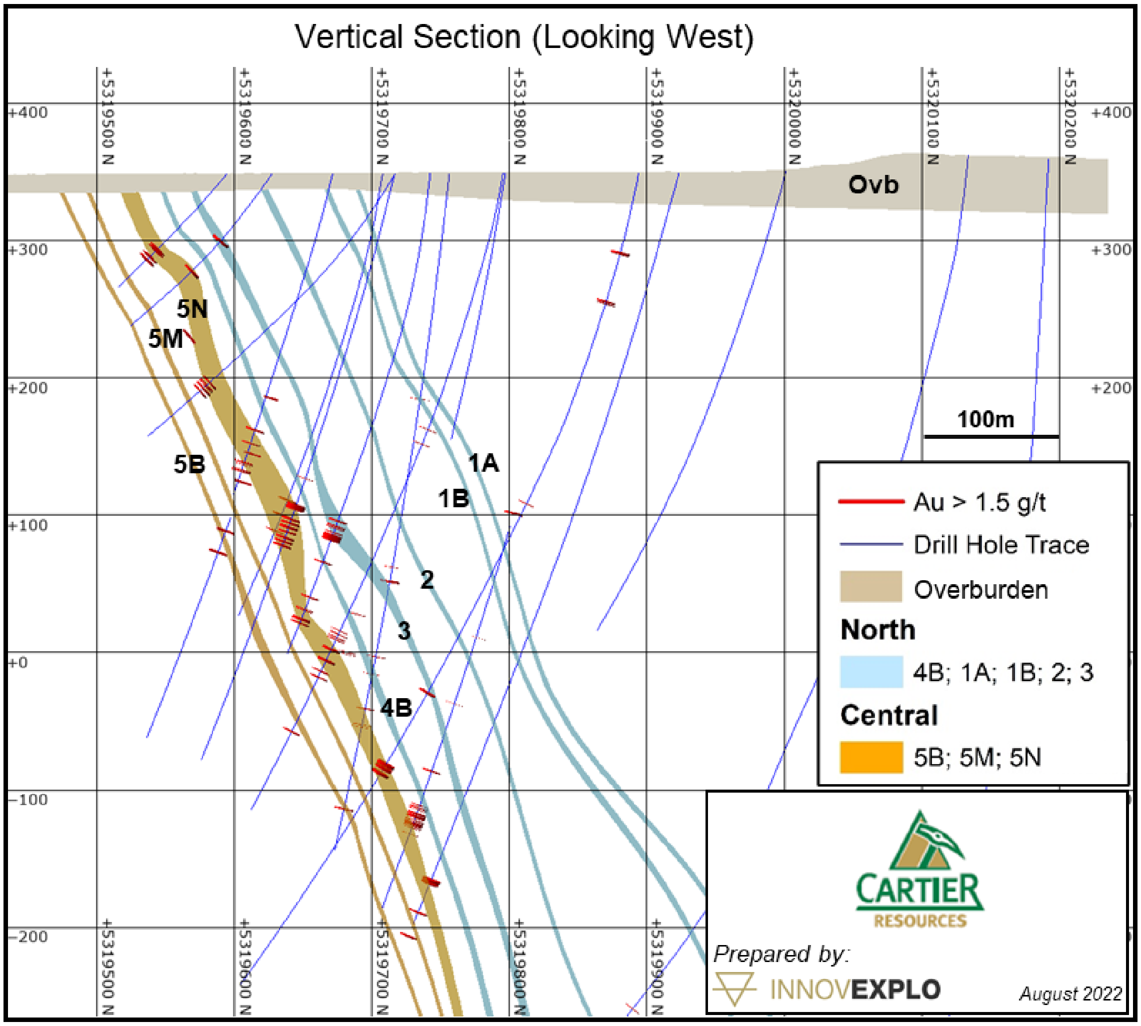


Figure 10-4 – Vertical section looking west (333240E) through the main gold areas in the Central and North gold corridors of the West Nordeau Deposit

10.8 Ongoing Drilling Program and Post-2022 MRE Results

In August 2022, Cartier initiated a 25,000 m drill program on the Chimo Mine Project to potentially expand the project's resources, including the Nordeau West Deposit, and to potentially discover new gold zones. The drilling will go through many of the 19 targeted gold structures and numerous other structures to reveal new gold zones. The results are intended to design the drill pattern below 800 meters.

The results presented in Table 10-5 are a selection of the most significant intervals from the ongoing drilling campaign. The lengths of the mineralized intersections discussed below are expressed as lengths measured along the drill core. No capping was applied to the higher grades. Intercept grades were obtained by weighted averages. The estimated true thickness of mineralized intersections is approximately 65 to 85% of the measured lengths, except for hole CH19-61A where the estimated true thickness is approximately 45% of the measured length.

The drilling program added a new gold zone, 3E1, in the East Chimo Mine sector. Hole CH22-58A yielded 9.9 g/t Au over 1.0 m in an interval of 4.5 g/t Au over 2.5 m, included within a wider interval of 2.0 g/t Au over 6.0 m. At a depth of 800 m, CH22-58B intersected values of 13.0 g/t Au over 1.0 m. The 3E1 Zone lies within Gold Structure 3, which has been intersected by other drill holes from the current and historical drilling programs. The new zone was defined using the number and geometric distribution of the intersections. It is the fourth gold zone discovered in the East Chimo Mine sector.

In the 3E1 Gold Zone, situated at a depth of 800m, CH22-58B intersect have values of 13.0g/t Au over 1.0m. In the 5BE Gold Zone, situated at a depth of 650m, includes values of 9.7g/t Au over 1.0m included in 6.5g/t Au over 2.0m from the hole CH22-62W.

The drilling program in the East Chimo Mine sector also expanded the dimensions of several known gold zones. Specifically, CH22-58B in the 5NE Zone intersected 5.2 g/t Au over 4.0 m, including 16.5 g/t Au over 0.5 m, extending Zone 5NE by 320 m for a total length of 1,150 m. In the 5BS Zone, drilling intersected 3.9 g/t Au over 6.9 m, including 9.0 g/t Au over 1.0 m, extending Zone 5BS by 110 m for a total length of 350 m. These results confirm the continuity of the mineralization of the gold zones in the East Chimo Mine Sector, aligning with the goal of the drilling program.

Significant intersections have been obtained from three areas. In the 5NE Zone, drilling yielded 4.0 g/t Au over 6.8 m, including 24.8 g/t Au over 0.5 m, part of a larger 13.5 m interval grading 2.6 g/t Au. In the 5B4 Zone, drilling intersected 2.0 g/t Au over 15.6 m, including 5.8 g/t Au over 1.5 m. Finally, in Gold Structure 2, drilling yielded 17.4 g/t Au over 1.0 m.

In the West Chimo Mine sector, Cartier found two (2) new gold zones. The 5BW Zone with values such as 16.8 g/t Au over 1.0 m, 6.0 g/t Au over 1.0 m, and 1.2 g/t Au over 16.0 m from holes CH23-76 and CH23-81. The zone is located 100 m west of the Chimo Mine drifts, between depths of 75 m and 350 m. Cartier drilled two (2) holes between 150 m and 350 m and is awaiting assay results to explore the vertical extension of the zone. Additionally, the 6N1W Zone was found only 50 m west of the Chimo historical mine drifts, between depths of 450 m and 600 m. This zone includes values such as 13.2 g/t Au over 0.5 m and 6.0 g/t Au over 1.0 m, included in 3.3 g/t Au over 5.0 m. One hole is currently being drilled to explore the vertical extension of the zone between depths of 600 m and 835 m.

In the West Nordeau Deposit, the 5NE1 Zone returned values of 9.6 g/t Au over 1.0 m, included in 3.3 g/t Au over 4.6 m in hole CH22-60. These values, located at a depth of 800 m, add to the drill results that constitute the resources of the West Nordeau Deposit.

Drilling activities in the West Nordeau Deposit have successfully confirmed the depth extension of the West Nordeau Deposit. Drilling intersected significant intercepts in the eastern part of the West Nordeau Deposit (5NE2 Zone). Hole CH22-64A intersected 26 g/t Au over 0.7 m and 10.2 g/t Au over 0.5 m in a wider section grading 2.3 g/t Au over 23.0 m, and hole CH22-64AW graded 2.1 g/t Au over 14.0 m. In the western part of the West Nordeau Deposit (5NE1 Zone), drilling intersected 3 g/t Au over 1.0 m, included within an interval grading 2.4 g/t Au over 5.6 m. These results confirm that mineralization continuity is possible below the West Nordeau Deposit.

As of May 2023, the assay results from the ongoing program were all received after the close-out date of the 2022 MRE. Overall, the visual comparison between the ongoing drilling results with the 2022 MRE demonstrated that the width and grade of the mineralized zones are on the same order of magnitude as for the 2022 MRE. The ongoing drilling program continues to confirm the geological and grade continuities demonstrated in the 2022 MRE.

For the purpose of the 2023 PEA (this Technical report), the QPs are of the opinion that any potential gains and losses from the ongoing drilling program would balance each other, and the resulting difference would not be material to the overall mineral resource used for the PEA. According to the drilling results in the lateral and depth extensions of the known mineralized zones and given the discovery of new zones, there is a potential to increase the mineral resources in the immediate periphery of the 2022 MRE.

Table 10-5 – Selection of significant drilling intervals from Cartier's ongoing drilling program

Hole ID	Coordinates UTM (°)	Azimut (°) / Plunge (°)	From (m)	To (m)	Interval* (m)	Au (g/t)
Structure 2						
CH22-63	330061/5319881/-25	184/-63	469.0	470.0	1.0	17.4
Zone 3E1 (Structure 3)						
CH22-58A	332591/5320326/-128	228/-73	9280	930.5	2.5	4.5
including			928.0	929.0	1.0	9.9
CH22-58B	332568/5320290/-228	203/-59	903.0	904.0	1.0	13.0
Structure 4B						
CH22-63	333061/5319881/-25	184/-63	554.0	561.0	7.0	3.0
including			559.0	561.0	2.0	7.3
Zone 5BE (Structure 5B)						
CH22-62W	332668/5319956/51	205/-74	695.0	697.0	2.0	6.5
including			696.0	697.0	1.0	9.7
Zone 5B4 (Structure 5B)						
CH22-62	332709/5320021/369	214/-77	660.0	675.6	15.6	2.0
including			663.5	665.0	1.5	5.8
Zone 5BW (Structure 5B)						
CH23-76	331426/5320136/340	220/-55	87.0	103.0	16.0	1.2
CH23-81	331426/5320140/340	212/-71	145.0	146.0	1.0	6.0
and			169.0	170.0	1.0	16.8
Zone 5NE (Structure 5N)						
CH22-58B	332568/5320290/-228	203 / -59	1,033.0	1,037.0	4.0	5.2
including			1,036.0	1,036.5	0.5	16.5
CH22-62	332709/5320021/369	214/-77	583.0	596.5	13.5	2.6
including			587.8	594.6	6.8	4.0
including			587.8	588.3	0.5	24.8
Zone 5NE1 (Structure 5N)						

Hole ID	Coordinates UTM (°)	Azimut (°) / Plunge (°)	From (m)	To (m)	Interval* (m)	Au (g/t)
CH22-60	333062/5319962/-203	197/-65	834.4	839.0	4.6	3.3
including			834.4	835.4	1.0	9.6
CH22-63	333061/5319881/-25	184/-63	614.0	619.6	5.6	2.4
including			616.0	617.0	1.0	6.3
Zone 5NE2 (Structure 5N)						
CH22-64A	333443/5319894/14	188/-68	729.0	752.0	23.0	2.3
including			729.6	730.3	0.7	26.0
including			735.6	736.1	0.5	10.2
CH22-64AW	333422/5319851/-141	213/-75	730.0	744.0	14.0	2.1
Zone 5BS (Structure 5BS)						
CH22-58B	332568/5320290/-228	203 / -59	1,115.1	1,122.0	6.9	3.9
including			1,120.0	1,121.0	1.0	9.0
Zone 6N1W (Structure 6N1)						
CH19-61A	331629/5320071/58	189/-71	599.0	641.0	42.0*	0.9
including			600.0	605.0	5.0*	3.3
including			604.0	605.0	1.0*	6.0
including			640.5	641.0	0.5*	13.2
The lengths of the mineralized intersections are expressed as lengths measured along the drill core. No capping was applied to the higher grades. Intercept grades were obtained by weighted averages. *The estimated true thickness of the mineralized intersections is approximately 65 to 85% of the measured lengths, except hole CH19-61A where the estimated true thickness is approximately 45% of the measured length.						

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

This item describes the issuer's sample preparation, analysis and security procedures on the Chimo Mine Property from 2016 to 2020, including the QA/QC procedures and results, and those of Plato Gold Corp. from 2007 to 2009, Chalice Gold Mines Inc. ("Chalice") from 2017 to 2019 and O3 Mining Inc. ("O3 Mining") in 2020 on the East Cadillac Property.

11.1 Chimo Mine Property

The information presented in this section is based on Beausoleil and Savard (2021) and was reviewed and validated by the QPs.

11.1.1 Core handling, sampling and security

The drill core is boxed and sealed at the drill rigs and driven daily to the logging facility in Val-d'Or (Quebec), where a technician takes over the core handling. The drill core is logged and sampled by professional geologists or under their direct supervision by a geologist-in-training. After logging, the core is marked with a red grease pencil for metal assaying. As a general rule, only mineralized zones are sampled. The sample intervals respect lithological and/or alteration contacts to be as representative as possible.

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 are recorded in the GeoticLog software, as well as in the sample tag notebook. Each sample ticket consists 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 stays in the notebook as a reference, while the other two are detached and placed in the core boxes at the beginning of each sample. As samples are removed, the second tag is stapled in the bottom of the box to act as a reference or control, while the third tag is placed in the sample bag along with the sample for shipment to the laboratory.

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

QA/QC sample tags are also placed in the core boxes. Once core sampling is complete, the sampling technician adds the corresponding barren material ("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 are 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 to the bottom of the box to mark the beginning of each sample interval. The technician then seals the plastic bag with staples.

After seven (7) samples have been sawed and placed in bags with identifying sample tags, they are all placed in a polypropylene bag on which the company name, the sample intervals and the number of samples are indicated with a permanent black marker.

The project geologist fills out a shipping form indicating the sample numbers, number of samples, types of analysis required and turnaround time (in working days).

For Phase 1 (2016), a carrier picked up the samples and delivered them to the laboratory. Samples from phases 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 shipment's compliance and sends Cartier's project geologist a LIMS (Laboratory Information Management System) file containing a confirmation of the order and the analytical requirements.

Once the results of the tests are received and the chemist has signed the final certificate, all pulps sent back by the laboratory are brought to an eco-centre in accordance with municipal regulations on waste disposal. Analytical rejects are also discarded except 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 a facility in Val-d'Or belonging to MNG Services Ltd ("MNG") for the project's duration.

11.1.2 Laboratory accreditation and certification

Samples from Phase 1 of the 2016-2020 drilling programs were sent to Accurassay Laboratories Ltd ("Accurassay") in Rouyn-Noranda (Quebec) for sample preparation and analysis. Phase 2, 3a and 3b samples were sent to Activation Laboratories Ltd ("Actlabs") in Val-d'Or for sample preparation and to their Ste-Germaine-Boulé (Quebec) 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 Properties.

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

11.1.3 Laboratory preparation and assays

Accurassay (now AGAT):

- Samples are sorted, bar-coded and logged into Accurassay's LIMS program upon receipt. 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 is used for the analysis (ALP1). The

remaining 200 g is 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 (ALFA2) and measuring the concentration by atomic absorption (“AA”). Samples between 1.0 and 5.0 g/t Au are re-analyzed by AA (ALFA2). Those with values 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 upon receipt. 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 (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 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.

11.1.4 Quality control and quality assurance (QA/QC)

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 the insertion of blanks and standards into the stream of core samples. A professional geologist adds one (1) blank and one (1) CRM to every batch of 20 samples. There is no systematic insertion of duplicates, but the analytical protocol ensures that all samples assaying 1.0 g/t Au 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 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, re-analysis is not required if the samples preceding or following the failed standard have not returned an anomalous gold value.

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. Cartier concluded that a personnel problem was the root of the analytical errors. This lack of rigour led Cartier to immediately terminate the analytical contract with Accurassay. Following a call for tenders in 2017, Actlabs was selected to prepare and analyze samples for future drilling programs on the property.

Certified reference materials (standards)

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

For the 2016-2020 drilling programs, 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 Mineralised material Research was used. When a gross outlier was identified, Cartier took action 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 to 2020 drilling programs are reliable and valid.

Table 11-1 – Results of standards used for the 2016 to 2020 drilling programs on the Chimo Mine Property

CRM	CRM Value (g/t Au)	Quantity Inserted	Average (g/t Au)	Accuracy %	Precision %	Outliers	Gross Outliers	% Passing Outlier
AY_ΛΓ1	0.514	20	0.4447	–13.5	10.4	0	0	100.0
AY_ΛΓ	0.504	8	0.5098	1.2	6.3	2	1	75.0
AY_ΜΓ	1.062	367	1.0671	0.5	3.5	3	0	99.2
AY_ΜΓ1	1.559	18	1.3851	–11.0	8.4	0	0	100.0
AY_ΜΓ2	1.58	8	1.4543	–8.0	7.8	0	0	100.0
AY_ΜΓ3	3.54	74	3.5738	1.0	3.9	0	0	100.0
AY_ΜΓ4	5.45	59	5.3564	–1.7	4.6	0	0	100.0
AY_ΜΓ5	6.66	255	6.7147	0.8	2.6	3	0	98.8

CRM	CRM Value (g/t Au)	Quantity Inserted	Average (g/t Au)	Accuracy %	Precision %	Outliers	Gross Outliers	% Passing Outlier
AY_HГ	10.5	10	9.7020	−7.6	5.8	1	1	90.0
AY_HГ1	11.95	53	11.9116	−0.3	4	1	0	98.1
AY_HГ2	12.11	261	12.1546	0.4	2.2	3	0	98.9
AY_HГ3	14.18	57	13.7877	−2.8	5.5	0	0	100.0

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's acceptability limit was set arbitrarily (by the issuer) at five (5) times the detection limit. A total of 1,199 blanks were inserted in the batches from the 2016-2020 drilling programs. No blanks failed the QC procedure, but twelve (12) samples returned grades higher than 5x the detection limit, representing less than 1.0% of all blanks.

Duplicates

The issuer's QA/QC procedures do not include systematic duplicate assays.

11.2 East Cadillac Property

The information presented in this item is based on Ballesteros (2021), Langton and Jourdain (2019) and Langton and Horvath (2009) and was reviewed and validated by the QPs.

11.2.1 Core handling, sampling and security

Limited data are available from pre-2006 programs regarding the sampling methods applied to the core from surface drill holes.

From 2007 to 2020, core logging was performed by professional geologists or under their direct supervision by a geologist-in-training, using industry-standard procedures.

The following data were described and entered into the logging software by the core logging geologist:

- log header, drill hole location, parameters, and surveys
- descriptions of the main geological units and sub-units
- mineralized zones with their mineralogy, attitude, thickness
- structures, alteration and RQD

Selected core intervals were sawn in half using a rock saw. One half was kept as a reference in core boxes, the other half bagged, labelled, and delivered to the laboratory in Val-d'Or.

The core boxes were marked with aluminum tags and moved to permanent storage. Most of the split core from the 2016 to 2020 drilling programs has been stored at O3 Mining's offices and logging facilities in Val-d'Or.

11.2.2 Laboratory accreditation and certification

Samples from the 2006 to 2009 drilling programs and the 2017 to 2019 programs were sent to ALS Minerals in Val-d'Or for sample preparation and analysis.

Samples from the 2020 drilling program were sent to AGAT in Val-d'Or for sample preparation and analysis or sometimes to other AGAT facilities in Mississauga and Timmins (Ontario).

ALS Limited attained ISO 9001:2000 registration in 2006. From 2010, ALS and AGAT facilities had ISO/IEC 17025 accreditations through the SCC. At the time of the drilling programs and still to this day, ALS and AGAT are commercial laboratories independent of the issuer with no interest in the property.

11.2.3 Laboratory preparation and assays

ALS (2006 to 2009):

Samples are sorted, logged into LIMS, and prepared for analysis upon receipt. Sample preparation comprises drying and crushing to 70% (2mm), then split using a riffle splitter. A 250-g split is pulverized to 85% passing 75 µm. Samples with visible gold are analyzed by screen/fire assay/AA methods (Au-SCR21), whereas the remaining samples underwent fire assay/AA analysis (Au-AA25). ALS Labs inserted either a standard, blank, or crush duplicate approximately every 20 samples in sequence.

ALS (2017 to 2019):

Samples are sorted, logged into LIMS, and prepared for analysis upon receipt. Sample preparation comprised drying and crushing to 70% (2mm), then split using a riffle splitter. A 250-g split is pulverized to 85% passing 75 µm. Samples were analyzed using fire assay/AA analysis (Au-AA25); samples that assayed greater than 10 ppm Au were re-run using gravimetric analysis ("Au-GRA21"). ALS Labs inserted either a standard, blank, or crush duplicate approximately every 20 samples in sequence.

AGAT (2020):

Samples are sorted, bar-coded and logged into the LIMS program upon receipt. They are then placed in the sample drying room and dried at 60°C. Samples were analyzed for the presence of gold by fire assay followed by an AA assay. When the gold grade exceeded 10 ppm Au, an analysis with a gravimetric assay was systematically carried out. Where the geologist had noted visible gold, gold assays by granulometric classes were carried out on these samples and the adjacent uphole/downhole samples. To do this, the entire sample was crushed then pulverized, and the resulting pulp was sieved at 100 µm. The entire coarse fraction is analyzed, while three analyses are carried out in the fine fraction.

11.2.4 Quality control and quality assurance (QA/QC)

There are no records of a quality control program before 2006.

The quality control programs of Plato Gold Corp. in 2006 and 2007 entailed the insertion of one (1) standard into the sample streams every 30 samples and one (1) blank inserted into the stream every 40 samples. In 2008, the drill core sampling program entailed randomly inserting one (1) blank, one (1) duplicate (quarter-core), and one (1) standard from among three CRMs into the sample stream every 15 samples.

From 2017 to 2019, the quality control program implemented by Chalice entailed three types of quality control sample inserts; standards (CRMs), blanks and duplicates utilized during the drilling programs. The protocols employed by Chalice have remained consistent throughout all their exploration programs.

Certified reference materials (standards): Six (6) different gold CRMs, obtained from MINERALISED MATERIAL Research & Exploration Pty Ltd were employed by Chalice. Standards were inserted at a frequency of 1-in-20 into the core sample streams. They were submitted to ALS Ltd and analyzed the same way as the other samples.

The mean and standard deviation from the standard's certificate of analysis was used to determine the upper and lower limits of acceptability; if the results fell outside 3SD, the laboratory re-assayed those samples. The results of standards used by Chalice in the 2017 to 2019 drilling programs on the East Cadillac Property are presented in Table 11-2.

Table 11-2 – Results of standards used in the 2017-2019 drilling programs on the East Cadillac Property (Langton and Jourdain, 2019)

CRM	Type	2017-2018 Program	2019 Program	TOTAL
OREAS_200:	Quantity Inserted:	9	0	9
	Quantity Outside 3SD:	0	0	0
	% Outside 3SD:	0%	0%	0%
OREAS_210:	Quantity Inserted:	348	91	439
	Quantity Outside 3SD:	2	1	3
	% Outside 3SD:	0.6%	1.1%	0.7%
OREAS_217:	Quantity Inserted:	149	84	233
	Quantity Outside 3SD:	5	1	6
	% Outside 3SD:	3.4%	1.2%	2.6%
OREAS_218:	Quantity Inserted:	160	0	160
	Quantity Outside 3SD:	1	0	1
	% Outside 3SD:	0.6%	0.0%	0.6%
OREAS_221:	Quantity Inserted:	192	58	250
	Quantity Outside 3SD:	1	2	3
	% Outside 3SD:	0.5%	3.4%	1.2%
OREAS_251:	Quantity Inserted:	35	0	35
	Quantity Outside 3SD:	2	0	2
	% Outside 3SD:	5.7%	0.0%	5.7%
Total	**Quantity Inserted:**	**893**	**233**	**1126**
	Quantity Outside 3SD:	**11**	**4**	**15**
	% Outside 3SD:	**1.2%**	**0.0%**	**1.3%**

Blanks: The blanks for drill core samples consisted of material from Nelson Granite in Vermillion Bay (Ontario), which ALS verified as having below-detection-limit gold content. They were inserted at a frequency of 1-in-20 into the core sample streams.

The acceptable assay value for blank samples used as core-interval samples was 0.05 ppm, 10 times the gold detection limit (0.005 ppm). Blanks that assayed higher than 0.05 ppm were re-assayed by the laboratory. Only one sample of the 1,160 blank core-interval samples assayed higher than 0.05 ppm.

Duplicates: Duplicate samples were created from half of the retained piece of half-core (i.e., quarter core) remaining after the original sample had been collected. A total of 1,104 core-interval duplicates were included with the primary core samples. Duplicates were inserted at a frequency of 1-in-20 into the core sample stream. Absolute relative differences of 40% or less between original and duplicate assay values were noted for approximately 80% of the samples, indicating a strong overall correlation.

The high variance (i.e., >40%) of some duplicate assay values compared to the original values is attributed to a ‘nugget effect’ typical for these types of gold deposits.

In 2020, the quality control program implemented by O3 Mining during the drilling campaigns entailed two types of quality control samples: standards (CRMs) and blanks.

Certified reference materials (standards): 10 different gold CRMs, obtained from MINERALISED MATERIAL Research & Exploration Pty Ltd were employed by O3 Mining. Standards were inserted at a frequency of 1-in-20 into the core sample streams. They were submitted to ALS Limited and analyzed the same way as the other samples.

The mean and standard deviation from the standard’s certificate of analysis was used to determine the upper and lower limits of acceptability: if the results fell outside two times the standard deviation (“2SD”), the laboratory re-assayed those samples.

Only one (1) out of 198 standards returned a result outside 2SD. This standard was placed in one of the zones targeted by the drilling. Although no anomalous gold values were reported in the sample interval, a re-analysis was requested to confirm that the zone did not have gold.

Blanks: Blanks were inserted at a frequency of 1-in-20 into the core sample streams.

The acceptable assay value for blank samples used as core-interval samples was 0.01 ppm. Blanks that assayed higher than 0.01 ppm and were close to core samples with high gold values (at the discretion of the project geologist) were re-assayed by the laboratory. For the drill holes completed in the vicinity of the West Nordeau Deposit, none of the 198 blanks assayed higher than 0.01 ppm.

Duplicates: O3 Mining’s QA/QC procedure did not include duplicate assays.

To conclude, the current and past operators have implemented adequate core handling, sampling and QA/QC procedures and programs on the Chimo Mine and East Cadillac Properties. Close monitoring is documented in the reports. The insertion frequency for control samples met industry norms, and the control sample results demonstrate that the assay data is sufficiently reliable for the purpose of mineral resource estimation.

Therefore, it is the opinion of the QPs that the procedures conformed to industry best practices and that the quality of the assay data is adequate and acceptable to support a mineral resource estimation.

12. DATA VERIFICATION

This item covers the data verification done by QPs on the diamond drill hole databases used for the 2022 MRE (the "Chimo Mine database" and the "West Nordeau database"). Data verification included a site visit on July 27, 2022, for the 2022 MRE and a second site visit on November 11 for the 2023 PEA.

12.1 2022 MRE and 2023 PEA Site Visits

A site visit was conducted on July 27, 2022, for the 2022 MRE by QPs Vincent Nadeau-Benoit and Alain Carrier. It included field checks of collar locations (handheld GPS), a visual inspection of surface drill pads, a visual assessment of access roads, a review of selected drill core intersections in the mineralized structures of the West Nordeau Deposit, independent resampling, and a review of the QA/QC program (Figure 12-1).

The core boxes from the Chimo Mine Deposit are stored at a facility in Val-d'Or belonging to MNG before being transported to the issuer's core shack. At the time of the visit, the core boxes from the West Nordeau Deposit were still stored at O3 Mining's Val-d'Or office. Cartier was about to start moving them to their storage facility.

Marc R. Beauvais conducted the second site visit on November 11, 2022, specifically for the 2023 PEA and this Technical Report. The aim was to assess the condition of the overburden composition near the proposed portal and potential mine pad locations (Figure 12.2) and to review of the general conditions of the land, the existing surface infrastructure and the main site accesses.

The QPs were accompanied by Gaétan Lavallière, Cartier's Vice-President of Exploration, during both property visits and the tour of the core logging facility.

12.2 Core Review

The QPs (Vincent Nadeau-Benoit and Alain Carrier) reviewed selected core intervals onsite. Cartier plans on keeping the mineralized drill core from the West Nordeau Deposit (currently stored at O3 Mining's Val-d'Or office) as it does for the Chimo Mine Property. However, the core from the non-mineralized intervals and all the core from the other holes will be discarded. The QPs examined selected intervals from the West Nordeau Deposit.

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

The QPs also completed independent re-sampling of mineralized intervals from the West Nordeau Deposit. The results (**Error! Not a valid bookmark self-reference.**) show that low-grade samples yielded results consistent with the original results and more variable results for higher-grade samples (although gold values are still considered high), reflecting a nugget effect commonly related to this type of deposit. These samples were also processed for density, and the resulting values were consistent with the values used for the 2022 MRE. The QPs recommend taking density measurements during the upcoming 2023 drilling program on the West Nordeau Deposit.

Table 12-1 – Independent re-sampling results for material from the West Nordeau Deposit

Hole information			Original (Cartier)		Quarter-split (QPs)				Struct.
Hole ID	From	To	Sample Number	Au (ppm)	IE Sample Number	AU (AA26) (ppm)	S.G. (GRA08) (g/cm3)	Certificate_IE	
NW08-01	427.40	428.25	741837	2.28	B00418011	0.97	2.83	VO22215607	5N
NW08-01	428.25	428.70	741838	7.59	B00418012	7.82	2.95	VO22215607	5N
NW08-01	428.70	429.25	741839	6.61	B00418013	4.23	2.86	VO22215607	5N
NW08-01	429.25	429.55	741840	4.43	B00418014	5.94	2.91	VO22215607	5N
NW08-01	429.55	430.15	741841	0.16	B00418015	0.02	2.82	VO22215607	5N
NW08-01	430.15	430.45	741842	4.25	B00418016	2.30	2.85	VO22215607	5N
ECG_17_002	85.90	87.00	V570235	1.56	B00418018	2.06	2.75	VO22215607	5N
ECG_17_002	87.00	88.00	V570236	0.03	B00418019	0.11	2.80	VO22215607	5N
ECG_17_002	88.00	89.00	V570237	0.03	B00418020	0.02	2.81	VO22215607	5N
ECG_17_002	89.00	90.00	V570238	0.09	B00418021	0.02	2.86	VO22215607	5N
ECG_17_002	91.00	92.00	V570239	26.70	B00418022	63.20	2.92	VO22215607	5N

12.3 Databases

The authors reviewed and validated all drilling information used for the 2022 MRE.

Since the 2022 MRE was published (Beausoleil and Savard, 2021), Cartier has not drilled the Chimo Mine or East Cadillac Properties.

The Chimo Mine database contains data from 3,685 diamond drill holes (296,999 m). Of this total, 3,658 holes were drilled in the block model area. The assays were used in the 2022 MRE.

The West Nordeau database contains data from 154 diamond drill holes (55,097 m). Of this total, 125 were drilled in the block model area. The assays for these holes were used in the 2022 MRE.

The validation included all aspects of both databases (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

The QPs checked 5% of the collar location coordinates in the Chimo Mine database to validate their correspondence with the original paper logs. 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. The QPs consider the collar surveys adequate for a resource estimate but still recommend that all collars be professionally surveyed.

For the West Nordeau database, the QPs checked 10% of the collar location coordinates to validate the correspondence between original paper logs or surveyor certificates and the database. In July 2022, Cartier contracted a land surveyor, Corriveau J.L. & Associés Inc., to professionally survey 31 collars that had not been professionally surveyed.

The drill hole collar coordinates in both databases are in UTM NAD83 Zone 18.

12.5 Downhole Survey

Downhole surveys were conducted in the majority of holes in the Chimo Mine database. The methods and instruments used for the surveys were Acid, Pajari, Reflex and Reflex SS for historical holes and EZ-Gyro for the 2016-2020 drilling programs. The downhole survey information was verified for 5% of the holes included in the Chimo Mine 2022 MRE. Minor errors of the type normally encountered in a project database were identified and corrected. The discrepancies for two (2) 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.

Downhole surveys were conducted on the majority of holes in the West Nordeau database. The methods and instruments used for the surveys were Acid, Tropari, Reflex and Gyro. Eighty (80) of the 154 diamond drill holes in the database had a non-varying downhole azimuth. Using a north-seeking gyro (NSG), Cartier re-surveyed any holes longer than 300 m that still had casing in the field that could be located. In total, 23 holes were re-surveyed, and the results were included in the final database. The downhole survey information was verified for 10% of the holes included in the West Nordeau 2022 MRE. Eleven (11) drill holes longer than 300 m in the database still lack any variation in the azimuth. To mitigate uncertainty regarding the position of the intersections in these holes at depth, the QPs decided to classify all resources below 300 m as inferred.

12.6 Assays

The majority of the diamond drill holes in the Chimo Mine database were assayed.

The QPs had access to Cartier's assay certificates for the 2016-2020 drilling programs and to logs in PDF format for the historical holes. The reviewed holes represent 5% of the holes in the Chimo Mine database. 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. No major errors or discrepancies were found.

For the West Nordeau database, Cartier has not drilled on the East Cadillac Property since acquiring it. However, the QPs had access to the assay certificates for the programs completed by Chalice Gold Mines (Québec) Inc. and the logs in PDF format for holes drilled by O3 Mining and those drilled before 2016. Assays were verified and compared for selected holes (10% of the diamond drill holes in the West Nordeau database) to the laboratory certificates provided by the laboratory or the drill logs in PDF format.

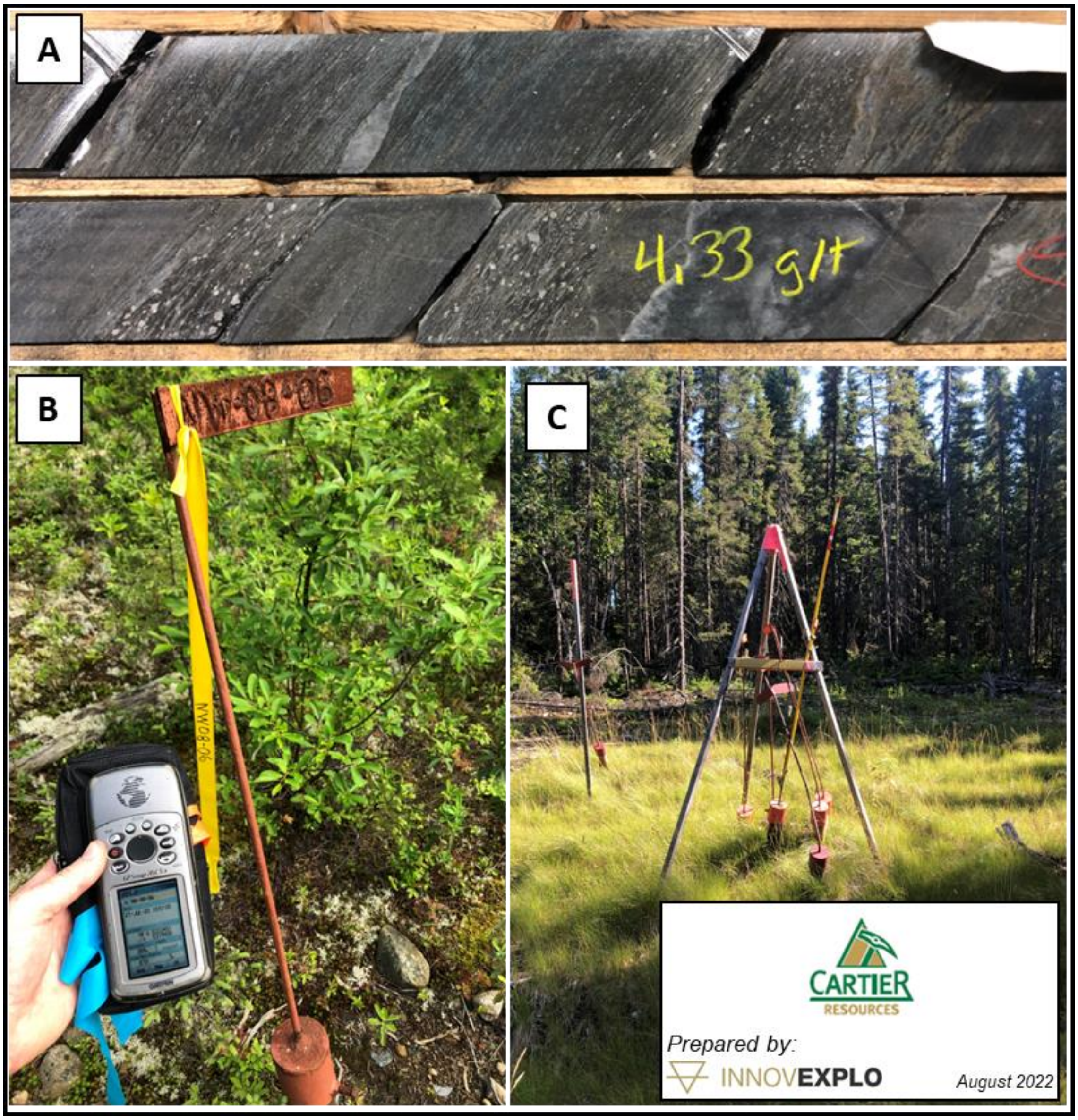
Although no major discrepancies were found during the validation of the West Nordeau database, the QPs found two irregularities and thus provide the following comments and recommendations:

1. The treatment of assay results below the detection limit is not homogeneous throughout the database (from one drill program to the other). In some programs, the value of the detection limit was used as the default value, while others used half the detection limit. The QPs recommend using a systematic and similar approach for all Au values below the detection limit.
2. The final Au value in the database is sometimes based on an average of at least two assay results (i.e., an assay with a duplicate). These averaged values refer to only one certificate number; the other is not recorded in the database and could not be verified by the QPs. The QPs recommend recording all the certificate numbers and assay results in the database from which final Au-values are calculated.

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

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 Properties. The authors consider the databases for the Properties to be valid and of sufficient quality to be used for the mineral resource estimate herein.



Note:
1. Review of the intersection of 5N Gold Structure in drill hole ECG_17_009 (from around 439.00 to 441.20m): Mafic volcanic unit with smoky quartz veining, biotite and mineralization as cubic arsenopyrite (around 1-2%).
2. Drill collar inspection on the East Cadillac Property (NW08-06).
3. Example of a drill pad on the Chimo Mine Property (CH18-45)

Figure 12-1 – July 27, 2022, site visit to the Chimo Mine and East Cadillac Properties and core review

Note:

1. Top photograph shows a panoramic view of the proposed mine site pad, taken from north to northeast.
2. Second photograph shows a panoramic view of the proposed mine site pad, taken from west to northeast.
3. The third image shows the location of the photographs above on the layout of the proposed mine site pad.

Figure 12-2 – November 11, 2022, site visit to the Chimo Mine and East Cadillac Properties and core review

13. MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Metallurgical Test Work Summary

No metallurgical test work was performed for the 2023 PEA (this Technical Report). The process flowsheet and design criteria discussed in this item are derived from the historical metallurgical test work performed at Lakefield Research Ltd (“Lakefield”, now SGS Lakefield Research Ltd) and CRM (now COREM) in the 1990s. Test work at Lakefield included flotation and cyanidation of the flotation concentrates, whereas the CRM test work focused on gravity concentration and flotation for investigating low gold recoveries in the plant. Recent test work at COREM focused on mineralized material sorting for producing a pre-concentrate of underground mineralized material. The latest information from InnovExplo indicated that the mineralized material sorter will be installed on surface.

The proposed flowsheet consists of a tertiary crushing stage (since the mineralized material is crushed and preconcentrated using a Mineralized material sorter) operated in a closed circuit with a vibrating screen to crush the mineralized material to a P80 of 12 mm. A ball mill-cyclone circuit grinds the mineralized material to a P80 of 74 µm. Gravity concentration recovers free gold from the cyclone underflow, and the overflow feeds a CIL circuit to recover gold. The CIL tails are dewatered and pumped to a tailings pond and/or used for backfill. Processing and Mineralized material sorter preconcentrated mineralized material with an upgraded gold grade of 4.55 g/t, the metallurgical recoveries for the process plant are projected at 94 to 95%. The gold lost in the sorter rejects are not included in the gold recovery. Those losses could account for up to 8%, according to COREM tests.

Historical metallurgical test work from SGS Lakefield and CRM are presented in section 13.2 and covers only direct cyanidation test results. Recent metallurgical test work performed at COREM on mineralized material sorting technology is presented in section 13.3.

13.2 Historical Metallurgical Test work

13.2.1 Metallurgical test work at Lakefield Research – Progress report 1

Cambior Inc. submitted eight (8) composite samples from Chimo (identified as Project 1000) for metallurgical test work to Lakefield. The test work comprised whole mineralized material analysis and specific gravity determination, Bond work index determination, flotation tests (rougher-cleaner), whole mineralized material cyanidation, cyanidation of flotation concentrates and acid-reducing potential. The report is included in Appendix C.

Head assays performed on the samples showed that gold grades ranged from 2.40 g/t to a high of 12.0 g/t for the eight (8) composites. Silver at 2.0 g/t was also present in the composites tested. Other elements assayed were copper, Iron, Arsenic, Sulphur and graphitic carbon. Specific gravities for the samples ranged from 2.69 to 2.84.

13.2.1.1 Bond Work Index

A Bond work index test was performed on composite F. The feed F80 was 13 mm, and the product P80 was 79 µm. The test screen size was 104 µm. The bond index was calculated as 14.5 kWh/ ton. This index was used to size the ball mill for the present study.

13.2.1.2 Whole Mineralised material Cyanidation

Whole mineralized material cyanidation tests were performed on composites C and J employing standard conditions: solution composition 1.0 g/L NaCN, % solids 33%, pH 11 and leach time 48 hours. The results are presented in Table 13-1.

Table 13-1 – Whole mineralised material Cyanidation tests – Composites C & J

Test No.	Grind %-74µm	Reagent Cons.		Sol'n Assays mg/L				% Au Rec.	Residue Assay Au g/t	Head Calc. Au g/t
		NaCN	CaO	Cu	Fe	As	CNS			
C-4	66.9	0.6	1.4	10.6	16.1	1.7	118	83.6	1.54	9.41
C-5	82.9	0.8	1.5	9.2	31.4	8.2	177	87.7	1.15	9.36
J-3	64.4	1.4	0.2	4.3	21.8	8.8	-	87.3	0.57	4.49
J-4	64.3	0.4	0.7	5.2	15.6	6.8	90	93.9	0.42	6.88

Cyanidation tests on the whole mineralized material indicate that gold recoveries of 94% are achievable at a relatively coarser grind size of 64.3 µm. Fine grinding to 82.9% did not improve gold recoveries significantly.

13.2.1.3 Acid-producing potential

Acid-producing potential tests were performed on Composite A and a sample submitted as 'Pascalis Special'. The results of the acid-producing tests presented in Table 13.2 indicate that neither sample is a potential acid producer.

Table 13-2 – The results of the acid-producing potential

Sample	Acid-producing ability Kg/t	Acid-consuming ability Kg/t
Composite A	26	136
Pascalis Special	3	146

13.2.1.4 Metallurgical test work at Lakefield Research – Progress report 2

Cambior Inc. requested that Lakefield additional metallurgical test work on Chimo (formerly identified as Project 1000) samples and Beauchemin mineralized material. The test work included gravity, flotation and cyanidation. Three (3) samples were used for the test work: Composite J, Composite H and Beauchemin mineralized material. A copy of the report is attached in Appendix C.

Table 13.3 presents the head analysis of the samples. Gold and silver grades are calculated from test results.

Table 13-3 – Head Assay

Sample	%				g/t	
	Cu	Fe	As	S	Au	Ag
Composite J	0.006	5.39	0.59	1.19	6.05	<0.02
Composite H	0.003	1.41	0.093	0.33	7.98	<2.0
Beauchemin mineralised material	0.011	5.22	0.003	0.85	4.85	-

13.2.1.5 Gravity Test work

Composites J and H were subjected to gravity test work using Wilfley and Mozley Tables to investigate the occurrence of free gold. The ground samples were processed on the Wilfley table and the Wilfley concentrate was upgraded on a Mozley table. Coarse free gold was observed on the Mozley table for the two composite samples tested. Table 13-4 presents the results for sample H and Table 13-5 summarizes the results for sample J.

Table 13-4 – Gravity test results for Composite H

Comp.	Product	Wt%	Assay g/t		Dist'n %	
			Au	Ag	Au	Ag
H	Mozley Concentrate	-	15848	2128	50.0	60.0
	Wilfely Concentrate	8.5	47	6.5	81.2	100.0
	Table Tailings	91.5	1.00	-	18.8	-
	Head (Calc.)	100.0	4.90	0.60	100.0	100.0

Table 13-5 – Gravity Test results for Composite J

Comp.	Product	Wt%	Assay g/t		Dist'n %	
			Au	Ag	Au	Ag
J	Mozley Concentrate	-	33559	2184	71.1	72.8
	Wilfely Concentrate	5.2	119	9.5	79.3	100.0
	Table Tailings	94.8	1.70	-	20.7	-
	Head (Calc.)	100.0	7.80	0.50	100.0	100.0

The results indicate that gravity concentration recovered 50% of the gold in composite H and 71% of the gold in composite J, confirming the presence of significant quantities of coarse free gold. Coarse free gold was also visible on the table for both samples.

13.2.1.6 Cyanidation Tests

Cyanidation tests were conducted on composite J gravity tails, Beauchemin mineralized material and a composite of Beauchemin mineralized material (96%) and composite J flotation concentrate (4%).

Bottle roll cyanidation tests were conducted for 48 hours at 11.5 pH with lime addition and a solution composition of 1 g/L NaCN. The pulp density of the solids was 33%. The results are presented in Table 13-6 to Table 13-8.

Table 13-6 – Cyanidation of Beauchemin mineralised material results

Test No.	Reagents cons. (kg/t)		% Extraction	Residue (g/t)	Head g/t
	NaCN	CaO	Au	Au	Au
H	0.85	0.02	94.0	0.29	4.76
J	0.86	-	94.2	0.29	4.93

Table 13-7 – Cyanidation of Beauchemin/Chimo Blend mineralised material results (94% -74 µm)

Test No.	Reagents cons. (kg/t)		% Extraction	Residue (g/t)	Head g/t
	NaCN	CaO	Au	Au	Au
BC-3	0.55	0.65	96.8	0.47	14.60
BC-4	0.58	0.87	93.7	0.59	9.30

Test BC-4 is a replicate of BC-3.

Table 13-8 – Cyanidation of composite J gravity tails results

Test No.	Reagents cons. (kg/t)		% Extraction	Residue (g/t)	Head g/t
	NaCN	CaO	Au	Au	Au
5-J	0.35	0.57	87.5	0.32	6.0
6-J	0.55	0.61	88.6	0.26	5.60

Test 6-J is a replicate of 5-J.

Table 13-9 presents the pregnant solution analyses.

Table 13-9 – Pregnant solution analysis

Composite	Test No.	Assays mg/L				
		Ag	Cu	Fe	As	CNS
H	2H& 3H	1.79	27.0	1.06	4.81	88.2
J	2J & 3J	1.14	19.4	32.5	21.60	213.0
BC	BC-1	0.17	26.5	13.0	0.35	29.4
	BC-2	0.21	24.5	22.5	0.29	19.6
	BC-3	0.44	32.0	13.0	11.90	85.3
	BC-4	0.30	31.5	13.0	7.40	83.3

The following conclusions were made regarding the Chimo and Beauchemin mineralised material testwork:

3. Gravity testwork showed gold recoveries of 50% for the Chimo composite H and 71% for the composite J. Coarse free gold was visible on the table for both samples.
4. Whole mineralised material cyanidation of Beauchemin mineralised material recovered 94% of the gold.
5. Cyanidation of a Beauchemin/Chimo blend recovered 95% of the gold. It was reported that blending high-grade flotation concentrate with Beauchemin mineralised material did not negatively affect gold extraction.

13.2.1.7 Metallurgical test work at Lakefield Research – Progress report 3

Metallurgical test work on additional samples of Chimo mineralized material (formerly identified as Project 1000) included flotation and cyanidation tests. A copy of the report is included in Appendix C.

The test work was conducted on five (5) different samples. Table 10-3 presents the head analyses for the samples.

Table 13-10 – Head Assay

Sample	Cu	Fe	As	S	C(graph)	C (tot)	Au	Ag
Francoeur	0.033	-	-	-	-	-	14.3	<2.0
Beauchemin	0.007	-	-	-	-	-	3.43	<2.0
Comp. K	0.009	2.28	0.21	0.52	0.22	-	6.48	<2.0
SN-1	-	-	0.44	1.23	0.44	0.80	11.7	<2.0
SN-2	-	-	0.80	1.62	0.54	1.62	4.60	<2.0

Specific gravity determinations for the Francoeur and Beauchemin composites were 2.89 and 2.81 respectively.

13.2.1.8 Beauchemin mineralised material test work

The Beauchemin mineralized material sample was cyanided directly to asses gold recovery by direct cyanidation. The sample was ground to 90% -74 µm, and the ground mineralized material was pulped to 33% solids. The pH was maintained at 11.5 with lime and 1 g/L NaCN solution strength. The pulp was cyanided for 48 hours in two stages of 24 hours each. The results of the tests are presented in Table 13-11.

Table 13-11 – Whole mineralised material cyanidation test results for Beauchemin mineralised material

Test No.	Reagent Cons.(kg/t)		% Extraction		Residue %, g/t	
	NaCN	CaO	Au	Cu	Au	Cu
4	0.04	0.77	93.9	41.1	0.28	0.008
5	0.06	0.83	94.0	29.8	0.30	0.008

The results of the direct cyanidation test indicate that 94% of the gold was extracted from the Beauchemin mineralized material. Cyanide consumption was low.

13.3 Metallurgical test work at COREM

Two bulk samples, sample 1 from the 5NE zone and sample 2 from zones 5M4 + 5B4 were sent by Cartier to COREM to evaluate the amenability for sensor-based mineralized material sorting. It was reported that zones 5M4+ 5B4 are the most representative zones. These tests aimed to investigate the possibility of producing a pre-concentrate that would reduce transport, milling and restoration costs by mineralized material sorting. A copy of the test work report is included in Appendix D.

Two samples were subjected to mineralized material sorting. Befmineralised material sorting, the samples were crushed to 100% -1.25 inch (32 mm), and the crushed product was screened to ¾ inch (19 mm). The fraction -32 + 19 mm was used for sorting, while the fraction finer than 19 mm was assayed for gold to complete the overall metallurgical balance.

Sample 2 achieved the best metallurgical results using optical (RGB) and XRT sensors proving the amenability to mineralized material sorting. Only the results of sample 2 are presented here. Other details can be found in the COREM report. Table 13-12 presents the results.

Table 13-12 – Mineralised material sorting test results

Product	Mass (Kg)	Mass (%)	Au (g/t)	Au Rec. %
Sorter pre-conc.	51.9	49.1	3.24	73.9
Sorter waste	48.7	46.1	0.38	8.1
<3/4 " fraction (-19 mm)	5.1	4.8	8.07	18.0
Total	105.7	100	2.16	100

Total Conc (sorter pre-conc.+<3/4" fraction)	57.0	53.9	3.68	91.9

The sorter produced a pre-concentrate with 74% of the gold in the feed at a mass pull of 49%. The gold grade was upgraded from 2.16 g/t to 3.24 g/t. The sorter rejected 46% of the total sample processed as waste which accounts for 8% gold with a grade of 0.38 g/t. The finer fraction (<3/4"), which accounts for 5% of the total sample processed, accounts for 18% gold with a gold grade of 8.07 g/t. The finer fraction combined with the sorter pre-concentrate accounts for 54% of the sample, with an overall recovery of 92% at a gold grade of 3.68 g/t.

The test results look very promising for reducing the mineralized material haulage costs for the mine and downstream process plant costs.

14. MINERAL RESOURCE ESTIMATES

The Chimo Mine Gold System Mineral Resource Estimate (the "2022 MRE") combines the updated mineral resource estimates for the Chimo Mine and West Nordeau Gold Deposits (the "Chimo Mine 2022 MRE" and the "West Nordeau 2022 MRE", respectively).

The QPs of the 2022 MRE are Vincent Nadeau-Benoit, P.Geo., and Alain Carrier, P.Geo., both of InnovExplo.

The effective date of the 2022 MRE is August 22, 2022.

The close-out date of the Chimo Mine diamond drill hole database is September 1, 2020. The close-out date of the West Nordeau diamond drill hole database is July 12, 2022.

The QPs prepared the West Nordeau 2022 MRE using all available information at the effective date.

While the 2023 PEA was underway (this Technical Report), the issuer initiated a new drilling program on the periphery of the 2022 MRE resource blocks. The results of the ongoing drilling program are discussed in section 10.8. In the opinion of the QPs, the new drilling results have no material effect on the MRE 2022 blocks used in the 2023 PEA, apart from potential resource gains at the margin of those already documented.

As part of the Chimo Mine 2022 MRE, the QPs reviewed and independently validated the following aspects of the previous Chimo Mine mineral resource estimate (Beausoleil and Savard, 2021; the "Chimo Mine 2021 MRE"):

- 3D lithological model and interpretation of the mineralized structures
- drill hole intercept database
- key assumptions
- block model key parameters, interpolation methods, strategies and parameters
- classification criteria, produce clipping areas for mineral resource classification and apply them to the block model
- mineral resources with "reasonable prospects for potential economic extraction" by selecting the appropriate cut-off grades and producing "resource-level" optimized underground mineable shapes
- historical voids and their exclusion from the mineral resource estimate
- constraining volumes (optimized underground mineable shapes)
- cut-off grades
- final mineral resource estimate

14.1 Chimo Mine Deposit 2022 MRE

14.1.1 Chimo Mine – Methodology

The mineral resource area of the Chimo Mine Deposit 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 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. Capping and several validations were carried out in Microsoft Excel and Supervisor.

The main steps in the methodology were as follows:

- A 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)
- 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

14.1.2 Chimo Mine – Drill hole database

The issuer provided a Geotic-MS Access database for the project on September 1, 2020, including all completed diamond drill holes. It contains 3,685 diamond drill holes (surface and underground drill holes), totalling 296,999 m, and includes 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 holes drilled in the resource volume area. It includes 241 historical holes (Figure 4-1). 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.

14.1.3 Chimo Mine – Geological model

The QPs reviewed and validated the 2020 geological model provided by Cartier's senior geologist, Mr. Ronan Déroff (P.Geo.) for the Central Corridor and InnovExplo's 2020 Leapfrog model for the North and South 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 of 2.4 m.

A total of 17 gold-bearing structures were modelled: seven (7) in the Central Corridor (structures 5B, 5B2, 5C, 5M, 5M2, 5N and 6N1), five (5) in the North Corridor (structures 1A, 1B, 2, 3 and 4B), and five (5) in the South Corridor (structures 6, 6B, 6C, 6P and 6P2) (Figure 14-2).

Mineralization is associated with quartz and arsenopyrite in fracture 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 surface was created using the Government of Quebec's freely available 2017 LIDAR data from the MFFP (Quebec's former Ministry of Forests, Wildlife and Parks). The resolution is approximately 2 m. The bedrock surface was generated using casing depths. The solids for the mineralized structures were clipped to this surface.

14.1.4 Chimo Mine – 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 Chimo Mine Property that were used to deplete the final resource model, all reviewed and validated by the QPs.

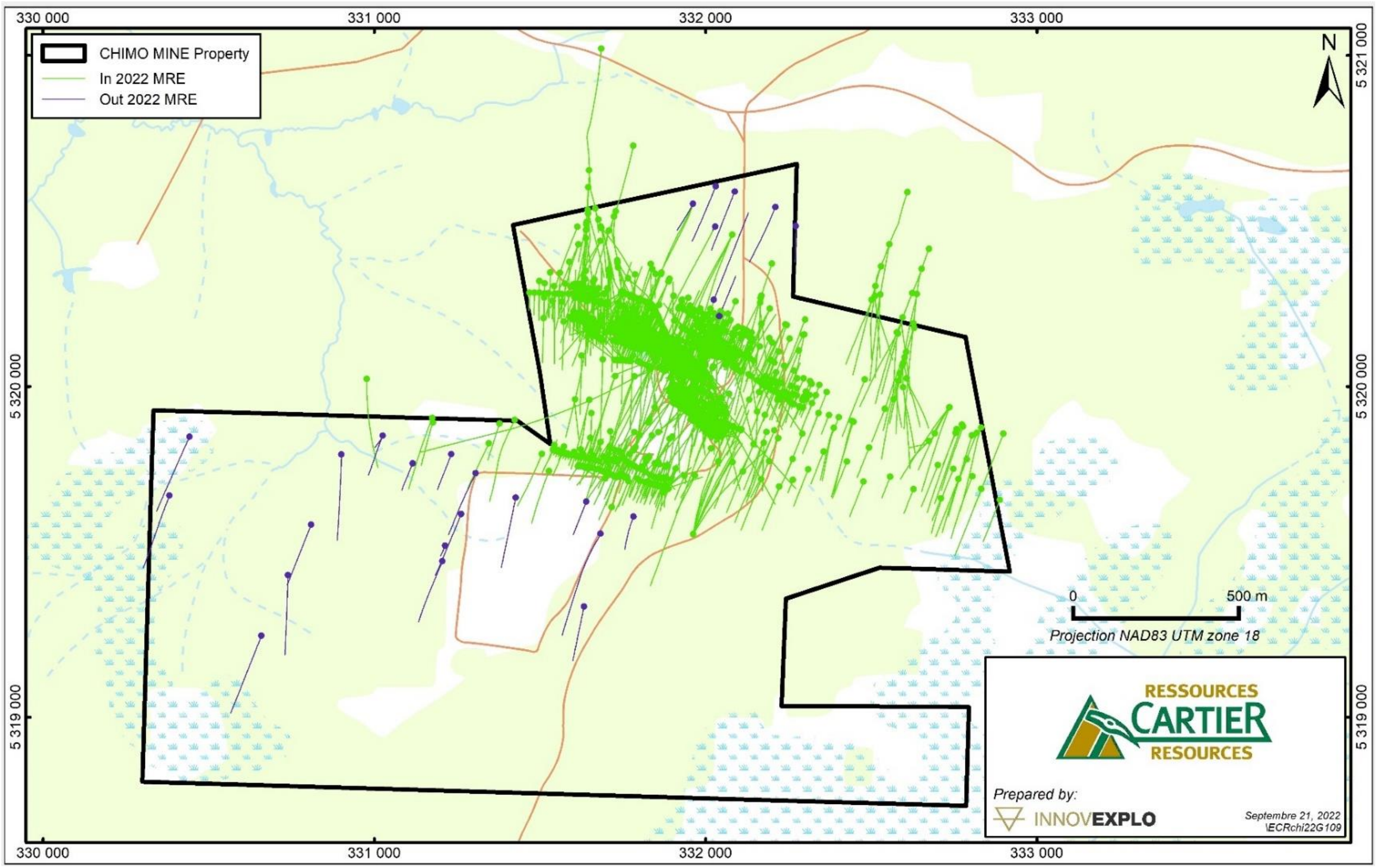


Figure 14-1 – Validated drill holes used for the Chimo Mine 2022 MRE

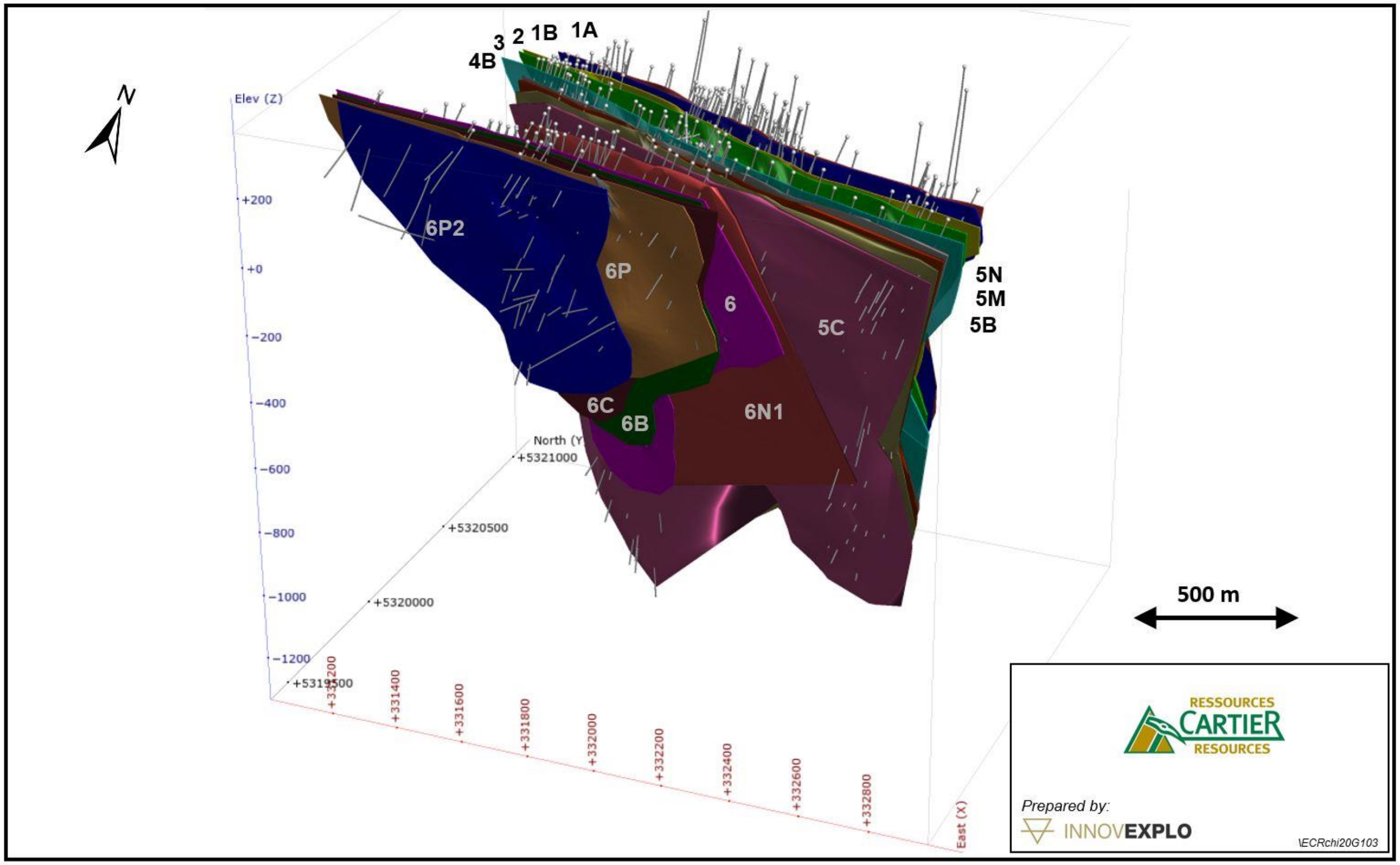
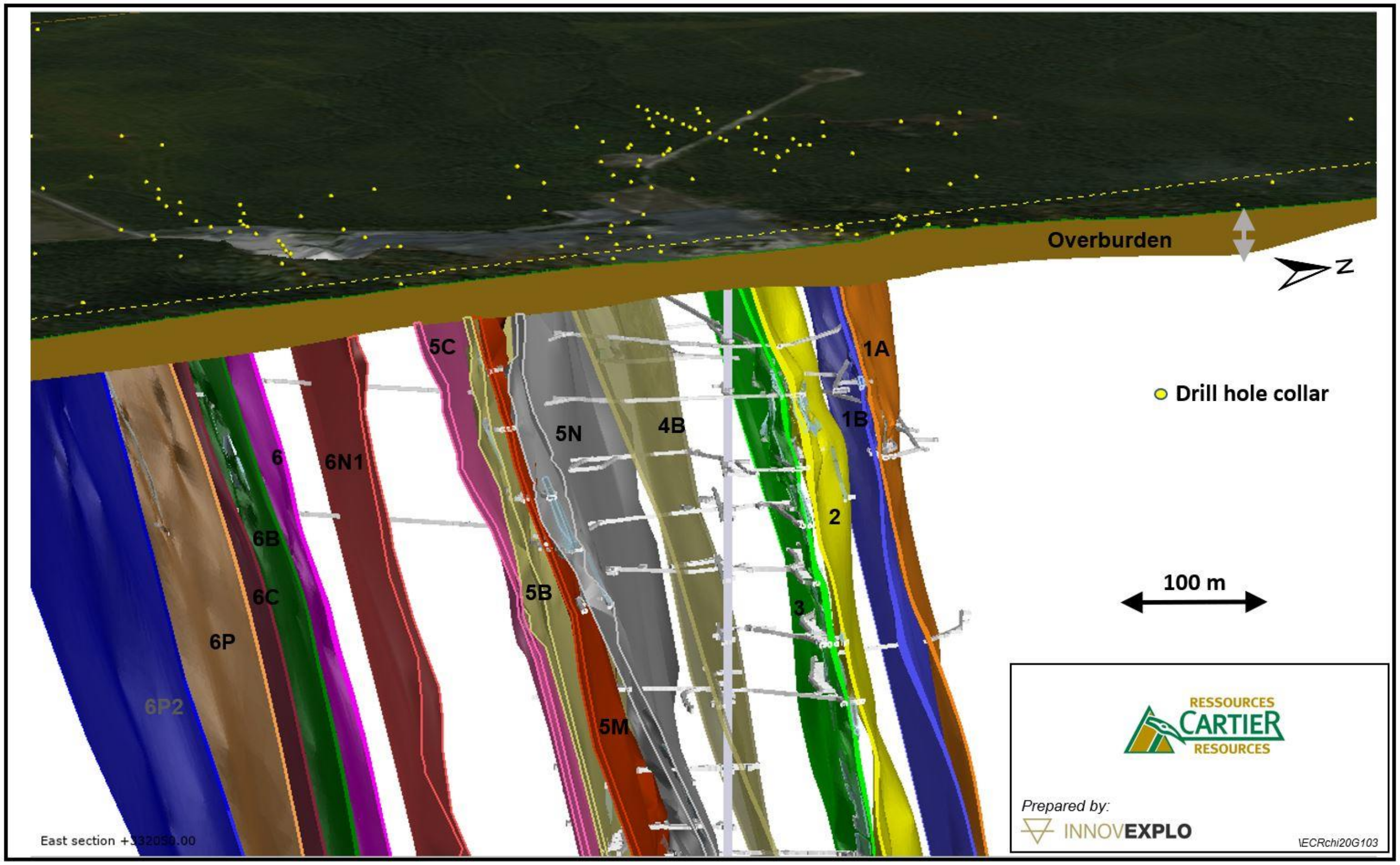


Figure 14-2 – Isometric view of the gold structures of the Chimo Mine Deposit



(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 Deposit

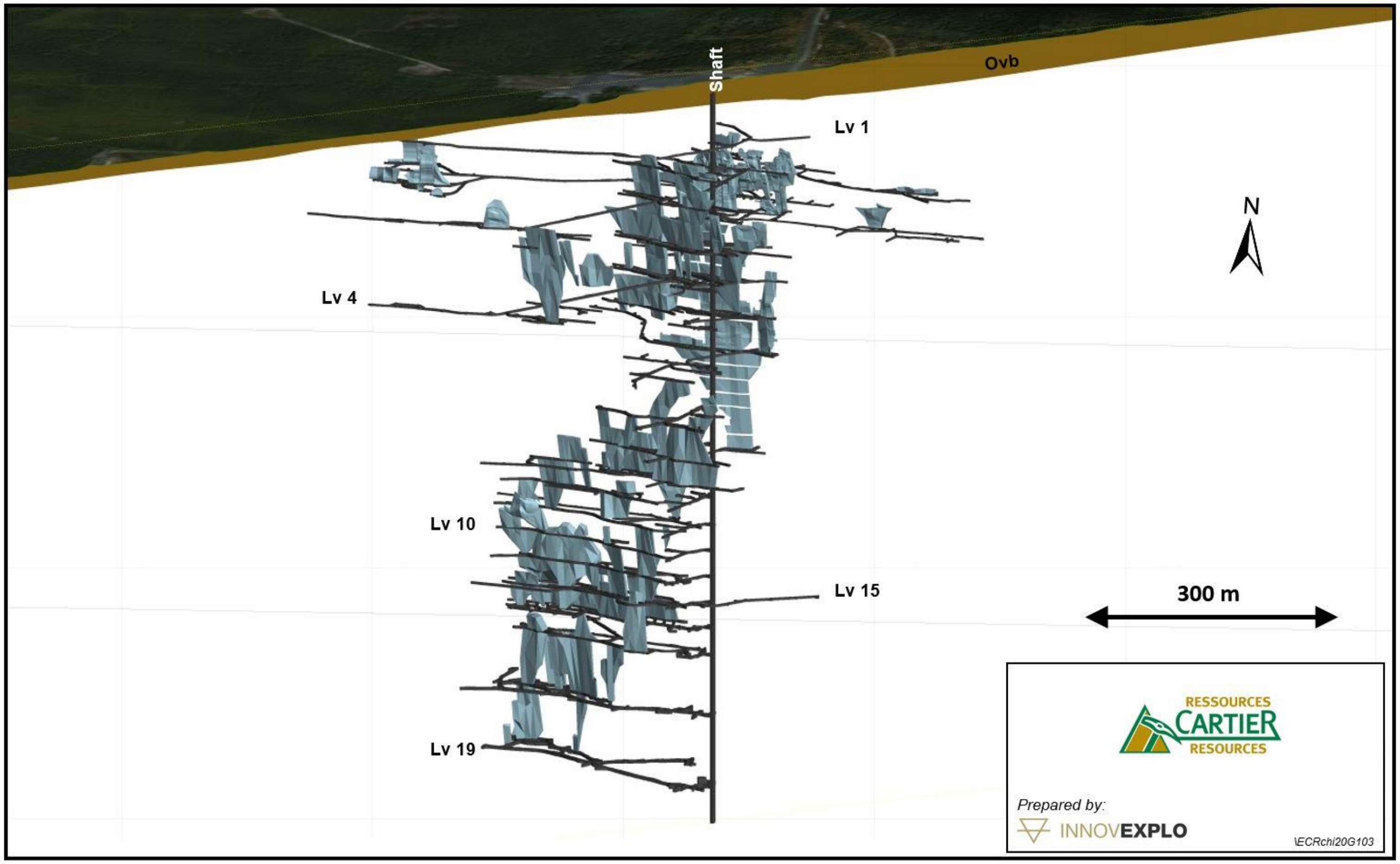


Figure 14-4 – Isometric view of the voids in the Chimo Mine Deposit

14.1.5 Chimo Mine – 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 – Chimo Mine Deposit – Summary statistics for the diamond drill holes raw assays

Gold Corridor Gold Structure	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%

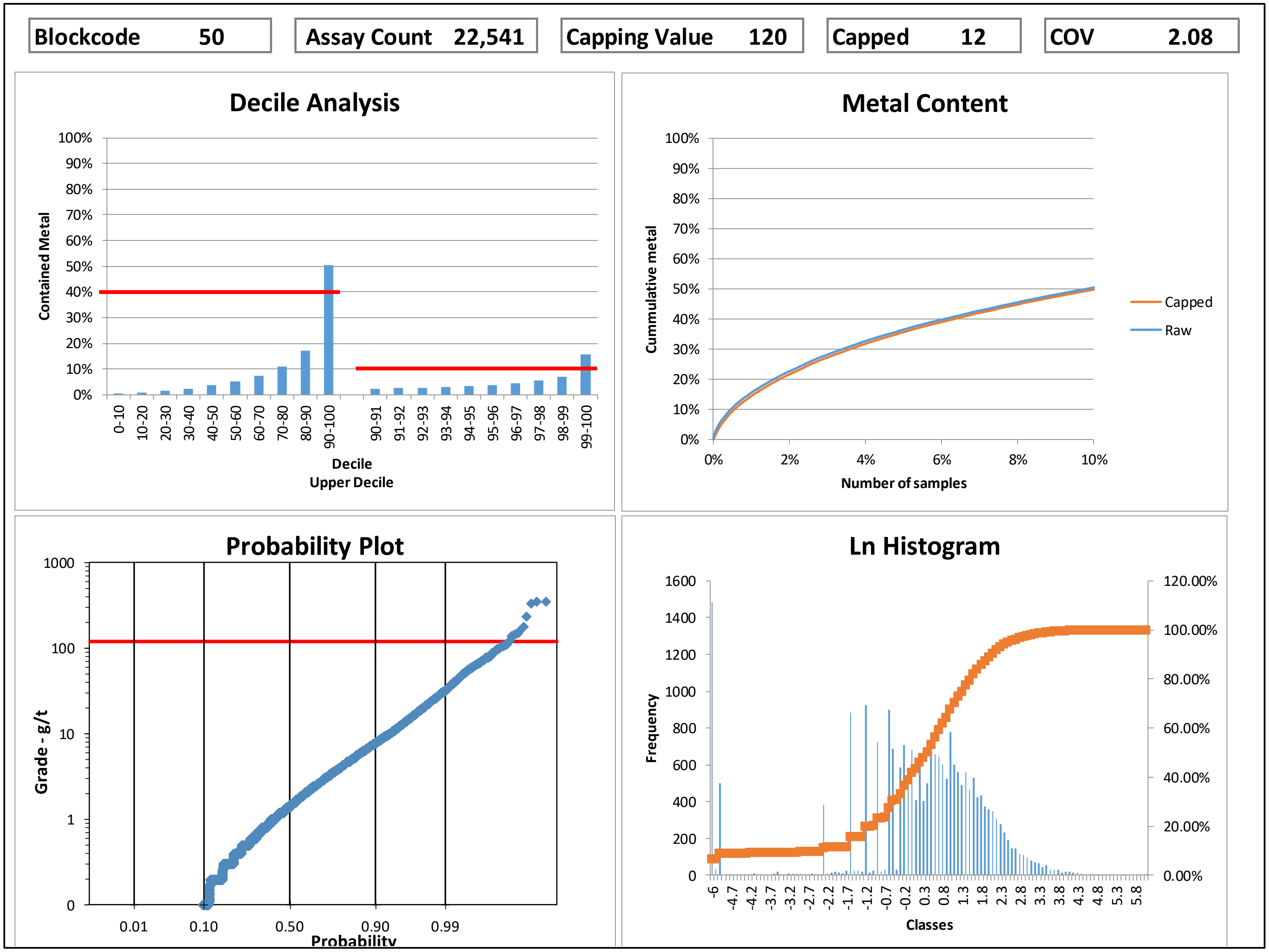


Figure 14-5 – Chimo Mine Deposit – Example of graphs supporting a capping value of 120 g/t Au for the 5B structure

14.1.6 Chimo Mine – Compositing

The gold assays of the diamond drill holes data were composited to 1-m lengths in each mineralized structure to minimize any bias introduced by the variable sample lengths. 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 – Chimo Mine Deposit – Summary statistics for the diamond drill holes composites

Gold Corridor – Gold Structure	Cut Assays		Composite			
	Mean (g/t Au)	COV	No. of composites	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

14.1.7 Chimo Mine – 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 twelve (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 data are summarized in Table 14-3 for each mineralized structure.

The mean density of 2.86 g/cm^3 is based on a small sample population of 140 but is close to the historical value. The QPs concluded that 2.90 g/cm^3 would be a reasonable value for the Chimo Mine 2022 MRE. However, 3.10 g/cm^3 was used for structures 1A and 1B, which are associated with the iron formation unit. A density of 2.00 g/cm^3 was assigned to the overburden.

Table 14-3 – Chimo Mine Deposit – 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
2	5	2.907
3	3	2.852
4B	2	2.767
6	1	2.717
6N1	1	2.877
6P	1	2.886
6P2	2	2.852
Others	2	2.837
Total / Global Mean	**47**	**2.859**

14.1.8 Chimo Mine – Block Model

The Chimo Mine 2022 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.

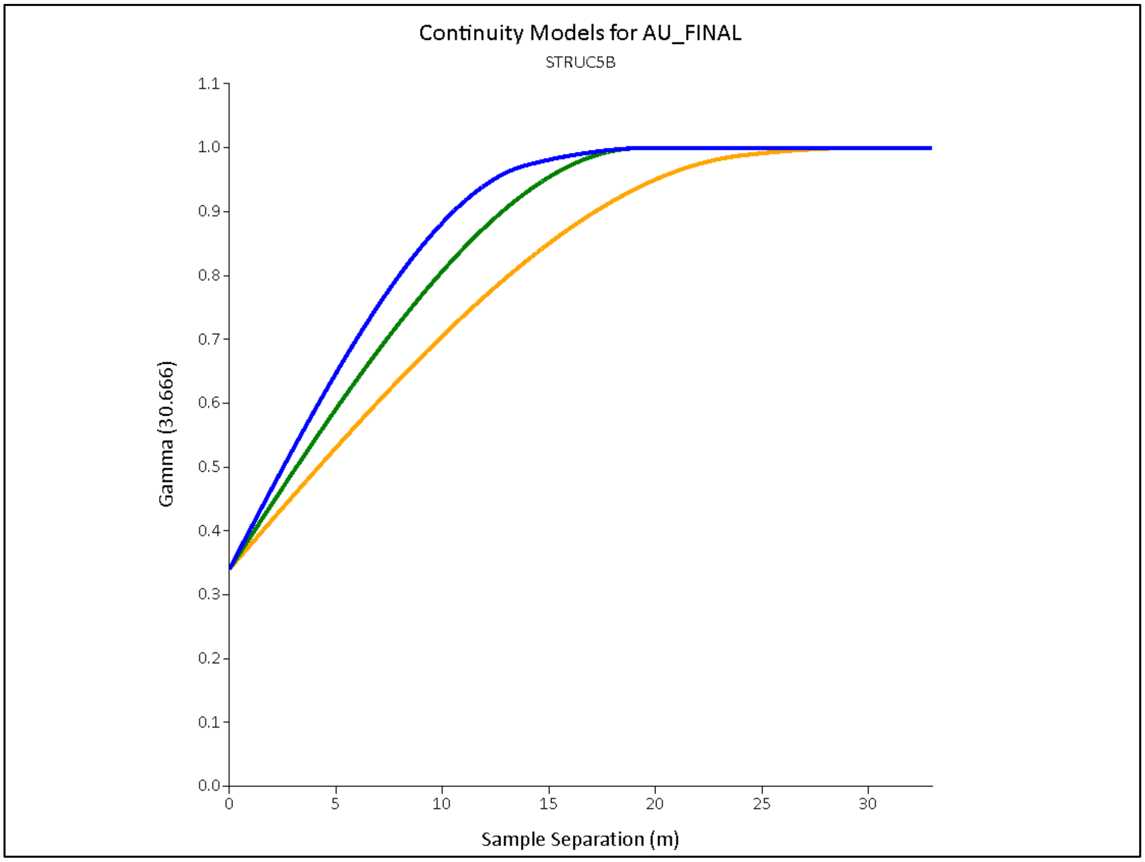
Table 14-4 – Chimo Mine Deposit – Block model properties

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°		

14.1.9 Chimo Mine – Variography and search ellipsoids

The 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 shows the first-pass search ellipse compared to the composite data points and interpolated blocks.



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

Figure 14-6 – Chimo Mine Deposit - Example of continuity models for the 5B search ellipsoids

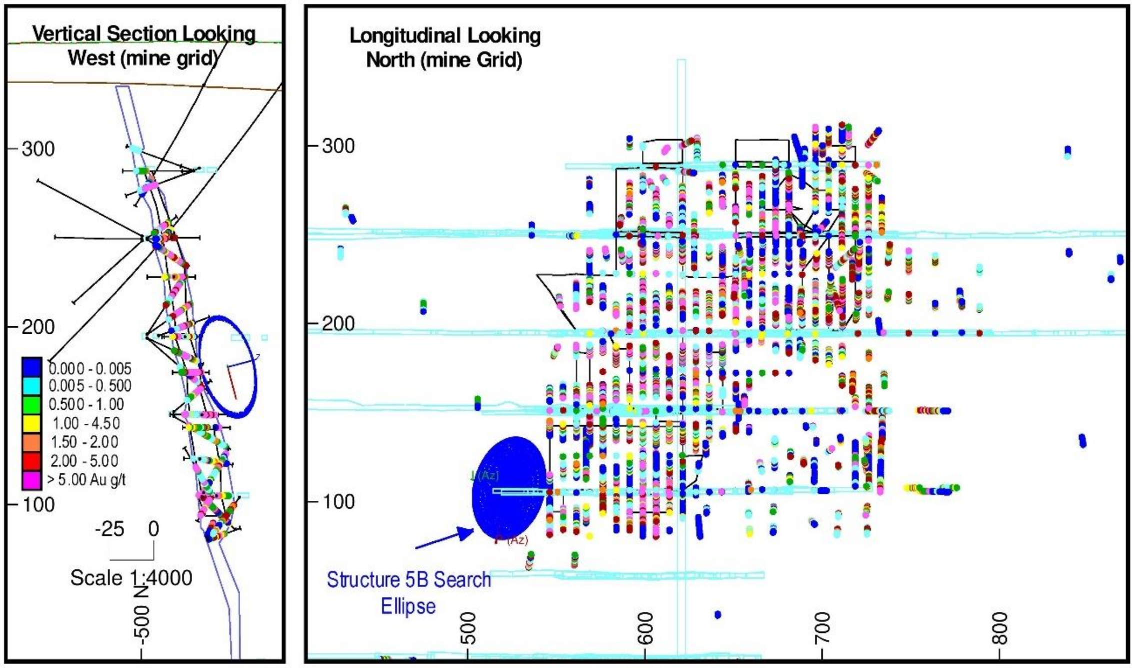


Figure 14-7 – Section view (vertical and longitudinal) of the search ellipsoid used for structure 5B during the first interpolation pass

14.1.10 Chimo Mine – Grade interpolation

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

The variography study provided the parameters 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 – Chimo Mine Deposit – Search ellipsoid parameters by structure

Gold Structure	Pass	Min Cmp.	Max Cmp.	Max Cmp./ diamond drill holes	Min diamond drill holes	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			

14.1.11 Chimo Mine – Block model validation

Block model grades, composite grades and assays were visually compared on sections, plans and longitudinal views for 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.

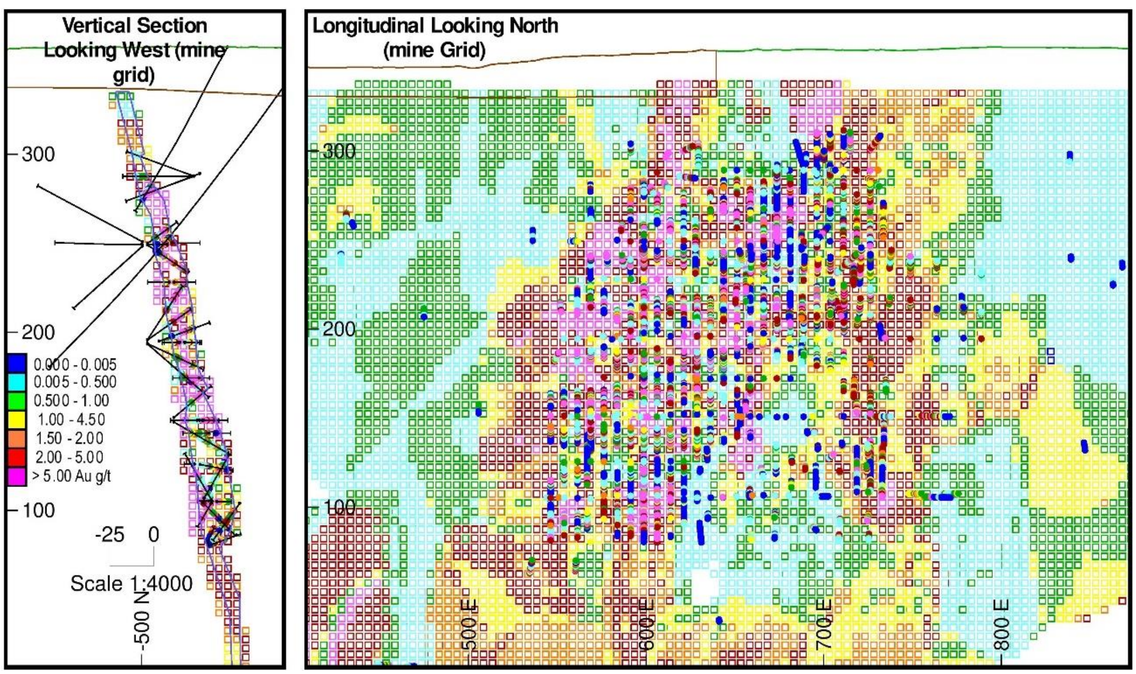


Figure 14-8 – Validation of the interpolated results for the 5B Structure

Table 14-6 – Chimo Mine Deposit – Comparison of the mean grades for blocks and composites

Gold 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

14.1.12 Chimo Mine – Mineral resource classification

The Chimo Mine MRE 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.

14.1.13 Chimo Mine – 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 – Chimo Mine Deposit – 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
Mineralised material 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**

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.

14.1.14 Chimo Mine – Mineral resource estimate

The QPs are 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 QPs are 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 Chimo Mine 2022 MRE is considered reliable and based on quality data and geological knowledge. The estimate follows CIM Definition Standards and CIM Best Practice Guidelines.

Figure 14-9 shows the classified mineral resources within the constraining volume for the 5B Structure.

Table 14-8 displays the Chimo Mine 2022 MRE results 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 Chimo Mine 2022 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 to demonstrate the resource model’s sensitivity to the selection of a reporting cut-off grade and should not be taken out of context.

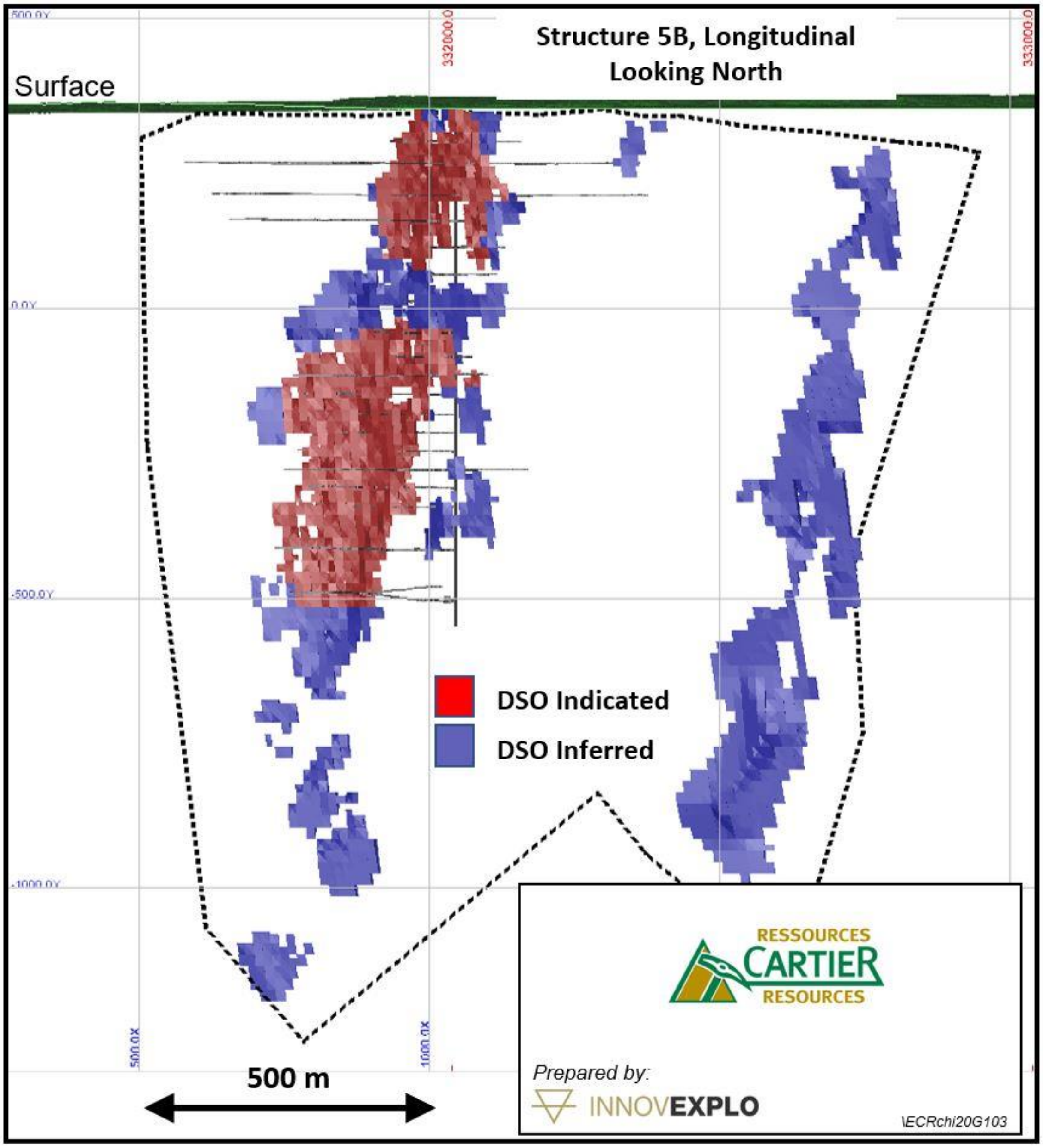


Figure 14-9 – Classified Mineral Resources within the constraining volume for the 5B structure (Chimo Mine Deposit)

Table 14-8 – 2022 Mineral Resource Estimate for the Chimo Mine Deposit

Corridor Cut-off Grade (g/t Au)	Indicated Mineral Resources			Inferred Mineral Resources		
	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)
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

Refer to Table 14-16 notes for the Mineral Resource Estimate notes

Table 14-9 – Cut-off grade sensitivity analysis for the Chimo Mine Deposit

Cut-off Grade (g/t Au)	North Gold Corridor			Central Gold Corridor			South Gold Corridor		
	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)
Indicated Mineral 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 Mineral 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

14.2 West Nordeau Deposit 2022 MRE

14.2.1 West Nordeau – Methodology

The mineral resource area of the West Nordeau Gold Deposit covers a strike length of 1.3 km ESE-WNW, a width of 1.0 km, and a vertical depth of 1.2 km below the surface.

The project's resource block model was prepared using Leapfrog Geo software v.2021.2.5 with the Edge Extension. Cartier provided the drilling database in Microsoft Excel format. They also provided preliminary 3D modelling of topographic and bedrock surfaces and the interpretation of gold-bearing structures built in GeoticMine software. The interpretation was reviewed, validated and then redone using Leapfrog and the intersects of the gold-bearing structures generated in GeoticMine. Edge was used for the resource estimation, consisting of 3D block modelling and interpolation using the OK method. Statistical studies and variography were done using Supervisor v.8.14 software. Capping and several validations were carried out in Microsoft Excel and Supervisor.

The main steps in the methodology were as follows:

- A 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)
- 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 parameters for an underground scenario
- Mineral resource statement

14.2.2 West Nordeau – Drill hole Database

The issuer provided the final West Nordeau drill hole database on July 12, 2022. It contains 154 diamond drill holes (drilled from surface only) totalling 55,097 m, including 18,973 assays representing 19,785 m of sampled drilled core or 36% of the total drilled length.

The resource database contains a subset of 125 holes drilled in the resource volume area, all of which are considered historical drill holes as they were not drilled by Cartier (Figure 14-10). The holes were generally drilled at a regular spacing of 50 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 resource database includes tables of the drill hole composites and wireframe solid intersections required for statistical evaluation and resource block modelling.

14.2.3 West Nordeau – Geological model

The QPs reviewed and validated the preliminary interpretation provided by Cartier's senior geologist, Mr. Ronan Déroff (P.Geo.), for the North and Central corridors. Deroff's geological interpretation used historical drilling information. The QPs remodelled the mineralized structures using the vein modelling module in Leapfrog using an automatic interval selection based on the intersects of the interpreted gold-bearing structures (the preliminary interpretation provided by Cartier). Cartier used GeoticMine to generate these intersects, which were reviewed and validated by the QPs. The modelled mineralized structures have a minimum thickness of 2.4 m.

Eight (8) mineralized structures were modelled: three (3) in the Central Corridor (structures 5B, 5M, and 5N) and five (5) in the North Corridor (structures 1A, 1B, 2, 3 and 4B) (Figure 14-11).

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

The topography surface was created using data from a 2017 LIDAR survey (available from the MFFP) with a resolution of approximately 2 m. The overburden-bedrock contact surface was modelled using logged overburden intervals and was used to clip the 3D wireframes of the interpreted gold-bearing structures.

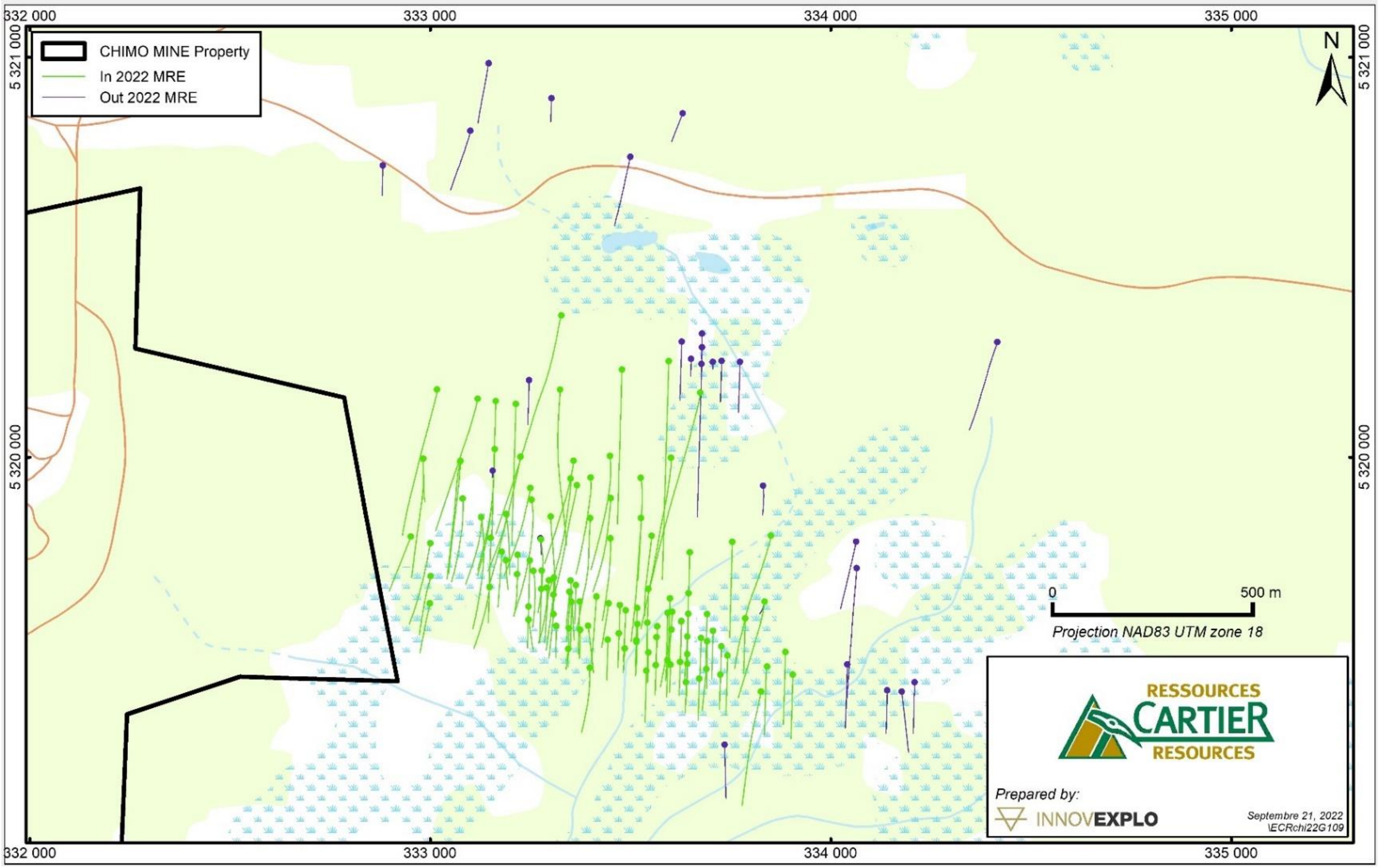


Figure 14-10 – Validated drill holes used for the West Nordeau 2022 MRE

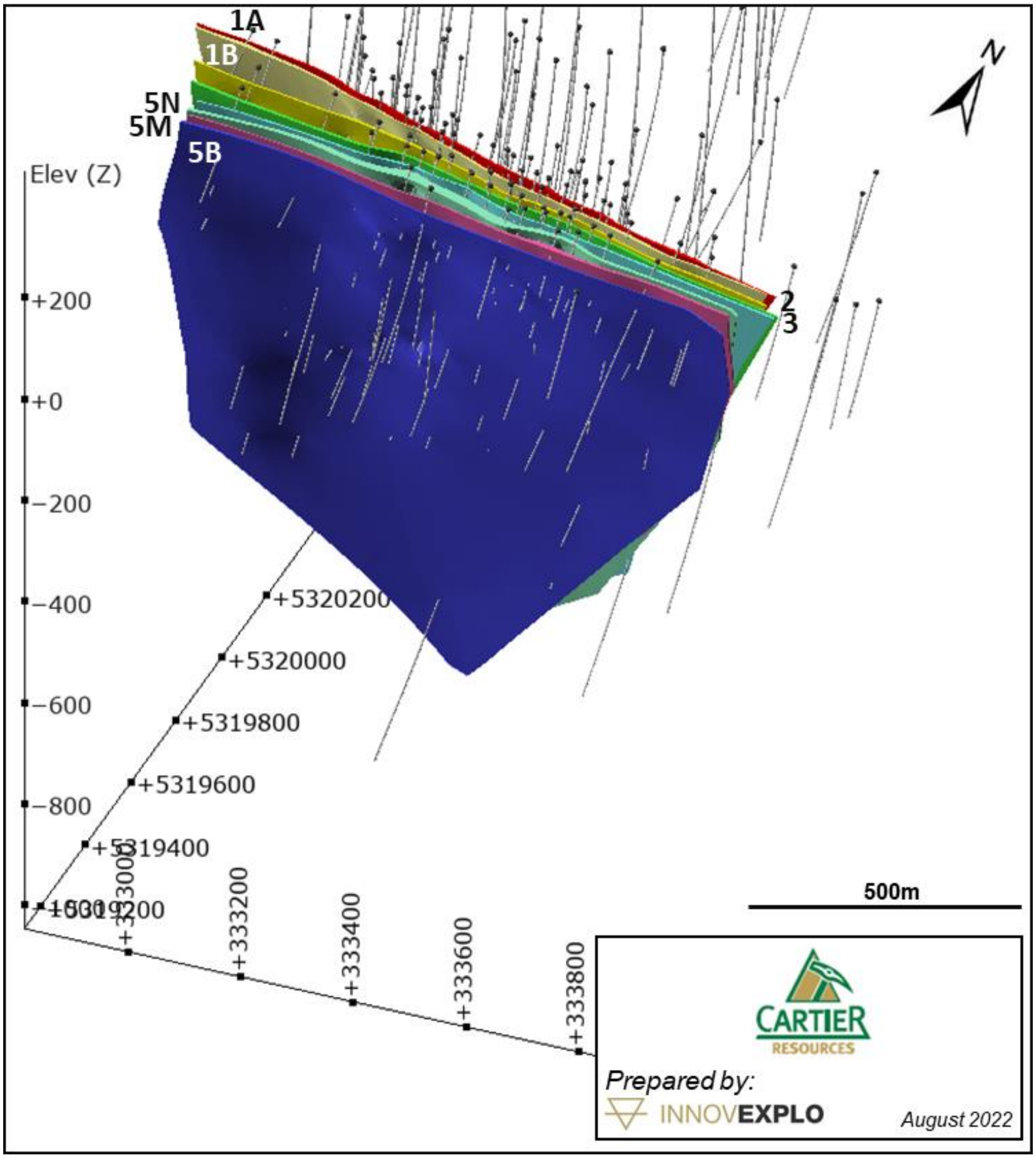


Figure 14-11 – Isometric view of the structures of the West Nordeau Deposit

14.2.4 West Nordeau – High-grade capping

Basic univariate statistics were completed on all individual structures. Capping was applied to raw assays. The selected capping values are the same as those used for the Chimo Mine 2021 MRE, respective to each structure. The QPs came to this decision by combining the dataset analysis (COV, decile analysis, metal content) with the probability plot and log-normal distribution of grades. Figure 14-8 presents a summary of the statistical analysis for each structure. Figure 14-12 shows an example of graphs supporting the capping value for the 5N Structure.

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Table 14-10 – West Nordeau Deposit – Summary statistics for the diamond drill holes raw assays

Gold Corridor – Gold Structure	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	179	4.3	0.22	2.75	-	-	-	-	-	-
North – 1B	240	10.03	0.28	3.9	-	-	-	-	-	-
North – 2	259	34.3	0.29	7.52	-	-	-	-	-	-
North – 3	383	44.7	0.65	4.75	-	-	-	-	-	-
North – 4B	450	8.47	0.39	2.02	-	-	-	-	-	-
Central – 5B	273	19.65	0.49	3.74	-	-	-	-	-	-
Central – 5M	349	20.78	0.39	3.81	-	-	-	-	-	-
Central – 5N	1,739	187.9	1.54	3.98	65	3	0.17%	1.45	4.14	3.81%

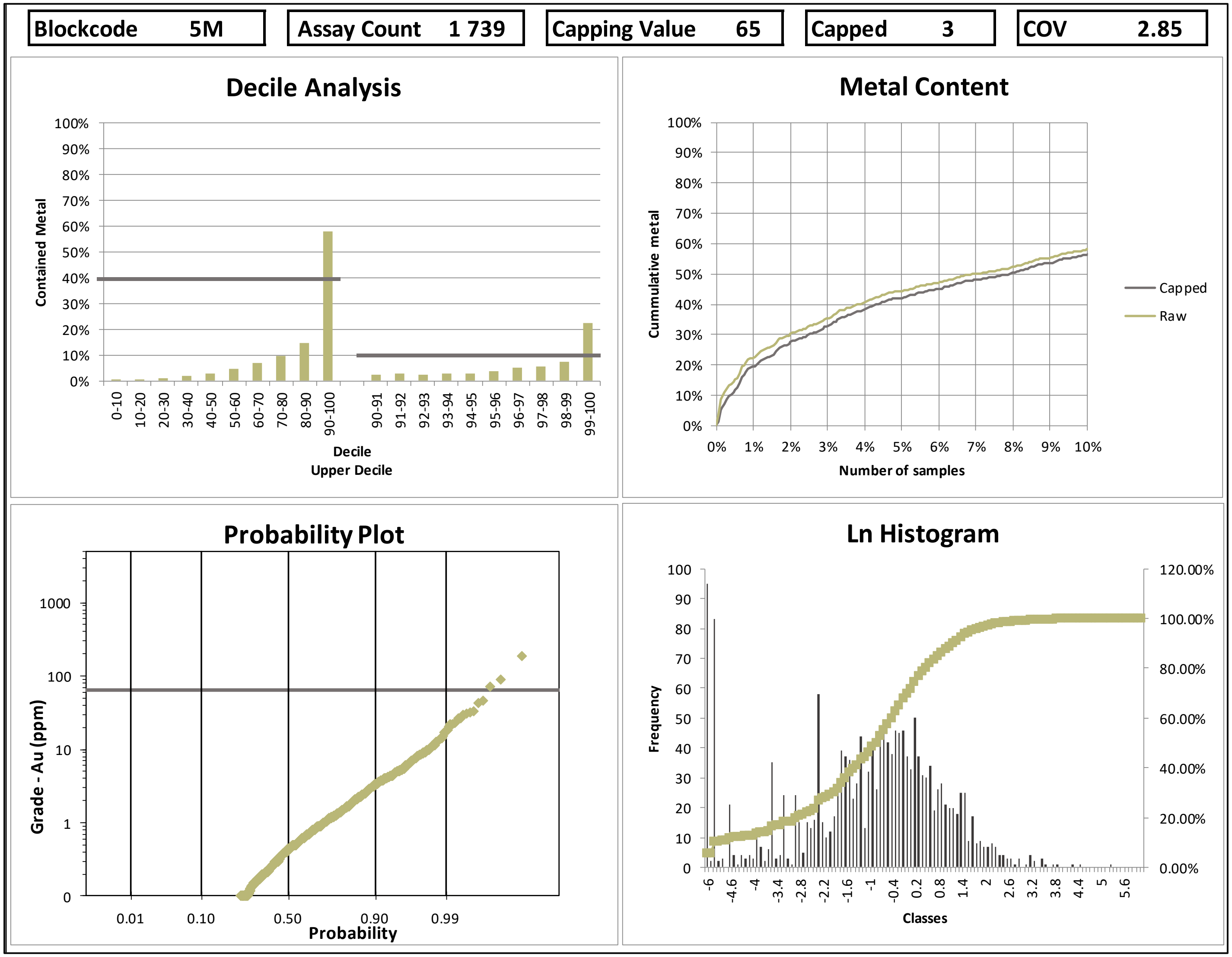


Figure 14-12 – West Nordeau Deposit - Example of graphs supporting a capping value of 65 g/t Au for the 5N Structure

14.2.5 West Nordeau – Compositing

To minimize any bias introduced by the variable sample lengths, the gold assays of the diamond drill holes data were composited to 1-m lengths in each mineralized structure. The thickness of the 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 14-11 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 14-11 – West Nordeau Deposit – Summary statistics for the diamond drill holes composites

Gold Corridor - Gold Structure	Cut Assays		Composite			
	Mean (g/t Au)	COV	No. of composites	Max (g/t Au)	Mean (g/t Au)	COV
North – 1A	0.11	3.87	399	4.30	0.11	3.41
North – 1B	0.13	5.28	422	5.58	0.13	4.14
North – 2	0.08	6.68	436	2.40	0.08	3.09
North – 3	0.34	5.92	628	30.43	0.34	5.07
North – 4B	0.26	2.69	632	8.47	0.26	2.41
Central – 5B	0.30	4.54	382	15.49	0.30	3.89
Central – 5M	0.22	4.45	513	14.05	0.22	3.77
Central – 5N	1.07	3.06	1,573	64.78	1.07	2.51

Max = maximum; COV = coefficient of variation

Note: The mean and COV values of capped assays differ from Table 14.8 because a grade of 0.00 g/t Au was assigned to unsampled intervals and were accounted for in the statistics shown in this table.

14.2.6 West Nordeau – Bulk Density

The only known SG measurements for the West Nordeau Deposit are for six (6) mineralized samples from West Nordeau collected from historical hole 10-484-82-30. The average of these measurements is 2.90 g/cm^3 (Langton and Jourdain, 2019). The QPs decided to use the same density values as for the Chimo Mine 2022 MRE (justified in Table 14-3): 2.90 g/cm^3 for gold structures 2, 3, 4B, 5B, 5M and 5N and 3.10 g/cm^3 for structures 1A and 1B, which are associated with the iron formation unit. A density value of 2.90 g/cm^3 was assigned to the bedrock outside the structures, and 2.00 g/cm^3 to the overburden.

14.2.7 West Nordeau – Block Model

The West Nordeau 2022 MRE block model includes all the mineralized zones. Due to the different orientations of the interpolation domains (Zone 3 vs Zone 4), a rotated sub-block model was used in Edge, rotated 15° on the Z axis in the general trend of the gold structures. The gold structures (interpolation domains) were used as sub-blocking triggers.

The origin of the block model is the upper-southwest corner. Block dimensions reflect drill spacing, the size and thickness of the gold structures, and plausible mining methods.

Error! Not a valid bookmark self-reference. shows the properties of the block model.

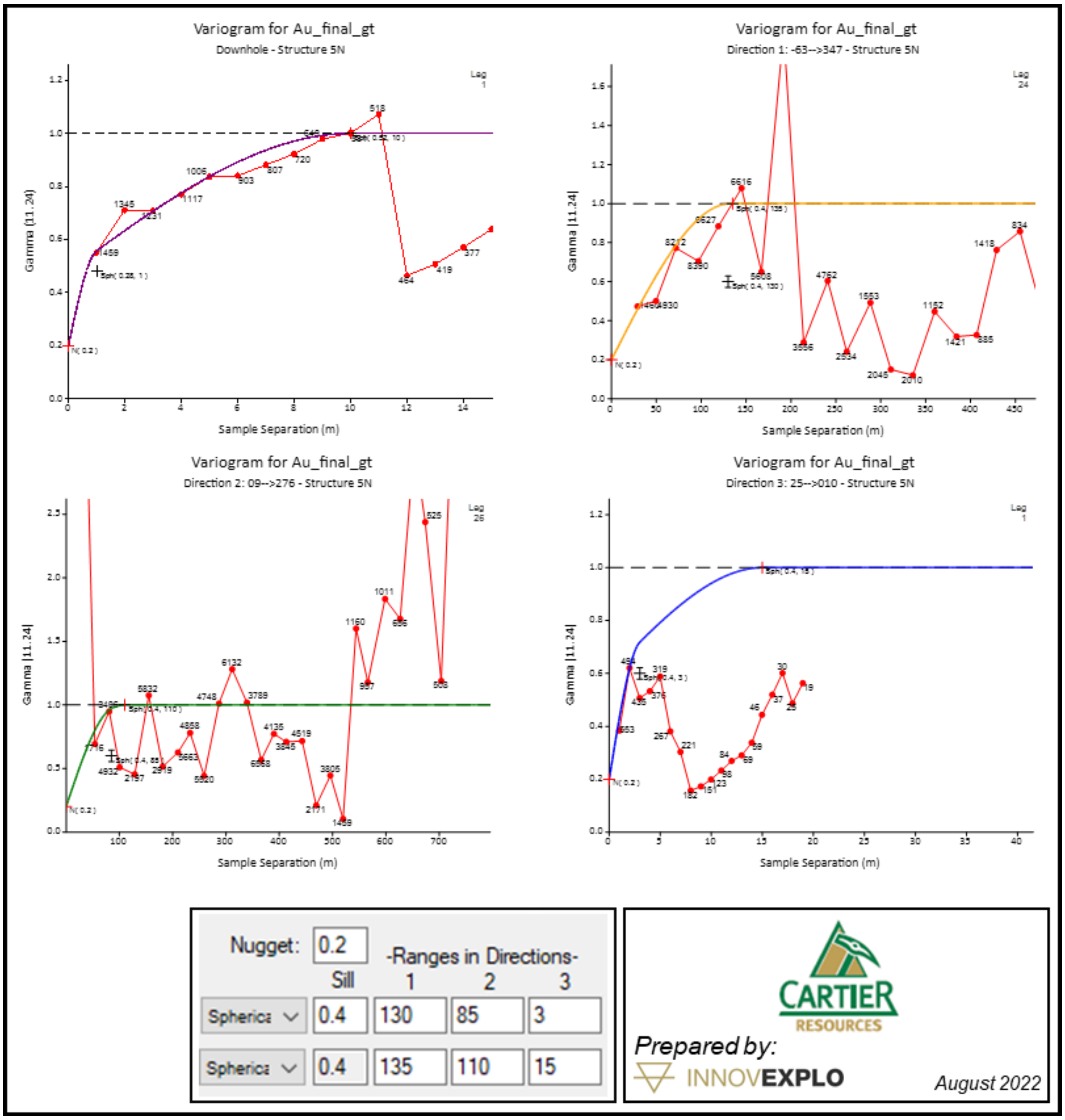
Table 14-12 – West Nordeau Deposit – Block model properties

Properties	X	Y	Z
Block Model Origin (UTM NAD83 Zone 18)	332687	5319436	390
Number of parent blocks	269	164	262
Block size (m)	5	5	5
Minimum sub-block size (m)	1	1	1
Block extent (m)	1,995	480	1,725
Rotation	-	-	°15

14.2.8 West Nordeau – Variography and search ellipsoids

The 3D variography, carried out in Snowden Supervisor v.8.14, yielded a best-fit model along an orientation that roughly corresponds to the strike and dip of the mineralized structures. The QPs used dynamic anisotropy to interpolate each gold structure. They adjusted the search ellipsoids (based on the variogram models) to fit each structure's mean orientation (azimuth and dip).

Figure 14-13 shows an example of the variography study for the 5N structure. Figure 14-14 presents an example of the search ellipse according to the composite data points for the same structure.



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

Figure 14-13 – West Nordeau Deposit – Example of continuity variograms for the 5N search ellipsoids

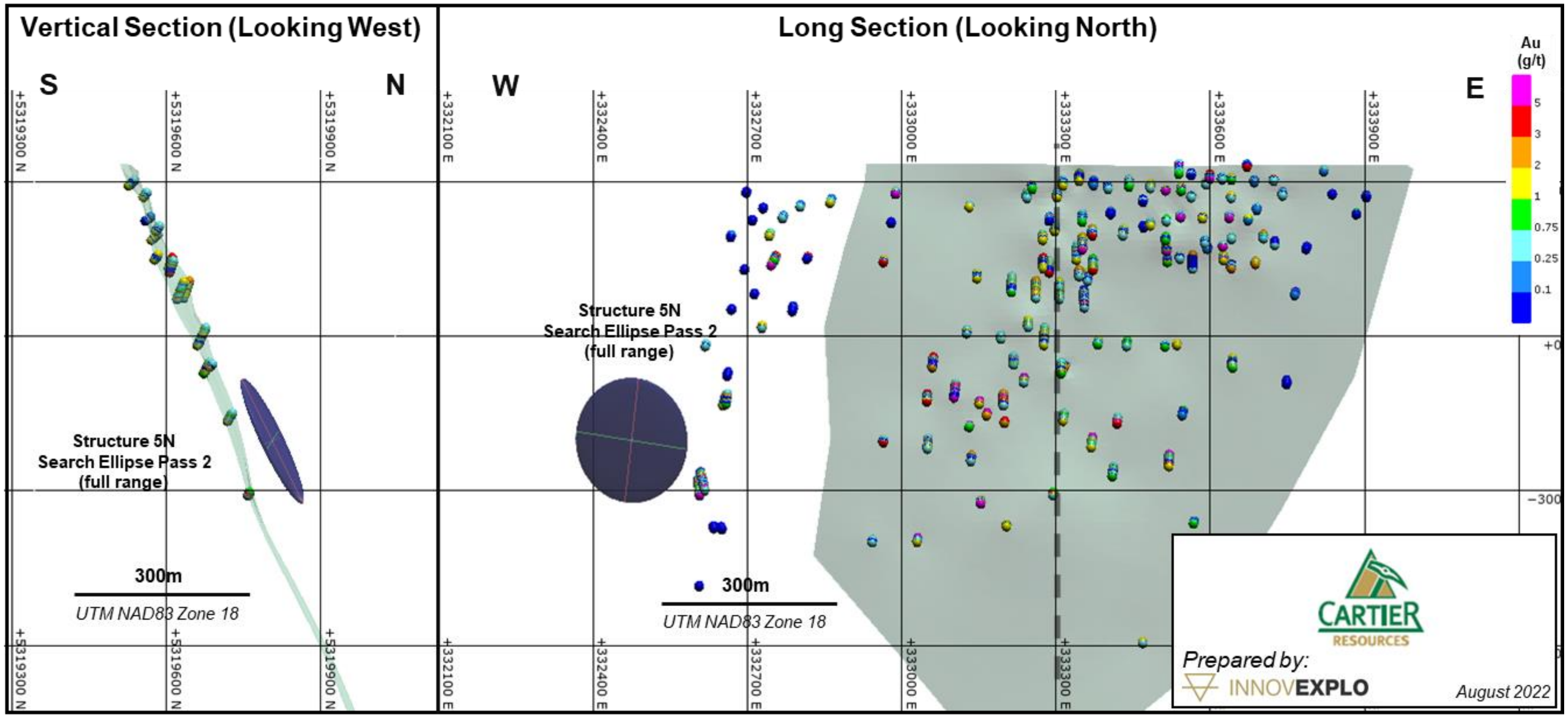


Figure 14-14 – Section view (vertical and longitudinal) of the search ellipsoid used for the 5N structure during the second interpolation pass (West Nordeau Deposit)

14.2.9 West Nordeau – Grade Interpolation

The variography study provided the parameters to interpolate the grade model using the composites. The interpolation inside each domain was run in Edge on point datasets corresponding to the mid-points of the composite intervals. A three-pass strategy was used with the capped composites. The capped composites for the Chimo Mine 2022 MRE (Table 14-2) were combined with those of the West Nordeau 2022 MRE to interpolate blocks, especially the ones close to the western boundary of the resource area, inside each gold structure (i.e., the 5N structure, the capped composites of the 5N structure from the Chimo Mine 2022 MRE and the Nordeau 2022 MRE were used to interpolate blocks inside the 5N structure).

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 Edge are summarized in Table 14-13.

Table 14-13 – West Nordeau Deposit – Search ellipsoid parameters by structure

Gold Structure	Pass	Min Cmp.	Max Cmp.	Max Cmp./ diamond drill holes	Min diamond drill holes	Leapfrog Rotation			Ranges		
						Dip	Dip Az	Pitch	X (m)	Y (m)	Z (m)
1A / 1B	1	6	16	4	2	Dynamic Anisotropy		60	37.5	30	10
	2	4	16	0	1				75	60	20
	3	2	12	0	1				150	120	40
2 / 3 / 4B	1	6	16	4	2	Dynamic Anisotropy		70	60	55	17.5
	2	4	16	0	1				120	110	35
	3	2	12	0	1				240	220	70
5B / 5M / 5N	1	6	16	4	2	Dynamic Anisotropy		80	55	50	10
	2	4	16	0	1				110	100	20
	3	2	12	0	1				220	200	40

14.2.10 West Nordeau – Block model validation

Validation was done visually and statistically by the QPs to ensure that the final mineral resource block model is consistent with the primary data.

First, the volume estimates for each code attributed to the mineralized zones were compared between the block model and the three-dimensional wireframe models.

Additionally, block model grades, composite grades and assays were visually compared on sections, plans and longitudinal views for 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. Figure 14-15 compares the composite grades to the block model.

The trend and local variation of the estimated OK and ID2 models were compared to the NN model and composite data, statistically, using swath plots in three directions (along sections at N015 and N105 and along the Z axis) for blocks interpolated by pass 1 and pass 2 (the 5N structure is shown as an example in Figure 14-16, Figure 14-17 and Figure 14-18).

The comparison between composite and block grade distribution did not identify significant issues.

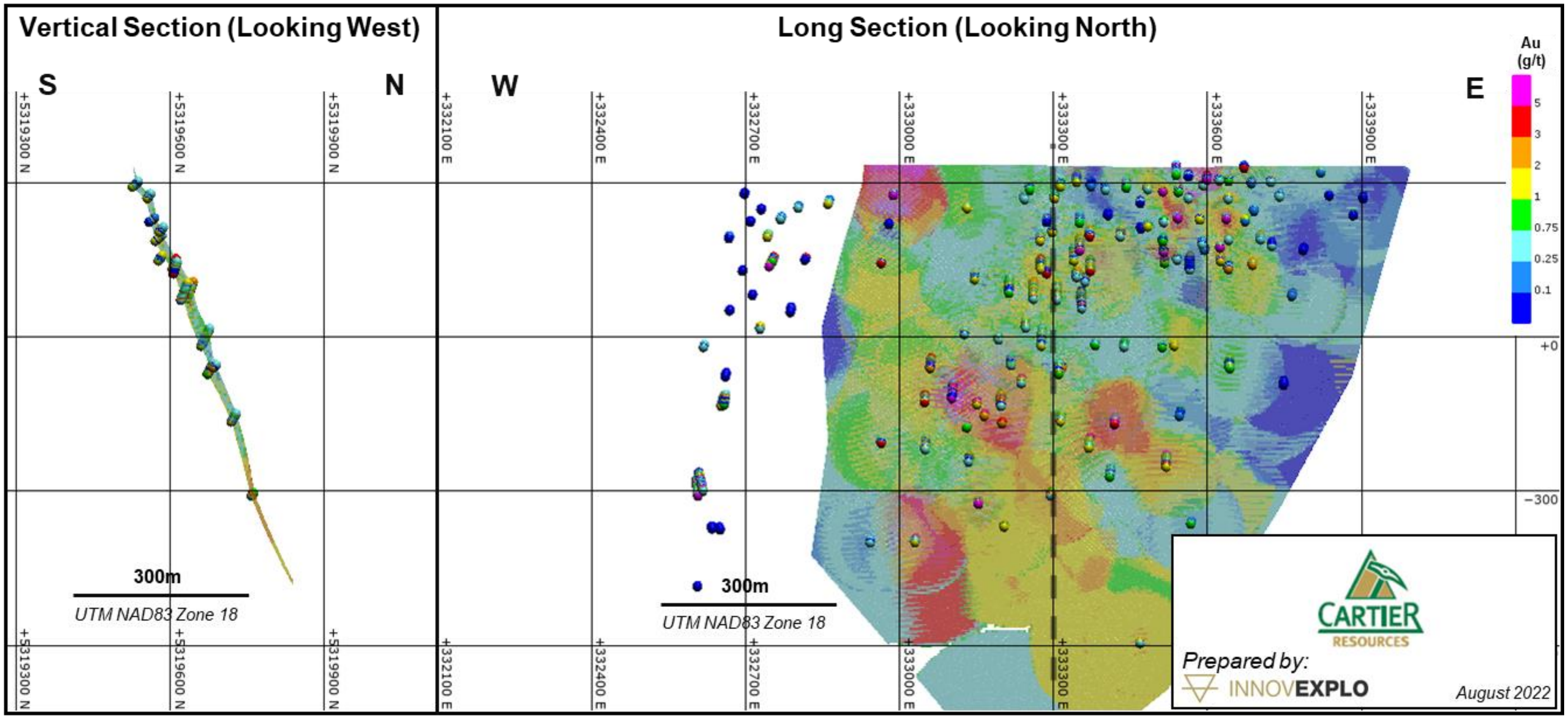


Figure 14-15 – Validation of the interpolated results for the 5N structure (West Nordeau Deposit)

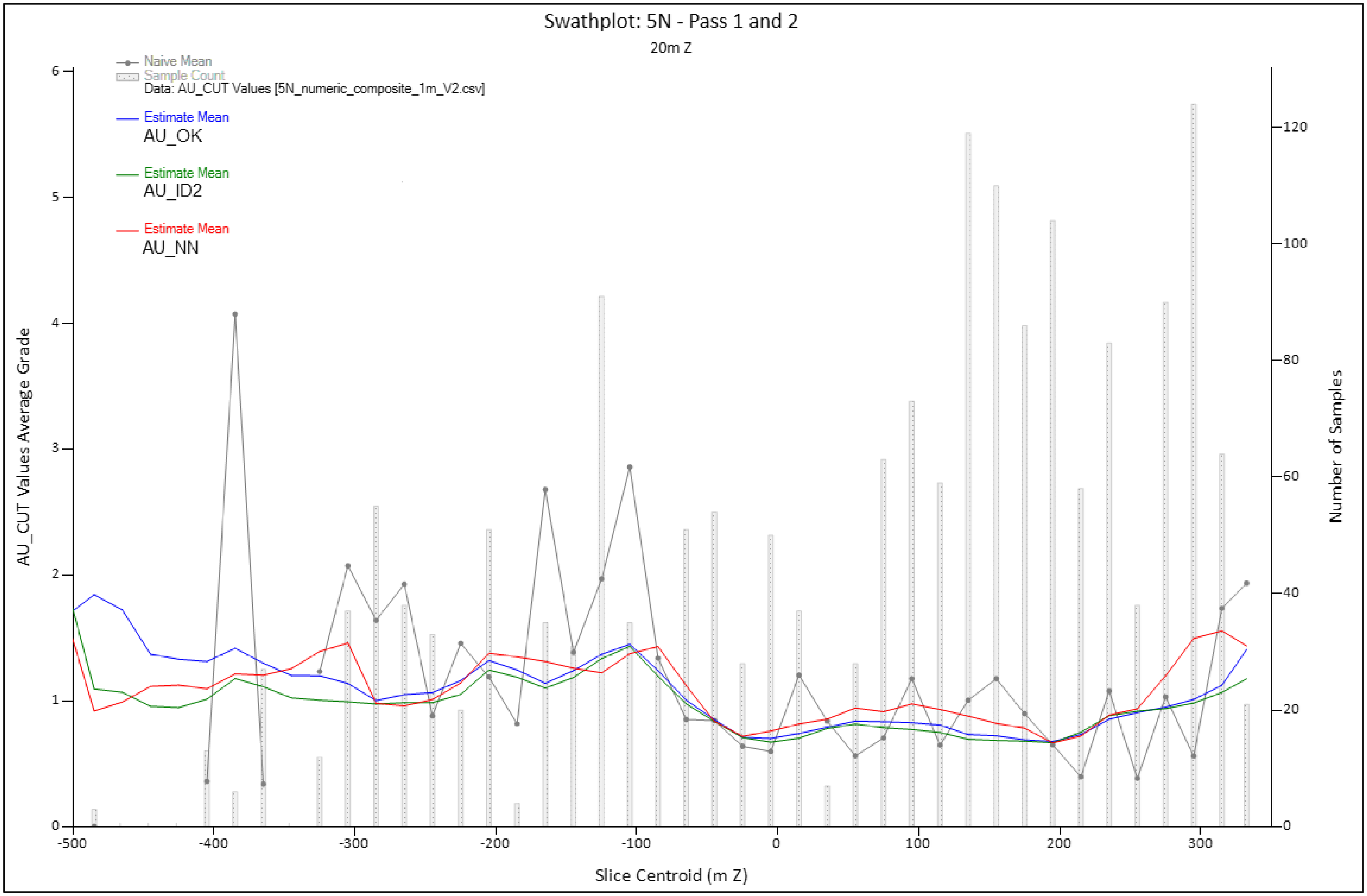


Figure 14-16 – Structure 5N swath plot comparison of block estimates along the Z axis (West Nordeau Deposit)

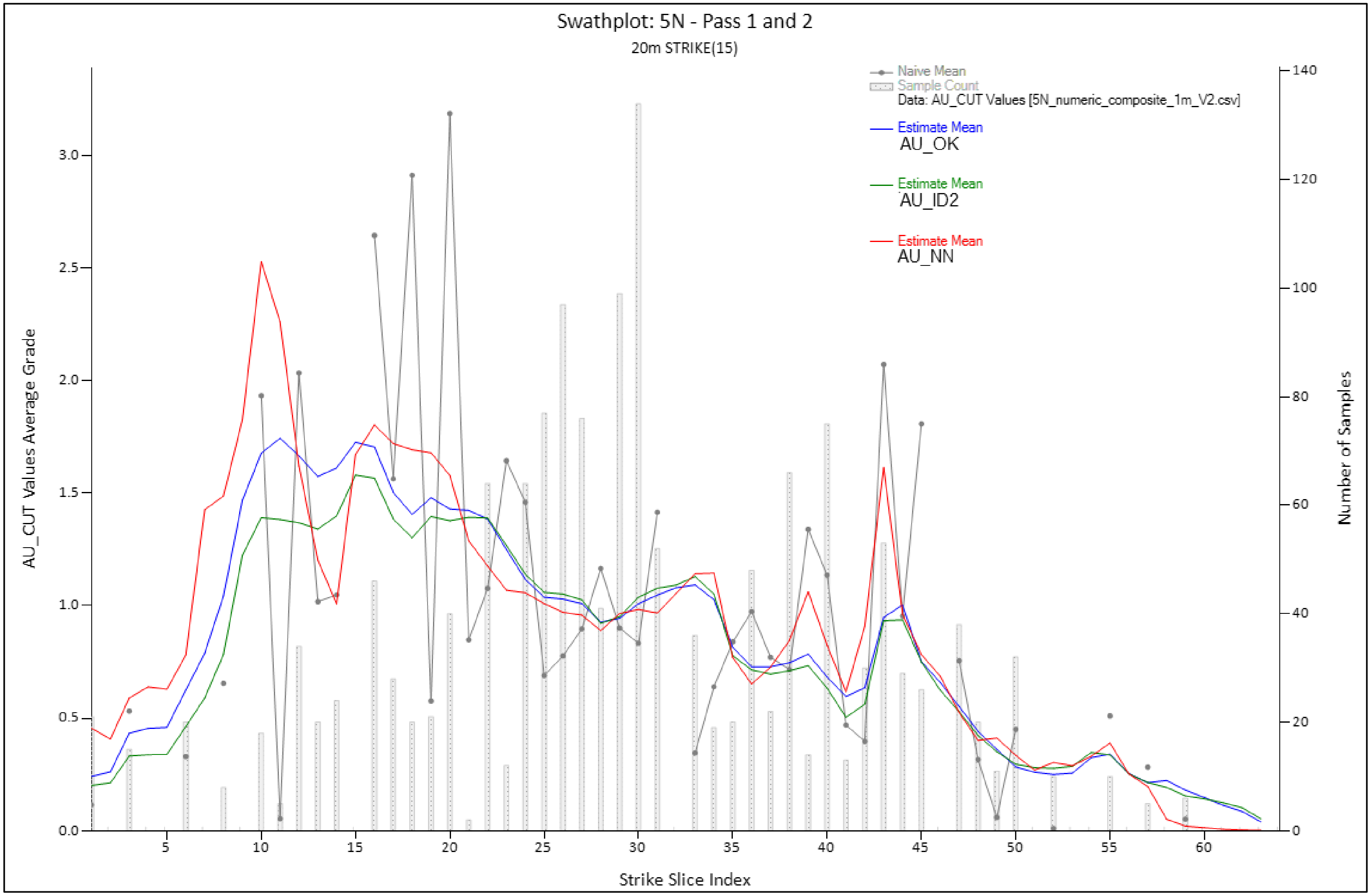


Figure 14-17 – Structure 5N swath plot comparison of block estimates along sections at N015 (West Nordeau Deposit)

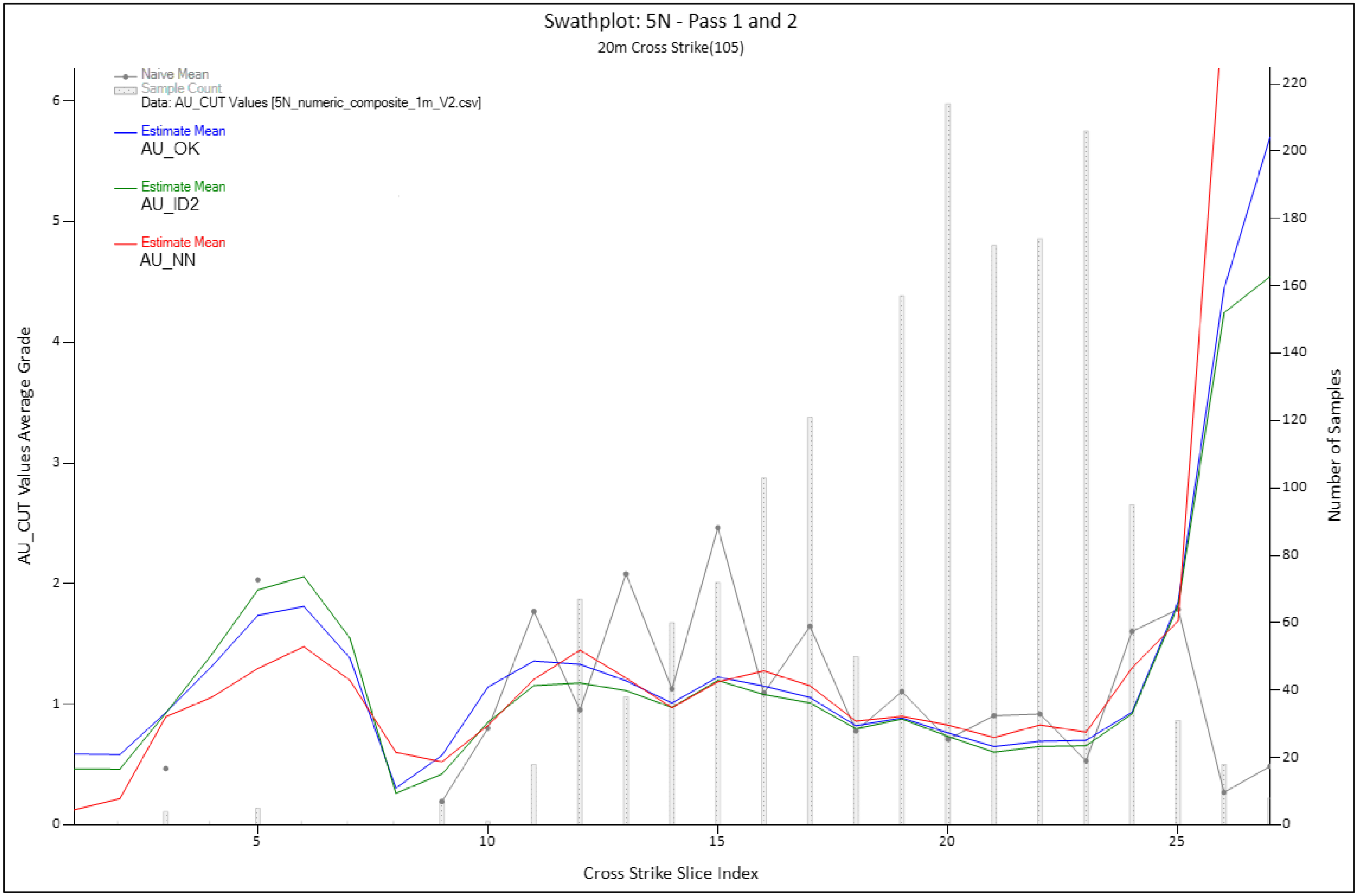


Figure 14-18 – Structure 5N swath plot comparison of block estimates along sections at N105 (West Nordeau Deposit)

14.2.11 West Nordeau – Mineral resource classification

The West Nordeau MRE 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.

14.2.12 West Nordeau – Economic parameters and cut-off grade

West Nordeau economic parameters and cut-off grade are based on the same assumptions as for the Chimo Mine 2022 MRE (see Table 14-7): gold price of US$1,612/oz, USD:CAD exchange rate of 1.34, mining costs of CAD$50.75/t (Central) and CAD$75.50/t (North and South), definition drilling costs of CAD$3/t (Central) and CAD$6/t (North and South), transport cost of CAD$9.80/t; environmental cost of CAD$ 0.75/t (Central) and CAD$1.50/t (North and South); processing cost of CAD$17/t; and G&A of CAD$12/t. The difference in royalties (1% NSR for Chimo Mine and 3% GMR for West Nordeau) were considered in the cut-off grade calculation but did not significantly affect the results.

The reasonable prospect for an eventual economic 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 for the Central Corridor and 2.0 g/t Au for the North and South corridors.

14.2.13 West Nordeau – Mineral resource estimate

The QPs are of the opinion that the current mineral resource estimate for the West Nordeau Deposit 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 QPs are also of the opinion that the requirement of reasonable prospects for eventual economic extraction has been met by: having a minimum width for the modelling of the gold structures, a cut-off grade based on reasonable inputs and constraints consisting of mineable shapes for the underground extraction scenario.

The West Nordeau 2022 MRE is considered reliable and based on quality data and geological knowledge. The estimate follows CIM Definition Standards and Best Practice Guidelines.

The West Nordeau 2022 MRE is considered reliable and based on quality data and geological knowledge. The estimate follows CIM Definition Standards and Best Practice Guidelines.

Figure 14-19 shows the classified mineral resources within the constraining volume for the West Nordeau 2022 MRE.

Table 14-14 displays the West Nordeau 2022 MRE results at the official cut-off grades of 1.5 and 2.0 g/t Au for an underground scenario.

Table 14-15 shows the cut-off grade sensitivity analysis of the West Nordeau 2022 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 to demonstrate the resource model's sensitivity to the selection of a reporting cut-off grade and should not be taken out of context.

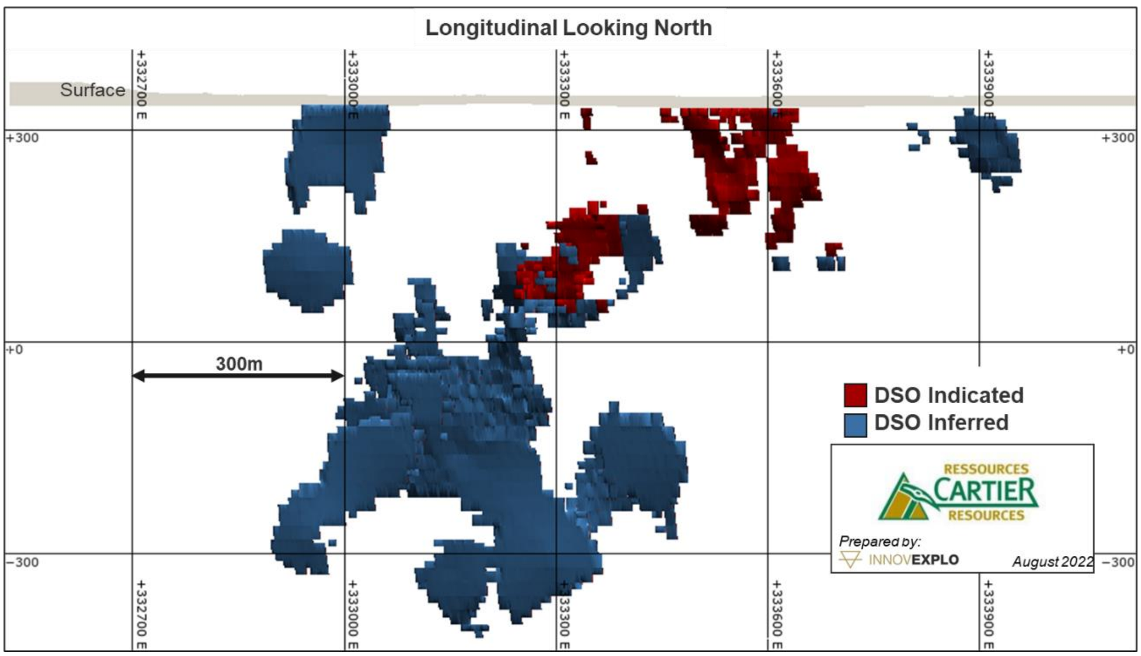


Figure 14-19 – Classified mineral resources within the constraining volume for the West Nordeau 2022 MRE

Table 14-14 – 2022 Mineral Resource Estimate for the West Nordeau Deposit

Corridor Cut-off Grade (g/t Au)	Indicated Mineral Resources			Inferred Mineral Resources		
	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)
North Gold (>2.0)	-	-	-	151,000	3.50	17,000
Central Gold (>1.5)	512,000	2.19	36,000	3,084,000	2.60	258,000
Total	512,000	2.19	36,000	3,235,000	2.64	275,000

Please refer to **Table 14-16** notes for the Mineral Resources Estimate notes

Table 14-15 – Cut-off grade sensitivity analysis for the West Nordeau Deposit

Cut-off Grade (g/t Au)	North Gold Corridor			Central Gold Corridor		
	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)
Indicated Mineral Resources						
1.00	20,000	1.19	1,000	1,303,000	1.55	65,000
1.25	8,000	1.42	300	834,000	1.83	49,000
1.50	3,000	1.63	200	**512,000**	**2.17**	**36,000**
1.75	1,000	1.78	100	355,000	2.47	28,000
2.00	**0**	**0.00**	**0**	260,000	2.75	23,000
2.25	0	0.00	0	181,000	3.10	18,000
2.50	0	0.00	0	137,000	3.41	15,000
2.75	0	0.00	0	103,000	3.76	12,000
Inferred Mineral Resources						
1.00	804,000	1.70	44,000	5,597,000	1.96	352,000
1.25	546,000	2.01	35,000	4,029,000	2.30	298,000
1.50	328,000	2.47	26,000	**3,084,000**	**2.60**	**258,000**
1.75	218,000	2.93	21,000	2,360,000	2.93	222,000
2.00	**151,000**	**3.45**	**17,000**	1,833,000	3.26	192,000
2.25	115,000	3.90	14,000	1,491,000	3.54	169,000
2.50	95,000	4.25	13,000	1,225,000	3.81	150,000
2.75	82,000	4.54	12,000	1,037,000	4.05	135,000

14.3 Chimo Mine Gold System 2022 MRE (combined Chimo Mine and West

Nordeau Gold Deposits)

The Chimo Mine Gold System 2022 MRE combines the updated mineral resource estimates for the Chimo Mine and West Nordeau Deposits. Table 14-16 displays the results of the 2022 MRE at the official cut-off grades of 1.5 and 2.0 g/t Au for an underground scenario.

Table 14-17 shows the cut-off grade sensitivity analysis of the 2022 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 to demonstrate the resource model's sensitivity to the selection of a reporting cut-off grade and should not be taken out of context.

Table 14-16 – Chimo Mine Gold System 2022 Mineral Resource Estimate (combined Chimo Mine and West Nordeau Gold Deposits)

Gold Corridor Cut-off Grade (g/t Au)	Indicated Mineral Resources			Inferred Mineral Resources		
	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)
North (>2.0)	1,119,000	3.85	139,000	1,714,000	3.54	1,950,00
Central (>1.5)	5,565,000	2.96	529,000	14,812,000	2.56	1,221,000
South (>2.0)	444,000	3.61	52,000	1,949,000	3.47	217,000
Total	7,128,000	3.14	720,000	18,475,000	2.75	1,633,000

Mineral Resource Estimates notes:

1. The independent and qualified persons, as defined by NI 43-101, are Vincent Nadeau-Benoit, P.Geo., Alain Carrier, M.Sc., P.Geo., and Marc R. Beauvais, P.Eng. (InnovExplo). The effective date is August 22, 2022.
2. The mineral resources are not mineral reserves as they do not have demonstrated economic viability. The mineral resource estimates follow CIM Definition Standards and CIM Best Practice Guidelines.
3. For the Chimo Mine Deposit, seventeen (17) structures were modelled using a minimum true thickness of 2.4 m: five (5) for the North Corridor; five (5) for the South Corridor; and seven (7) for the Central Corridor. For the West Nordeau Deposit, eight (8) structures were modelled using a minimum true thickness of 2.4 m: five (5) for the North Corridor; and three (3) for the Central Corridor.
4. A density value of 2.90 g/cm^3 or 3.10 g/cm^3 (supported by measurements) 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 before 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 economic 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 for the Central Corridor and 2.0 g/t Au for the North and South corridors. The cut-off grade reflects the geometry and 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, mining cost of CAD$50.75/t (Central) and CAD$75.50/t (North and South), definition drilling cost of CAD$3/t (Central) and CAD$6/t (North and South), transport cost of CAD$9.80/t; environment cost of CAD$ 0.75/t (Central) and CAD$1.50/t (North and South); processing cost of CAD$17/t; and G&A of CAD$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. For the Chimo Mine Deposit, the mineral resources were estimated using GEOVIA GEMS software v.6.8.2 from capped and composited assays constrained by the modelled structures. The ordinary kriging method was used to interpolate a block model (block size = 5 m x 5 m x 5 m). For the West Nordeau Deposit, the mineral resources were estimated using Leapfrog Edge software v.2021.2.5 from capped and composited assays constrained by the modelled structures. The ordinary kriging method was used to interpolate a sub-blocked model (parent block size = 5 m x 5 m x 5 m).
8. The resource estimates are 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. The inferred category is defined by 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 (tonnes) 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 independent and qualified persons for the 2022 MRE are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issues that could materially affect the mineral resource estimate.

Table 14-17 – Cut-off grade sensitivity analysis for the Chimo Mine Gold System 2022 MRE (combined Chimo Mine and West Nordeau Gold Deposits)

Cut-off Grade (g/t Au)	North Gold Corridor			Central Gold Corridor			South Gold Corridor		
	Metric Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Metric Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)	Metric Tonnes (t)	Grade (g/t Au)	Gold Ounces (oz Au)
Indicated Mineral Resources									
1.00	2,311,000	2.64	196,000	8,105,000	2.41	627,000	843,000	2.62	71,000
1.50	1,607,000	3.21	166,000	**5,565,000**	**2.96**	**529,000**	630,000	3.06	62,000
2.00	**1,119,000**	**3.85**	**139,000**	3,856,000	3.49	433,000	**444,000**	**3.61**	**52,000**
2.50	785,000	4.52	114,000	2,725,000	4.03	353,000	293,000	4.25	40,000
Inferred Mineral Resources									
1.00	4,583,000	2.19	323,000	23,699,000	2.06	1,572,000	4,830,000	2.24	348,000
1.50	2,714,000	2.84	248,000	**14,812,000**	**2.56**	**1,221,000**	2,897,000	2.91	271,000
2.00	**1,714,000**	**3.54**	**195,000**	9,167,000	3.07	904,000	**1,949,000**	**3.47**	**217,000**
2.50	1,240,000	4.01	160,000	5,966,000	3.52	675,000	1,351,000	3.96	172,000

15. MINERAL RESERVE ESTIMATES

Not applicable at the current stage of the Project.

16. MINING METHODS

16.1 Introduction

This item discusses the proposed mine plan for the potential reopening of the Chimo mine (the "Chimo Mine Project" or "Project") developed by InnovExplo for the 2023 PEA. The mine plan presented herein is based on the 2022 MRE produced by InnovExplo. The indicated and inferred resources of the 2022 MRE were converted into economically mineable shapes, based on the parameters described in Item 14, for the underground mining of subvertical veins.

The Project will involve an underground operation with a mining method optimized to the deposit geometry, with longitudinal long-hole retreat as a preferred mining method. Mining will take place around the historic Chimo mine in the renamed Chimo Mine Main Sector, in addition to three new mining sectors to the east and in-depth: East Chimo Mine, Chimo Mine Extension and West Nordeau. Mining and development will take advantage of the rehabilitated shaft, which will be used for material and supplies handling, and a new portal to access the top of the Main Sector.

The proposed mine plan minimizes operational risks while optimizing mining development, production, scheduling and feasibility. The material handling systems were optimized to benefit from the existing infrastructure and the sub-vertical deposit. Mined-out voids will be filled using a combination of cemented rockfill ("CRF") and rockfill to ensure maximum mineralized material recovery and rock stability. Adjusted performances were considered for excavation near existing openings and in relation to more problematic structures, like the graphite formation.

The current mine plan will sustain production of 4,500 tpd while in production, with a three-year pre-production period. An additional objective of the Project is the reduction of CO_2 emissions and reduced environmental footprint of mine tailings by employing appropriate technologies, mining strategies and practices. The Chimo underground mine is designed to create a safe working environment and reduce the consumption of non-renewable energy using electric and high-efficiency technologies. The Project intends to take advantage of supplementary technological advances as they become available, including ventilation-on-demand and high-efficiency fans to reduce power requirements.

The reader is cautioned that this PEA is preliminary in nature. The PEA includes Inferred Mineral Resources that are too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

16.2 Rock Engineering

16.2.1 Historical Practices

The Chimo mine was in operation intermittently between 1966 to 1997. Although the first claims were staked in 1936, it was only in 1964 that Chimo Gold Mines started sinking a shaft to a depth of 190 m and developed three levels. Production officially started in January 1966 and ended in August 1967. Up to this time, 63,162 ounces of gold had been produced from 140,000 metric tonnes of mineralised material (Viens and Blouin, 1991). After a new exploration campaign, reserves were then estimated at 993,000 tonnes of mineralised material grading 5.45 g Au/t (Sauvé et al., 1986). Louvem Mines Inc. resumes the exploitation of the Chimo mine between 1984 and 1988 extracting a total of 493,000 tonnes at an average grade of 5.69 grams gold per tonne. The mine was then operated by Cambior Inc. from 1989 to 1997. Following infrastructure rehabilitation and the sinking of a shaft to 930 meters, Cambior mined 1,692,000 tonnes at a grade of 3.83 grams of gold per tonne (Blue Note Mining, 2010). During its various periods of operation, the production rate at Chimo Mine varied from 300 to 1,000 tonnes per day (Bonneville, 2020).

Figure 16-1 shows a longitudinal view of the entire mine plan with old mined out stopes, in grey, and new stopes, in pale blue, for the entire Chimo Mine Project.

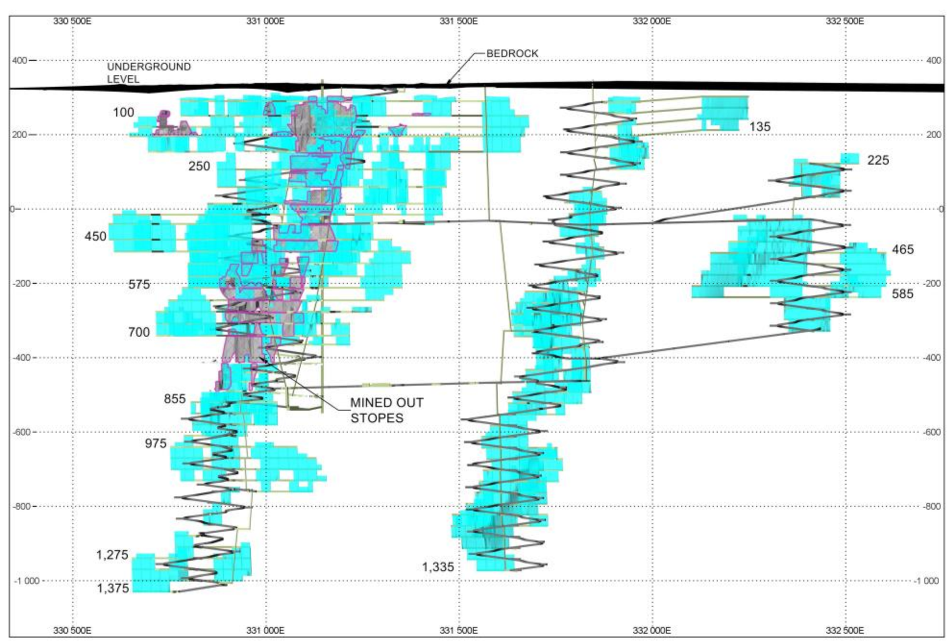


Figure 16-1 – Overview of the Chimo Mine Project

The main characteristics of the mining method used in the past at the Chimo mine are as follows:

- From 1988 to 1993: Open stopes, minimum height of 30 m, 4" diameter long-holes. Extraction retreating to the east (shaft).
- From 1994 to 1997: Backfilled stopes, paste fill, stope height of 75-80 m, 4" diameter long-holes. Extraction retreating to the west.

According to Bonneville (2020), the mine was accessed by a conventional timber shaft with three compartments in line. The dimensions of the compartments were 5'0''x5'6". The shaft is 914 m deep, and the mine was developed over 19 levels. Historical production came from zones 1, 2, 3, 5 and 6. Zone 5 was the most important one, and it consisted of several structures. However, rock burst events caused damage in the mine below level 17 and on lower levels. In fact, the dilution caused by unfavourable structures in the hanging wall was originally the only significant operating problem. At some point during mining operations, the western part of Levels 13 and 14 rapidly became unstable, necessitating the mass blasting of the Level 14 stopes. Following the rise of a notch at the western end from the main area, the gradual degradation of level 13 became evident. Although the active exploitation of the area ceased in April 1993, numerous seismic events continued to occur until October of the same year, some of which were of very high intensity.

Following these events, a strategy for mining zone 5 lenses below level 16 was proposed by CANMET as follows (CANMET, 1994):

- The horizontal dimension of the stopes will be kept at approximately 15 m.
- Mining will generally be done from east to west without leaving pillars.
- When two or three parallel zones are present, mining will be done from north to south.
- Backfilling will immediately follow the mineralised material extraction, and at least two weeks should pass before excavating the adjacent stope.
- The central zone will be mined early in the mining sequence to minimize the presence of personnel near a zone subject to high stresses.
- The pillars (if created) in zones A and B must be aligned in an axis oriented N30W and never in a northeast axis.
- The extraction of the sill pillar of level 16 should only be undertaken on the condition that the mining is slow, very well controlled (immediate backfilling), and that a large part of the pillar of zone B remains in place.
- Backfill quality control should become a routine operation.
- Stress monitoring should be carried out in the central transverse pillar and the shaft pillar.

16.3 Rock Mass Properties

Cambior retained the services of CANMET to analyze the previously mentioned ground problems. According to the final report elaborated by CANMET, Zone 5 of the Chimo mine is in a sequence of andesites and tuffs located south of their contact with a metasediment formation. The regional schistosity is parallel to the stratigraphic units and is oriented N 290 with a dip of 70° N. Longitudinal shear zones alternating with schistose and massive amphiboles are typical of the rock mass at Chimo (CANMET, 1994). The mineralization is consistent with the stratigraphy as the fault and shear zones contain numerous quartz veins and veinlets with disseminated arsenopyrite in the shales around the quartz veins. The network of fractures from levels 17 to 19 is basically the same as that observed above level 17. Qualitative surveys have made it possible to determine the different families of major joints for these levels, which are presented in Table 16-1.

Table 16-1 – Summary of geological structures on levels 8 to 18 (CANMET, 1994)

Level	Zone 5A				Zone 5B			
	Direction	Dip	Spacing	Size	Direction	Dip	Spacing	Size
#	(°)	(°)	(m)	(m)	(°)	(°)	(m)	(m)
8	20	90		2. - 3	30	30		
	240	45		3	90	40		
	140	90		3	275	72		
	170	20		2. - 3	50	90		
					335	65		
9	15	80	-5	2	100	80		
	115	80	-5	1	290	70		5. - 10
	335	80	-5	1	20	90		
	32	10	-5	4	160	30	0.15	5. - 10
10	60	50	0.2	>3	0	70		
	235	85	0.15	>3	25	75		
	115	15	15	>3	102	65		
					13	15		
11	65	50	2	1				
	160	55	1	3. - 5				
	210	87	1 5	>3				
	310	40	3	>3				
	290 (f)	77	0.05	>3				
14	340	88	0	3	30	88	0 5	3. -5
	30	80	0 6	2 3	210	20	0 6	>5
	290	70	5 - 1	>4	115	30	1 5	1
15	290	75		>5	330	70		2. - 3
	20	75		2 - 5	230	85		3
	30	25		2 - 3				
16	0	75		3	295	77	0 5	>5

Level	Zone 5A				Zone 5B			
	Direction	Dip	Spacing	Size	Direction	Dip	Spacing	Size
#	(°)	(°)	(m)	(m)	(°)	(°)	(m)	(m)
	180	25	0.3	5. - 15	0	75	0 5	3
	290	75		>10				
17	40	85	0,1	1	35	80	1	3
	290	80			33	44	1	3
	150	35	1	2. -3	320	75	1	3
					300	17	1	3. - 5
					50	75		
18	35	70						
	285	75						
	320	75						
	300	35						

In addition, the presence of a graphite fault (Figure 16-2) has been documented as a major structure and may require special needs in terms of support and stope performance. This fault should be investigated in more detail at the feasibility level.

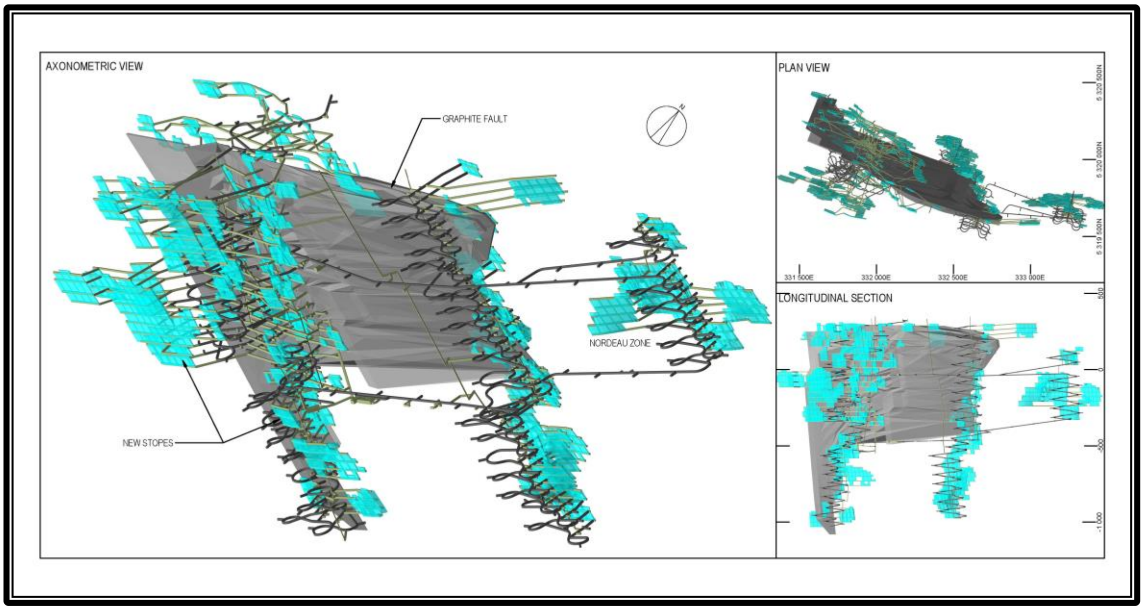


Figure 16-2 – Graphite Fault

16.3.1 Rock Mass Classification

CANMET performed some tests to complete the rock mass characterization. The resulting RMR (Bieniawsky, 1976) and Q-system (NGI) parameters for zones 5A and 5B are presented in Table 16-2 and Table 16-3, respectively.

Table 16-2 – Rock Mass Rating characterization of the historical Chimo mine (CANMET, 1994)

Parameters	5A	5B
Strength of Rock (MPa)	150 – 250	150 – 250
Rating	12	12
RQD (%)	50% – 80%	90% – 100%
Rating	8 – 17	20
Spacing of joints (m)	0.08 – 0.50	0.30 – 0.70
Rating	12	20
Condition of joints	Roughness varying from moderately rough to very smooth, with little or no altered surface, continuous and sometimes with a slight undulation	Slightly rough surfaces, separation ‹ 1mm, hard joint wall rock
Rating	8	20
Groundwater in Joints	Damp	Damp
Rating	10	10
RMR	50 (RQD 50%) – 59 (RQD 80%)	82

Table 16-3 – Q-system characterization of the historical Chimo mine (CANMET, 1994)

Parameters	5A	5B
Rock Quality Designation (RQD)	50 – 80	90
Joint Set Number (Jn)	6	6
Joint Roughness Number (Jr)	1.5	2
Joint Alteration Number (Ja)	1.5	0.75
Joint Water reduction Factor (Jw)	1	1
Stress Reduction Factor (SRF)	5	5
Q index	1.7 (RQD 50%) – 2.7 (RQD 80%)	8

16.4 Stope Dimensioning and Dilution

Stope dimensioning was determined using a combination of the Stability Graph method (Potvin, 1988) for long-hole stoping; a review of the stability of the Historic Chimo Mine stopes (Table 16-4), and the experience of the Authors with similar deposits. Analysis was constrained such that a minimum of 75% of the stopes had stable walls without additional ground support. A transition zone, without support, was accepted for the back of the stopes, as ground support will be present in the drifts. For the other stopes, secondary ground support is planned to maintain stability and to minimize dilution. The 75% factor is important in consideration of the variations of the rock mass conditions in the deposit.

Table 16-4 – Limit Conditions according to estimated parameters from the historical Chimo mine (CANMET, 1994)

					Limit Conditions	
					Good Ground	Graphic Schist
Average					HR = 8.0	HR = 5.2
Level		Elevation		Exposed Height	Stope Width	Stope Width
from	to	from	to	(m)	(m)	(m)
1	2	9917	9879	43	25	14
2	3	9879	9824	60	22	13
3	4	9824	9780	49	24	13
4	5	9780	9736	50	24	13
5	6	9736	9688	53	23	13
6	7	9688	9642	51	23	13
7	8	9642	9588	59	22	13
8	9	9588	9545	48	24	13
9	10	9545	9513	37	28	14
10	11	9513	9481	37	28	14
11	12	9481	9447	39	27	14
12	13	9447	9415	37	28	14
13	14	9415	9383	37	28	14
14	15	9383	9351	37	28	14
15	16	9351	9319	37	28	14
16	17	9319	9287	37	28	14
17	18	9287	9210	82	20	12
18	19	9210	9140	75	20	12

To avoid stability and dilution challenges, stope dimensioning also considered the recommendations made by CANMET in 1994 with the information available at the time, namely:

- A safety measure should be added so that the stope widths are between 15 m and 30 m depending on its height.
- The width of the stopes will be between 2.4 m and 30 m with most widths being in the range of 10 m to 20 m.

- When designing stopes next to a graphitic shear zone, it is assumed that the graphite on the side of the hanging wall will fall off when exposed. In these cases, the graphite is included inside the stopes.
- The height of the stopes in the Extension and East sectors will be determined by the geometry of the mineralized zones. Levels in these areas should maximize mineral recovery while minimizing the amount of development.

Thus, to make the mine design and planning easier and uniform, the stope dimensions shown in Table 16-5 were used in the study. For sectors Extension, East and Nordeau, a constant sub-level spacing of 30 m was selected to allow the flexibility to reduce stope length when the rock condition and stresses constraints are unfavourable (e.g., in presence of graphite). On the other hand, the spacing between the sub-levels of the Main zone was set at 25 m, but the possibility of rehabilitating and using the old galleries was prioritized, when possible, to maximize recovery while reducing the environmental footprint. The proposed stope-sizing respected the stability criteria selected for the study for the deeper stopes planned.

Table 16-5 – Stopes Dimensions Summary

Item		Longitudinal Stoping		
		Sub-level spacing	Max. Stope Length	Max. Stope Width
Zone	Main	25 – 47	25	15
	Extension	30	25	25
	East	30	25	15
	Nordeau	30	25	15

The dilution estimates were based on the experience of the Authors with similar deposits, mining methods and blasting methods. These estimations were also validated by the ELOS method described by Clark (1997). The proposed value assumed good blasting practices and a good understanding of the rock mass to reduce the stope length or add secondary ground support where required. The estimated ELOS for the stopes are shown in Table 16-6.

Table 16-6 – ELOS Estimation

Sector		Footwall (m)	Hanging Wall (m)
Zone	Main	0.25	0.5
	Extension	0.25	0.5
	East	0.25	0.5
	Nordeau	0.25	0.5

16.4.1 Sill Pillars and Mining Sequence

Sill pillars will be temporarily left in place and will serve to increase the number of production centres in concurrent locations. The sill pillars are designed to be 30 m vertical height, like the regular long-hole stope height, and will be placed typically at 150 m vertical intervals, or the equivalent of a five vertical stope progression. According to the production centres, the vertical interval will vary depending on the mine planning. The sill pillars will be recovered as mining progresses upward.

Since, in many cases, the mining sequence will follow a longitudinal retreat toward the centre of the mineralized zone, the sill pillar dimensions will be reduced, causing an increase of the induced stresses in its centre. Additional ground support and potential drift rehabilitation could be required in the mineralised material drift at sill level. Considering these aspects, the recovery for stopes mined in the sill pillar was reduced to 73% with floor-to-floor uppers, while the recovery for the rest of the uppers stopes was reduced to 85%, according to the experience of the Authors.

16.4.2 Stand-Off Distance

In some parts of the Main Sector, mineralized material remains close to the old mined out stopes. Taking this aspect into account, a 5 m pillar will be left between the historical stopes and the new backfilled stopes, while a 10 m pillar will be left if the new stopes are not backfilled. Moreover, when the 10m pillar cannot be respected to ensure longitudinal extraction, the stopes will be mined with the transverse variant of the mining method. It is planned to mine the stopes close to the old workings towards the end of the mine life. That delay allows time to improve the understanding of the rock mass, drill and blast approaches and other production activities. At that point, it is assumed that it will be possible to mine these stopes without important challenges.

Other pillars have been determined according to the Authors' experience in operations with similar conditions and will be left between the different types of excavations. A summary is presented in Table 16-7.

Table 16-7 – Mine Design Pillars

Pillar Type	Minimal Distance (m)
Ramp/Stope	25
Drift/Stope	10
Raise/Stope	10
Ramp/Drift or Access	10
Drift/Drift	7
Raise/Drift (Mont vent)	25
Raise/Drift (Mineralised material pass)	10
Drop raise/Drift	10
Old working/Stope	5 – 10
**A 5m pillar will be left for backfilled stopes, otherwise a 10m pillar will be left.*	

16.4.3 Crown Pillar Stability

A crown pillar stability assessment was not required for the purpose of the current study. Based on the current mine plan, the closest stopes to surface are in the Main Sector (Table 16-8). It is assumed a 30 m crown pillar will be sufficient to ensure the stability of the stopes and facilities. This assumption should be validated at the feasibility level.

Table 16-8 – Crown Pillar Distances from the Main Sector closest Stopes

Sector	Stope number	Stope width	High Stope back to the Bedrock-overburden surface
Main	272	5.54	35.273
Main	273	4.48	32.024
Main	274	4.53	31.331
Main	307	3.89	30.401
Main	485	3.81	23.239
Main	881	8.51	28.53
Main	882	9.26	29.334
Main	883	9.02	29.192
Main	884	3.75	28.278
Main	885	4.38	28.294
Main	886	3.72	28.155
Main	887	4.6	27.695
Main	888	4.09	28.107
Main	889	4.06	27.876
Main	890	3.97	27.953
Main	891	4.07	27.645
Main	892	6.34	29.043
Main	893	7.53	28.119
Main	894	3.06	29.074
Main	895	4.66	28.95
Main	896	15.79	28.591
Main	897	3.8	27.703
Main	898	4.7	28.811
Main	899	23.51	27.756
Main	900	14.19	28.292
Main	901	4.1	27.902
Main	902	3.83	27.742

Sector	Stope number	Stope width	High Stope back to the Bedrock-overburden surface
Main	903	23.49	28.217
Main	904	4.91	28.107
Main	905	24.35	29.491
Main	906	4.91	28.471
Main	923	4.74	28.188
Main	924	4.62	27.747
Main	944	3.91	27.574
Main	948	9.07	29.384
Main	964	3.74	27.632
Main	966	5.05	28.405
Main	967	9.76	27.447
Main	968	6.61	28.568
Main	969	20.81	28.365

16.5 Ground Support

16.5.1 Ground Support Required for Development

For costing requirements, preliminary ground support templates were developed from common empirical support practice, taking excavation dimension, and the anticipated structural influences into account based on values commonly used in similar hard rock mines in the province of Québec. Anticipated ground support requirements for development are summarized in Table 16.9. Other drift sizes are planned for the Project but are not summarized in Table 16.9 as they do not require major ground support patterns. These other drifts size used similar patterns than the ones described in the table for uniform support practices. Also, the recommended ground support is the same for the ramps and haulage drifts.

Different ground support patterns have been planned for the of ramp access development periods, major infrastructure excavation, and other Project components. Furthermore, the anticipated good ground conditions in the deposit’s footwall allowed for lighter ground support to accelerate the development cycle time at the beginning of the project. As the drifts developed during the start-up will be further from the production activities, they would be slightly less affected by mining-induced stresses and rock mass deterioration. If additional ground support is required in some part of the development to ensure long term stable excavations, it will be installed after the critical development cycle has been completed.

Table 16-9 – Typical Ground Support for Development

Openings	Dimensions	Planned Ground Support
Start-Up (permanent)	5.5mH x 5.5 mW (Ramps and access drifts) And 5.3 mH x 5.0 mW (Haulage drifts)	Back: 2.4 m fully resin grouted rebar (1.5 m x 1.5 m) with 1.8 m galvanized split set in a dice pattern, Wall: 1.8 m galvanized split set (1.5 m x 1.5 m), Screen: #6 gauge, galvanized welded wire mesh to within 1.8 m of floor Face: 1.8 m split set (1.5 m x 1.5 m)
Standard Design (permanent)	5.5mH x 5.5 mW (Ramps and access drifts) And 5.3 mH x 5.0 mW (Haulage drifts)	Same as Start-Up but pattern converted to 1.2 m x 1.2 m
Standard Design (temporary)	5.0 mH x 4.5 mW (Mineralised material drifts and drawpoints)	Back: 2.4 m fully resin grouted rebar (1.2 m x 1.2 m) with 1.8 m split set in a dice pattern. Wall: 1.8 m split set (1.2 m x 1.2 m). Screen: #6 gauge, galvanized welded wire mesh to within 1.8 m of floor. Face: 1.8 m split set (1.2 m x 1.2 m).
Intersections	Span < 7.0 m	Primary support: As per development support outlined above
	7.0 m < Span < 9.0 m	Primary support: As per development support outlined above. Secondary Support: 3.8 m SuperSwellex (2.0 m x 2.0 m).
	9.0 m < Span	Primary support: As per development support outlined above. Secondary Support: 5.0 m cables (2.0 m x 2.0 m).
	Note	Replace SuperSwellex by cables in permanent haulage drifts due to proximity to production activities. Replace cables by SuperSwellex in temporary intersection.

In addition to Table 16-9, 0.5 m split sets are planned when required to affix screening to rock faces, unless other criteria are mentioned. In the presence of wide fault zones, a minimum of 50 mm fibre reinforced shotcrete is recommended to be added to the primary support.

For excavations larger than 7.0 m, 5.0 m cables on a 2.0 m x 2.0 m pattern will be applied at the back as secondary support. For permanent infrastructures, wire mesh will be extended close to floor level and 50 mm shotcrete added to the back and the walls.

16.5.1.1 Secondary Ground Support Estimated for Stopes

Based on the Authors' experience in operations with a similar operating environment, secondary support was considered for secondary transverse stopes and stopes in the sill pillars. Some random stopes were also planned to be cabled in consideration of the lower rock mass properties in some parts of the mine, specially in the proximity of the graphite fault. The criterion used for the estimation consisted of cabling all the stopes whose width was equal to or greater than 12 m and applying a cable density equivalent to a ratio of 10 m^3 per cable meter. The estimation results are summarized in Table 16-10.

Table 16-10 – Cable Estimation Requirements per Zone

Mining Method	Cable Requirements per Zone (m)			
	Main Sector	Extension Sector	East Sector	Nordeau Sector
Longitudinal	18,778	7,453	32,377	761
Transversal	1,983	0	0	0

16.5.2 Estimation of Backfill Requirements

For this early-stage study, it was assumed that most stopes will be backfilled with cemented rockfill (CRF) rockfill with a cement proportion of 4%. When required, the lowest level of a production centre will be backfilled with and a higher cement proportion (7%) to ensure a full and safe recovery of the sill pillars. Other stopes will be filled with rockfill and he last level in a sequence, the sill pillar, will be recuperated by uppers and will not be backfilled. At the feasibility level, il will be required to validate these assumptions by assessing backfill strength requirements. Table 16-11 presents the total quantities of backfill considered.

Table 16-11 – Backfill Estimation

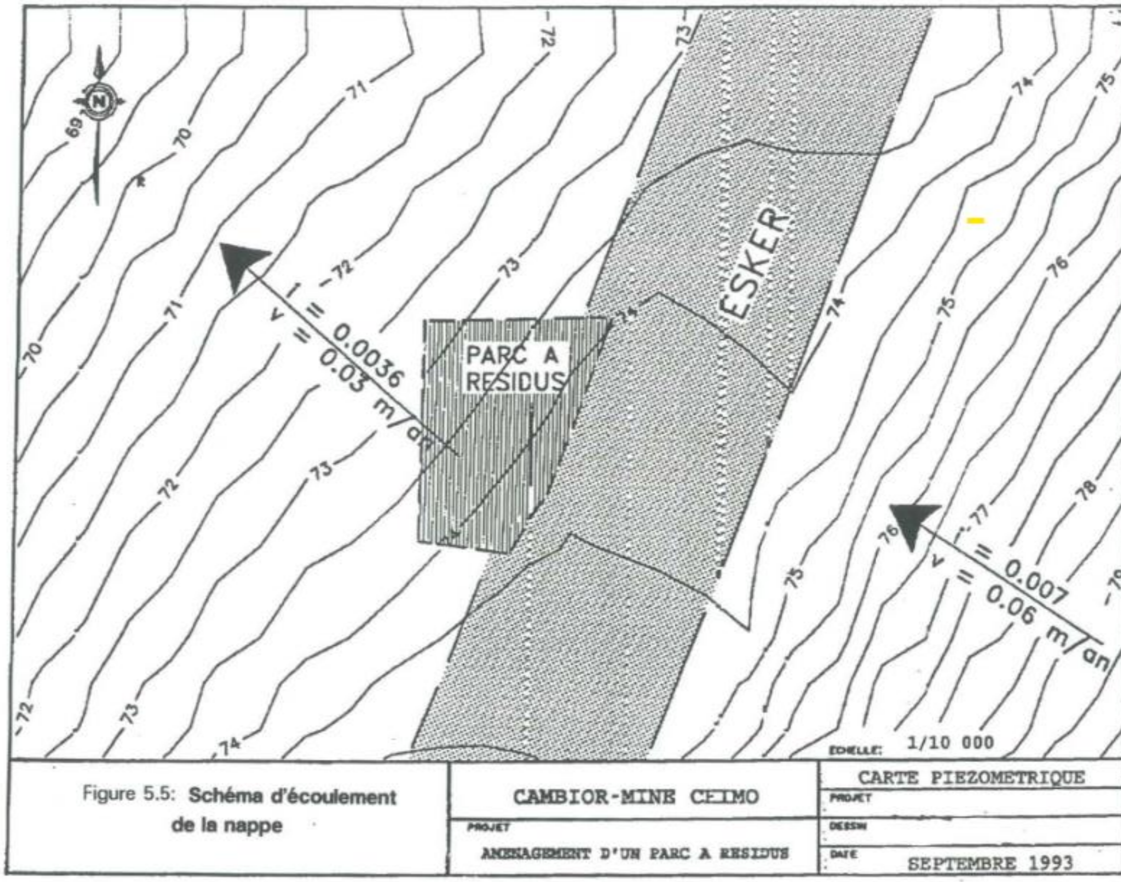
Fill Material		Main Sector	Extension Sector	East Sector	Nordeau Sector
Rockfill	Ton	2,393,563	531,987	1,521,015	571,673
CRF - 4%	Ton	2,289,133	627,454	1,771,982	998,706
CRF - 7%	Ton	43,710	-	278,574	27,448
Backfill Required	Ton	4,726,405	1,159,441	3,571,571	1,597,826

16.6 Hydrogeology

The hydrogeological data available on the project site are not recent, (1993) but adequate for the present study and are contained in the report of the closure and restoration plan of the old Chimo mine.

It comes from this report that the hydrogeological study carried out on the old Chimo mine site during the summer 1993 revealed that in the ground water, there exists a maximum hydraulic gradient of 0.004 in the north-west direction, i.e., in a direction perpendicular to the esker. The same study highlights the existence of 0.00035 hydraulic gradient within the esker, oriented in the northeast direction as the esker. Since the permeability of the esker materials (10^{-2} cm/s) is greater than that of the surrounding soils (10^{-5} cm/s), the study suggests a possible partial ground water flow along the esker, and not along the direction of the highest gradient, which is perpendicular to the esker (Cambior, 1996).

Figure 16-3



shows the groundwater flow pattern as interpreted by the study.

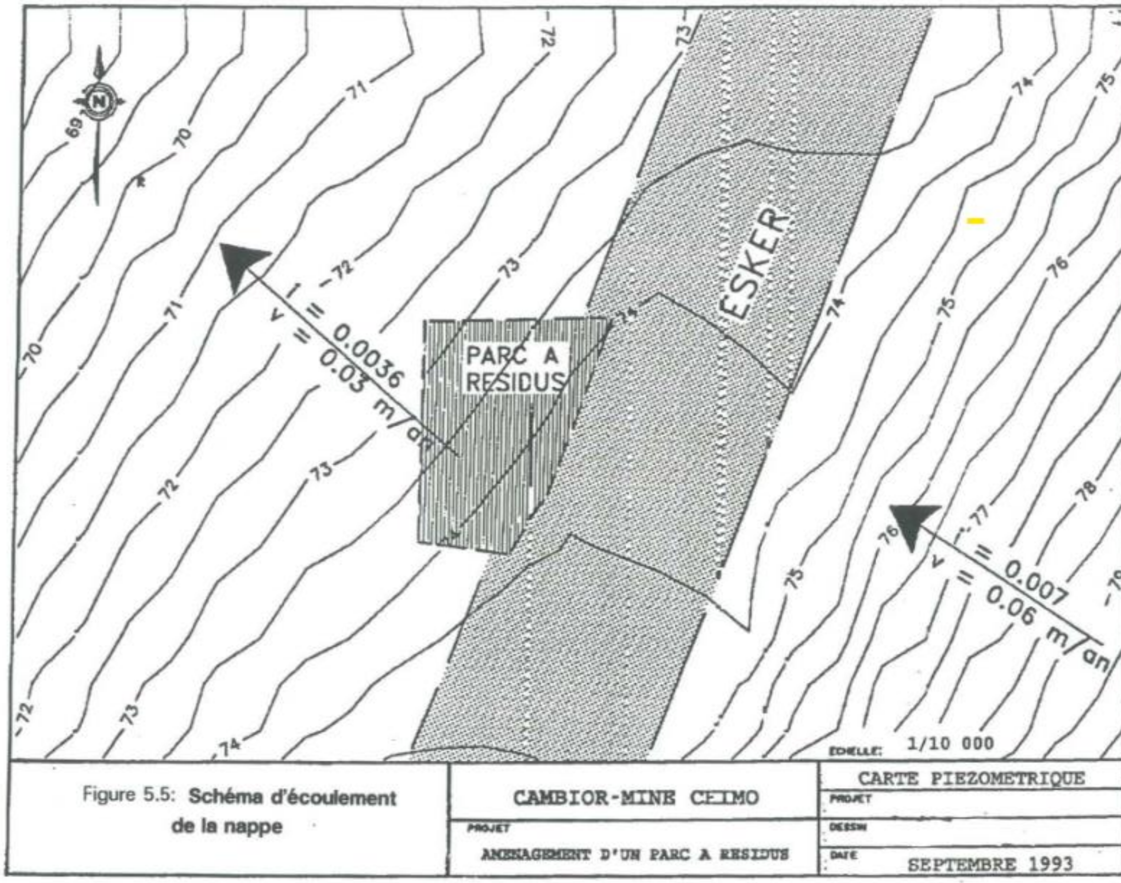


Figure 16-3 – Groundwater flow pattern in the old Chimo mine site (Cambior, 1993)

An analysis of isopiez lines was carried out to verify this hypothesis and determine the groundwater flow direction and velocity inside the esker. This analysis showed that the water flows northwest inside the esker with a hydraulic gradient that can reach 0.0009. The groundwater flow velocity estimated was 3.5 x 10^{-5} cm/s. Based on these results, the study concludes that very little groundwater should flow by infiltration into the tailings storage facilities (“TSF”). Thus, seepage water will not present a serious hazard for the TSF.

However, up to date and more complete data should be carried out to evaluate the current directions and ground water flow rate. Pumping tests within existing exploration boreholes would make it possible to anticipate the quantity of groundwater to be pump out during mining operations.

16.7 Mine Design

The Chimo Mine Project employs longitudinal long-hole retreat as the primary mining method, with a combination of longitudinal and transverse stopes around the mined-out portion of the historic mine. In addition to the Chimo Mine Main sector, three new mining sectors will be exploited to the east and in-depth: East Chimo Mine, Chimo Mine Extension and West Nordeau.

The shaft will be rehabilitated as a priority and will provide access to the center of Chimo Mine Main sector. Development will then start from the Main sector portal and from 400 level. During the first 18 months, two simultaneous development teams will excavate necessary infrastructures, in addition with linking the main ramp as a primary goal.

A three-years pre-production phase from 2024 to 2026 will produce an estimated 380k tonnes of mineralised material (for 32 k gold ounces) in mineralised material development before ramping up to the desired 4,500 tpd production over a three (3) months period. Starting 2027, full production will be in effect, with the remaining critical infrastructures completed in the first half of 2027.

Levels are spaced every 25 m in the Chimo Mine Main sector to profit from the existing levels layout, while the new sectors are spaced every 30m to minimize development and capital expenses. Two main levels (400 and 850) will provide connection between Main sector and the East and West Nordeau sectors, and will house major infrastructures like mineralised material silo, service bay, explosive depots, and main pumping.

Fresh air will be supplied directly from the shaft during pre-production, until the main ventilation raise is completed between Main and East sectors. While in full production, the main ventilation raise will be the primary fresh air entry, with the shaft as a secondary fresh air supplier; the main ramp will be used as the main exhaust for the mine.

Figure 16-4 presents an overview of the project at completion.

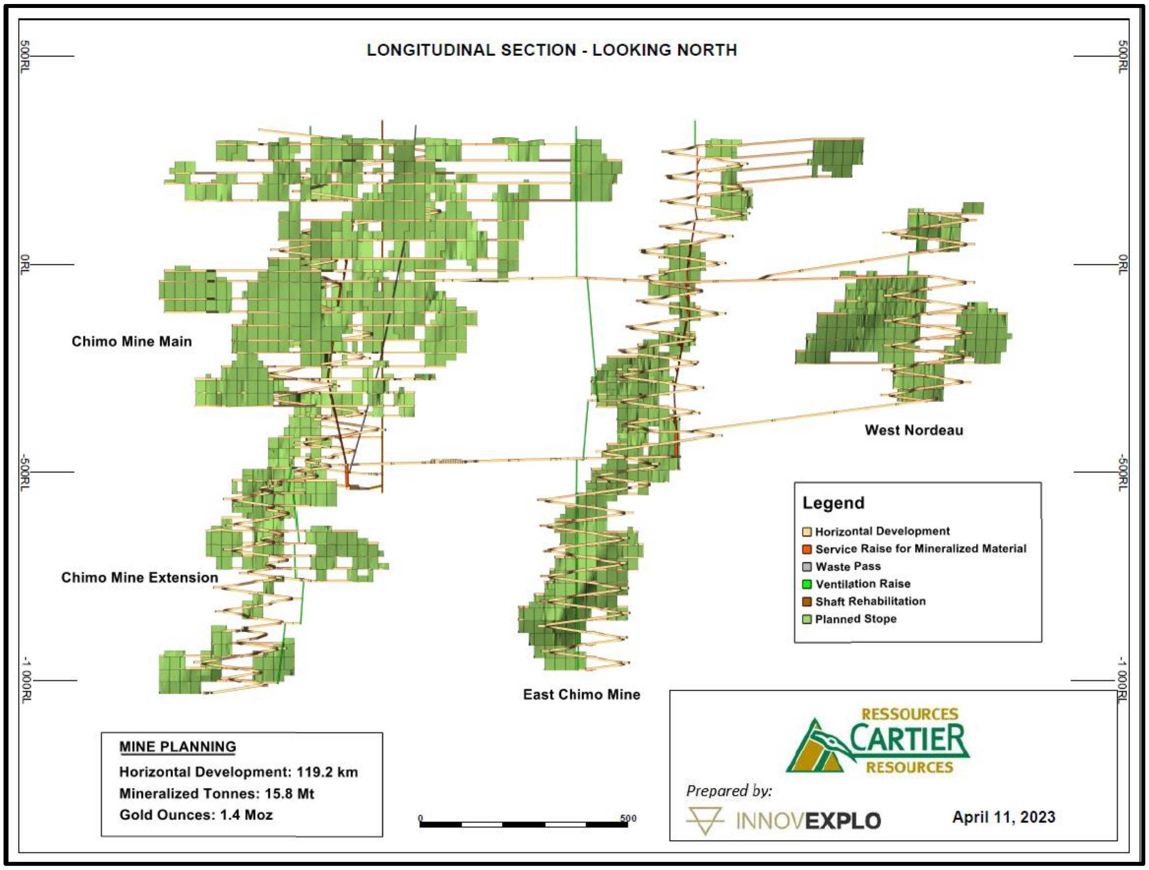


Figure 16-4 – Overview of Chimo Mine Project

16.8 Main Infrastructure

Most major infrastructures are located underground, around the existing shaft in Main sector, or in the connecting ramps toward East sector. The main service bay, explosive depots (powder and cap magazines) and pumping station are located on the 925 level. Redundant and secondary infrastructure are also located on the 425 level, to be used during pre-production.

Two main service raise for mineralized material systems will be excavated, in Main and East sectors, and will funnel material to the 850 level and corresponding silos for each zone. A new crusher and loading installation will be installed at the bottom of the shaft, with a vertical conveyor fitted inside the shaft as the main method of vertical haulage.

Main ventilation fans are planned above ground, minimizing the need for extensive underground ventilation installation. The use of an mineralised material sorter at the shaft output, will furthermore decrease the mill mineralised material input.

16.8.1 Crusher and Loading

The crusher installation is located at the 900 level, just below the main 850 level, and will include a mineralized material silo, crusher room, conveyors, remuck bay and additional services (electrical, pumps and automation). The full system will be excavated in Q1 2027 and will be available in Q2 2027. The 8 m diameter circular mineralised material bin will hold about 7,300 tonnes, equivalent to around 1.5 days of production.

Figure 16-5 presents an overview of the crushing station. The final position and design of the station may be optimized in future studies, depending on rock mechanics and mechanical requirements of final equipements.

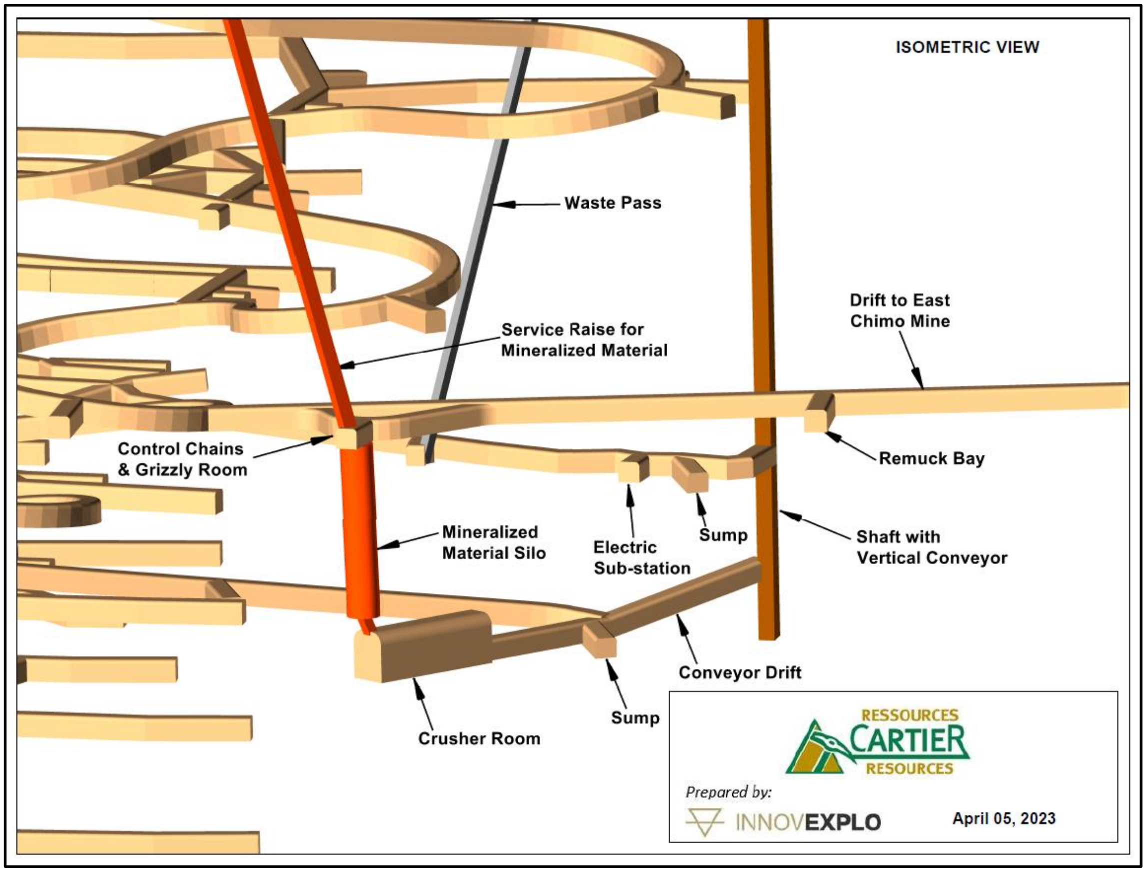


Figure 16-5 – Crushing Station Isometric Overview (Level 900)

16.8.2 Pumping System

The pumping rate at the Chimo mining project is estimated from the pumping rate recorded in the historic mine (Cambior 1996), by adding:

- The water inflows that will come from planned excavations in the four sectors, namely the Chimo Mine main sector, the Chimo Mine Extension sector, the East Chimo Mine sector and the West Nordeau sector.
- The contribution of underground operating equipment.

The pumping rate recorded to the historic mine was 114 m^3/hour (503 US gpm) and only concerns groundwater from the Chimo Mine main sector. The estimated groundwater flows generated by planned excavations are respectively:

- Main sector: 150.4 m^3/h (662 US gpm);
- Extension sector: 36.1 m^3/h (159 US gpm);
- East sector: 63.2 m^3/h (278 US gpm);
- West Nordeau sector: 30.1 m^3/h (132 US gpm).

According to mine planning, the peak water flow produced underground by all the underground equipment in operation was estimated at 63.2 m^3/h (278 US gpm)

Thus, the total water flow retained for pump selection is 350 m^3/h (1509 US gpm). All estimations include 20% contingency. Note that a hydrogeological study is required to assess the current groundwater flow rates. The exploration drill holes already in place can be used to conduct a future study, without having to drill new holes.

A temporary pumping station is planned on the 400 level near the main ventilation raise on the Main-East ramp connection. A single GEHO-TZPM-1600 pump, with a pumping capacity of 400 m^3/h on level 850, will ensure pumping of all water inflows from the main pumping station to the water treatment pond at surface (through the main ventilation raise). Following the completion of the main pumping station excavation on level 850 (Q3 2028), all installation will be moved to level 850 main station.

Water will be transported gravitationally by a system of sumps and drain holes, when possible, and will use auxiliary pumps to move water horizontally or from the lower parts of the mine.

Figure 16-6 presents the dewatering diagram during full production.

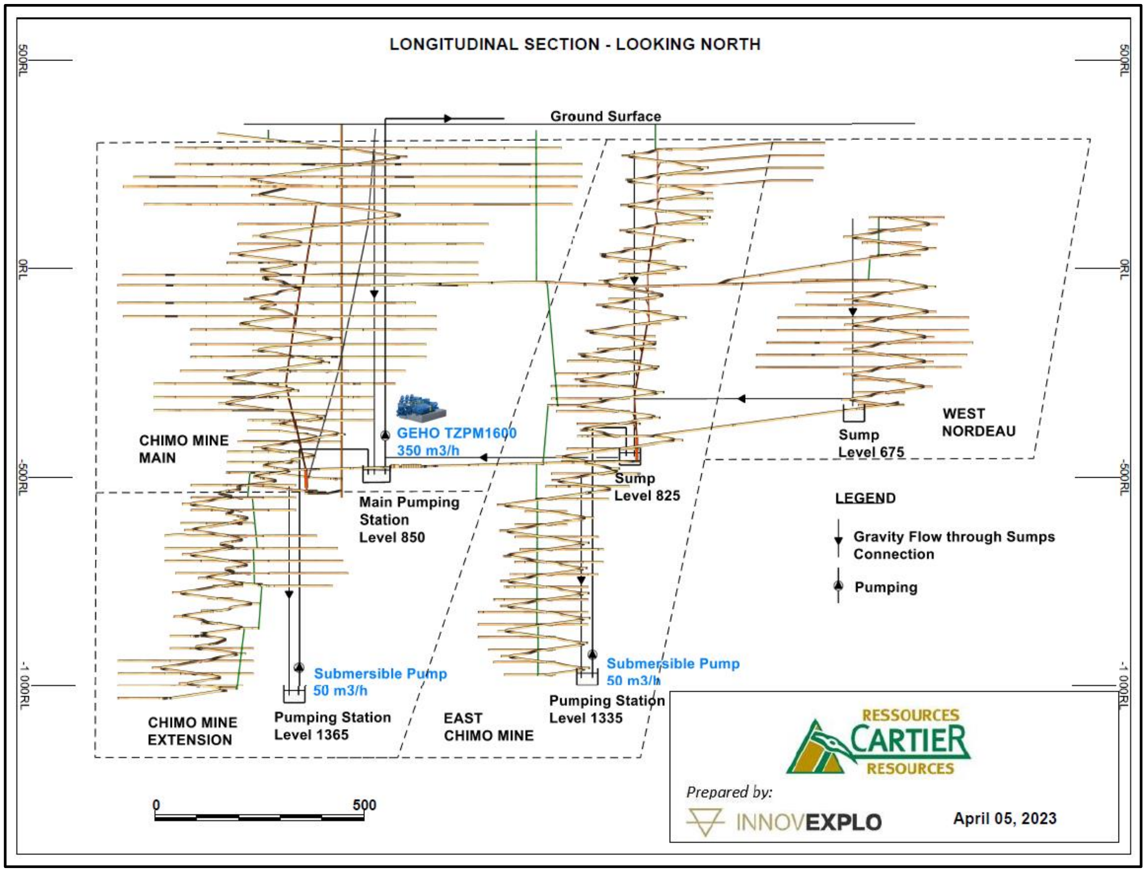


Figure 16-6 – Dewatering Diagram

16.8.3 Service Bay

The service bay, also located on level 850 level in the Chimo Mine main sector, will include: bypass access from main ramp, welding bay, garage, tires storage, washing bay, small warehouse, greasing bay, fuel bay and parking. The service bay design allows for easy entry and exit of vehicles and will facilitate overall maintenance underground.

A small service bay is also planned on level 400; it will be used as a temporary garage during pre-production or for minor maintenance during production.

Figure 16-7 presents an overview of the service bay area on level 850.

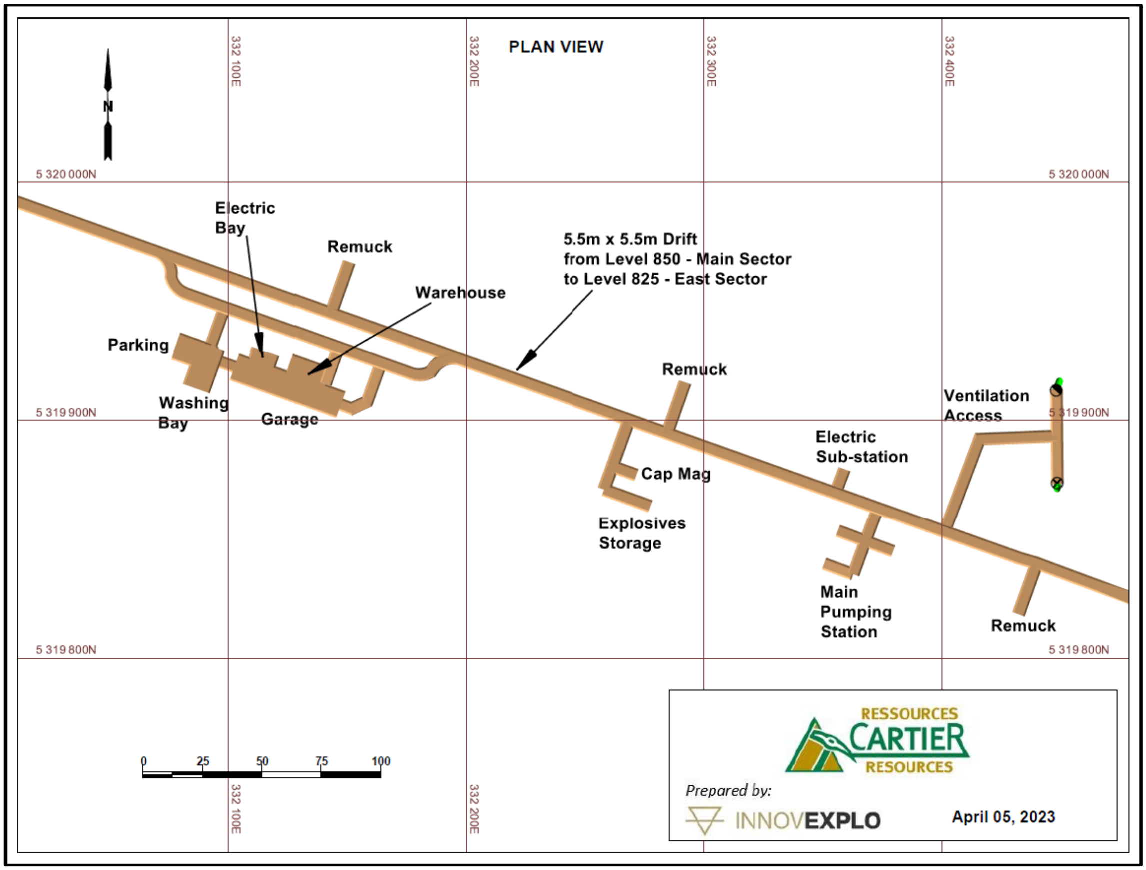


Figure 16-7 – Service Bay Area - Level 850

16.8.4 Mineralized material handling system

Mineralised material is hauled by LHDs from the production area to a remuck, and then loaded to a truck or a service raises for mineralized material. Up until the service raises for mineralized material and crushing station are fully operational, the bulk of the production is hauled to the surface by trucks. 2027 will bring into operation the crushing station, vertical conveyor and service raises for mineralized material (Main and East sectors). All mineralised material will flow directly in the service raise for mineralized material systems, except whenever truck availability or stope proximity to the surface encourage truck haulage. Mineralised material from the West Nordeau, Extension and lower East sectors will be primarily hauled by trucks to one of the two silos, in Main sector or in East sector.

The 7m diameter circular mineralised material bin in mid-East sector (850 level) will hold 6,000 tonnes and accommodate all eastern sectors. Mineralised material haulage between East silo and Main silo will be fully automated, using automated electric trucks.

Figure 16-8 shows the underground material handling flowsheet.

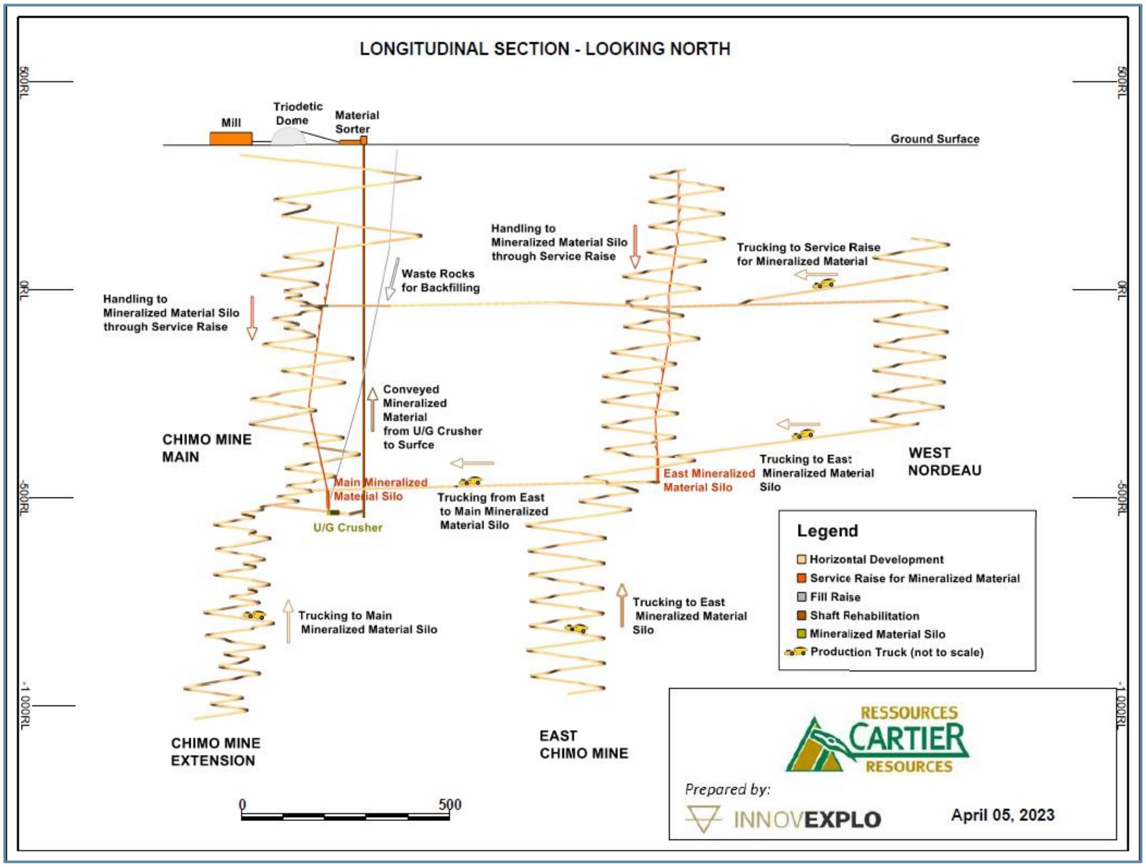


Figure 16-8: Underground Material Handling Flowsheet

16.8.5 Additional infrastructure

Additional infrastructure includes waste service raises, emergency underground refuge stations, powder and cap magazines, and internal ventilation raises.

The waste pass system located in Main sector will allow for waste material from the mineralised material sorter at surface to be returned underground for backfilling purposes. Waste material can then be recovered on levels 250, 600 and 875 to facilitate CRF and rockfill backfilling activities.

Two main explosive depots (powder and cap magazines) are situated on the 400 and 850 levels; in addition to temporary mobile depots, wherever needed. These can easily accommodate the explosive requirements of the project and are designed with room to spare for material manipulation and to comply with all federal and provincial requirements.

Each underground refuge station is designed and located to accommodate the necessary number of workers at any given time. The refuges are located closer than the required 1,000 m to ensure no delays in the development sequence.

Mine ventilation and ventilation network are detailed in Section 16.14.8.

16.9 Mine Design Criteria

Main drifts (ramps and access drifts) are 5.5 m wide by 5.5 m high, whereas waste drifts not used by trucks are 5.3 m wide by 5.0 m high. Mineralised material drifts (4.5 m wide by 5.0 m high) are designed smaller to limit unnecessary waste production. Remucks are generally spaced every 150 m for development and production efficiency.

The following subsections describe the different types of rockworks and heading (summarized in Table 16-12). PEA design was planned with no gradient where applicable; the proposed gradient in the table describes the desired gradient in the final operation.

Table 16-12 – Mine Design Parameters

Development Heading	Width (m)	Height (m)	Gradient
Ramp	5.50	5.50	13.3% (15% max)
Level Access	5.50	5.50	2%
Level Haulage (waste)	5.30	5.00	2%
Mineralised material Drift (Operation)	4.50	5.00	2%
Old Working Rehabilitation (Slash)	5.30	5.00	2%
Sump, Electrical Station, Ventilation Access	5.30	5.00	2%

Table 16-13 summarized the general pillars set by rock mechanics and used for the preliminary design.

Table 16-13 – Mine Design Pillars

Pillar Type	Minimal Distance (m)
Ramp/Stope	25
Drift/Stope	10
Raise/Stope	10
Ramp/Drift or Access	10
Drift/Drift	7
Raise/Drift (Mont vent)	25
Raise/Drift (Service raise for mineralized material)	10
Drop raise/Drift	10
Old working/Stope	7.5

To maximize production through automation, the ramps between levels will have a minimal turning radius of 25 m, where possible. To minimize maintenance and operator fatigue, ramps are designed in an “8” shape as much as possible. A remuck bay is also planned between every level for development efficiency.

16.10 Level Design

A typical production level includes an access drift, a sump, a primary/secondary electrical station, a remuck bay, a ventilation access (connected to the level or the ramp), and haulage drifts and mineralised material drifts (see Figure 16-9). Depending on location, it can also include a refuge, a service raise access (Main and East sectors), and other relevant infrastructure.

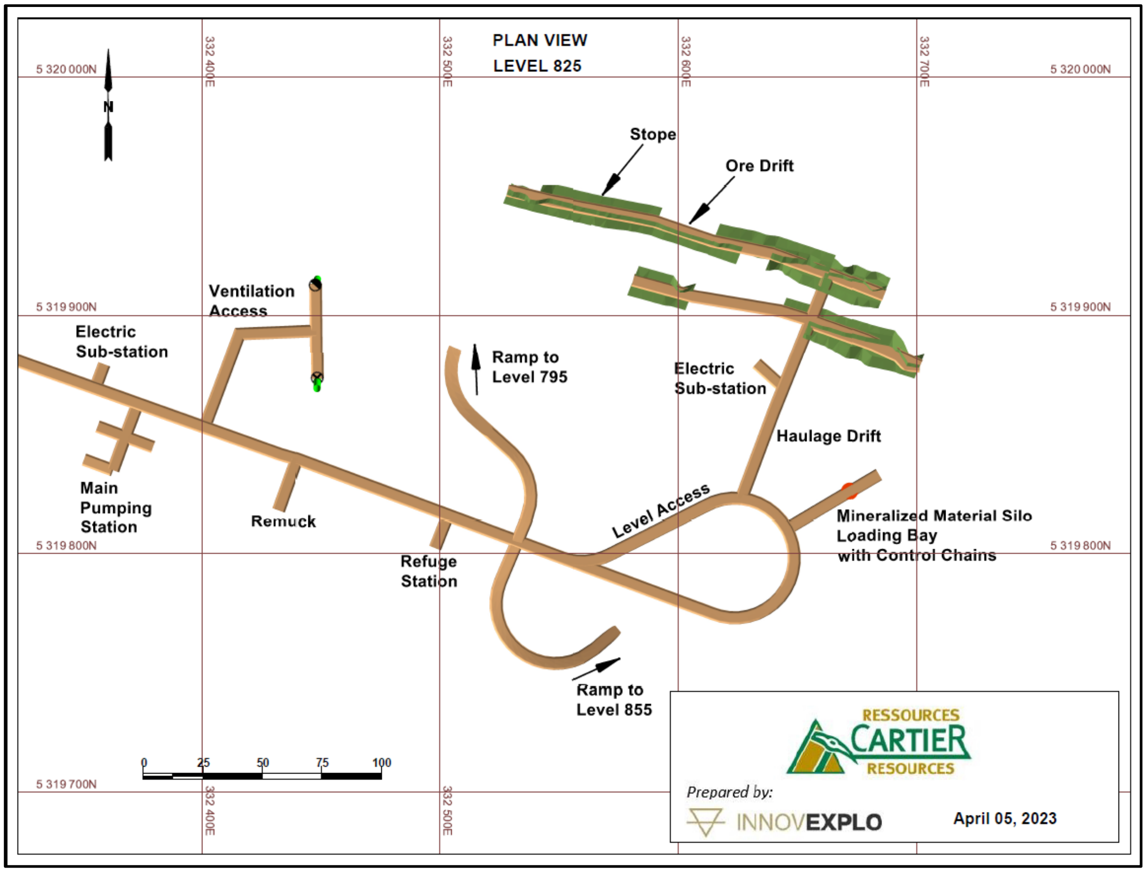


Figure 16-9 – Level 825 Plan View - East Chimo Mine Sector

The access drifts and loading bay (5.5 m x 5.5 m) are used by trucks and LHDs, whereas haulage drifts will only accommodate LHD (5.3 m x 5.0 m). New sectors (East, Extension and West Nordeau) follow a more standardized level design, while Main sector has variable level design and access to accommodate the existing development and mined out portion.

A sump will be excavated roughly at 60° and -15% from the access to facilitate mucking of mud excess. Each level has at least one secondary electrical station; main electrical stations are positioned every four levels. Developments are designed to respect the 2% minimal gradient to facilitate water runoff to level sump.

16.11 Emergency Egress

All production activities will respect the current legislation by ensuring that at least two distinct egresses are always available. Main sector above level 900 will benefit from the rehabilitated shaft as a secondary egress way. Additional manways will be outfitted in the necessary ventilation raises to ensure proper safety exit coverage in all the deeper part of the mine. Mid-East sector and West Nordeau sector will use connecting ramps between the zones as secondary egress way; production will only start after connection between ramps is completed.

16.12 Mining Methods

Production mining will employ numerous production fronts to maximize productivity and flexibility to reach the targeted 4,500 t/d rate. The main long-hole mining method is longitudinal retreat, with some minor case where a transverse method will be used (mining recovery near existing open stope in the Chimo Mine Main sector).

Production centres are separated to maximized efficiency, depending on the development schedule. Mining of each production centre (normally between 4-5 levels) will ascend from the lowest to the highest level. The last level in a sequence, the sill pillar, will be recuperated by uppers and will not be backfilled. When required, the lowest level of a production centre will be backfilled with CRF and a higher cement proportion (7%) to ensure a full and safe recovery of the sill pillars. Some stopes will be drilled using upper drilling (e.g., stopes at the apex of sectors and sill pillars).

16.12.1 Longitudinal Long-Hole Retreat

Longitudinal long-hole methods will be used for most stopes in the mine, ranging from 3 m to 25 m wide. The average dip of the deposit is 75 º, which is ideal for this type of mining. Special considerations are taken for the low number of oversized or irregular stopes, including parallel development, slash openings, etc.

Performance and recovery adjustments are taken into account regarding stopes inside a 50m pillar from the existing stopes. The same is also true for stopes being affected by the graphite fault.

Table 16-14 – Mined Out and Graphite Performance Adjustment

Area	Distance	Performance Adjustment
Mined out	Inside 50m Pillar	60%
Graphite Fault	> 50% Overlap	80%

A typical mining cycle includes secondary ground support where required. V-30 slot-drilling is made in advance of the production drill mobilization, followed by the complete production drilling of the stope. Longitudinal stopes are blasted in two phases: a primary blast for the void and the secondary blast after the first blast is mucked out. The second blast may be loaded during mucking to maximize efficiency. Once the stope is blasted and mucked out, it is backfilled with CRF, or with rockfill whenever possible (natural pillar, final stope in a sequence, etc.). The total tonnage mined by the longitudinal long-hole method represents 87% of the overall total mineralized material mined.

Figure 16-10 illustrates the mining cycle for longitudinal long-hole retreat.

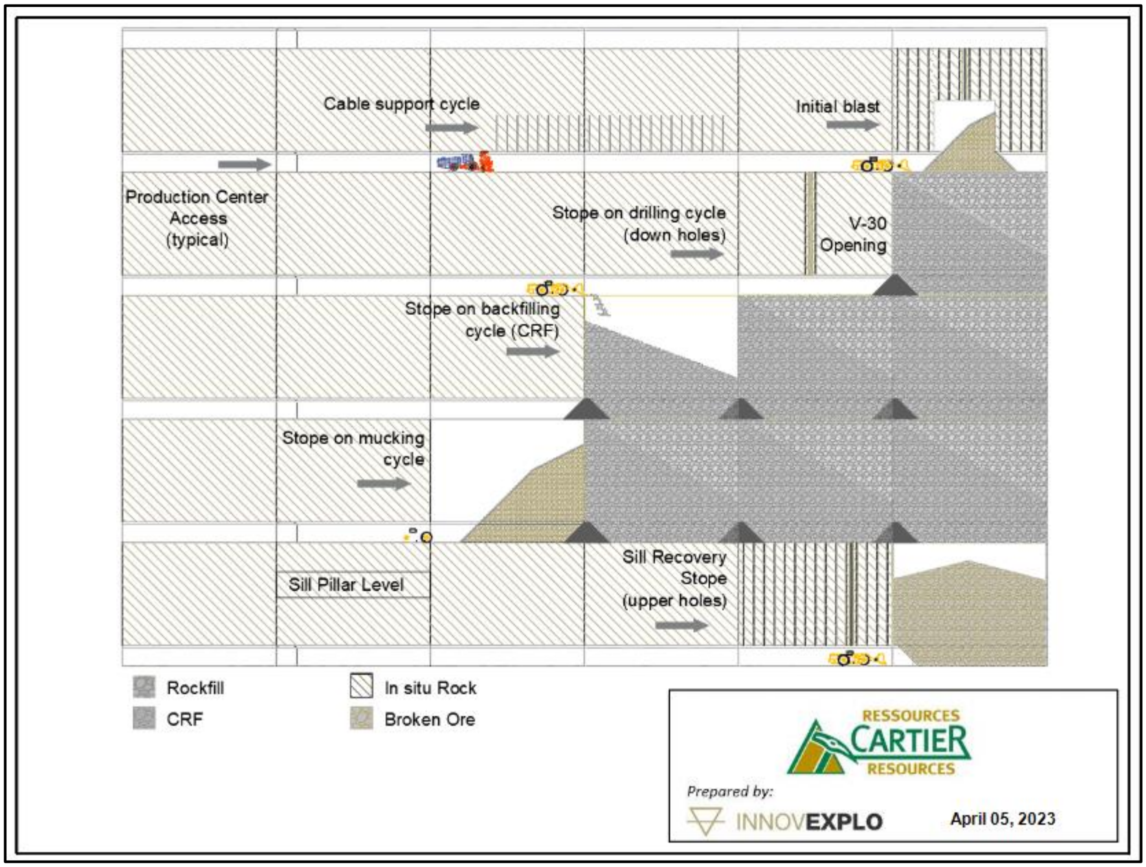


Figure 16-10 – Mining Cycle for Longitudinal Long-Hole Retreat

16.12.2 Transversal Long-Hole

A transverse long-hole method will be used primarily to recover additional resources near the historic mine mined out sectors.

Similarly, longitudinal stoping, typical mining cycles include secondary ground support where required, V-30 slot-drilling, production drilling, mucking and backfilling. The mining sequence starts with the primary stopes from bottom to top, whereas the secondary stopes are blasted when both adjacent primaries on two levels are backfilled. For the same drawpoint, the farthest stope is mined first, and the sequence retreats towards the hauling drift. This sequence creates a pyramidal shape with the mining voids when the mining progress in a centre of production and is beneficial with respect to the rock mechanics and production aspects. Most transverse stopes need two blasts.

Figure 16-11 illustrates the mining cycle for transversal long-hole mining.

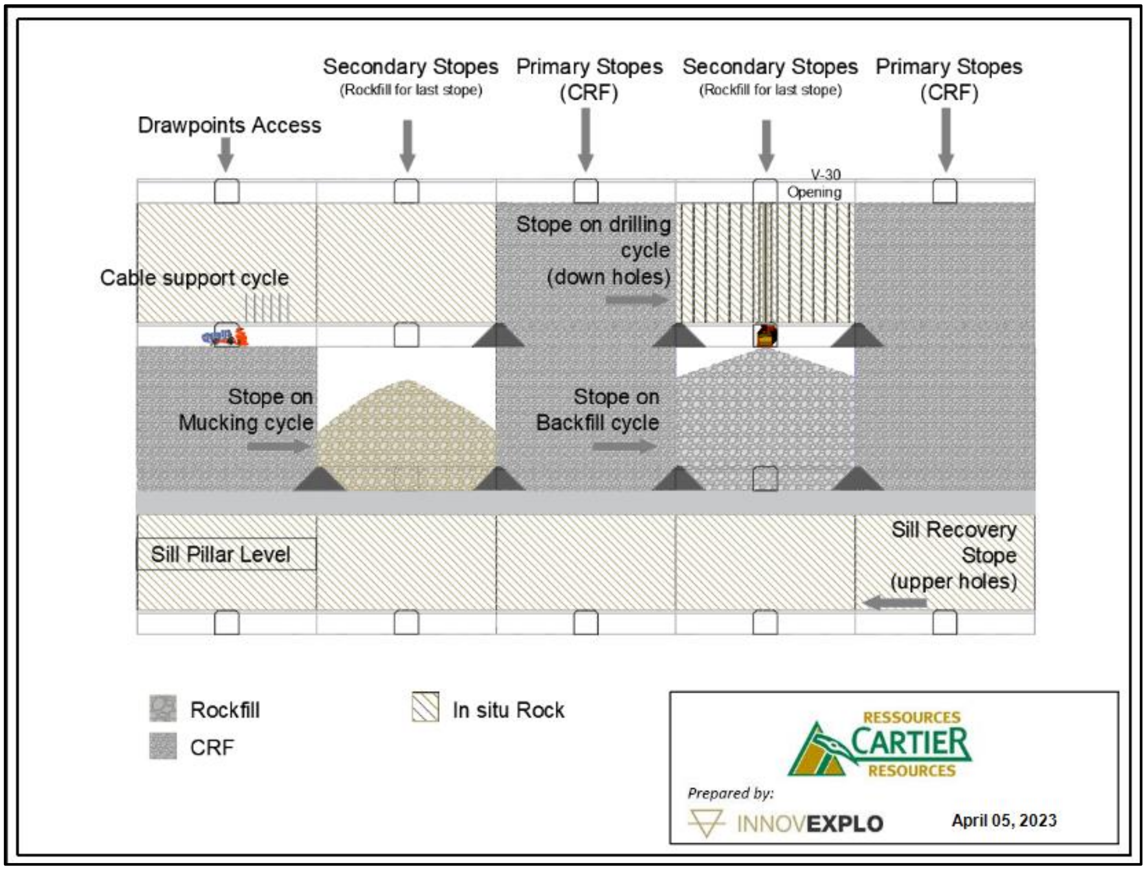


Figure 16-11 – Mining Cycle for Transversal Long-Hole mining

16.12.3 Backfill

Two types of backfill are used at Chimo Mine Project. The primary backfill method is dry cemented rockfill (dry CRF) with a 4.0% cement binder, except above sill pillars where the cement binder is increased to 7.0%. This percentage may change depending on the results encountered underground. Simple rockfill will be used as much as possible, especially at the end of a longitudinal sequence, for secondary transverse stopes or for stopes with no direct effects to adjacent excavations.

For the purpose of this preliminary economic assessment, material movement and cost estimation are based on the use of CRF and RF to backfill the stopes.

Development waste rock will be used as CRF or rockfill as a priority. Excess waste rock will be stocked in unused or depleted levels, whenever possible. Some remucks may also be used to stockpiled temporarily excess waste rock for future backfill. Excess waste rock will be hauled to the surface, although waste material sent to surface is minimized as much as possible. During full production, crushed waste material from the mineralised material sorter will be sent underground through waste pass for backfill purposes. The required backfill strength will depend on the size of the stope and the mining sequence. A typical stope would require a backfill strength of 780 kPa (lab testing) or of 260 kPa (field backfill strength). To maximize safety and flexibility, the curing time used is 7 days before exposing a backfilled face (other activities, like stope preparation and drilling, can start sooner).

Figure 16-12 presents a typical CRF backfill operation.

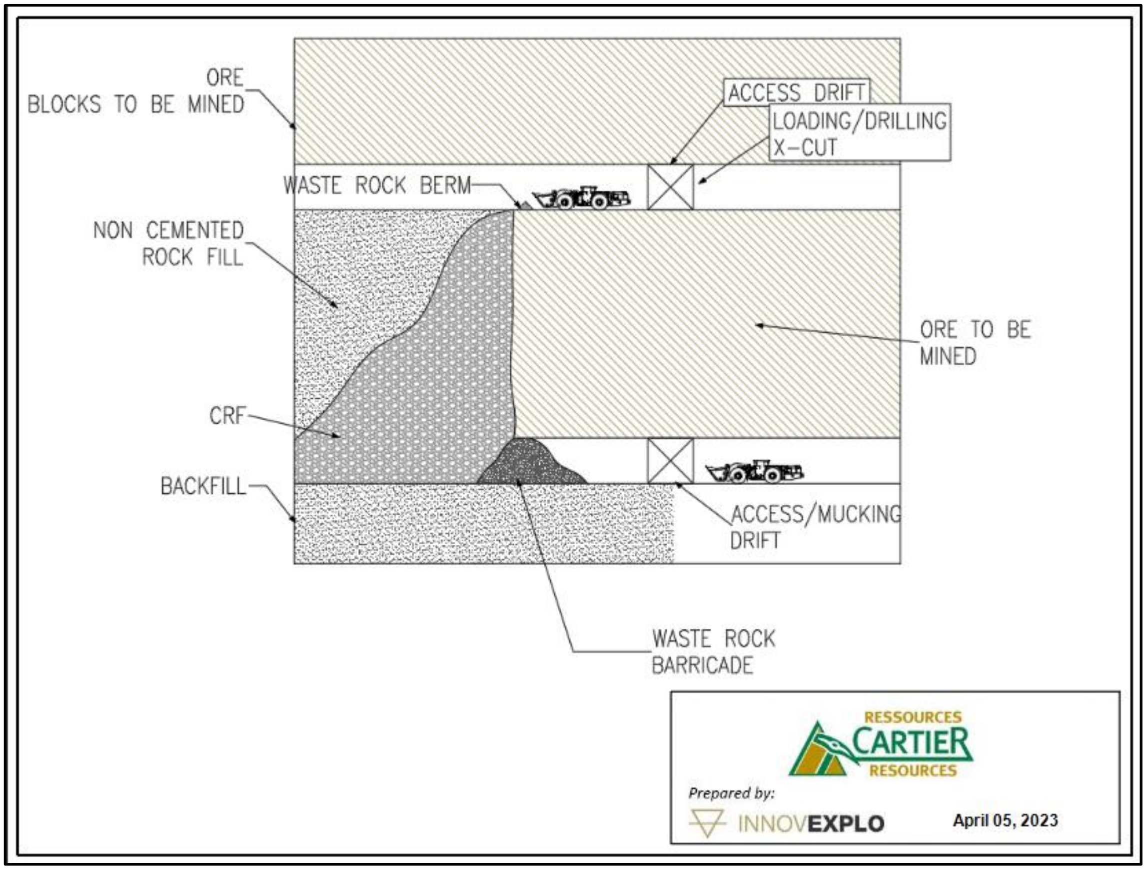


Figure 16-12 – Cemented Rockfill (CRF) Overview

16.13 Mine Schedule

16.13.1 Production Rates and Performance Parameters

To maintain accurate underground mine scheduling, detailed cycle times were calculated for main underground activities. The operational parameters used for the Chimo Mine Project are detailed in Table 16-15. Each day includes two 10-hour shifts and considers all related operational activities (e.g., shift changes, lunch break, refuelling, loss of time and transportation to workplaces). To maximize the efficiency of the mineralised material haulage between the east sector mineralised material silo and the main mineralised material silo during full production, automation is planned for electric truck. The automation will begin at the end of the pre-production period, around Q2 2030. A three-month period is planned to get an efficient ramp-up for these new technologies.

Table 16-15 – Operating Parameters

Operating Parameters	Units	Quantity
Average Production Days per Year	Days	365
Number of Shifts per Day	Shifts	2
Effective Hours per Day (No Automation)	Hours	17

Production operating hours have been defined depending on each equipment cycle time. An overall efficiency of 85% is assumed for major equipment. Production rate and cycle times have been evaluated by activities and tasks, mining area, and sub area. Rates per sector also vary depending on automation availability, geotechnical and operation conditions. Production performance is 20% lower in graphite areas, and 40% lower around mined out of the Chimo Mine Main sector. Table 16-16 summarizes the rate used for critical production tasks in the scheduling.

Table 16-16 – Main Production Activities Rates

Equipment	Tasks	Rate	Rate in Graphite	Rate Around Mine out	Units
Cable bolting	Stopes Support	163	130	98	m/day
V-30	Cut Opening	10	8	6	m/day
Production Drills	Stope Drilling	230	184	138	m/day
LHD	Mucking	1 167	934	700	t/day
	CRF	1 190	952	714	t/day
	Rockfill	1 506	1 205	903	t/day

Regarding horizontal development, the pre-production phase rapid development is paramount to achieve the targeted commercial production start. Various strategies are planned to accelerate the development rate at that phase such as blast at will, lighter ground support on critical path, efficient equipment. The rates for the development vary mostly by drift sizes and the development strategy (multiple versus single faces). The development planning is made first by estimating the required numbers of working jumbos. Then, based on the quantity of required jumbos, the number of such other related equipment such as bolters, LHDs (required for development) are estimated based on detailed cycle time of the development path. Here too, the development performance is 20% lower in graphite areas, and 40% lower around mined out of the Chimo Mine Main sector. Table 16-17 and Table 16-18 summarize the rates used for single face horizontal development and multiple faces horizontal development respectively.

Table 16-17 – Rates for Single Face Horizontal Development

Heading	Max Dev. per Face	Max Rate per Face	Jumbo Rate
	(m/day)	(m/month)	(m/month)
5.5 x 5.5 - Preproduction Period	6.3	192.0	192.0
5.5 x 5.5 - Production Period	4.0	121.0	242.0
5.3 x 5.0	4.0	121.0	242.0

Table 16-18 – Rates for Multi Faces Horizontal Development

Heading	Max Dev. per Face	Max Rate per Face	Jumbo Rate
	(m/day)	(m/month)	(m/month)
5.5 x 5.5	2.7	81.0	243.0
5.3 x 5.0	2.9	87.0	261.0
5.3 x 5.0 - Slash Drift	4.0	121.0	363.0

The same cycle time calculation process is used to estimate the vertical development rates. The rates vary based on the selected method used and the size of the excavation. To these rates, additional delays are applied to consider other activities when required such as ground support and manway construction.

16.13.2 Production Plan

For the purpose of this preliminary economic assessment, it is assumed that the underground development will start from main ramp portal on a fictive date of January 1, 2024, with the production schedule strategy to reach as soon as possible the planned stopes in the upper levels of the Chimo Mine main sector. The first mineralised material development is planned for Q3 2025, as soon as the first primary ventilation system is available, with the fresh air raise (FAR) section from level 400 to surface completed, and surface main fan installed.

The first four stopes would be mined in October 2026 on levels 300, 350 and 375 simultaneously. During the three years of pre-production (2024, 2025 and 2026), 375 585 tonnes @ 2.65 g/t average grading will be mined and hauled to the temporary mineralized material stockpile at surface. The mineralized material coming from development count for 56% of the total production during preproduction. All the extracted mineralized material will come from the Chimo Mine main sector. A service bay, an explosives storage and cap magazine are excavated and available on level 400, but some major infrastructures like the main garage, underground crusher and main raises for mineralized material are still in development on levels 850 and 900 in the Chimo Mine main sector.

The commercial production period is scheduled to start at the end of Q1 2027 when the mine will reach 4,500 t/d for the first time after three years of pre-production. Based on current mineral resources, Chimo Mine Project has a mine life extending to August 2036, but potential conversion of mineral resources and exploration potential could possibly extend the mine life.

The life-of-mine plan shows a rapid production ramp-up in the third year, with production rising to an average of 140,000 oz/year for the subsequent nine years up to 2035. Production ends in 2036 with 708,036 tonnes of mineralized material grading 2.68 g/t. The ounces and other material reported in chapter 16 refer to diluted reserve that consider mining recovery and other underground mining factors but do not consider mill recovery.

The Chimo Mine Extension and the East Chimo Mine sectors are projected to start production in Q1 2030, when the production in the Chimo Mine main sector is in decline and the second section of the main FAR from level 825 to level 400 is completed. The production in the East Chimo Mine sector start from level 825 upwards and downwards with some infrastructures such as mineralized materiel silo, service raise for mineralised material. The production starts at the West Nordeau sector in Q1 2033 when the first ramp linking West Nordeau to the East Chimo Mine from level 765 is completed. Five development teams are required to have sufficient working faces available to maintain the daily production of 4,500. An average of 11,000 m of horizontal development are realized per year with a maximum of 12,700 m in 2029, and a minimum of 901 m in 2035 with only two development teams.

A summary of the underground schedule, overall and by mining area, is provided in Table 16-19 and Table 16-20.

Table 16-19 – Underground Schedule Summary

Item	Unit	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	TOTAL
Horizontal Development	m	3 858	9 255	12 356	11 960	11 984	12 739	11 908	12 557	12 293	10 035	7 043	901	0	116 889
Vertical Development	m	896	861	0	1 250	0	55	616	633	260	415	395	221	0	5602
Total Development	m	4 754	10 116	12 356	13 210	11 984	12 794	12 525	13 191	12 553	10 449	7 438	1 122	0	122 492
Mineralised material Production	kt	0	0	167	1 426	1 421	1 495	1 379	1 368	1 459	1 412	1 536	1 638	708	14 009
Mineralised material Development	kt	5	56	151	194	226	148	264	175	189	231	107	5	0	1 751
Total Mineralised material	kt	5	56	318	1 620	1 647	1 643	1 643	1 543	1 647	1 643	1 643	1 642	708	15 758
Mineralised material per day (average)	t/d	14	152	871	4 439	4 513	4 501	4 501	4 228	4 513	4 501	4 500	4 500	1 940	43 173
Gold (g/t)	g/t	3,01	2,74	2,63	2,71	2,52	2,64	2,73	2,57	2,50	2,65	2,67	3,06	2,68	2.67
Gold (oz)	koz	1	5	27	141	133	140	144	127	132	140	141	161	61	1 353
Waste Produced	kt	353	730	851	695	649	817	673	896	848	571	475	64	0	7 622
Rockfill	kt	0	0	27	516	450	474	462	510	583	519	450	553	475	5 019
Cemented Rock Fill	kt	0	0	59	743	521	544	384	446	694	671	806	939	230	6 037

Table 16-20 – Underground Summary per Sector

Item	Unit	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Chimo Mine Main														
Total Mineralised material	kt	5	56	318	1 620	1 647	1 631	1 177	544	125	14	0	0	0
Gold	koz	1	5	27	141	133	139	103	41	10	1	0	0	0
Total Development	m	4 754	10 029	12 044	13 210	11 429	10 430	3 639	0	0	0	0	0	0
Chimo Mine Extension														
Total Mineralised material	kt	0	0	0	0	0	0	24	209	595	385	173	164	230
Gold	koz	0	0	0	0	0	0	2	20	50	35	12	12	17
Total Development	m	0	0	312	0	0	52	1 580	4 022	3 249	2 150	2 172	0	0
East Chimo Mine														
Total Mineralised material	kt	0	0	0	0	0	12	442	773	842	606	715	1 083	304
Gold	koz	0	0	0	0	0	1	38	65	65	51	58	107	28
Total Development	m	0	87	0	0	555	2 156	7 090	5 748	4 337	5 201	4 934	1 122	0
West Nordeau														
Total Mineralised material	kt	0	0	0	0	0	0	0	17	85	639	754	395	174
Gold	koz	0	0	0	0	0	0	0	1	8	53	70	42	17
Total Development	m	0	0	0	0	0	156	216	3 421	4 966	3 098	333	0	0

16.14 Mine Services

16.14.1 Electrical Services

Primary design assumes an electrical substation (4,160 V) per level, to operate the development and production equipment, and a main electrical station every 3-4 levels (a main electrical station can power 3 to 4 substations) equipped with step down transformer to allow 600 V switch gear to operate.

In addition to the stations, there will be a requirement for additional elements, such as cable extensions, PTO 3 plugs, leaky feeder and optic fibre for communication. Additional electrical design will need to be conducted to evaluate exact requirements, based on fleet equipment (notably jumbo, production drill, bolters and fans).

16.14.2 Communication Network

The communication system will include a surface distribution system, united network, point-to-point wireless telephone network, internet via satellite, and underground communication system.

A sturdy communication network will be required to ensure optimal use of automation and safety features needed for the project. Current and upcoming technologies will be put forward to maximize appeal for workers and management. Additional discussions and quotes from external consultants will be required to assess the best communication tools for each sector.

The current design is based on the industry's best practices and previous projects with similar parameters.

16.14.3 Mine Automation and Monitoring System

No automation is currently planned for the production schedule but will be considered to maximise productivity in future studies. Nevertheless, automation is assumed to be included wherever possible. This includes, but is not limited to: services raises, shaft and loading, conveyors, ventilation fans and doors.

One of the main opportunities for automation is the transfer drift on level 825, where most mineralized material from the East and Nordeau sectors will go through. Alternatives options considered to optimize the transfer with automation are autonomous trucks, autonomous trains, or additional conveyors. Further trade-off studies are required to select the most appropriate and economical method to be used.

16.14.4 Fuel Distribution Network

An underground fuel bay will be positioned strategically near the main underground services. A 2-inch steel pipe and automated pumping system will ensure constant flow to the fuel stations. Additional designs are required to validate optimal location of the fuel bays. The current design is based on the industry's best practices and previous projects with similar parameters.

16.14.5 Compressed Air and Water Supply

The compressed air piping network will be installed along the ramp, main drifts, and egress ways throughout the mine. Compressed air will provide power to the pumps for dewatering development work and for drilling during production or development, as well as emergency air to the refuge stations.

Internal ramps are designed with 4" pipes for water and air, depending on the estimated pressure. Levels and haulage drifts are designed with 2" pipes for water and air. Water pressure reducing valves are installed every level to ensure proper control of water pressure. The current design is based on the industry's best practices and previous projects with similar parameters.

16.14.6 Historical Mine Dewatering

The estimated total annual volume of water in the decommissioned mine is approximately 1,000,000 m3 (Cambior, 1996). The preferred option is to dewater the former mine through the historic shaft. Contractors will be consulted to evaluate the planned flowrate for this kind of operation. Mine schedule may be impacted depending on future discussions with specialize contractors.

One of the solutions proposed (based on previous projects) is to lower submersible pumps in series using a winch system. The descent will be monitored every 5 metres to ensure that no problems occur and that the pumps are lowered safely.

Mine dewatering will be most probably conducted in parallel with the shaft rehabilitation.

16.14.7 Shaft Rehabilitation

Shaft rehabilitation will be executed in parallel or directly following the historic mine dewatering. The shaft rehabilitation is paramount to the pre-production phase of the project, and any delays may negatively impact the production schedule. To ensure proper planification and to minimize risks regarding delays, additional consulting with specialized contractors is required.

The current rehabilitation performance used in the schedule reflects overall estimation based on past experiences and similar projects.

16.14.8 Mine Ventilation

A step-by-step ventilation system will be implemented from starting with temporary ventilation system when the main fresh raise is not yet available, up to the final system where the main fans are installed and operate both in the shaft and fresh air raise collars. Main fans will be provided with variable frequency drive (VFD) to optimize the utilization of ventilation.

16.14.9 Fresh Air Requirement

To comply with Quebec regulations concerning underground mining operations, 700 kcfm will be required at full production. The fresh air rate used to dilute diesel equipment emissions correspond to that appearing on the certificate of homologation issued by the CANMET Mining and Mineral Sciences Laboratories. Conservative utilization rates were applied to account for the time when machines may be mechanically unavailable or simply not in use: 80% for production equipment, 50% for production equipment that operates primarily with electricity, 65% for service equipment that operates primarily with diesel fuel and 40% for electric running machinery. To meet the regulation, the minimum air speed in the drifts is 15m/min, which corresponds to 14000 cfm for a 5.3m x 5.0m haulage drift. Allowance is also added to evacuate the dust that might be generated from the conveyor and the crusher.

Table 16-21 shows the ventilation rate for each piece of underground equipment and the total fresh air rate required during full production, including a 15% contingency.

Table 16-21– Fresh Air Requirement in full production

Equipment Type	Power		Recommended Dilution Rate per unit		Quantity	Utilization Factor	Total Airflow	
	(kW)	(HP)	(m³/s)	(cfm)			(m³/s)	(cfm)
Development								
Jumbo 2 Booms	121	162	3,1	6 590	5	50%	7,8	16 475
Bolter	74	100	4,3	9 200	7	50%	15,2	32 199
LHD Development	315	422	6,6	14 000	6	80%	31,7	67 201
Truck 50T	585	785	12,7	27 000	4	80%	40,8	86 400
Explosif Truck (Dev't & Prod't)	110	147	4,3	9 200	2	65%	5,6	11 960
Scissor Lift	110	147	4,3	9 200	4	65%	11,3	23 919
Production								
Cable Bolter	121	162	3,1	6 590	1	50%	1,6	3 295
ITH Longhole	121	162	3,1	6 590	1	50%	1,6	3 295
Production Drill	121	162	3,1	6 590	2	50%	3,1	6 590
LHD Production	315	422	6,6	14 000	8	80%	42,3	89 601
Truck 50T	585	785	12,7	27 000	4	80%	40,8	86 400
Electric Truck 50T			6,6	14 000	1	40%	2,6	5 600
Support and Service								
Boom Truck	150	201	6,7	14 200	1	65%	4,4	9 230
Personal carrier	110	147	4,3	9 200	1	65%	2,8	5 980
Mechanical Truck	110	147	4,3	9 200	1	65%	2,8	5 980
Shotcrete Sprayer	110	147	4,3	9 200	1	65%	2,8	5 980
Fuel-Lube Truck	150	201	6,7	14 200	1	65%	4,4	9 230
Grader	150	201	6,7	14 200	1	65%	4,4	9 230
Cassette Carrier	150	201	6,7	14 200	1	65%	4,4	9 230
TransMixers	150	201	6,7	14 200	1	65%	4,4	9 230
Block Holer	110	147	4,3	9 200	1	65%	2,8	5 980
Water canon	150	201	6,7	14 200	1	65%	4,4	9 230
Electric Lift			6,6	14 000	1	40%	2,6	5 600
Water Truck	150	201	6,7	14 200	1	65%	4,4	9 230
Backhoe Loader	93	125	5,6	11 800	1	65%	3,6	7 670
Service LHD	256	343	5,7	11 988	1	65%	3,7	7 792
Tractor	55	73	1,8	3 800	3	65%	3,5	7 410
Allowance for Conveyor			19,8	42 000	1	100%	19,8	42 000
Allowance for Crusher			6,6	14 000	1	100%	6,6	14 000
TOTAL							286,0	605 939
Contingency	15%						42,9	90 891
Total with contingency							328,8	696 829

16.14.10 Pre-production Ventilation Plan

The temporary ventilation system will be put in place during the pre-production in two phases:

The first phase starts with the main ramp development from surface portal to level 400, and the shaft rehabilitation. For both shaft collar and ramp portal, an identical temporary ventilation system is put in place including one auxiliary 150 HP fan with rigid ducting 60 inches diameter. Rigid ducting has a very low friction factor and prevents leakage and duct maintenance. Figure 16-13 presents the temporary ventilation network in Q2 2024.

When the shaft rehabilitation is completed, the development in level 400 start with a main ramp section going upwards and haulage drift towards the Chimo Mine East sector and the excavation of the fresh air raise (FAR) from level 400 to surface. Figure 16-14 shows the temporary ventilation network in Q1 2025 with a total fresh air of 300 kcfm blown.

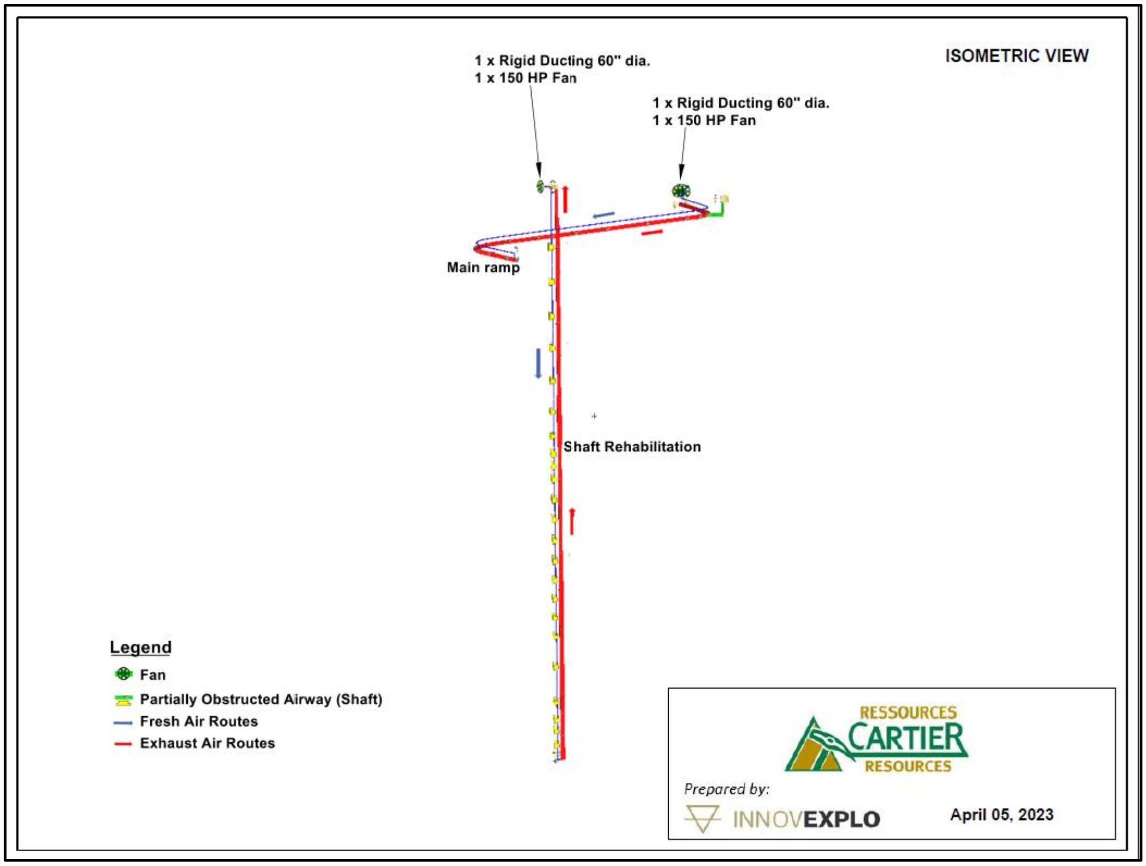


Figure 16-13 – Phase 1 - Temporary Ventilation Network in Q2 2024

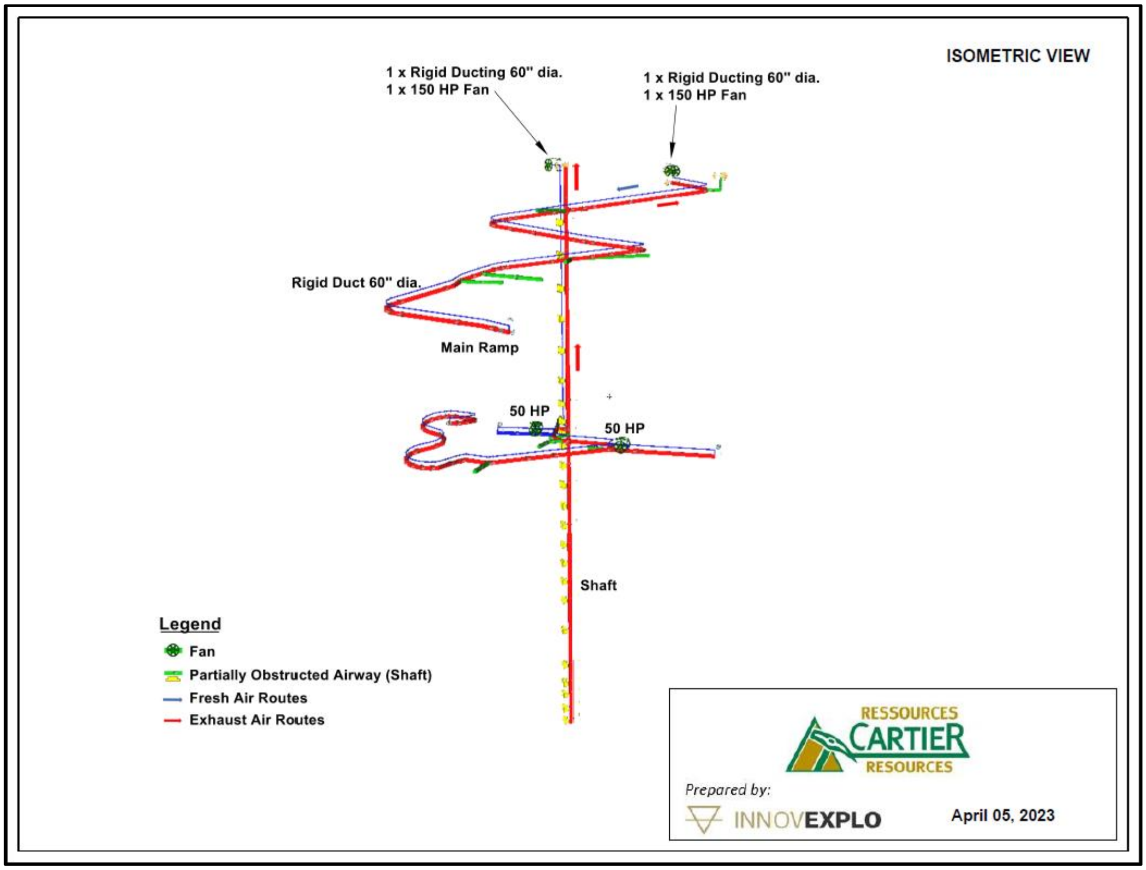


Figure 16-14 – Phase 1 - Temporary Ventilation Network in Q1 2025

In the second phase, the first section of the fresh air raise (FAR) from level 400 to surface is completed and the main fans installed. All the required fresh is blown from the intake FAR. The two 150 HP fans and rigid ducting are moved from the surface to the level 400. The first 150 HP fan serves to push the required fresh air on level 850 trough the rigid ducting installed in the shaft, for the development of the main ramp from level 850 upwards and the haulage drift towards the East sector to complete the second section of the FAR, from level 850 to level 400. The second 150 HP fan on level 400 is used for ramp development from level 400 downwards, to meet the team developing the ramp upwards from level 850. A 350 HP underground fan is placed in the exhaust air raise (EAR) located about 120m from the ramp portal, in order to create a sufficient depression that draw a downstream of fresh air from the ramp portal to the EAR access. This prevents the formation of fog in the ramp during hot seasons, thus improving visibility in the ramp. The second phase is completed when the FAR and the main ramp are completed from level 850 to the surface, and the loop closed.

Figure 16-15 illustrates the temporary ventilation network in Q3 2026.

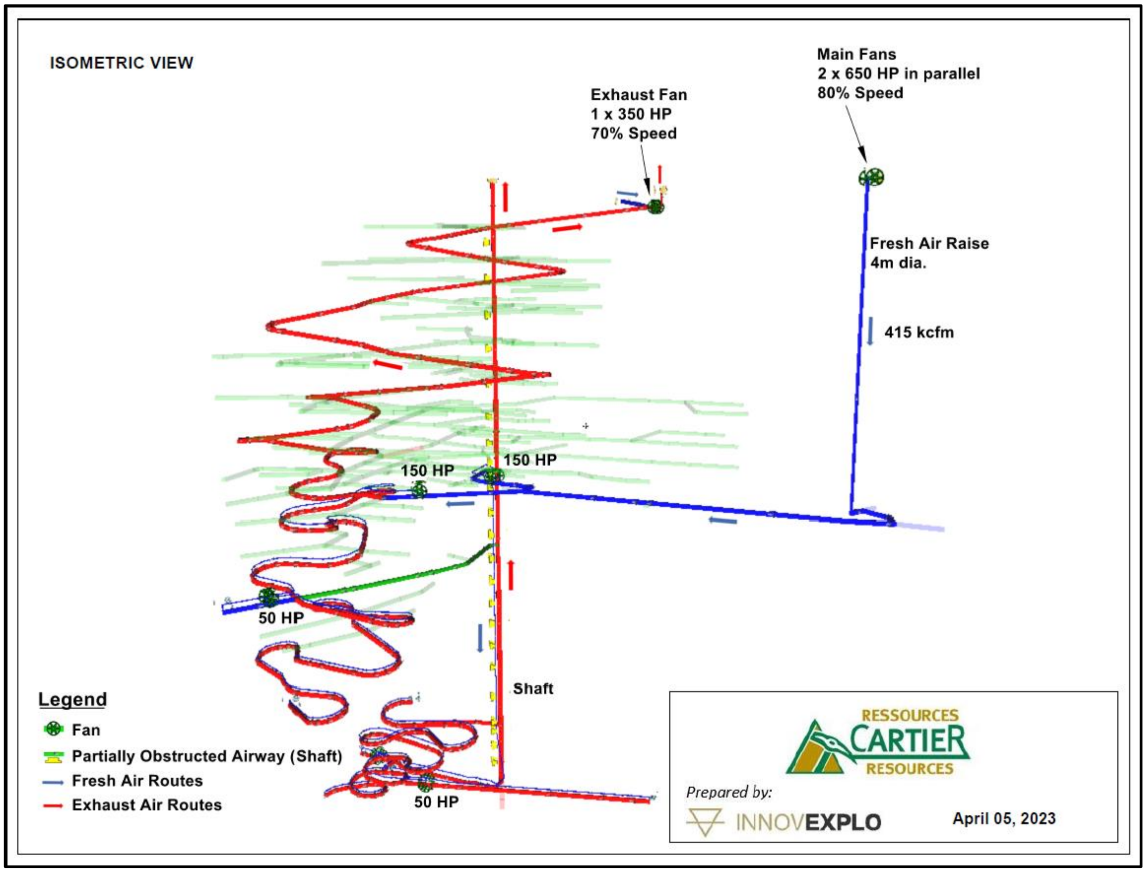


Figure 16-15 – Phase 2 - Temporary Ventilation Network in Q3 2026

16.14.11 Final Ventilation Network

The final ventilation network in full production has a capacity of 700 kcfm. The FAR and the shaft serve as intakes, while the East Chimo Mine raise and the main ramp are the exhaust routes. Main surface fans are located at the FAR collar (2 x 650 HP fans in parallel) and at the shaft collar (1 x 450 HP fan). The fresh air is distributed down Chimo Mine extension sector and lower east sector through the manway raise network accessing every level of these areas. Return air catches the ramps to rise to the surface. Airflow is sent to West Nordeau sector using the access ramp from level 765 in the East Chimo Mine sector.

An exhaust air raise provided with an underground 350 HP fan is located about 120m from the ramp portal to a sufficient depression that draw a downstream fresh air from the ramp portal to the EAR access, to prevent fog in the ramp during hot seasons.

The figure Figure 16-16 presents the final ventilation network in full production, including the results of the ventilation simulation carried out with the Howden Ventsim Design software. The general locations of ventilation doors and regulators to balance airflow within the mine are also presented.

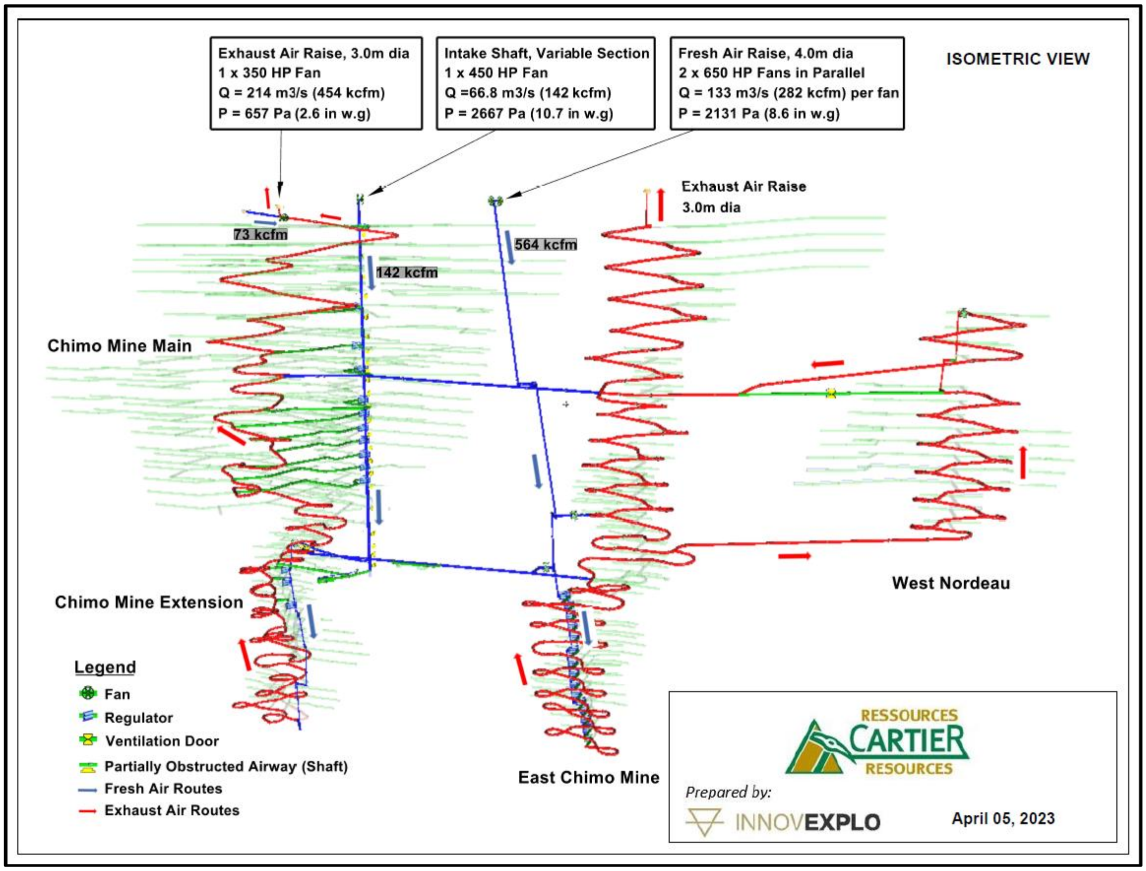


Figure 16-16 – Final Ventilation Network in Full Production

16.14.12 Level Ventilation

The quantity of fresh air circulation in haulage drift should accommodate two trucks. Figure 16-17 shows the typical situation where the fresh air is taken from the downcast internal air raise. A 48" flexible duct has been considered for the design.

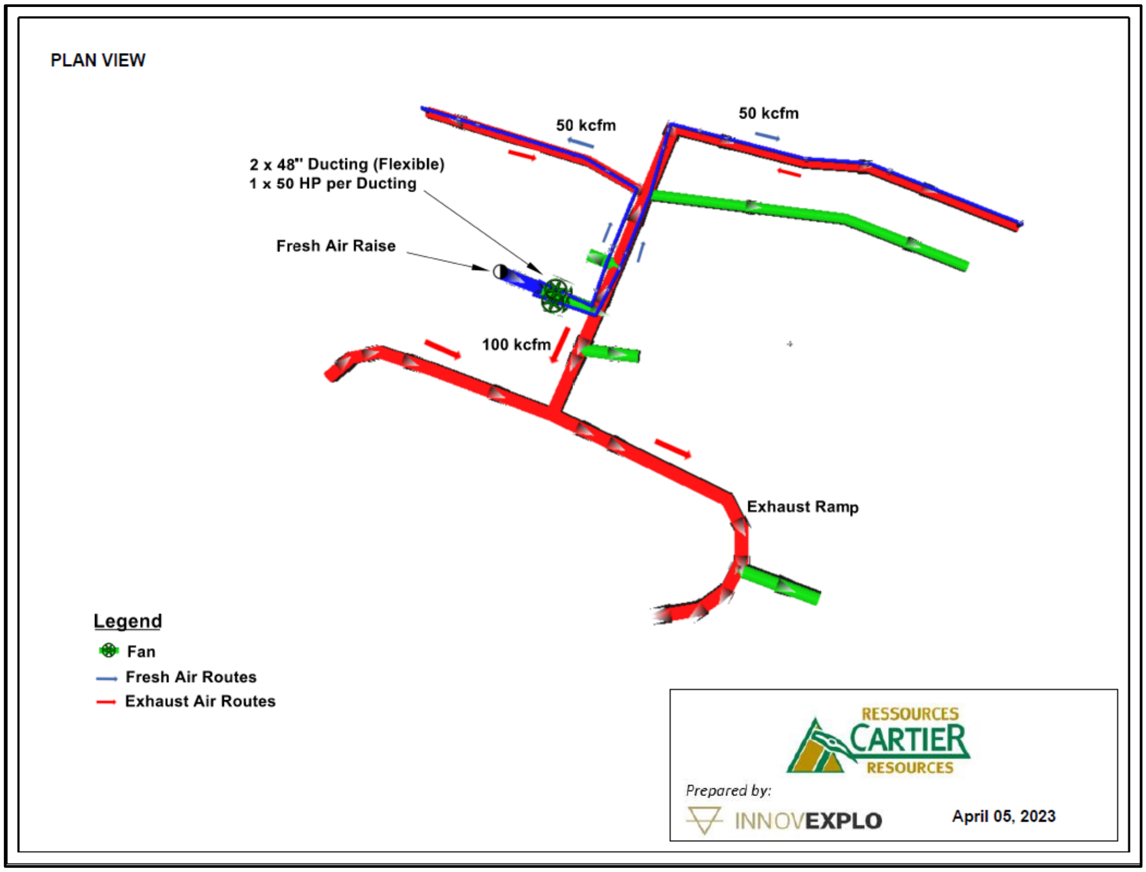


Figure 16-17 – Typical Auxiliary Ventilation Arrangement for a Level

16.14.13 Fan and Heating System

The main fans at full capacity are pre-selected following the result of the ventilation simulation. The heater system is chosen according to the amount of fresh air blown by the fans and the anticipated climatic conditions at the project site throughout the year. The fans performance and the heater capacity are proposed by the manufacturer Howden. Table 16-22 shows the selected model of fan and heater for the permanent ventilation network of the Chimo Mine Project.

Table 16-22 – Fan Operating Point and Heater Model

Fan Location	Fan Model	Heater Model	Nominal Power (HP/Fan)	Total Pressure (in w.g)	Airflow/Fan (kcfm)
Fresh Air Raise	2 x AFN SO 12 1200 2244	Simplex 300	650	12.2	275
Shaft	1 x 8400-VAX-3150	Simplex 200	450	12.0	150
Main Exhaust Air Raise	1 x 8400-VAX-3150	N/A	350	3.0	225

16.15 Underground Mine Equipment

16.15.1 Maintenance Schedule

Maintenance of the underground equipment is planned to minimize downtime ensure an overall machinery availability of 85% and more. In order to maximize equipment life, their maintenance is done following supplier rebuild recommendation. The maintenance for all equipment will be done at the underground service bay located to level 850 in the Chimo Mine main sector.

16.15.2 Mining Equipment List

The required operational quantities for all major and critical equipment (jumbo, cable bolter, production drills, LHDs, trucks, etc.) were estimated during the planning process. Yearly operation hours have been estimated for all other secondary services equipment based on typical operation and current mine scheduling requirements. For secondary equipment, yearly operation hours range between 1,200 and 2,400 (20% to 50% utilization). A production 50 tonnes trucks power with electric battery will be dedicated to handle mineralized material from the East Silo to the Main Chimo Mine Silo around the underground crusher.

All the equipment list in the study is to be acquired by the project owner between 2024 and 2031.

The required mobile equipment fleet acquired for surface service and underground operation is presented per year in Table 16-23.

Table 16-23 – Mine Equipment List

Equipement Type	Brand	Model	Max	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Surface Equipment																
Wheel Loader	Caterpillar	986K	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Grader	Caterpillar	14M3	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bulldozer	Caterpillar	D6T	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Generator Set 2000 kVA 60Hz	Caterpillar	3606	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pickup truck	Ford	F-150	10	5	6	8	10	10	10	10	10	10	10	10	10	10
UG Development																
Jumbo 2 booms	Sandvik	DD422i	6	3	6	5	6	5	5	5	5	5	5	4	2	0
Bolter	Sandvik	DS312	7	2	7	7	7	7	7	7	6	7	6	5	2	0
LHD Development	Sandvik	LH517i	7	3	6	7	6	6	6	6	6	6	6	5	2	0
Truck 50T	Sandvik	TH551i	4	2	4	4	4	4	4	4	4	4	4	3	2	0
Explosif Truck (Dev't & Prod't)	Maclean	EC3	2	1	2	2	2	2	2	2	2	2	2	1	1	0
Scissor Lift	Maclean	SL3	4	1	4	3	4	4	4	4	4	4	3	3	1	0
UG Production																
Cable Bolter	Sandvik	DS422i	1	0	0	1	1	0	1	1	1	0	0	1	0	1
ITH Longhole	Sandvik	DU412i	3	0	1	1	1	1	1	2	2	2	2	3	1	2
Production Drill	Sandvik	DL432i	3	0	0	1	3	2	3	3	3	3	3	3	3	3
LHD Production	Sandvik	LH517i	8	0	0	3	7	7	7	7	8	8	8	8	8	8
Truck 50T	Sandvik	TH551i	4	0	0	3	4	4	4	4	4	4	4	4	4	4
Electric Truck 50T	Sandvik	TH551i	1	0	0	0	0	0	0	1	1	1	1	1	1	1
UG Support & Service																
Boom Truck	Maclean	BT3	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Personal carrier	Maclean	PC3	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Mechanical Truck	Maclean	MT2	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Shotcrete Sprayer	Maclean	SS5	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Fuel-Lube Truck	Maclean	FL3	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Grader	Maclean	GD5	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Cassette Carrier	Maclean	CS3	1	0	0	0	1	1	1	1	1	1	1	1	1	1
TransMixers	Maclean	TM3	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Block Holer	Maclean	BH3	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Water canon	Maclean	WC3	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Electric Lift	Toyota	Tora-Max	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Water Truck	Maclean	WS3	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Backhoe Loader	Caterpillar	440	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Service LHD	Sandvik	LH307	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Tractor	Kubota	M4D	5	1	1	2	2	3	3	5	5	5	5	5	5	4
TOTAL			79	21	40	51	75	73	75	79	79	79	77	74	60	51

16.16 Mine Personnel

Mine personnel are split between three areas: technical services, maintenance and supervision (mechanical and electrical), and underground operations (construction, development, and production).

Operators and maintenance personnel generally work on a 7-7 schedule. This results in four crews alternating days and nights, when necessary. The electrical and mechanical supervisors will alternate day and night shifts at times; a supervisor or senior employee will always be present to oversee the shifts. Additional supervisors, technicians and some specific workers will work Monday to Friday on a 5-2/4-3 schedule, day shifts only.

In addition, all pre-production and development work will be completed by a mining contractor. The costs associated with the use of a contractor have been summarized in Section 21

16.17 Mine Production

Production personnel include the operations personnel and the maintenance staff. The operations personnel include the underground supervision (mine superintendent, captain and trainer) and those required for the major and secondary equipment, as well as blasters. The Maintenance personnel includes the maintenance management staff, mechanics, electricians, and helpers. The list of the production personnel required over the life of the mine is presented in Table 16-24.

Table 16-24 – Production Personnel

Production	Max	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Operations														
Mine Superintendent	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Captain	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mine Shifters	16	8	12	16	12	12	12	12	12	12	12	12	12	10
Jumbo operators	20	4	16	20	20	20	20	20	20	20	20	20	8	2
Bolter operators	24	6	20	24	24	24	24	24	24	24	24	24	10	4
L-H operators	24	8	12	24	24	24	24	24	24	24	24	24	20	8
Blasters	4	0	2	4	4	4	4	4	4	4	4	4	4	2
Mine Truck drivers	24	8	12	24	24	24	24	24	24	24	24	24	20	8
Servicemen	8	2	4	8	8	8	8	8	8	8	8	8	8	4
Trainer	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Q&A Production Engineer	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance														
Maintenance Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance Supervisor	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Maintenance Planner	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Electricians	10	2	4	8	10	10	10	10	10	10	10	10	8	4
Mechanics	12	2	4	8	12	12	12	12	12	12	12	12	8	4
Helpers	4	0	2	4	4	4	4	4	4	4	4	4	2	2
Total	149	44	93	147	149	149	149	149	149	149	149	149	107	55

16.18 Technical Services

Most of the staff in technical services work at the mine site office during the day, with weekends off (5-2 schedule). A list of technical services personnel required over the life of the mine is shown in Table 16-25.

Table 16-25 – Technical Services Personnel

Technical Services	Max	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Geology	0													
Chief Geologist	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Database technician	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Sr geologist, resources	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Sr geologist, production	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Int Geologist	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Jr Geologist	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Sr Geology technician	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Geology technician	2	0	0	1	2	2	2	2	2	2	2	2	2	1
Journeyman Coreshack	2	0	0	1	2	2	2	2	2	2	2	2	2	1
Engineering														
Technical Superintendant	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chief Engineer	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Sr Mining engineer	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sr Rock mechanic engineer	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Intermediate mining engineer (Plan+Dev)	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Intermediate mining engineer (Ventilation)	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Intermediate mining engineer (Stoping)	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Intermediate mining engineer (Constr+Cost)	1	0	0	1	1	1	1	1	1	1	1	1	1	1
Junior mining engineer	1	0	0	0	1	1	1	1	1	1	1	1	1	1
Sr Mine Technician	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mining technician (Survey)	4	2	2	2	4	4	4	4	4	4	4	4	4	4
Mining technician (Stoping)	4	0	0	0	4	4	4	4	4	4	4	4	4	4
Junior mining technician	4	0	0	0	4	4	4	4	4	4	4	4	4	4
Total	33	7	8	17	33	33	33	33	33	33	33	33	33	31

17. RECOVERY METHODS

17.1 Mineralized material Sorter and Process Flowsheets

The process flowsheet selected for the study is based on the historical metallurgical test work conducted at SGS (formerly Lakefield Research) and COREM (formerly CRM). No metallurgical test work was performed for this PEA. However, mineralized material sorting tests were performed at COREM on some representative samples to assess the effect of preconcentrating the mineralised material before it enters the processing plant on surface. Historical metallurgical test work and results are presented in Item 13.

Mineralized material produced at the mine site will be crushed underground using a jaw crusher. The crushed material will be transported to the surface and stored in a 2,400 t silo. From the silo, the mineralized material is conveyed to the mineralized material sorter building (see Figure 17-1).

The preconcentrated mineralized material is transported to a crushing plant housing a tertiary cone crusher operated in a closed circuit with a double-deck vibrating screen. The crushed mineralized material is stored in a triodetic dome. The milling circuit consists of a ball mill operated with cyclones. A gravimetric separator followed by an intensive leach reactor ILR or Acacia recovers free gold from the cyclone underflow. The cyclone overflow is thickened in a thickener to a density of 45-50% solids and leached in a CIL circuit. Gold is recovered by electrowinning cells for producing the bullion. The plant includes a reagent preparation and distribution system. The dewatered flotation tailings are pumped to a tailings pond or paste backfill (see Figure 17-2).

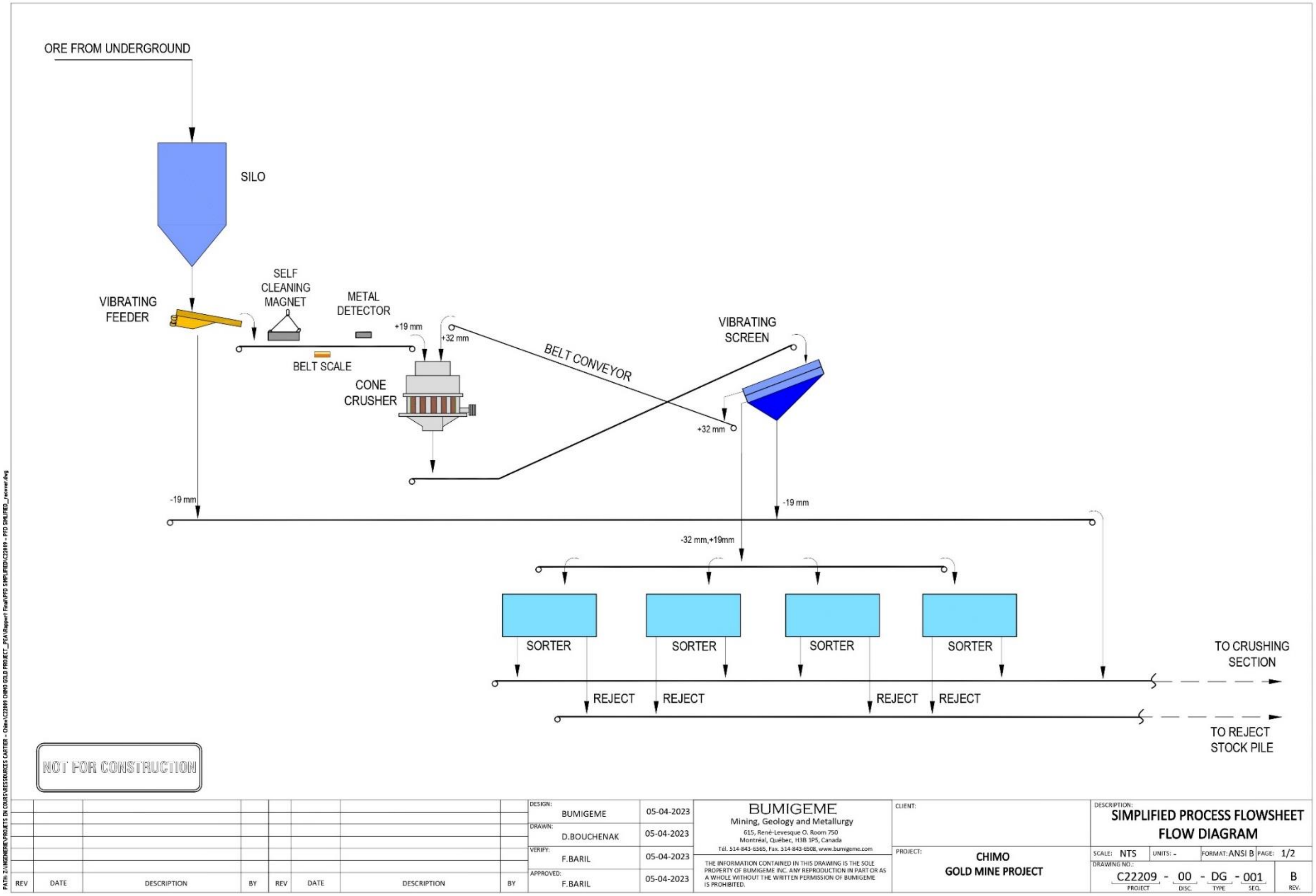


Figure 17-1 – Mineralised material sorter Plant Flowsheet

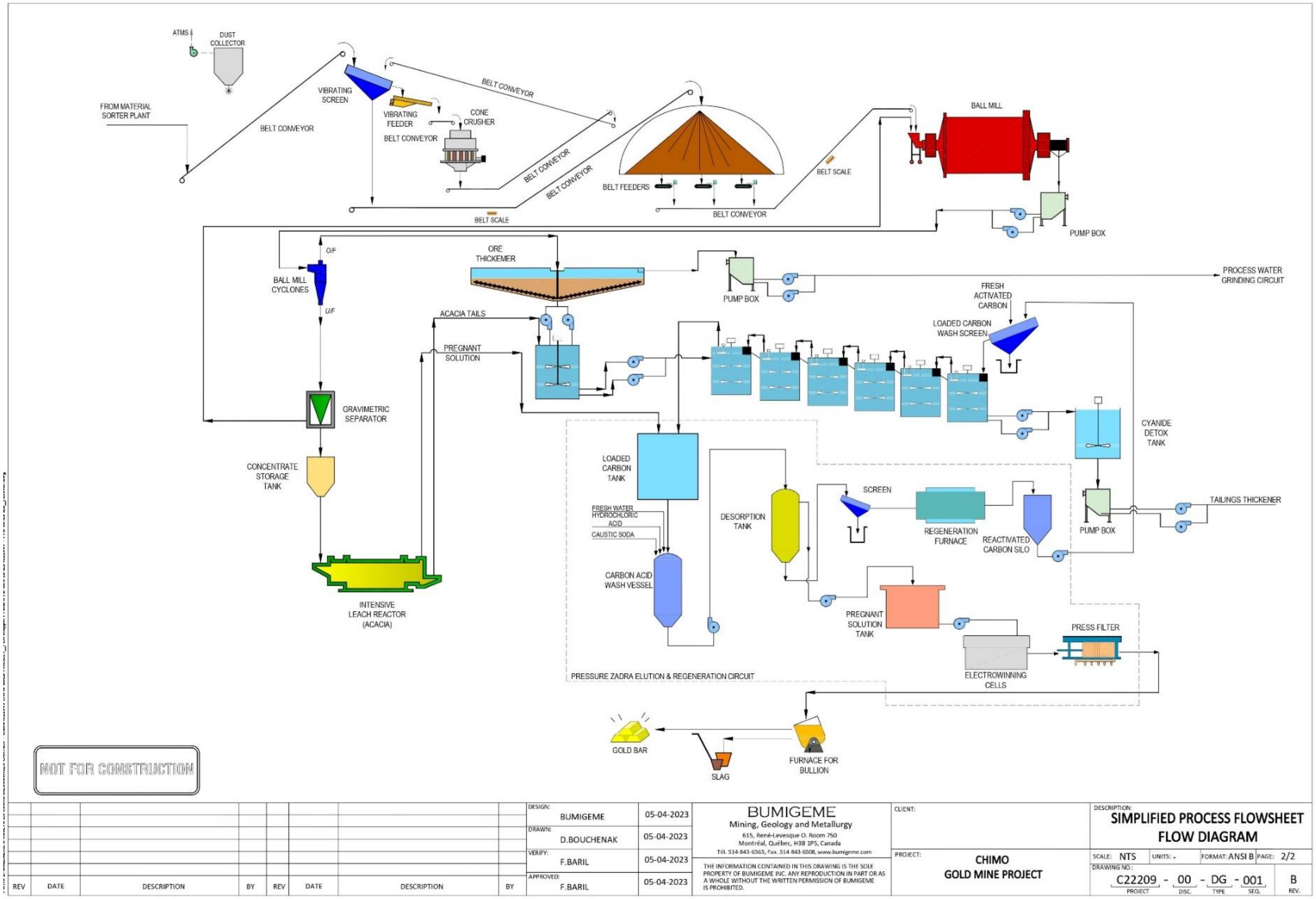


Figure 17-2 – Process Flowsheet

17.2 Process Design Criteria

The design criteria for the process plant (mineralised material sorter plant and cyanidation plant) are based on a nominal throughput capacity of 2400 tpd. Sizing and selection of the process plant equipment are based on the design criteria. The cyanidation plant will produce 119,318 oz/y gold at the projected recovery of 93.1%.

Table 17-1 presents the design criteria parameters for the process plant. The values presented are from historical metallurgical test work, Bumigeme's database and benchmark values.

Table 17-1 – Process Design Criteria Basis

Description	Value	Unit
Process plant throughput	2,400	tpd
Average gold feed grade	4.55	g/t
Crushing plant availability	65	%
Process plant availability	90	%
Gold recovery by gravity circuit	38	%
Grind size P80	74	µm
CIL retention time	48	hours
Gold recovery by CIL	95	%
Overall gold recovery	93.1	%

17.3 Mineralized Material Sorter Circuit

A vibrating feeder feeds a secondary cone crusher via a conveyor to produce a feed suitable for mineralized material sorter. From the crusher, the mineralized material is conveyed to a triple deck screen (3 m wide x 7.3 m long) that size the material into three products: a fine product of minus 19 mm, a product of minus 32 mm plus 19 mm to the mineralized material sorters, and a coarse product of plus 32 mm that return to the cone crusher. The mineralized material is conveyed to 4 mineralised material sorters to be preconcentrated. Two products will come from the sorters: a preconcentrated mineralized material that will be conveyed to the crusher building and rejects that will be transported to an outside stockpile.

17.4 Crushing Circuit

The preconcentrated mineralized material from the mineralized material sorter (-32+19 mm) is fed to the tertiary crushing plant. A belt conveyor feeds a vibrating double deck screen (1.8 m wide x 4.8 m long) having a 19 mm top deck and 12 mm lower deck. The screen oversize feeds a tertiary cone crusher which operates in closed circuit with the screen, while the undersize -12 mm is transported to a fine mineralized material triodetic dome on a belt conveyor. The crushed mineralized material is stored in the dome containing a minimum of two days of mineralized material reserve for the concentrator. Belt feeders installed under the dome will feed the ball mill via conveyor.

17.5 Grinding and Gravity Circuit

A conveyor feeds a 4.5 diameter x 7.6m long overflow ball mill with a 2,400 kW motor. The ball mill operating in a closed circuit with cyclones grinds the mineralized material to a P80 74 µm. A QS30 Knelson concentrator installed in the grinding circuit recovers free gold from the cyclone underflow stream. The gravity concentrates are leached in an Intensive leach reactor Acacia. The Knelson concentrator tails return to the mill discharge pump box. The pregnant leach solution from the Acacia is pumped to a loaded carbon tank prior to feeding it into an electrowinning cell in the gold room. The Acacia tails are pumped to the CIL feed mixing tank.

17.6 CIL Circuit

Cyclones overflow are sent by gravity to a 20m thickener to raise density to 45-50% solids. Thickener underflow and Acacia circuit tailings are pumped in a cyanidation feed mix tank before leaching. The conditioned slurries are pumped to the CIL tanks.

The CIL circuit consists of a series of six tanks, each 14 m in diameter, agitated mechanically by a 112 kW motor. Lime is added to the tanks to maintain a pH of around 11. Sodium cyanide and air are added to the tanks to leach gold. Gold-loaded carbon moves counter-current to the slurry flow to the first tank and is then pumped to the loaded carbon tank. The pregnant solution from the Acacia circuit is also pumped to the loaded carbon tank before feeding the electrowinning cell. The residue from the CIL circuit feeds a cyanide destruction tank. The detoxed slurry is pumped to a tailings pond or a backfill plant.

17.7 Energy, Water and Consumable Requirements

17.8 Energy Requirement

The total electrical connected load for the process plant is estimated at 7.608 MW including running and standby loads. The operating demand load is estimated at 7.165 MW. The plant will be hooked up to the Hydro-Quebec grid. All power consumed will be hydroelectric.

The consumption is estimated at 38.14kWh/tonne.

17.9 Water Requirement

The water requirement for the process plant is met by two sources: fresh water and process water (recycled water). Process plant water requirements are estimated at 375 m^3/h. Fresh water requirements will be minimized by recycling the process water. Fresh water is required mainly for reagent preparation, Knelson concentrator and pump gland seals. Most of the equipment in the process plant uses process water recycled from thickeners overflow and tailings pond.

17.10 Consumable Requirement

There are three main areas in the plant where consumables are used:

Grinding: Forged steel balls are used as grinding media in the ball mill. Grinding media is received in trucks, stored in the grinding area, and charged to the mill daily.

Cyanidation: Sodium cyanide (NaCN) and quicklime (CaO) are used in cyanidation circuit. The acacia circuit also consumes cyanide for leaching gold. Bulk cyanide is received in briquette form and delivered in road ISO tankers. Quicklime is delivered in bulk solid form in trucks.

Dewatering: Flocculants are used in thickeners and are received in 25 kg bags.

17.11 Process Plant Personnel

The manpower requirement for the process plant has been estimated as 55 persons, which includes 10 staff employees and 45 hourly operating personnel. Table 17-2 and Table 17-3 present the list of staff and operators, respectively for plant operation.

Table 17-2 – Process Plant Staff Requirement

Position	No. of Employees
Mill Superintendent	1
Mill Foreman	1
Metallurgists	2
Metallurgical Technicians	4
Clerk	1
Chief Assayer	1
Staff Total	10

Table 17-3 – Process Plant Operator Requirement

Position	No. of Employees
Control room (2/shift)	8
Mineralised material sorter	8
Crusher	4
Grinding	4
Helpers	4
Gravity/ILR	4
Cyanidation	4
Electricians	1
Mechanics	2
Assayers	4
Furnace/Refinery	2
Operators Total	45

17.12 Plant Control System

The process control system used in the plant will be a programmable logic controller (PLC) and SCADA base system. The general control philosophy will be a high level of automation and remote control to allow process functions with minimal operator intervention. Instrumentation will be provided within the plant to measure and control key process parameters.

18. PROJECT INFRASTRUCTURE

The Chimo Mine Project (the "Project") is serviced via a 11 km unpaved road accessed from the provincial Highway 117. The planned mine site infrastructure will efficiently support all the underground operation, administration activity, equipment maintenance, mineral processing, water management and tailings facility management.

Surface infrastructure will be composed of rehabilitated existing elements like the main shaft, the existing powerline and the former tailing impoundment to which newly constructed buildings and various other elements will be constructed as required. This shall include the following:

- Main access and services roads;
- Portal boxcut
- Main site pad;
- Main shaft building and crusher spread
- Mineralized material sorter
- Triodetic dome;
- Mill;
- Paste Plant;
- Main electrical substation and distribution;
- Portable water distribution system;
- Sewage system;
- Office dry complex;
- Warehouse;
- Mobile equipment workshop;
- Compressed air station;
- Electrical pumping station;
- Laydown cold storage;
- Core shack;
- Reagents storage
- Fuel and lube storage;
- Explosives magazine;
- Overburden stockpile
- Waste pile;
- Temporary mineralized stockpile;
- Other pads (Organics pile, domestic waste, industrial waste)
- Tailings storage facility
- Water treatment plant;
- Water treatment ponds;
- Parking lot;
- Fencing and security gate.

18.1 Existing Infrastructure

The former Chimo mine operated from the early to mid 1990s. When it shut down in January 1997, all the buildings were removed, and the tailing impoundment was reclaimed in compliance with the prevailing regulations. The only infrastructure still presents at the mine site is the main shaft which has been capped with a concrete slab and the 25 kV power line.

It is assumed that the current surface area will allow for quick installation of the shaft pumping and rehabilitating equipment. The current tailings facility area will be prepared and extended to accept the upcoming volume of tailings produced by the new milling facility. The actual powerline will provide early on, from the beginning of the project, all the electrical power to support the construction and the early industrial activity.

18.2 Roads

18.3 Access Roads

The public access road leading to the private road access onto the mine property is along a paved highway (Route 117) 5 km south of Lac Simon and approximately 11 km on Chemin Chimo to reach the private access point onto the Project's claims. An additional 750 m of private road will be at the start of the construction area. Closer examination of the access from Route 117 to the site will be required to ensure industrial traffic may operate safely and efficiently. It is to be noted that the Chimo bridge between Villebon and Simon lakes may need to be reinforced.

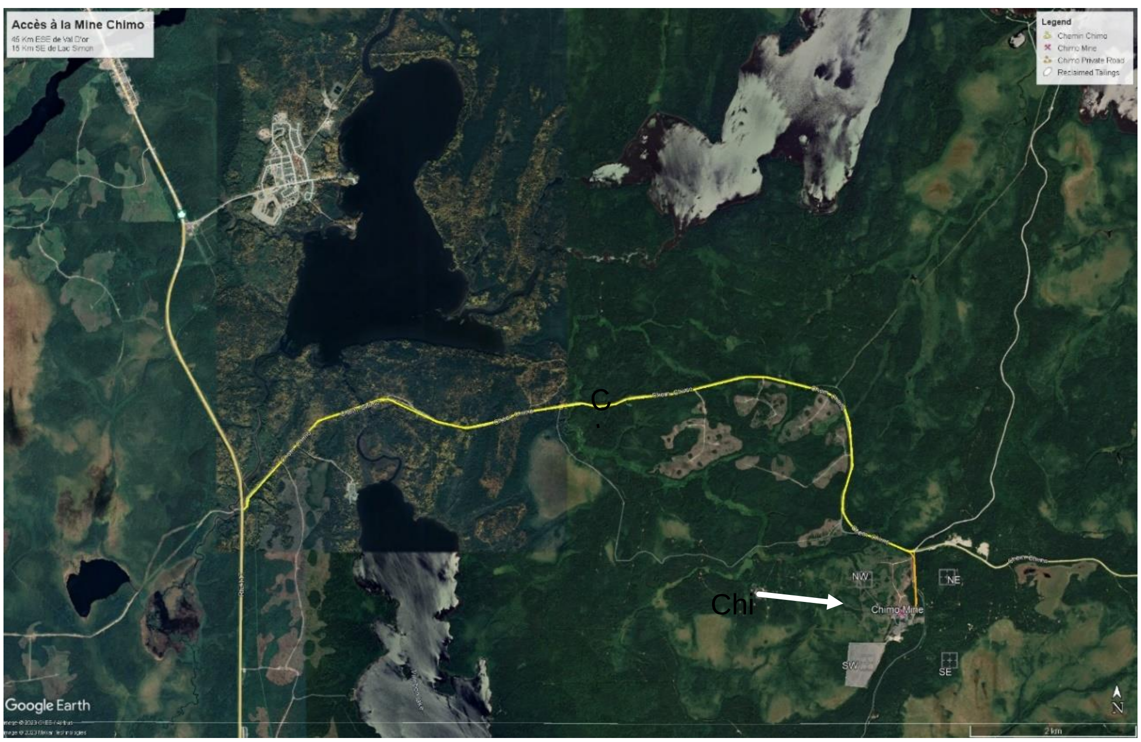


Figure 18-1– Potential Road Access Upgrade

18.4 Site Roads

Even if some operational gravel roads are already present on the site, some new roads are planned to allow access to different parts of the site, such as the portal boxcut, the main pad, the main ventilation heating system, the water treatment plant, the water treatment ponds and the exhaust air raise collar. Figure 18-2 presents the proposed surface general arrangement showing planned roads.

18.5 Underground access ramp portal

The overburden thickness was estimated to be 15 m in thickness at the location of the underground portal. A boxcut into the overburden will be required to expose the rock face to a height of approximately 10 m to allow safe portal construction (Figure 18.2). The proposed boxcut has a slope angle of 18º (3H:1V) and is designed with a 10 m wide gravel road having a -10% gradient. The estimated earthwork volume is 62 m^3.

Figure 18-3 shows the boxcut isomeric view.

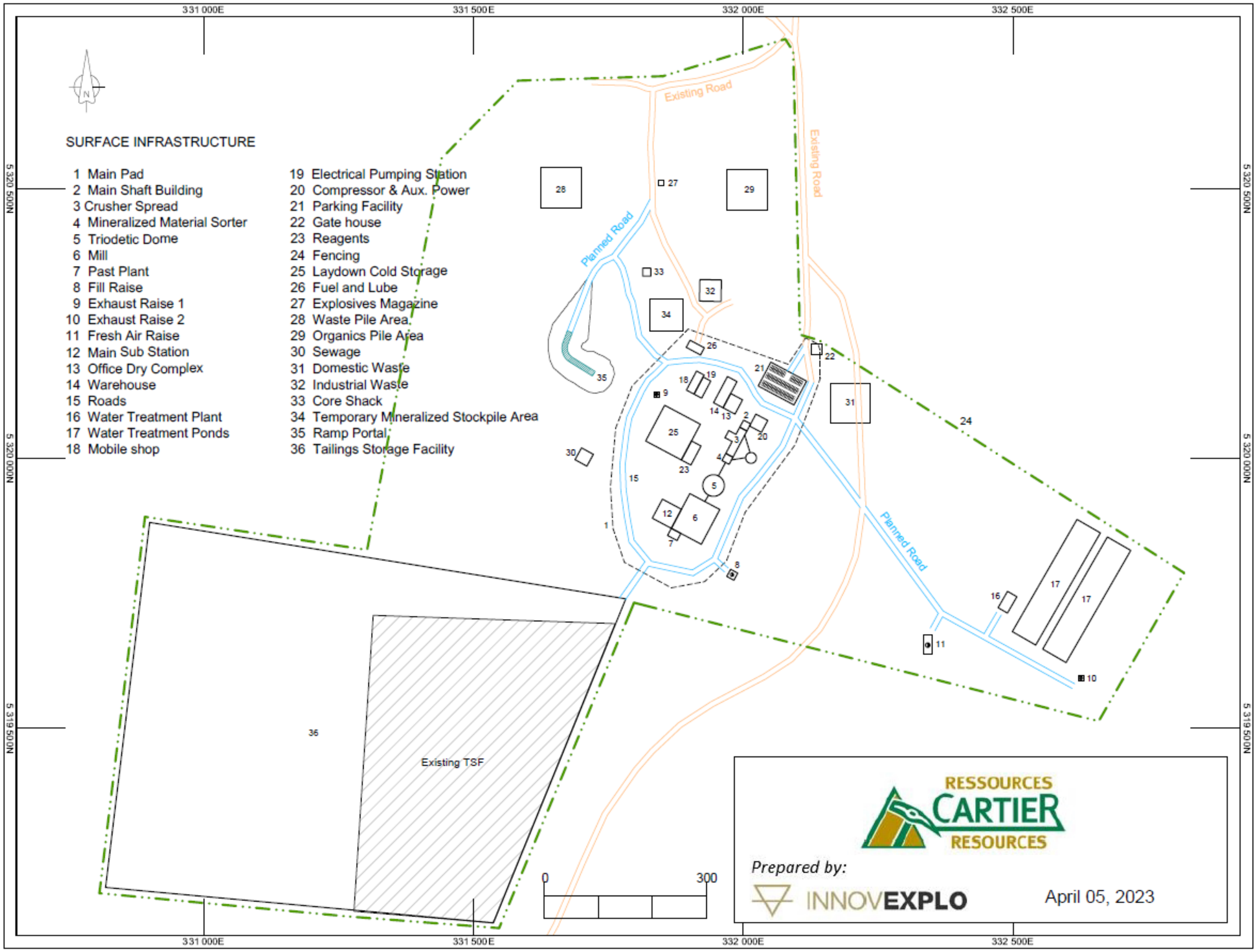


Figure 18-2 – Proposed surface general arrangement

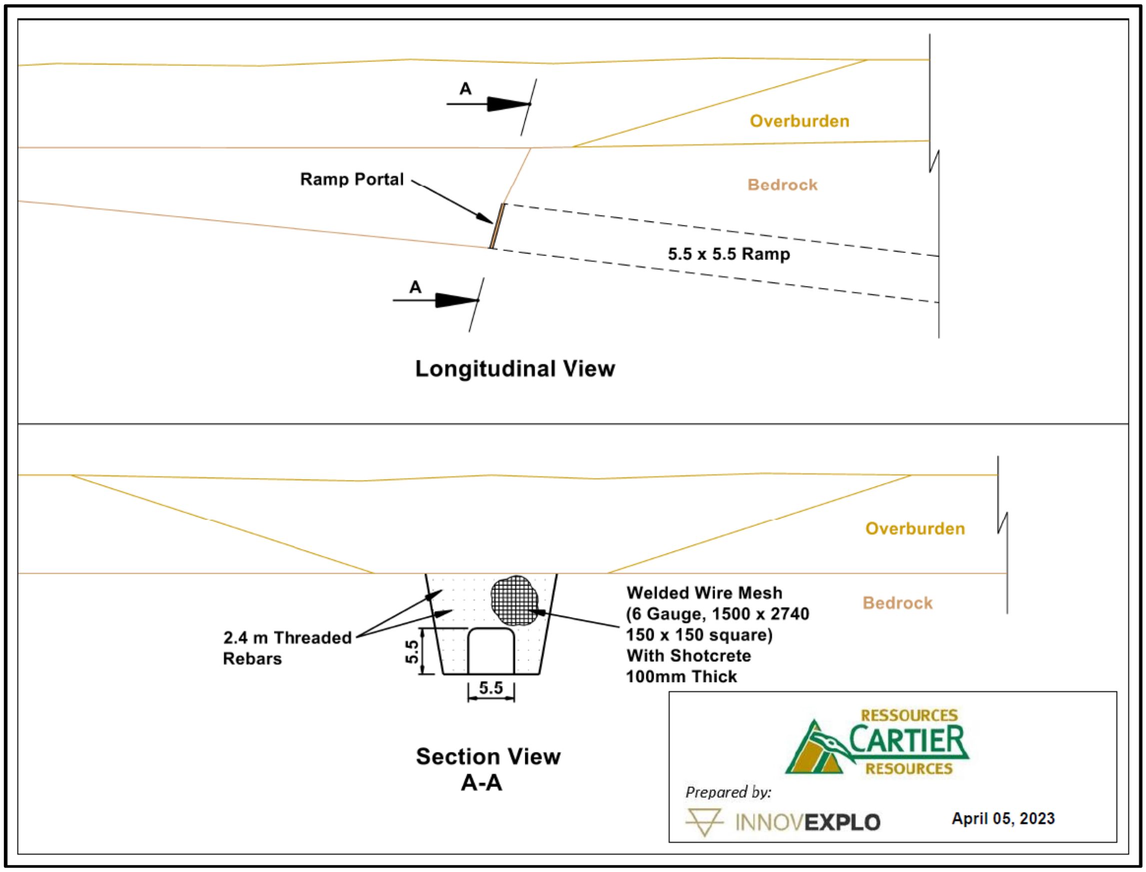


Figure 18-3 – Portal boxcut section views

18.6 Site Pad

Based on the size of the operation, the lay of the land, and considering the environmental and social sensitivity of any construction of mines, it has been determined to utilize a 125 Ha pad as the main construction and operation area. The project requires accommodation for the building and construction phase as well as have the room necessary to safely operate the various components of the process. The main area including the plant pad will be 5 m thick with a total volume of approximately 615 000 cubic meters of aggregate material.

18.7 Plant Pad Preparation

This large-scale operation required significant area to allow for safe, efficient constructability, operations and maintenance of a fully self-contained mining metallurgy process. The average pad depth for the plant pad is estimated to be 5.0 m thick accommodating buried pipes and cables in utilidors. The total volume used is nearly one million bank cubic meters of rock or 2.6 million tonnes of material.

18.8 Electrical power

Based on the power estimate (including 20% contingencies), the total connected load for the surface facilities is 9,850 kW. This total load is made up of the process plant and other site services. There are electric loads for the underground workings, including ventilation, dewatering, jumbo drills, and battery charging stations. An estimated 4,100 kW is added for the total mine load of approximately 13,650 kW. This converts to approximately 17,440 kVA with an assumed 0.8 power factor.

There are two potential utility connections that can support the proposed site, both supplied from Hydro-Quebec substation. One of these substations is located approximately 26 km west of the project mine site and the second substation is located approximately 45 km to the North near the town of Senneterre, Quebec.

18.8.1 Electrical power distribution

The plant electrical network will be connected to the HQ power grid via a 120-13.8 kV main substation. Underground cables (13.8 kV) from the main substation will be feeding a main switchgear located in an electrical room in the mill area. Local power distribution is provided by aerial cabling and tall wood pole to reach distant areas of the mine site whereas high power cables will be buried from the mine sub-station. In case of a power outage, emergency diesel generators will feed the critical loads.

18.8.2 Back-up Power

An estimate of 2 MVA will be required to ensure safety of the operation during a power disruption. The standard method of providing this power is through diesel generators. These are incorporated into the power plant estimate.

18.9 Communications

The Chimo mine site will be connected to the public telephone service and internet using a new IP telephone network. The communication between buildings will use monomode optic fiber. To allow employees to have wireless access, a network access point (WI-FI Unifi AP Pro) will be installed in each of the buildings to permit cellular and computer connections. Pricing as been estimated based on similar application of neighbouring project and is covered under contingency at this time.

18.10 Surface Material Handling System

The production shaft is used to convey crushed mineralized material from the underground jaw crusher to the surface shaft building, where a secondary and tertiary cone crushers reduce materials to a grain size of 80% passing 12 mm or 20 mm. Then, the fine material will pass through the sorting machine for a preconcentrated step that will separate the economically valuable (mineralized) rock from waste, by rejecting the waste. An incline conveyor transfers preconcentrated material from sorter to the heated triodetic dome for stockpiling before further processing. The stockpiled preconcentrate is sent to the mill using covered and heated conveyor. Figure 18.4 illustrated the preconcentrate flowsheet. Figure 18-4 illustrates the preconcentrate flowsheet.

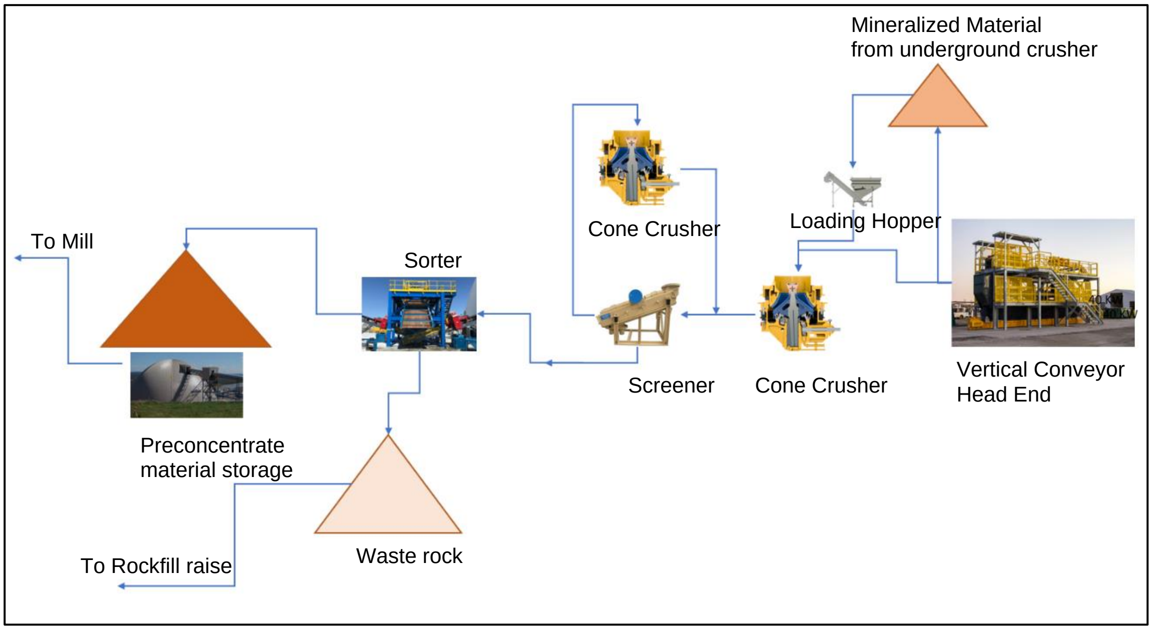


Figure 18-4 – Preconcentrate flowsheet

18.11 Primary Ventilation and Heating

There are two sets of surface main fans and heater to supply the underground workings with fresh air. The first set located at east consists of two 650 HP fans in parallel, the air heater and the container electric house installed at the fresh air raise collar. The second set is located at shaft collar, including a 300 HP fan with air heater.

18.12 Potable Water System

The potable water system also includes the process water system that needs to meet or exceed dissolved solids that may interfere in the extraction process notwithstanding the ability to use as a source for drinking and bathing.

The water needs to be drawn from an authorized site by the Province of Quebec to a suitable tank and from the tank, distributed after being treated for organics, total dissolved solids, as well as metal ions.

18.13 Sewage System

The two main factors that dictate the size and complexity of a commercial septic system are the maximum amount of wastewater that the buildings could produce daily, and soil/site conditions. Some domestic sewage systems today may require a separation of grey water and black water to ensure proper operation of the overall process in turning the waste products into environmentally safe materials. The assumption here is to forgo this issue and design a system for 90,000 liters per day. (335 l/d/person).

18.14 Buildings and Buildings Earthworks

With the main pad established, construction of the buildings may begin. Foundations and structures have been lumped for preliminary estimate purposes detailing of the various buildings and styles may vary with higher resolution in subsequent studies. The following table itemizes these buildings with notable exceptions as the mill and the mineralised material storage dome.

18.15 Fuel and Fuel Storage

Fuel pads and waste oil depots need to be constructed to ensure any spillage will be contained and, in the event of a fire, a method to prevent the spread to other infrastructure or surrounding bush.

18.16 Change House (Dry Facility)

The building is sized for workers and staff personnel to change out of their street clothes for work gear. The facility will have a street clothes locker on one side, a shower/washroom facility in the middle, and a work gear PPE on the other side.

18.17 Materials Pads

Whatever the pads are holding, whether it be potentially economic mineralisation, waste rock, acid generating waste rock or backfill, each material storage pad will require construction and lining. Lining of acid generating or potentially acid generating pads will require a minimum of 1 m of clay or silt covered by a geosynthetic liner and a protective layer. Non-acid generating pad simply require a clay or sandy till base and a working layer.

A waste rock storage area (WRSA) will be located near the portal of the underground. The WRSA will be used to stockpile all waste rock that is hauled out of the underground. No geotechnical data are available for the foundation conditions in the area of the portal location. An assessment of the area will be required prior to selecting the WRSA location.

No geochemical analysis has been completed on the waste rock to date. Therefore, the assumption is that all material is potentially acid generating (PAG) and water runoff will be treated at the mill site, which is directly below the WRSA.

18.18 Rock Dump Construction (Clean)

Berms and drainage systems containing water and preventing seepage are designed to handle two- and one-half years of development.

The pad size and cost are incorporated into the main pad.

18.19 Mineralised material Pad and Temporary Stockpile

The stockpiles of mineralised material and development will have a similar design as the acid generating pad.

18.20 Office Maintenance Complex

The offices and maintenance buildings will be constructed of structural steel buildings that are readily supplied from the Val-d'Or area. Competitive bidding and a substantial labour supply shall make it favorable for Chimo Mine.

18.21 Surface Explosives Storage

Surface storage of explosives will be incorporated into the explosives supplier's contract.

18.22 Accommodations

No onsite accommodations have been considered in this study as the mine is within easy commuting distance to surrounding communities.

18.23 Water Management System

Water management will be a series of collection ditches and ponds used to collect impacted water from around the property outside of the tailings facility. Water drawn from the tailings facility will be recirculated back into the processing facility as process water. The collected surface impact water, along with mine discharge water, is pumped into a raw water collection pond.

This water is then treated through a water treatment facility. Treated effluent water that achieves background or better water quality is then discharged into a clean water holding pond. Water from the clean water holding pond is then reused in mining and milling process and excess water is allowed to discharge to the environment via several septic fields named potential discharge points (PDP).

These discharge points function in such a way to ensure the released water weeps (disperses) back into the ground water below the surface as it would if the project did not take place. There will be no single point discharge of any water to into any natural creeks, streams or bodies of water.

18.24 Garbage

Domestic garbage will be collected and taken to the nearest approved landfill site and managed by a local contract.

18.25 Security

Security of all industrial sites are required, and fencing is required around all hazardous points as well as gates for entry onto the property.

18.26 Tailings Dewatering and Transport

The tailings are thickened using an 18 m diameter paste or deep cone thickener located adjacent to the concentrator building. Flocculant for the thickener will be provided by a common flocculant system located inside the concentrator. Thickener overflow will be returned to the concentrator for use as process water.

The bottom of the thickener will be cladded with heating to allow for easier access to and maintenance of the thickener underflow pumps.

Thickened tailings are pumped from the discharge of the thickener to a small agitated tank located inside the concentrator building. The intent of the tank is to help homogenize the thickener underflow so a more consistent density of tailings is pumped to the Tailings Storage Facility (TSF).

From the agitated tank, thickened tailings are pumped to the TSF via centrifugal pumps. The pipeline to the TSF is considered to be insulated with heat tracing, but alternatively the strategy of circulating water when tailings isn't flowing can be used to avoid freezing of the line.

The tailings disposal pumps will be located inside the concentrator building adjacent to the agitated tank. Both the thickener underflow pumps and the disposal pumps will have redundancy in an operating and standby configuration.

18.27 Tailings Storage Facility

Tailings generated at the concentrator are pumped from the thickener to the TSF located southwest of the mine. The TSF will expand on the existing tailings facility that was developed in the mid-90's. The TSF site was chosen on the basis that the existing tailings facility will require less development at startup than native ground. The existing tailings facility site was selected following a comparative analysis and found to have the best conditions for tailings storage (Cambior, 1996). It is assumed that the rationale are still valid now as they were then.

At present, no tailings geochemical testing has been conducted; it is assumed the tailings geochemistry will be similar to that of the former mine (i.e. non-acid generating and effluent meeting requirements of Directive 019) per the former closure plan (Cambior, 1996).

An estimated 9.5 million tonnes (Mt) will be generated by the mill over the 9.6 year life-of-mine (LOM) at a nominal throughput rate of 2,700 tonnes per day (tpd). The estimated dry density of the thickened tailings is 1.4 t/m^3 based on an average specific gravity of 2.7 g/cm^3 and an assumed void ratio of 0.9 g/cm^3 for the deposited tailings, indicating that 6.7 Mm^3 of storage capacity are required for the LOM tailings.

The TSF is understood to be underlain by a glaciolacustrine plain of former Lake Barlow. The topography is generally flat and sloping to the northwest. To the east of the TSF is an esker deposit that rises above the surrounding topography and generally is oriented along a north-south axis. At present, no geotechnical investigations have been carried out for the site; it is assumed that the entire TSF is underlain by glaciolacustrine clay that will provide a barrier to seepage.

It is unknown at this stage whether there are environmental constraints that would impact the proposed location of the TSF.

The TSF will be contained by an earthfill starter embankment and raised with dry deposited tailings using upstream methods. The outer slope of the TSF will be covered with granular soils that are filter compatible with the tailings and may be progressively reclaimed with erosion resistant rockfill or vegetated topsoil as the active deposition area rises. The TSF will generally be sloped from south to north following the natural topography with an overall tailings beach slope of between 3 and 5%.

18.28 Water Management

Tailings bleed water and runoff from the TSF will passively drain to an external reclaim pond located down gradient to the north of the TSF, which will supply the mill with make-up water. Collection ditches will be excavated around the entire TSF perimeter to collect runoff falling on the external slope and intercept seepage from the TSF. The collection ditches will passively drain to the reclaim pond. Surplus water from the reclaim pond will be discharged to the environment following treatment (if required).

18.29 Starter TSF

For the first year of operations, tailings deposition will be contained within the footprint of the existing tailings facility. An estimated 985,500 t of tailings will be deposited from a central discharge forming a cone that rises about 10 m above existing ground. A 3 m high till berm will be constructed around the perimeter to contain the deposited tailings. Bleed water and runoff will passively drain through an overflow spillway into the external collection ditches, and ultimately drain to the reclaim pond.

18.30 Ultimate TSF

During the first year of operations while tailings are deposited within the starter TSF, the ultimate TSF footprint will be developed. The ultimate TSF will expand west and south from the existing tailings facility and have an approximate area of 900 m by 1,100 m, or about 99 ha. The area will require clearing and grubbing, and stripping of the surficial peat. A 6 m high starter embankment will be constructed around the perimeter with a low permeability till core and a granular outer shell. The starter embankment will provide capacity for 1 to 2 years of production.

Dam raises will be carried out every 1 to 2 years by excavating dried tailings from the upper reaches of the beach and constructing tailings berms that are 1 to 2 m high. Each dam raise will step in at an assumed rate of 15 m horizontal to 1 m vertical.

The ultimate TSF at the end of mine life will be approximately 15 m at the south end and slope north towards the reclaim pond at an assumed gradient of 3%.

18.31 Operational and Closure Considerations

During the first year of operations in the Starter TSF area, it will be important to ensure that water is allowed to drain away to the reclaim pond. This may require more active management including pumping or regrading areas where water tends to accumulate. The Starter TSF perimeter berm may require multiple overflow spillways to ensure drainage occurs and water does not pond against the berms.

The central discharge point within the starter TSF will require occasional relocation to maximize the storage within the cell.

The TSF is intended to be designed for closure such that it can quickly transition to closure at any time before the planned end of operations. The sloped geometry of the TSF will shed water and accelerate the consolidation of deposited tailings. Once operations cease, the TSF need only to be covered and revegetated to form a stable landform. The reclaim pond should be drained by discharging the water when it is safe to do so. The pond may be breached or lowered to reduce the volume of it.

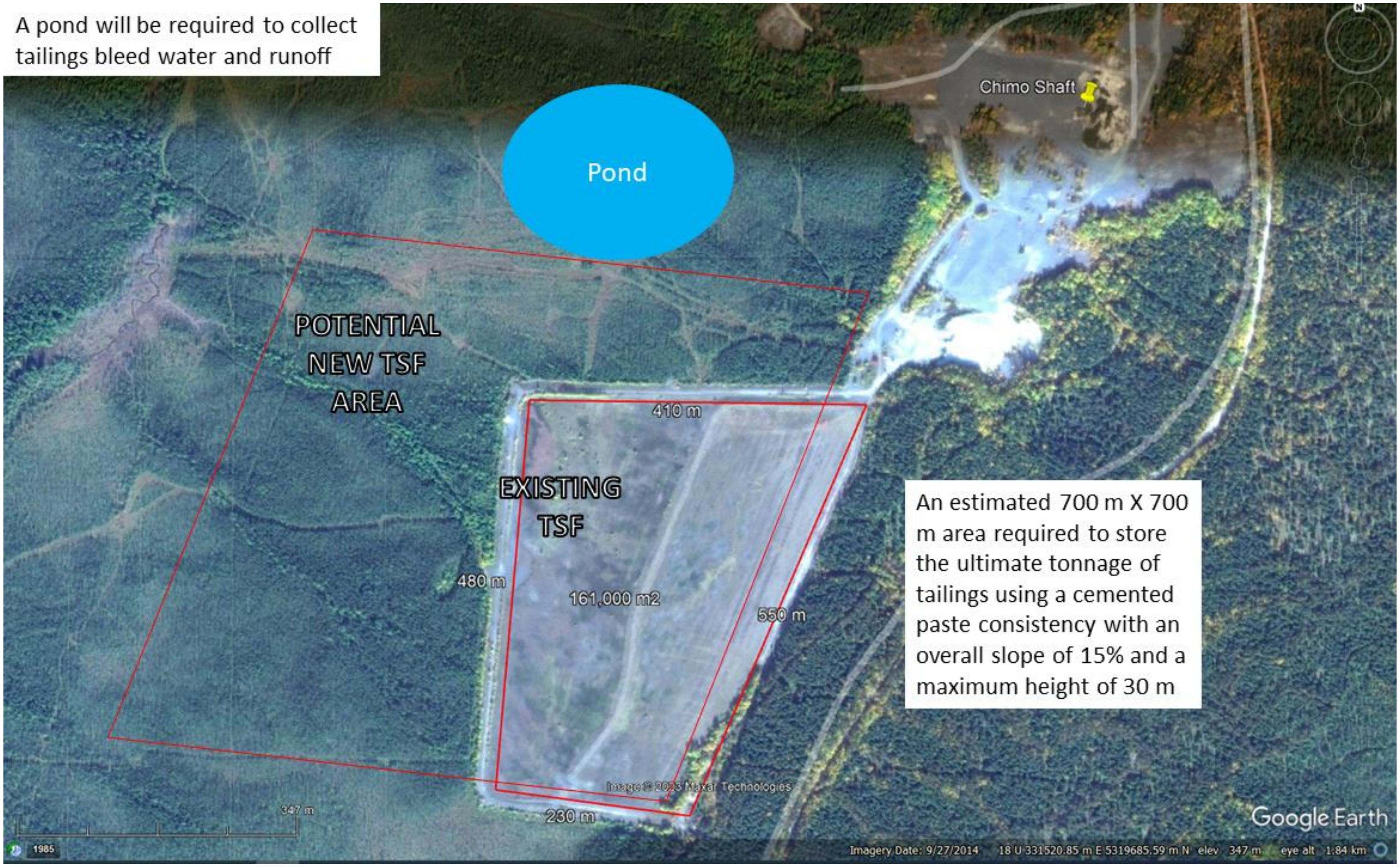


Figure 18-5 – Location of the TMF and appurtenant structures

19. MARKET STUDIES AND CONTRACTS

This PEA assumes a gold price for the mine design and economic analysis (Item 22) of USD 1,750/oz (base case). The gold price used in this PEA is derived from the past five (5) years of historical metal price averages, and prices used in publicly disclosed comparable studies deemed credible. The forecasted gold price is kept constant and is meant to reflect the average metal price expectation over the life of the Project. It should be noted that metal prices can be volatile, and there is the potential for deviation from the LOM forecasts.

As of this date, Cartier has no contract with a refinery to treat (and pay for) its anticipated gold production from the Chimo Mine Project. However, since the gold market is categorized as an open market, InnovExplo assumed for the purpose of this study that Cartier would sell all its production to regular gold buyers.

Cartier currently has no contracts to support mining or processing or the development of the Chimo Mine Project, although several supply and service agreements will be required to be put in place to launch development work on site.

Contracts will be required to provide supply for all major activities of mining and processing, such as equipment vendors, power, explosives, cyanide, binder, ground support, maintenance, mechanical, electrical and civil works, plant infrastructure, construction and mining contractors. The terms and rates for these contracts are yet to be negotiated but shall be within industry standards.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Legal Context

The first step of this process is the filing of a project written notice which describes:

- the project,
- the variants for carrying it out,
- the objectives and justification,
- the site and its main environmental characteristics,
- main issues identified and anticipated impact on the receiving environment,
- a timetable,
- a summary of the communications that have been done and those anticipated with the host communities,
- and which type of greenhouse gases the project is likely to entail, if ever.

The Government of Quebec's Ministry of the Environment (formerly the MELCC, now the MELCCFP) will then reply with a guideline document presenting the level of detail required for the Impact Assessment report.

Once the Impact Assessment report is submitted and declared satisfactory by the authorities, the analysis shall last not more than 13 months. Then, the authorities can require more information or specify conditions before the authorization is issued.

A generic guideline for an underground gold mine will include:

- A reference to a Feasibility Study with the same characteristics to ensure the anticipated impacts are those that have the potential to occur during the realization of the project;
- A complete baseline conducted according to the most recent governmental guidelines;
- Physicochemical characteristics of the mineralised material, the waste rocks, and the tailings according to the most recent governmental guidelines;
- Water balance for each phase of the project on a monthly;
- Anticipated water discharge quality compared with the relevant aquatic life and fish consumption criteria defined in the OER calculation guide (MELCC, 2022).

Once the authorization associated with ESIA is issued, then the proponent can apply for the construction permits. These applications include the plans issued for construction. No onsite accommodations are expected to be build.

20.2 Status of the environmental database

The Chimo gold deposit was discovered about 90 years ago and has been in operation three times. The most recent period of exploitation is from December 1989 to January 1997. Most of the documents from this period are available, namely:

- Tailings storage facility, pre-construction, operation, closure and monitoring data;
- Closure plan, which includes a description of the receiving environment and the dismantling report; and
- Acid generation static testing for mineralised material, waste rock and tailings which demonstrate non-acid generation materials.

This information is still adequate but needs to be completed. Today, the level of detail required and the number of components to be inventoried are much higher. For example, caribou and wetlands have grown in importance in the eyes of the stakeholders. The analysis of industrial waste, such as waste rock and tailings, has also evolved. Static acid generation tests alone are insufficient. Metal leaching assays are also required.

The climatic data and the data for the social and biological environments will have to be updated. The endangered species list has evolved, as has the access to the forest.

During the recent drilling programs to delimit the Chimo Mine - Nordeau Deposit, the issuer has sampled each lithology, including waste rock, in proportion to the volume that might be extracted, according to the MELCC guideline (MELCC, 2020). These samples are safely stored and waiting for ARD and metal leaching tests.

Much of the needed information is available publicly, namely:

- Recent climatic data;
- Wetlands map;
- Location of sandpits, snowmobile and ATV trails, hunting cabins, protected habitats, protected areas, etc.; and
- Socio-economic data.

The MELCCFP has listed the reclaimed tailings facility as an industrial garbage storage site. The site is associated with arsenic contamination. Following the closure and reclamation of the tailings facility, a release certificate was issued by Quebec Natural Resources Department on March 14, 2001. Since then, the MELCC has taken over the surveillance of the stability of the reclaimed pile and the monitoring of run-off water quality.

20.3 Relation with host communities

Since 2015, the issuer’s top management team has engaged with the surrounding land users, namely two outfitters, cottage and cabin owners, hunters and trappers, as well as with the Council of the Nation Anishnabe of Lac Simon, whose community is 9 km directly northwest of the mine site. The Anishnabe community has asked the issuer to consider its members for contractor agreements and to collaborate as a stakeholder in the Chimo Mine Project.

21. CAPITAL AND OPERATING COSTS

The capital and operating cost estimates presented in this PEA study for the Chimo Mine Project (the "Project") are based on the construction of an underground mine, process plant and tailings facility designed for an average mining throughput of 4,500 tpd and 3,000 tpd mineralized material processing over the life of mine ("LOM"). The plant site is located in close proximity to an industrial urban setting. Acquisition of non-domestic capital items, or operating consumables, assumes the exchange rates listed in Chapter 22.

21.1 Capital Cost

The project total capital costs are estimated at CAD$461.7 million ($M), including pre-production capital expenditures and sustaining capital expenditures.

The total pre-production capital costs for Chimo Mine Project are estimated at CAD$302.1M. This includes capital lease payments of mobile equipment, capital purchases of surface and underground infrastructure, capital development and for mine closure bonds. This is summarized in Table 21.1. All costs are in Canadian dollars (CAD$) and inclusive of a 25% contingency (the exception is underground development at 10% contingency). The cost components are discussed further in the following sections of this report.

The ongoing, sustaining total capital costs for the remaining life of the Chimo Mine Project life (following the pre-production period) is estimated at CAD$159.6M. This includes ongoing capital leasing of mobile equipment, ongoing rebuilds and improvements on surface and underground infrastructure, and ongoing capital development. This is summarized in Table 21.2. All costs are in Canadian dollars (CAD$) no contingency was applied to sustaining costs.

Capital costs were sourced from third party equipment manufacturers, contractors and vendors and InnovExplo internal capital database. The capital estimation was completed with an accuracy of +40%/-30%.

The capital costs do not include:

- Costs to obtain permits;
- Costs for pre-feasibility and feasibility studies;
- Any provision for changes in exchange rates;
- GST/QST;
- Project financing and interest charges;
- Price/cost escalation during construction;
- Import duties and custom fees;
- Pilot plant and other testwork;
- Sunk cost;
- Exploration activities;
- Severance cost for employees at the cessation of operations and;
- Any additional costs (but can partly be absorbed in contingency allowance).

The underground operation will require development prior to start mining operation. This development, which will require about three years, is categorized as capital expenditure and will include:

- Portal at the ramp entrance;
- Rehabilitation of the vertical shaft and mine dewatering;
- All surface buildings including mineral processing facilities;
- Water treatment plant
- Electrical power distribution
- Surface main ventilation and heating facilities

Table 21-1 – Pre-production Capital Expenditure Summary

Item	Total cost (CAD$ M)
Contractor Mob-Demob	1,7
Mine Rehab & dewatering	9,6
Mine Development	52,9
UG mobile equipment	9,4
UG Infrastructure	23,3
Surface Infrastructure and equipment	203,3
Surface mobile equipment	0.7
Environmental	1,2

Table 21-2 – Sustaining Capital Expenditure Summary

Item	Total cost (CAD$ M)
Mine Development	$140,5
UG mobile equipment	$12,8
UG Infrastructure	$4,0

Surface Infrastructure and equipment	$1,0
Surface mobile equipment	$1,2

21.1.1 Contractor and mine rehab/dewatering

A mine contractor will mobilize on site to install temporary industrial facilities capable of supporting the shaft rehabilitation, the mine dewatering and the pre-production lateral and vertical development. A civil work contractor will undertake the construction of the milling facility as well as all the surface buildings and install any ancillary equipment as required. It is assumed that a general contractor will take charge of the construction management. The total amount of capital dedicated to the contractor mod and demob as well as shaft rehab and dewatering is estimated at 11.3 M$

21.1.2 Mine Development

Capital development includes lateral development for both the ramp and levels (in waste rock) as well as vertical development for the fresh air and exhaust raises excavated by both raise bore and Alimak methods. During the pre-production period, the capital development is mostly occurring in Chimo Main sector where CAD$52,9 M will be spent to excavate 18,930 meters equivalent. The remaining mine development occurring during the production period is totaling 49,641 meters equivalent at a total cost of CAD$140,5 M.

21.1.3 Underground Mobile Equipment

The mobile equipment fleet consists of underground production and development units to support the underground mine. All equipment will be leased under a capital purchase agreement signed with vendors. Lease will be based on a 4 years amortization at 4%. A downpayment of 25% as well as buyout value of 10% of the base price as been applied as capital expenditure whilst the monthly amortization has been assigned to operating costs. The estimated number of units required is 68. The total cost estimation for mobile equipment for Chimo CAD$9.4M for the pre-production period and CAD$12.8M for the sustaining production period.

21.1.4 Underground Infrastructure

The underground infrastructure encompasses all the equipment to support material handling (mineralized and waste rock) as well as secondary ventilation, electrical and communication distribution and underground pumping system. Most of these infrastructures are build relatively early into the LOM therefore, CAD$23.3 M is dedicated to the pre-production period as opposed to CAD$4.0 M for the remaining LOM.

21.1.5 Surface Infrastructure

The Process Plant and Surface Mine Infrastructure cost summary includes the pre-production costs and its related ongoing sustaining costs to support the Chimo Mine and

Mill Complex. The costs include labour, materials, supplies and services for the establishment and ongoing project maintenance of the facility. This capital cost estimation includes various processes such as Project Indirects, Surface Infrastructure, and the Mill Concentrator and Tailings Facility. The total Process Plant and Surface Mine Infrastructure cost during the pre-production period for Chimo is estimated at CAD$203.3. The total sustaining costs are estimated at CAD$1.0M.

It is to be noted that surface infrastructure is considering the construction of the shortest powerline (25.0 km from the Hydro-Quebec sub-station located to the West of Chimo project site). Therefore, the powerline estimated cost is $C13.5M including EPCM and contingencies.

21.1.6 Surface Mobile Equipment and Environmental

A small fleet of surface mobile equipment has been selected to support the various industrial activities such as road maintenance, snow plowing and material off-loading. The sum dedicated to the Environmental is mostly dedicated undertaking various studies and obtain permits and pay for lab fees.

It is assumed that the contractors will be responsible to provide the above-mentioned services during the pre-production period therefore, the Owner will buy most of its mobile equipment fleet past the pre-production period. Consequently, the total amount dedicated to the surface mobile equipment and to the Environmental is estimated at CAD$1.9 M in pre-production period and CAD$1.2 M for the remaining LOM.

It is to be noted that the mine closure costs were estimated separately with an initial expense of CAD$0.9 M at the beginning of the project followed by a CAD$2.6 M expenses in the last two years of Chimo operation.

Table 21-3 below provides a detail of all the pre-production capital expenditure and ongoing capital expenditure during the LOM.

Table 21-3 – Detailed Capital Expenditure (CAD$ M)

Contractor Mob-Demob	Pre-prod	Ongoing
Mobilisation	0.5	0.0
Temporary facility prep.	0.7	0.0
Temporary Electrical Distribution	0.6	0.0
Demob	0.1	0.0
Sub-Total	1.7	0.0
Mine rehab and dewatering		
Shaft rehabilitation	6.1	0.0
Pumping	0.2	0.0
Water treatment	1.4	0.0
Contingency	1.9	0.0
Sub-Total	9.6	0.0
Mine Development (waste)		

Contractor Mob-Demob	Pre-prod	Ongoing
MAIN	51.8	41.8
EXTENSION	0.8	23.8
EAST	0.2	56.3
NORDEAU	0.0	18.7
Sub-Total	52.9	140.5
UG Mobile equipment		
Equip. Fleet - Down payment	9.4	6.9
Equip. Fleet - Buyout	0.0	5.9
Sub-Total	9.4	12.8
UG Infrastructure		
UG Dewatering	4.4	0.0
Ventilation equipment	1.3	0.0
Material Handling	11.7	0.0
Service Facility	3.0	3.7
Electrical distribution	2.9	0.3
Sub-Total	23.3	4.0
Surface infrastructure and equipment		
Portal Boxcut & Exhaust Raise	7.0	0.0
General Buildings	12.1	0.0
Milling Facility	112.7	0.0
TSF Facility	14.9	0.0
Material Handling	33.1	0.0
Power line & Subs-Station	13.5	0.0
Electrical Distribution	3.1	0.0
Communication system	1.8	0.0
Ventilation System	3.1	1.0
Compressed air	1.9	0.0
Sub-Total	203.3	1.0
Surface Mobile equipment		
Equip. Fleet - Down payment	0.7	0.7
Equip. Fleet - Buyout	0.0	0.5
Sub-Total	0.7	1.2
Environmental		
Pre-Production	1.0	0.0
Contingency	0.2	0.0
Sub-Total	1.2	0.0

Contractor Mob-Demob	Pre-prod	Ongoing
Total CAPEX	**302.1**	**159.6**

21.1 Operating Cost

The operating cost estimates presented in this PEA study for the Project are based on InnovExplo database of benchmarked data, with similar activities as that of the proposed mines. The benchmarked unit costs were then factored (increased up or down) to reflect Chimo mine operation. A fixed and variable component was included thus allowing the costs to reflect the production rate of each particular year.

Operating costs include labour, supplies, services, power and mobile equipment maintenance and parts. The average operating cost per tonne milled for Chimo Underground is estimated at 119.61 $/t.

The General and Administration costs for integrated project is estimated at $19.03/tonne and a processing cost of $17.59/tonne. These costs are summarized in Table 21-4.

Table 21-4 – Operating Capital Expenditure Summary (CAD$ M)

Item	CAD$ M	CAD$/t
Contractor's Indirect	24.1	2.84
Definition drilling	30.7	3.62
Stope development	225.6	26.56
Stoping	336.5	39.62
UG services	48.6	5.72
Milling	149.4	17.59
TSF Operation & Mgm't	29.3	3.45
G&A	161.6	19.03
Environmental monitoring	10.0	1.17
Total OPEX	1,015.9	119.61

Underground Mine costs pertains to the operational costs to support the mineralization extraction at Chimo mine which utilizes a longitudinal long-hole retreat approach. Stopes are mostly backfilled with either or both Cemented Rock Fill (CRF) and/or plain, uncemented Rock fill.

Contractor Indirect OPEX are budgeted for the pre-production period while they are involved in the initial mine development and construction. Definition drilling is estimated to support all the infill drilling required to improve the operating block model and provide more accurate contour of the mineralized zones.

Stope development consist of all the lateral development in the mineralized material to allow production equipment to access the various production centers. The stoping activity encompasses blast hole production drilling, mucking and backfilling activities in order to extract the mineralized materials. Expenses related to the leasing contract of the underground mining fleet is accounted for in this budget line.

The operating cost related to the processing facility located at Chimo Mine site include labour, maintenance, power, supplies and services to support the ongoing expense of running the mill. Having an operating capacity of up to 3,000 tpd, it should easily support the nominal volume of 2,400 tpd of pre-concentrated mineralised material coming from the sorter facility. Capital costs have been based on vendor quotations for major equipment and operating costs have closely referenced the costs of similar mill.

The tailings are thickened using an 18 m diameter paste or deep cone thickener located adjacent to the concentrator building. Flocculant for the thickener will be provided by a common flocculant system located inside the concentrator. Thickener overflow will be returned to the concentrator for use as process water.

General and Administration costs include the mine indirects that are not charged directly to the operating mines. It includes the administration at the main office located at Chimo Mine site. The surface mobile equipment leasing contract is incorporated into the G&A as well.

Underground mine costs are summarized in Table 21-5 below.

Table 21-5 – Operating Capital Expenditure breakdown (CAD$ M)

Development and production	
Contractor indirect OPEX	24.1
Sub-Total	24.1
Definition drilling	
Definition Drilling	30.7
Sub-Total	30.7
Stope development	
MAIN	101.6
EXTENSION	18.6
EAST	43.6
NORDEAU	19.1
ENERGY COST	42.6
Sub-Total	225.6
Stoping (incl. stope prep.)	
MAIN	124.4
EXTENSION	33.8
EAST	95.1

NORDEAU	44.4
ENERGY COST	38.8
Sub-Total	336.5
UG Services	
Hoisting	7.1
Pumping	5.4
Equipment Lease	14.9
ENERGY COST	25.1
Sub-Total	52.4
Milling	
Pre-concentration	3.5
Mineralised material processing	128.4
Electicity	17.5
Sub-Total	149.4
TSF Oper & Managment	
Paste plant operation	19.5
Tailings management	5.9
Contingency	3.8
Sub-Total	29.3
G&A	
Administration	33.3
Material and other	8.3
Engineering	69.7
Material and other	17.4
Electricity	3.8
Diesel fuel	5.3
Surface Services	15.7
Material and other	3.9
Equipment Lease	4.2
Sub-Total	161.6
Environmental monitoring	
Assays	0.6
Personnel	2.6
Miscellaneous	0.4
Sewage system maintenance and monitoring	0.0

Financial guarantee to MNR	4.7
Maintenance	0.4
Contingency	1.3
Sub-Total	10.0
TOTAL OPEX	**1,015.9**

22. ECONOMIC ANALYSIS

A cash flow model was developed to perform economic analysis for the project. The cash flow predictions were done on a monthly basis and in accordance with the project development and production schedule. The analysis was performed on a constant dollar basis and takes into consideration capital cost estimates, operating cost estimates, closure cost and salvage value provisions, working capital requirements and taxation obligations. The economic analysis results present net present value ("NPV"), internal rate of return ("IRR") and payback period on a pre-tax and post-tax basis. A sensitivity analysis was performed on key parameters.

22.1 Principal Assumptions

Key assumptions used to build the project cash flow model include:

- Long term gold price of US$1,750/oz
- Exchange rate of CAD $1.00 = US$0.77
- Propane price of CAD $0.80 per litre
- Diesel price of CAD $0.90 per litre
- Electricity cost of CAD $0.045 per kwh for the first 210,000 kw of monthly consumption and CAD $0.032 per kwh thereafter
- Discount rate of 5%

22.2 Production Schedule

The production schedule is based on an underground mining operation that uses conventional longitudinal and transverse longhole stoping with a mining rate of 4,500 tpd over a 9.7-year mine life. A total of 15.8 Mt of mineralized material at an average grade of 2.7 g/t will be mined. Mineralized material would then be sorted using automated industrial sorting technology based on RGB and XRT sensors before being transported to the processing plant. The sorter is expected to operate with a concentration ratio of 1.85 and a recovery rate of 91.9%. The processing plant will process 2,400 tpd on average over the life of mine with an estimated recovery rate of 93.1%. Average annual production amounts to 116,900 ounces of gold for a total of 1,158,000 ounces over the mine life. Figure 22-1 and Figure 22-2 illustrate the processing and production schedule for the project. A detailed annual production schedule is presented in Table 22-1, highlighting the key physicals used to build the cash flow model.

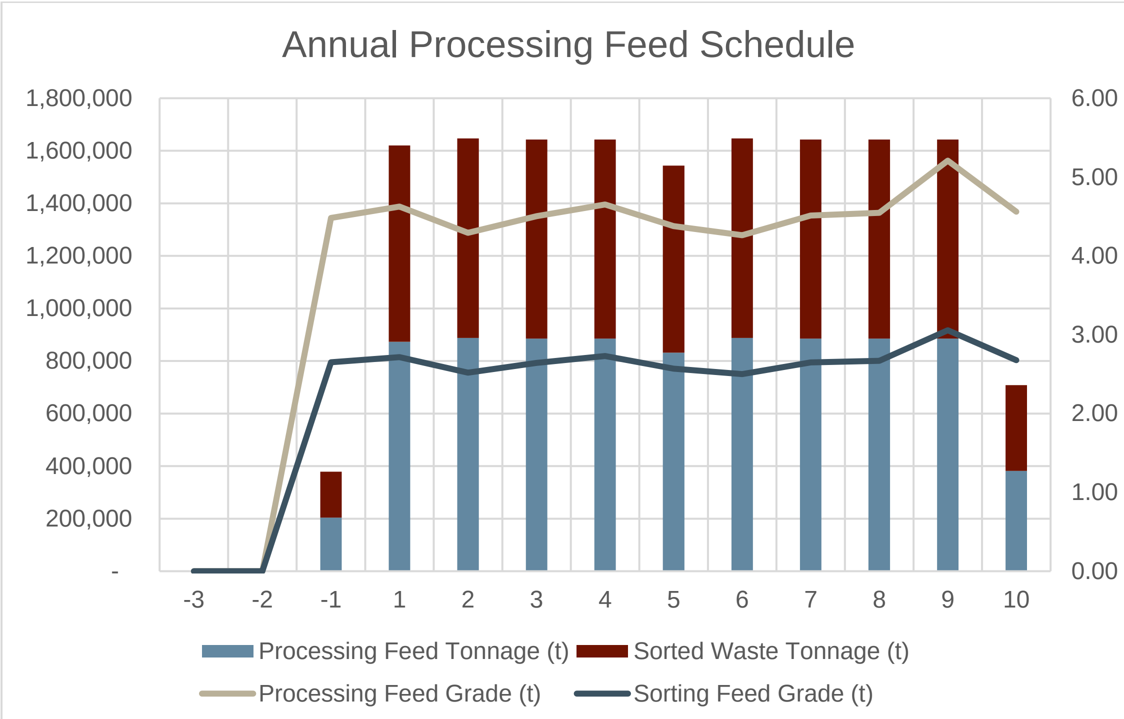


Figure 22-1 – Annual Processing Feed Schedule

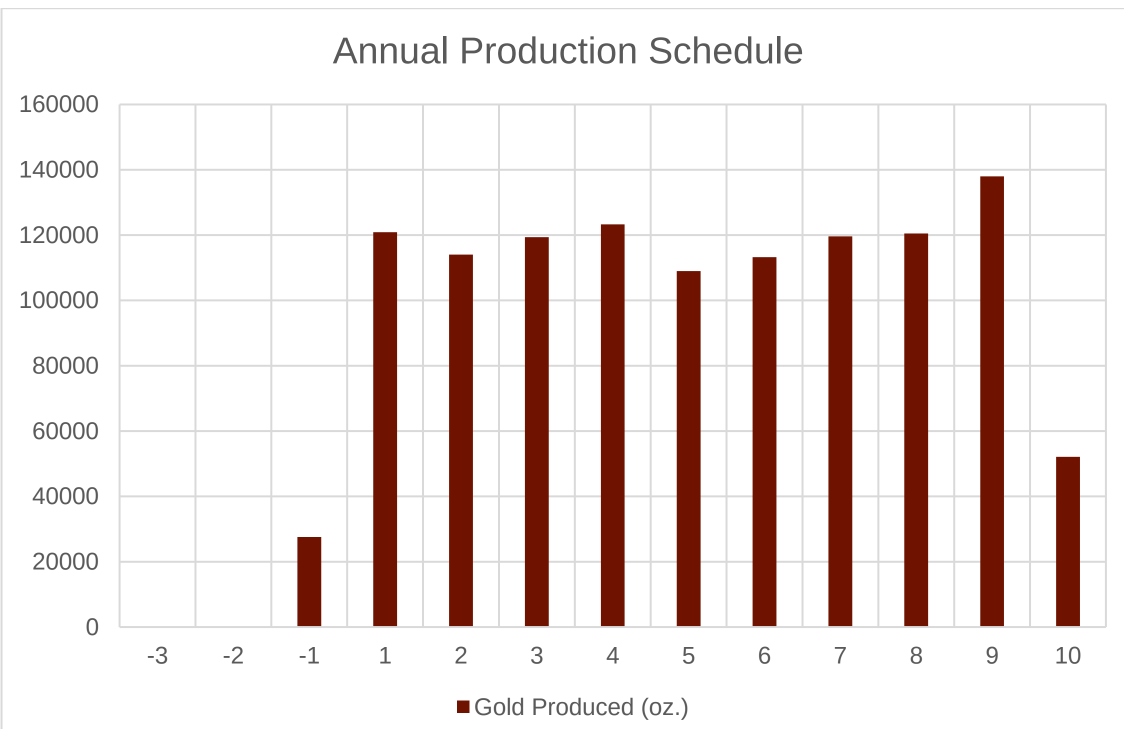


Figure 22-2 – Annual Production Schedule

Table 22-1 – Annual Production Schedule

Period		Total	-3	-2	-1	1	2	3	4	5	6	7	8	9	10
Mining															
Mined Tonnage	*(t)*	15,757,709	5,201	55,506	317,878	1,620,061	1,647,115	1,642,691	1,642,825	1,543,312	1,647,126	1,642,957	1,642,502	1,642,500	708,036
Mined Grade	*(g/t)*	2.67	3.01	2.74	2.63	2.71	2.52	2.64	2.73	2.57	2.50	2.65	2.67	3.06	2.68
Material Sorting															
Sorting Feed Tonnage	*(t)*	15,757,709	-	-	378,585	1,620,061	1,647,115	1,642,691	1,642,825	1,543,312	1,647,126	1,642,957	1,642,502	1,642,500	708,036
Sorting Feed Grade	*(g/t)*	2.67	0.00	0.00	2.65	2.71	2.52	2.64	2.73	2.57	2.50	2.65	2.67	3.06	2.68
Sorting Concentration Ratio	-	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Sorting Recovery	*(%)*	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%	91.9%
Processing															
Processing Feed Tonnage	*(t)*	8,493,405	-	-	204,057	873,213	887,795	885,410	885,482	831,845	887,801	885,554	885,309	885,307	381,631
Processing Feed Grade	*(g/t)*	4.55	-	-	4.48	4.63	4.29	4.50	4.65	4.38	4.26	4.51	4.55	5.21	4.56
Processing Recovery	*(%)*	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%	93.1%
Production															
Gold Produced	*(oz.)*	1,157,710	0	-	27,584	120,911	114,053	119,375	123,313	108,989	113,267	119,614	120,490	138,011	52,103

22.1 Revenue

Revenue was calculated using gold pricing and exchange rate assumptions. A refining charge equal to $5.00 per ounce was applied, equivalent to $6M over the life of mine. Total project gross revenue equals $2,634M.

22.2 Royalties

A 1% net smelter return royalty (NSR) is applicable on the metal sales from the Chimo Mine portion of the project to Triple Flag Precious Metals. A 3% gross metal royalty (GMR) is applicable on the metal sales from the West Nordeau portion of the project to Globex Mining Enterprises. These royalties represent a cost of $33M over the life of mine.

22.3 Capital and Operating Costs

The project requires $341M of initial capital and $160M of sustaining capital. Operating costs are estimated at $107 per tonne milled. Average cash costs of US$647/oz and all-in sustaining cost of US$755/oz are expected over the mine life.

22.4 Closure Costs and Salvage Value

Closure costs are estimated at $3M with equipment salvage value estimated at $5M.

22.5 Working Capital

The financial model also includes $25M in working capital requirements that is drawn down at the beginning of commercial production and returned at the end of the project life. Working capital requirements were determined as being equal to three months of operating costs.

22.6 Taxes

The financial model considered applicable taxation regime to approximate potential project economics. A federal corporate income tax rate of 15% and a provincial corporate income tax rate of 11.5% was applied on taxable income. Mining tax was evaluated in accordance with the Quebec Mining Tax Act, considering both a sliding scale profit tax based on profit margin and a minimal royalty based on gross revenue. Over the life of the project, provincial corporate income tax amounts to $105M, federal corporate income tax amounts to $137M, and Quebec mining tax amounts to $193M for total taxes of $435M. Carbon tax was not considered at this stage of project evaluation.

22.7 Cash flow forecast

Table 22-2 and Figure 22-3 present the project cash flow on an annual basis. The project is expected to generate a total after-tax cash flow of $688M.

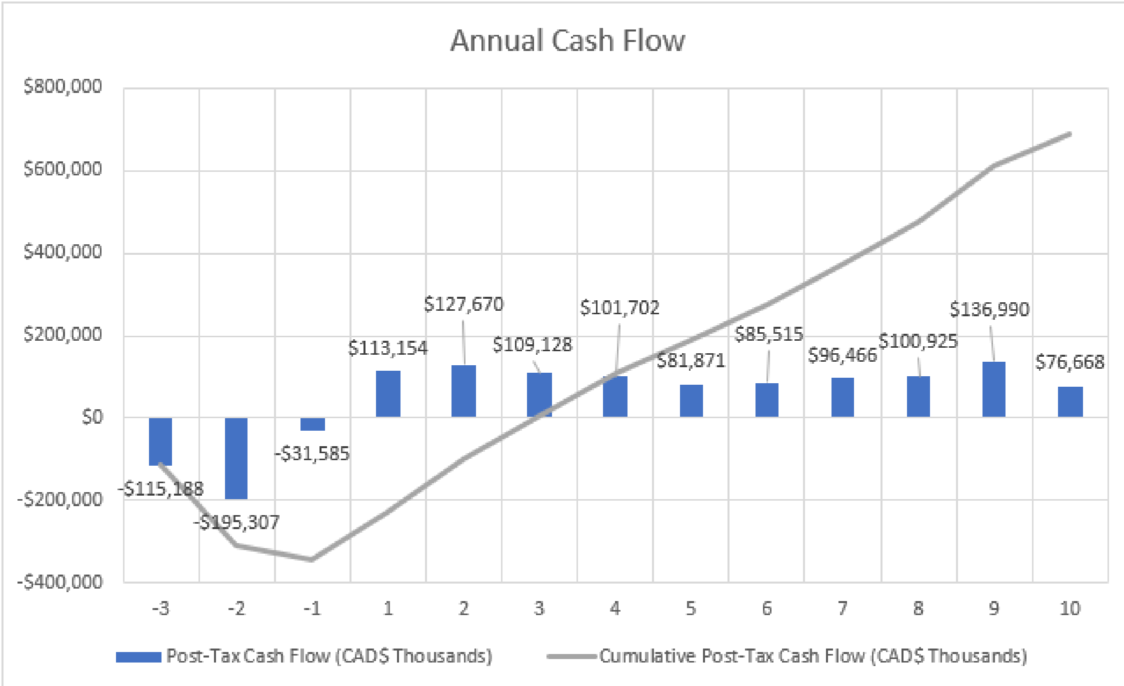


Figure 22-3 – Annual Cash Flow

Table 22-2 – Annual Cash Flow

Annual Cash Flow (CAD$ Thousands)														
Period	**Total**	**-3**	**-2**	**-1**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Revenue														
Gross Revenue	$2,633,790	$0	$0	$62,754	$275,073	$259,471	$271,579	$280,538	$247,950	$257,682	$272,121	$274,114	$313,974	$118,535
Refining Charge	$5,789	$0	$0	$138	$605	$570	$597	$617	$545	$566	$598	$602	$690	$261
Royalties	$39,420	$0	$0	$939	$4,117	$3,884	$4,065	$4,199	$3,711	$3,857	$4,073	$4,103	$4,699	$1,774
Net Revenue	$2,526,904	$0	$0	$0	$270,351	$255,017	$266,918	$275,722	$243,694	$253,259	$267,450	$269,409	$308,585	$116,500
Expenditure														
Capital Expenditure	$500,821	$114,314	$195,307	$31,585	$26,655	$14,896	$15,440	$20,703	$26,434	$23,655	$15,889	$13,608	$1,875	$460
Operating Costs	$905,881	$0	$0	$0	$102,754	$100,124	$98,574	$100,221	$90,149	$96,468	$99,505	$94,033	$85,697	$38,354
Closure Costs	$3,494	$873	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,048	$1,572
Salvage Value	$5,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,000
Working Capital														
Working Capital	$0	$0	$0	$0	$25,000	$0	$0	$0	$0	$0	$0	$0	$0	-$25,000
Taxation														
Taxes	$434,566	$0	$0	$0	$4,160	$13,621	$45,130	$54,496	$46,426	$48,638	$54,860	$59,696	$83,069	$24,470
Cash Flow														
Pre-Tax Cash Flow	$1,122,577	-$115,188	-$195,307	-$31,585	$117,314	$141,291	$154,258	$156,198	$128,297	$134,154	$151,326	$160,622	$220,059	$101,138
Post-Tax Cash Flow	$688,011	-$115,188	-$195,307	-$31,585	$113,154	$127,670	$109,128	$101,702	$81,871	$85,515	$96,466	$100,925	$136,990	$76,668
Cumulative Post-Tax Cash Flow		-$115,188	-$310,495	-$342,080	-$228,925	-$101,256	$7,873	$109,575	$191,446	$276,961	$373,427	$474,353	$611,343	$688,011

22.8 Results

On a post-tax basis, the project demonstrates an NPV5% of CAD$388M, an IRR of 20.8% and a payback period of 2.9 years. On a pre-tax basis, the project demonstrates an NPV of CAD$672M, an IRR of 27.4% and a payback period of 2.5 years. A summary of project key project economic parameters and results is presented in Table 22-3.

Table 22-3: Summary of Project Economics

Economical Parameters		
Long term gold price	*(US$)*	1750.00
Exchange rate	*(CAD$:US$)*	1.00:0.77
Discount rate	*(%)*	5
NSR Royalty on Chimo Mine Property	*(%)*	1
GMR Royalty on West Nordeau property	*(%)*	3
Mining Parameters		
Average grade mined	*(g/t)*	2.7
Cut-off grade	*(g/t)*	1.9
Mining rate	*(tpd)*	4,500
Total tonnage mined	*(Mt)*	15.8
Mine life	*(years)*	9.7
Processing Parameters		
Concentration ratio of mineralized material sorted	-	1.85
Recovery rate of mineralized material sorted	*(%)*	91.9
Average grade of sorted mineralized material	*(g/t)*	4.6
Processing rate	*(tpd)*	2,400
Processing capacity	*(tpd)*	3,000
Total tonnage milled	*(Mt)*	8.5
Production Parameters		
Average annual production	*(oz/year)*	116,900
Total production	*(oz)*	1,157,710
Capital Costs		
Initial capital	*(CAD$M)*	341
Sustaining capital	*(CAD$M)*	160
Closure and rehabilitation costs	*(CAD$M)*	3
Salvage value	*(CAD$M)*	5
Operating Costs		
Total operating costs	*(CAD$/t milled)*	107
Cash Costs		
Average cash costs	*(US$/oz)*	647

Average All-in sustaining cash costs	*(US$/oz)*	755
Financial Analysis		
Pre-tax $NPV_{5\%}$	*(CAD$M)*	672
Pre-tax IRR	*(%)*	27.4
Pre-tax payback period	*(years)*	2.5
Post-tax $NPV_{5\%}$	*(CAD$M)*	388
Post-tax IRR	*(%)*	20.8
Post-tax payback period	*(years)*	2.9
Profitability Index (Post-tax $NPV_{5\%}$ / Initial Capital)	-	1.14

22.1 Sensitivity Analysis

Sensitivity analysis was performed to see the impact on post-tax 5% NPV, IRR and payback period by variating the gold price, operating costs, and capital costs. The results of the sensitivity analysis are presented in Table 22-4, Table 22-5, and Table 22-6 with the base case highlighted. Spider diagrams representing the impacts of variating the gold price, operating costs, and capital costs on after-tax NPV, IRR and payback period are illustrated in Figure 22-4, Figure 22-5, and Figure 22-6.

Table 22-4 – Gold Price Sensitivity

Gold Price Variation	Post-Tax NPV 5%	Post-Tax IRR	Post-Tax Payback Period
1300	105.1	9.7%	5.5
1400	169.4	12.4%	4.6
1500	233.0	15.0%	3.9
1600	295.3	17.4%	3.4
1700	357.0	19.7%	3.1
1750	387.8	20.8%	2.9
1800	418.5	21.8%	2.8
1900	479.1	23.9%	2.6
2000	539.2	25.8%	2.4
2100	598.8	27.7%	2.2
2200	658.3	29.5%	2.0

Table 22-5 – Operating Cost Sensitivity

Operating Cost Variation	Post-Tax NPV 5%	Post-Tax IRR	Post-Tax Payback Period
-50.0%	563.2	26.5%	2.3
-40.0%	528.8	25.4%	2.4
-30.0%	494.3	24.3%	2.5
-20.0%	459.5	23.2%	2.6
-10.0%	424.1	22.0%	2.8
0.0%	387.8	20.8%	2.9
10.0%	350.9	19.4%	3.1
20.0%	313.8	18.1%	3.3
30.0%	276.1	16.7%	3.6
40.0%	237.5	15.2%	3.8
50.0%	198.4	13.6%	4.2

Table 22-6 – Capital Cost Sensitivity

Capital Cost Variation	Post-Tax NPV 5%	Post-Tax IRR	Post-Tax Payback Period
-50.0%	605.6	42.6%	1.3
-40.0%	562.1	36.3%	1.6
-30.0%	518.5	31.2%	1.9
-20.0%	474.9	27.1%	2.2
-10.0%	431.3	23.7%	2.6
0.0%	387.8	20.8%	2.9
10.0%	344.2	18.2%	3.3
20.0%	300.6	15.9%	3.7
30.0%	257.0	13.9%	4.2
40.0%	213.4	12.0%	4.8
50.0%	169.9	10.4%	5.4

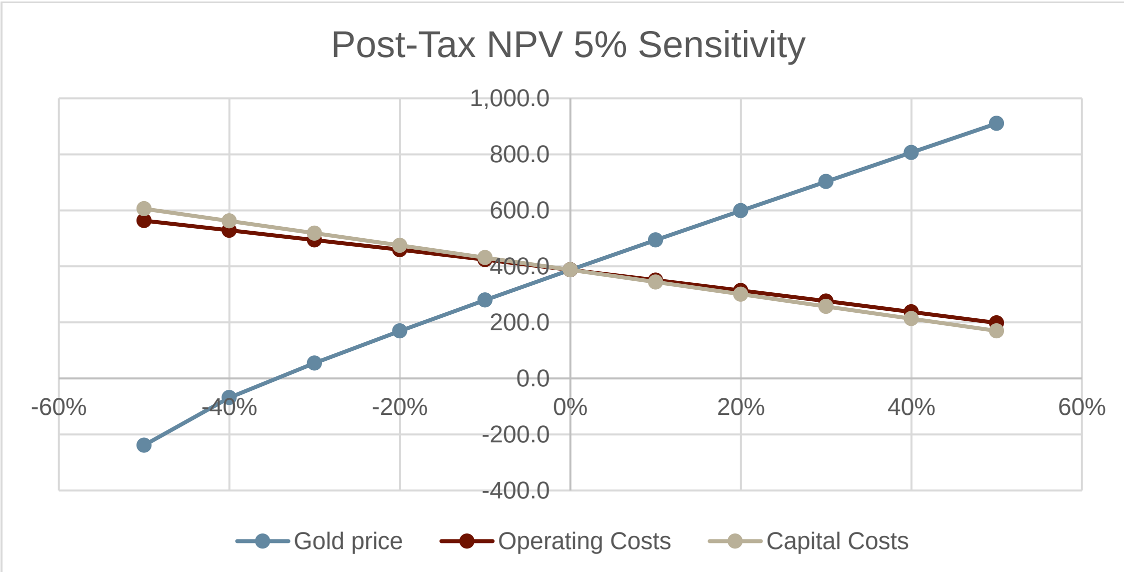


Figure 22-4 – Net Present Value Sensitivity

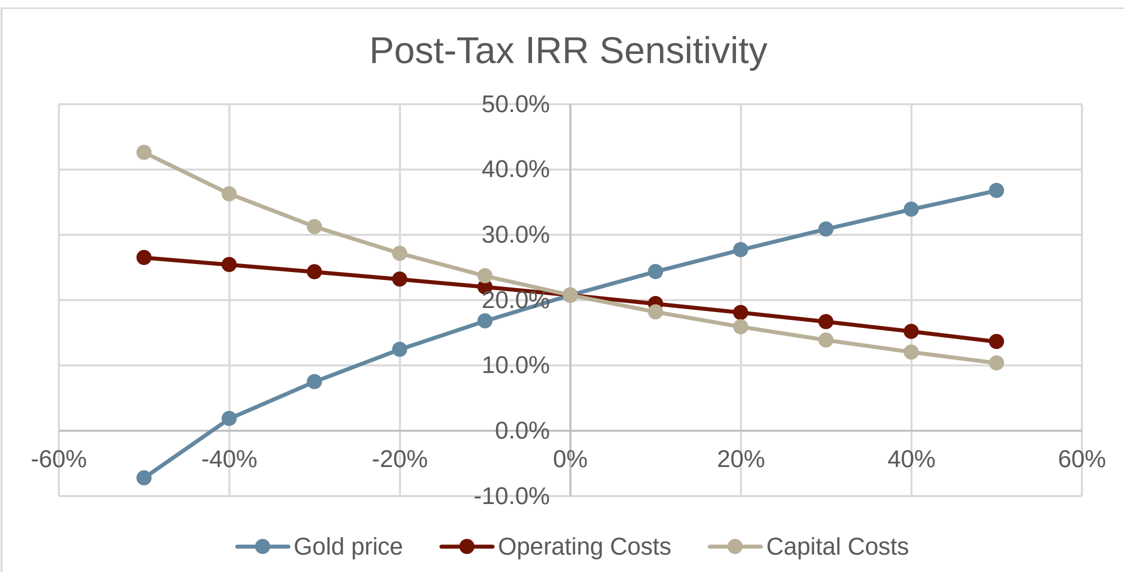


Figure 22-5 – Internal Rate of Return Sensitivity

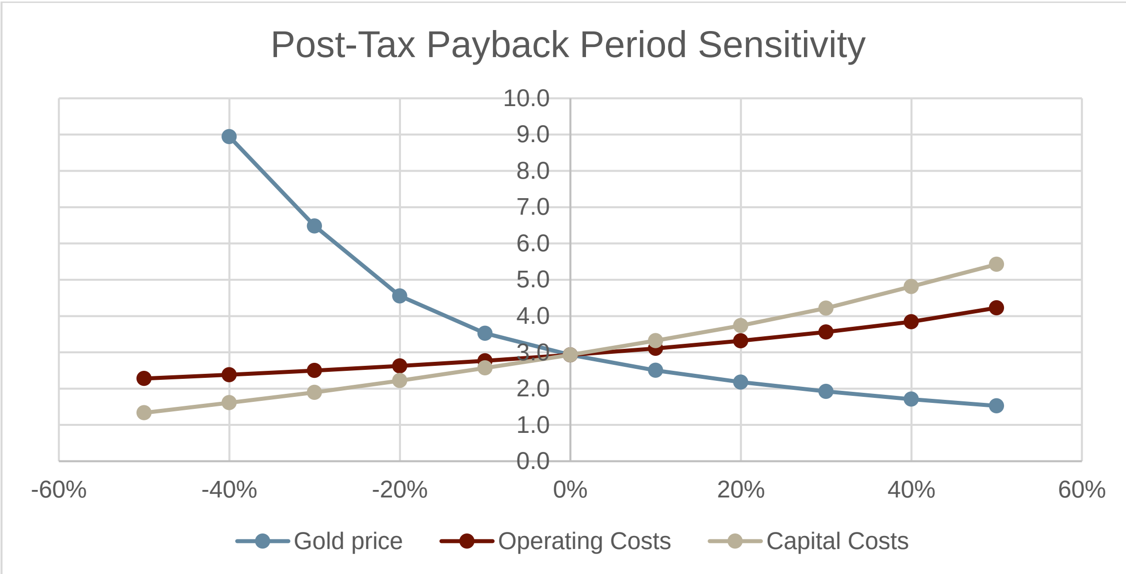


Figure 22-6 – Payback Period Sensitivity

23. ADJACENT PROPERTIES

The Chimo Mine and East Cadillac Properties are located in the Val-d'Or mining camp. They are surrounded by several properties of various sizes, some of which expose known precious and base metal showings (Figure 23-1**Error! Reference source not found.**).

There are no adjacent properties that are relevant to the technical report or to the progress of the issuer's Properties. The Val-d'Or mining area is very active in terms of exploration and mining activities, particularly to the west of the properties (e.g. Lamaque and Goldex). The immediate neighbours of the issuer's properties are at the early exploration stage.

The QPs 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 and East Cadillac Properties.

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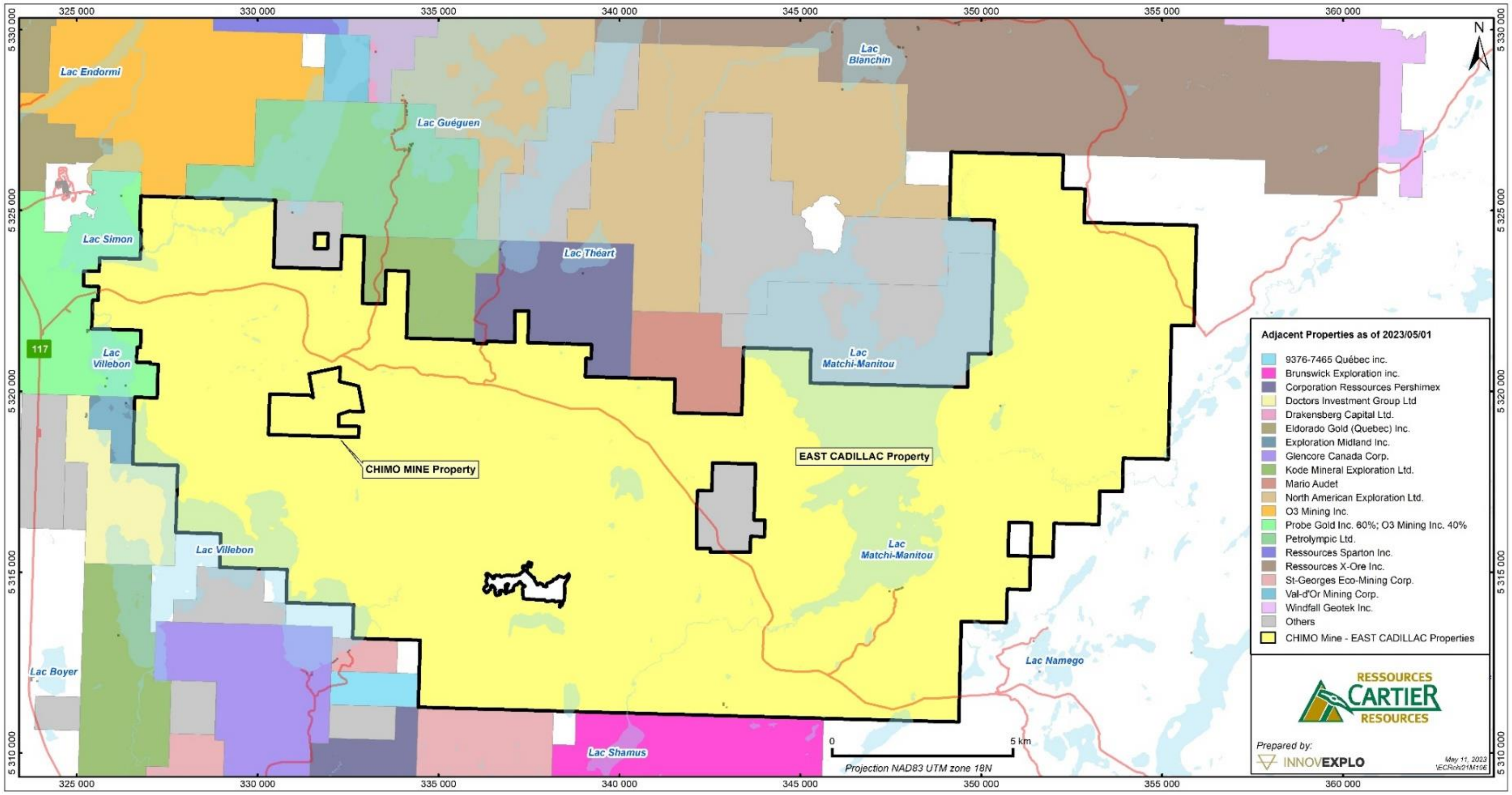

Figure 23-1 – Adjacent properties to the East Cadillac and Chimo Mine Properties

24. OTHER RELEVANT DATA AND INFORMATION

This PEA report is prepared based on a series of design principles common to many other projects having similar technical and environmental settings. On the other end, some of these principles are based on more specific design characteristics that needed to be assessed in order to orient the purpose of the project to be the most functional.

Given the location of the project site relatively to the neighbouring communities, the other mining operation currently existing or under development and the limited possibilities available pertaining to mineral processing, the authors have undertaken two specific trade-off studies which contributed to orient the decision of the technologies retained herein.

24.1 Material Handling

It is planned that during the production phase, all the mineralized material extracted underground will be brought to the surface using a vertical conveyor installed in the existing shaft, with a daily production of 4,500 tpd. This conveying option was chosen as a substitute to the skipping option. This decision is supported by a detailed trade-off study which was assessing the material hoisting capacity by skip, of the current Chimo shaft infrastructure. It is to be noted that all the internal wood structure was left in place when the mine ended its operation. It was demonstrated in this study that a skipping system could sustain a daily production capacity of up to 5,000 tpd (PRB Mining Services, April 2020).

Conversely, the mineralised material skipping option requires the construction of a 57.2 m high headframe containing a mineralized material silo, and installation of a dump hoist powered by a 4880 HP_{RMS} AC motor, with 65 mm diameter cables (PRB Mining Services, April 2020). The total investment and operating costs skipping are much higher compared with that of the vertical conveyor installed in that same shaft. The following Table 24-1 gives a summary comparison of capital costs for the two options.

Table 24-1 – Comparison of capital costs between Skipping and Vertical Conveying

Item	Capex
Skipping (est. 2020)	
Headframe	5 000 000 $
Hoisting System	20 000 000 $
Mineralised material bin	1 200 000 $
Total skipping (1)	26 200 000 $
Conveying (est. 2023)	
Versitical conveyor sysem	25 000 000 $
Total Conveying (2)	25 000 000 $
Difference (1)-(2)	**1 200 000 $**

The author would like to point out that this study was undertaken in 2020 therefore, therefore, the CAPEX comparison of both systems are slightly impaired by the differences of the time period each option was estimated. Undertaking an updated skipping option system assessment in this present year would most likely present a significant increase considering the current chain of supply market prices.

24.2 On Site Milling Versus Toll Milling

Two scenarios for the mineralized material processing have been analysed. The first scenario consists of building the mill on the Chimo site, with the tailing storage facilities. The second scenario involves hauling the mineralized material with trucks to an off-site mill already in operation and paying fees for milling. Preconcentration with a sorting system is carried out on site for both scenarios. Table 24-2 shows a summary comparison of the costs associated with these two scenarios.

In order to establish a fair comparison, the following assumptions were made for the toll milling option:

- 9.00 $/t for preconcentrates transportation;
- 37.00 $/t for toll milling.

Table 24-2 – Costs Comparison Summary between On Site Milling and Toll Milling.

On site Milling	Unit	Quantity
Production		
Mining	t	15 757 709
Sorting	t	8 493 405
Capex		
Mill and Hauling system Construction	$	112 717 000
Tailings Storage Facilities	$	14 885 000
Total Capex	$	127 602 000
Opex		
Milling (17.18 $/t)	$	145 661 898
Tailings management (2 $/t)	$	16 986 810
Total Opex	$	162 648 709
Total Capex-Opex (1)	**$**	**290 250 709**
Toll Milling	**Unit**	**Quantity**
Production		
Mining	t	15 757 709
Sorting	t	8 493 405
Capex		
Surface Silo & Material Handling System	$	3 500 000
70 km Road Construction/Rehabilitation	$	12 000 000
Total Capex	$	15 500 000
Opex		
Road Transport (9 $/t)	$	76 440 646
Custum Milling (37 $/t)	$	314 255 991
Total Opex	$	406 196 637
Total Capex-Opex (2)	**$**	**421 696 637**
Difference (1)-(2)	**$**	**(131 445 928)**

Following the financial analysis, other considerations were made before making a final decision. Notably, there are very few options available for toll milling at the time of writing this report. Therefore, the “on site milling” option made the most sensible option in spite the complexity required to build and operate a milling/tailings facility in comparison to toll milling.

25. INTERPRETATION AND CONCLUSIONS

The Chimo Mine Project is a gold deposit, located in proximity the well known and prolific Abitibi mining camp. The project site is easily accessible all year round from public roads and benefits from an easy access to a wide range of mining expertise, services and skilled workers. It is located 50 km east of Val-d'Or, Quebec and the mine site is already connected to the provincial electrical grid and have access to a modern wireless communication infrastructure. One of its most valuable assets is it can rely on its existing 920 m shaft, allowing quick access to the underground workings when deemed required.

This report is based on information collected by InnovExplo during several site visits performed between July 2022 and November 2022 on the Chimo mine site and Cartier's core logging facility. Other data and information were provided by Cartier and obtained from the public domain. InnovExplo has no reason to doubt the reliability of the information provided by Cartier.

25.1 Geology and Mineral Resource Estimates

Cartier created a mineralization and alteration-structural model for the gold structures using all available geological and analytical information. To accurately model the resources of the deposits, the QPs based their wireframe model of mineralized structures on the drill hole databases and interpretations provided by Cartier's geologists.

The authors believe that the information presented in this report provides a fair and accurate picture of the Project's potential. Engineering assumptions are made that prove faulty, and an increase in dilution.

The geological and grade continuity of gold mineralization in the Chimo Mine Gold System is demonstrated and supported by historical past production, underground exposures and dense drilling. The Chimo Mine mineralization consists of 30 gold zones that belong to 19 gold structures, themselves grouped into three gold corridors: Central, North and South.

The Chimo Mine Project contains 7,1 million tonnes at an average grade of 3.14 g/t Au for 0.7 million ounces of gold in the Indicated category and 18,5 million tonnes at an average grade of 2.75 g/t Au for 1,6 million ounces of gold in the Inferred category.

One of the prominent risks from a geological point of view is the inaccurate density of the rock mass used to determine tonnage estimates. Adding a sampling protocol to test the density measurement of each structure and various host rocks would certainly contribute to mitigate that risk.

The Chimo mine site has interesting opportunities from exploring further the resource potential over 2.5 km for Chimo Mine, East Chimo Mine and West Nordeau sectors, over 6 km including Portal, West Simon, Nordeau and Nordeau East sectors and over 15 km for the East Cadillac property. To this date, these aeras are showing interesting potential to expand further the mineral inventory.

25.2 Mining

This PEA was prepared by a group of independent consultants supported by Cartier to demonstrate the economic viability of an integrated project, targeting all mineral resources defined in the Chimo Mine Project. This technical report provides a summary of the results and findings from each major area of investigation to a level that is considered to be consistent with that normally expected for a PEA of a resource development project.

The results of the PEA indicate that the integrated project including re-opening of the proposed Chimo Mine has financial merit at the base case assumptions considered. The results are considered sufficiently reliable to guide Cartier's management in a decision to advance the project to a prefeasibility study.

Analysis of the results of the investigations has identified a series of risks and opportunities associated with each of the technical aspects considered for the development of the proposed project.

The key risks include:

- There is a risk of increased external dilution beyond the planned amount of mineralized material around the existing stopes in the Main sector. The uncertainty on the true position of the former stope contours will require additional precaution and most likely require additional work to maintain the integrity of the underground workings.
- There is a risk that the electrical power requirement could not be met due to a present shortage from the public utility grid.
- There is a risk that the selected location for the underground ramp portal is inapropriate due to thicker than anticipated overburden material.
- A process related risk at present is the ability to recruit suitably trained staff, operators and workers considering the highly competitive employment market created by existing operating mines in the Abitibi mining camp.

The key opportunities include:

- Exploration potential to increase the mineral resources of the Chimo Mine Project with additional drilling targeting the deep extension below the currently defined mineralization zones for both East Chimo Mine and West Nordeau sectors.
- Further stope design optimization will lead to reduced internal dilution and increased plant feed head grades.
- Further detailed mine planning work could possibly bring more mineralized material into the mine plan.
- Further definition drilling should convert some of the existing Inferred mineral resources to Indicated or Measured category. This will be a benefit for future higher level technical studies.
- Further geotechnical work would increase the knowledge on the rock mass behavior. This would in turn better define the ground control tactics to employ

for better dillution control and provide guideline in the selection of appropriate ground support supplies.

- A comprenhensive greotechnical survey program of the futur location of the industrial mine site would increase significantly the knowledge of the soil composition and the location and shape of the bedrock profile.

25.3 Mineral Processing and Metallurgical Testing

The PEA base case is based on construction of a new concentrator at the Chimo Mine site to process Chimo mineralization. The new concentrator will have a capacity of 3,000 t/d and employ a direct cyanidation technology to produce gold dorés. For both the metallurgical performance and the operating costs of a new concentrator, reference has been made to comparable milling facility data available from Bumigeme project database.

The process flowsheet selected for the study is based on the historical metallurgical test work conducted at SGS (former Lakefield Research) and at COREM (former CRM). Material will be sorted using automated sensor-based sorting technology with an expected concentration ratio of 1.85 and a recovery rate of 91.9%. Based on the historical metallurgical test work, projected metallurgical recoveries for the proposed flowsheet are around 93.1%.

No metallurgical test work was performed for the Preliminary Economic Assessment study. However, mineralized material sorting tests were performed at COREM on some representative samples to assess preconcentration of the mineralized material prior to sending it to the process plant. The objective of the mineralized material sorting plant is to reduce the construction cost of the mill, the overall energy consumption, reduce the volume of mineralized material treated in the cyanidation plant and further reduce the tailing facility footprint.

It most be noted that a few neighbouring mining companies operating a milling facility, have recently stated publicly their intention to consider toll milling in a near future to optimize their operation. Further investigation of such option may provide an additional option to consider pertaining to Chimo's mineralized material processing.

The key risks include:

- There is a risk that the predictive metallurgy associated with material sorting and/or milling will not be consistent. This may translate into a negative impact on the revenue.
- Approximately 85% by tonnage of the plant feed is from Inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA based on these mineral resources will be realized.
- Possible metal leaching can require more complex waste rock and tailings management.

The key opportunities include:

- There is a potential to improve the predicted metallurgical forecast for the Chimo plant feed through additional mineralized material sorting, metallurgy test work and optimization of the plant flow sheet.
- Condider returning the tailings underground to reduce tailings volume at the surface.
- Site already alterded by past monong activities which may facilitate permitting.

26. RECOMMENDATIONS

26.1 Geology

InnovExplo recommends that Cartier continues exploring the Chimo Mine Property and potential on the East Cadillac property to increase the resources of the Chimo Mine Project. More specifically, InnovExplo recommends that Cartier carries out initial metallurgical testing of the Chimo mineralized zones to specify their recoverability. Furthermore, InnovExplo is suggesting undertaking advanced mineralized material sorting prior to metallurgical testing in order to reproduce the expected industrial workflow that material will eventually follow in operation mode.

InnovExplo is unaware of any other significant factors and risks that may affect access, title, or the right or ability to perform the exploration work recommended for the Chimo Mine Project.

InnovExplo recommends the following work program;

- Continue drilling to increase inferred resources; CAD$ 12 750 000
- Upgrade drilling program for inferred resources; CAD$ 11 050 000
- Exploration drilling (Portal, West Simon, Nordeau, East Nordeau and East Bateman sectors); CAD$ 2 550 000
- Complete an updated MRE 5; CAD$ 300 000
- Drill to collect bulk samples for mineralised material sorting and metallurgical tests; CAD$ 1 500 000
- Complete an updated PEA 2; CAD$ 500 000

26.2 Metallurgical testing

InnovExplo recommends that preconcentration and metallurgical test work are to be undertaken with development of all the process parameters that are necessary for detailed design of all the unit operations of the concentrator including the thickening and filtration characteristics of the concentrates and tailings. This should also include full characterization of the concentrates and tailings for marketing and environmental requirements.

Future process test work should select samples from each domain that are representative of the mineralization as well as any dilution that will be included as a result of mining operations. This should include both hanging-wall and footwall material as well as any matrix inclusions that may enter the RoM mineralization. Mineralogical analysis of any of this material that may impact the mill operation such as talc minerals should be identified.

Developing technology with the design of flotation cells (i.e. staged float cells) should be investigated for possible application in the flowsheet and the expected benefits. Supplier test work may be required.

The test work cost for the preconcentration is estimated at CAD$185,000 and the metallurgical test work program is estimated at CAD$315,000.

26.3 Mining

InnovExplo recommends the following studies in order to develop further the Chimo Mine Project;

- Perform a prefeasibility level geotechnical study including the upper and lower zones of the Chimo Mine to support next stage of Chimo Mine design. An estimated CAD$145,000 cost will be needed.
- Perform a prefeasibility level hydrogeological study to support next stage of Chimo Mine dewatering design. An estimated CAD$85,000 cost will be needed.
- Evaluate Chimo Mine ramp access options including overburden characterization and portal design. An estimated CAD$95,000 cost will be needed.

26.4 Environmental and Permitting

InnovExplo recommends that engineering and planning studies should commence as early as possible for the environmental infrastructure and design as follows:

- Realize environmental characterization studies
- Realize social characterization studies
- Site Geotechnical Investigation to assess infrastructure foundations and borrow sources
- Hydrogeological studies including water balance, surface and groundwater models
- Detailed testing of waste rock for acid generating potential
- Environmental Assessment
- Assessment for TMF (Tailings Management Facilities) should be completed

27. REFERENCES

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Taux recuperation historic_Usinage Mine Chimo

Usinage_Stats_1989-@_1997

APPENDIX I – LIST OF MINING TITLES OF THE CHIMO MINE PROPERTY

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2431503	CDC	Active	2015-07-23	2024-07-22	55,78	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439460	CDC	Active	2016-04-22	2024-02-29	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439464	CDC	Active	2016-04-22	2024-02-29	1,88	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439467	CDC	Active	2016-04-22	2024-02-29	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439469	CDC	Active	2016-04-22	2024-02-29	19,05	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439474	CDC	Active	2016-04-22	2024-02-29	0,93	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439476	CDC	Active	2016-04-22	2024-02-29	12,27	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439479	CDC	Active	2016-04-22	2024-02-29	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439480	CDC	Active	2016-04-22	2024-02-29	35,42	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2439487	CDC	Active	2016-04-22	2024-02-29	35,24	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2450535	CDC	Active	2016-06-22	2025-06-21	0,69	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals
2450536	CDC	Active	2016-06-22	2025-06-21	0,35	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR to Trip Flag Precious Metals

APPENDIX II – LIST OF MINING TITLES OF THE EAST CADILLAC PROPERTY

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2385084	CDC	Active	2013-05-13	2024-05-12	23,67	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2405317	CDC	Active	2014-06-05	2025-06-04	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405318	CDC	Active	2014-06-05	2025-06-04	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405319	CDC	Active	2014-06-05	2025-06-04	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405320	CDC	Active	2014-06-05	2025-06-04	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405321	CDC	Active	2014-06-05	2025-06-04	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405322	CDC	Active	2014-06-05	2025-06-04	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405323	CDC	Active	2014-06-05	2025-06-04	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405324	CDC	Active	2014-06-05	2025-06-04	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405325	CDC	Active	2014-06-05	2025-06-04	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405326	CDC	Active	2014-06-05	2025-06-04	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2405327	CDC	Active	2014-06-05	2025-06-04	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423153	CDC	Active	2015-02-16	2024-02-15	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423154	CDC	Active	2015-02-16	2024-02-15	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423155	CDC	Active	2015-02-16	2024-02-15	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423156	CDC	Active	2015-02-16	2024-02-15	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423157	CDC	Active	2015-02-16	2024-02-15	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423158	CDC	Active	2015-02-16	2024-02-15	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423159	CDC	Active	2015-02-16	2024-02-15	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423160	CDC	Active	2015-02-16	2024-02-15	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423161	CDC	Active	2015-02-16	2024-02-15	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423162	CDC	Active	2015-02-16	2024-02-15	57,54	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423163	CDC	Active	2015-02-16	2024-02-15	57,53	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423164	CDC	Active	2015-02-16	2024-02-15	57,53	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2423165	CDC	Active	2015-02-16	2024-02-15	57,53	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2423166	CDC	Active	2015-02-16	2024-02-15	57,53	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2434329	CDC	Active	2015-10-23	2024-10-22	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR Daniel St-Pierre
2434769	CDC	Active	2015-11-26	2024-11-25	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR Glen Griesbach
2434770	CDC	Active	2015-11-26	2024-11-25	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR Glen Griesbach
2434771	CDC	Active	2015-11-26	2024-11-25	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR Glen Griesbach
2437791	CDC	Active	2016-04-06	2024-06-27	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437792	CDC	Active	2016-04-06	2024-06-27	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437793	CDC	Active	2016-04-06	2024-06-27	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437794	CDC	Active	2016-04-06	2024-06-27	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437795	CDC	Active	2016-04-06	2024-06-27	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437796	CDC	Active	2016-04-06	2024-06-27	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437797	CDC	Active	2016-04-06	2024-06-27	23,58	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437798	CDC	Active	2016-04-06	2024-06-27	6,94	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437799	CDC	Active	2016-04-06	2024-06-27	43,03	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437800	CDC	Active	2016-04-06	2024-06-27	57,35	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437801	CDC	Active	2016-04-06	2024-06-27	52,57	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437802	CDC	Active	2016-04-06	2024-06-27	32,74	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437803	CDC	Active	2016-04-06	2024-06-27	0,3	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437804	CDC	Active	2016-04-06	2024-06-27	18,32	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437805	CDC	Active	2016-04-06	2024-06-27	56,27	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437806	CDC	Active	2016-04-06	2024-06-27	4,43	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437807	CDC	Active	2016-04-06	2024-06-27	43,39	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437808	CDC	Active	2016-04-06	2024-06-27	14,98	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437809	CDC	Active	2016-04-06	2024-06-27	35,21	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437810	CDC	Active	2016-04-06	2024-06-27	11,57	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2437811	CDC	Active	2016-04-06	2024-06-27	1,98	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437862	CDC	Active	2016-04-06	2025-06-18	38,19	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437863	CDC	Active	2016-04-06	2025-06-18	39,43	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437864	CDC	Active	2016-04-06	2025-06-18	15,86	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437865	CDC	Active	2016-04-06	2025-06-18	3,09	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437866	CDC	Active	2016-04-06	2025-06-18	20,01	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437867	CDC	Active	2016-04-06	2025-06-18	36,26	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437868	CDC	Active	2016-04-06	2025-06-18	21,3	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437869	CDC	Active	2016-04-06	2025-06-18	11,28	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437870	CDC	Active	2016-04-06	2025-06-18	26,77	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437871	CDC	Active	2016-04-06	2025-06-18	5,74	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437872	CDC	Active	2016-04-06	2025-06-18	39	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437873	CDC	Active	2016-04-06	2025-06-18	39,49	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437912	CDC	Active	2016-04-06	2025-06-01	7,16	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437913	CDC	Active	2016-04-06	2025-06-01	8,11	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437914	CDC	Active	2016-04-06	2025-06-01	23,22	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2437915	CDC	Active	2016-04-06	2025-06-01	7,26	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438058	CDC	Active	2016-04-08	2025-10-31	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438059	CDC	Active	2016-04-08	2025-10-31	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438060	CDC	Active	2016-04-08	2025-10-31	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438061	CDC	Active	2016-04-08	2025-10-31	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438062	CDC	Active	2016-04-08	2025-10-31	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438063	CDC	Active	2016-04-08	2025-10-31	47,1	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438064	CDC	Active	2016-04-08	2025-10-31	1,02	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438065	CDC	Active	2016-04-08	2025-10-31	34,49	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2438066	CDC	Active	2016-04-08	2025-10-31	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438067	CDC	Active	2016-04-08	2025-10-31	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438103	CDC	Active	2016-04-08	2024-05-02	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438104	CDC	Active	2016-04-08	2024-05-02	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438130	CDC	Active	2016-04-19	2024-05-01	0,54	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438131	CDC	Active	2016-04-19	2024-05-01	1,07	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438132	CDC	Active	2016-04-19	2024-05-01	4,88	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438133	CDC	Active	2016-04-19	2024-05-01	8,9	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Harfang
2438140	CDC	Active	2016-04-22	2024-08-01	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438141	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438142	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438143	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438144	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438145	CDC	Active	2016-04-22	2024-08-01	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438146	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438147	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438148	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438149	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438150	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438151	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438152	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438153	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438154	CDC	Active	2016-04-22	2024-08-01	23,1	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438155	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438156	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2438157	CDC	Active	2016-04-22	2024-08-01	23,24	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438158	CDC	Active	2016-04-22	2024-08-01	18,25	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438159	CDC	Active	2016-04-22	2024-08-01	21,14	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438160	CDC	Active	2016-04-22	2024-08-01	6,8	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438161	CDC	Active	2016-04-22	2024-08-01	8,49	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438162	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438163	CDC	Active	2016-04-22	2024-08-01	30,41	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438164	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438165	CDC	Active	2016-04-22	2024-08-01	13,26	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438166	CDC	Active	2016-04-22	2024-08-01	20,04	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438167	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438168	CDC	Active	2016-04-22	2024-08-01	48,47	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438169	CDC	Active	2016-04-22	2024-08-01	54,35	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438170	CDC	Active	2016-04-22	2024-08-01	18,07	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438171	CDC	Active	2016-04-22	2024-08-01	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438172	CDC	Active	2016-04-22	2024-08-01	22,36	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438173	CDC	Active	2016-04-22	2024-08-01	7,64	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438174	CDC	Active	2016-04-22	2024-08-01	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438175	CDC	Active	2016-04-22	2024-08-01	23,74	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438176	CDC	Active	2016-04-22	2024-08-01	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438177	CDC	Active	2016-04-22	2024-08-01	1,05	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438178	CDC	Active	2016-04-22	2024-08-01	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438179	CDC	Active	2016-04-22	2024-08-01	18,12	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438180	CDC	Active	2016-04-22	2024-08-01	29,17	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438181	CDC	Active	2016-04-22	2024-08-01	5,45	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2438182	CDC	Active	2016-04-22	2024-08-01	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438183	CDC	Active	2016-04-22	2024-08-01	49,4	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438184	CDC	Active	2016-04-22	2024-08-01	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438185	CDC	Active	2016-04-22	2024-08-01	18,18	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438186	CDC	Active	2016-04-22	2024-08-01	45,34	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438187	CDC	Active	2016-04-22	2024-08-01	49,51	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438188	CDC	Active	2016-04-22	2024-08-01	45,26	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438189	CDC	Active	2016-04-22	2024-08-01	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438190	CDC	Active	2016-04-22	2024-08-01	49,49	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438191	CDC	Active	2016-04-22	2024-08-01	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438192	CDC	Active	2016-04-22	2024-08-01	18,61	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438193	CDC	Active	2016-04-22	2024-08-01	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438194	CDC	Active	2016-04-22	2024-08-01	56,91	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438195	CDC	Active	2016-04-22	2024-08-01	51,88	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438196	CDC	Active	2016-04-22	2024-08-01	18,53	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438197	CDC	Active	2016-04-22	2024-08-01	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438198	CDC	Active	2016-04-22	2024-08-01	3,13	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438199	CDC	Active	2016-04-22	2024-08-01	37,53	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438200	CDC	Active	2016-04-22	2024-08-01	38,56	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438201	CDC	Active	2016-04-22	2024-08-01	1,82	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438202	CDC	Active	2016-04-22	2024-08-01	53,39	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438203	CDC	Active	2016-04-22	2024-08-01	53,73	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438204	CDC	Active	2016-04-22	2024-08-01	19,94	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438205	CDC	Active	2016-04-22	2024-08-01	1,35	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438206	CDC	Active	2016-04-22	2024-08-01	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2438207	CDC	Active	2016-04-22	2024-08-01	54,18	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438208	CDC	Active	2016-04-22	2024-08-01	37,6	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438209	CDC	Active	2016-04-22	2024-08-01	7,25	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438210	CDC	Active	2016-04-22	2024-08-01	22,19	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438211	CDC	Active	2016-04-22	2024-08-01	54,53	Ressources Cartier inc. (80277) 100 % (responsable)	no Royalty
2438798	CDC	Active	2016-05-04	2025-08-14	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438799	CDC	Active	2016-05-04	2025-08-14	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438800	CDC	Active	2016-05-04	2025-08-14	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438801	CDC	Active	2016-05-04	2025-08-14	50,8	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438802	CDC	Active	2016-05-04	2025-08-14	18,51	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438803	CDC	Active	2016-05-04	2025-08-14	2,23	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438804	CDC	Active	2016-05-04	2025-08-14	39,36	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438805	CDC	Active	2016-05-04	2025-08-14	7,15	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438806	CDC	Active	2016-05-04	2025-08-14	5,03	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438807	CDC	Active	2016-05-04	2025-08-14	34,64	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438808	CDC	Active	2016-05-04	2025-08-14	5,61	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438809	CDC	Active	2016-05-04	2025-08-14	6,93	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438810	CDC	Active	2016-05-04	2025-08-14	1,76	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438811	CDC	Active	2016-05-04	2025-08-14	33,42	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438935	CDC	Active	2016-04-27	2025-12-12	3,24	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438936	CDC	Active	2016-04-27	2025-12-12	24,05	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2438937	CDC	Active	2016-04-27	2025-12-12	3,85	Ressources Cartier inc. (80277) 100 % (responsable)	3%GMR Globex
2443200	CDC	Active	2016-05-05	2024-11-02	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443201	CDC	Active	2016-05-05	2024-11-02	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443202	CDC	Active	2016-05-05	2024-11-02	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2443203	CDC	Active	2016-05-05	2024-11-02	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443204	CDC	Active	2016-05-05	2024-11-02	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443205	CDC	Active	2016-05-05	2024-11-02	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443206	CDC	Active	2016-05-05	2024-11-02	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443207	CDC	Active	2016-05-05	2024-11-02	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443208	CDC	Active	2016-05-05	2024-11-02	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443209	CDC	Active	2016-05-05	2024-11-02	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443210	CDC	Active	2016-05-05	2024-11-02	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443211	CDC	Active	2016-05-05	2024-11-02	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443212	CDC	Active	2016-05-05	2024-11-02	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443213	CDC	Active	2016-05-05	2024-11-02	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443214	CDC	Active	2016-05-05	2024-11-02	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443215	CDC	Active	2016-05-05	2024-11-02	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443216	CDC	Active	2016-05-05	2024-11-02	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443217	CDC	Active	2016-05-05	2024-11-02	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443218	CDC	Active	2016-05-05	2024-11-02	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443219	CDC	Active	2016-05-05	2024-11-02	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443220	CDC	Active	2016-05-05	2024-11-02	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443221	CDC	Active	2016-05-05	2024-11-02	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443222	CDC	Active	2016-05-05	2024-11-02	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443223	CDC	Active	2016-05-05	2024-11-02	55,09	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443224	CDC	Active	2016-05-05	2024-11-02	50,83	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443225	CDC	Active	2016-05-05	2024-11-02	54,25	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443226	CDC	Active	2016-05-05	2024-11-02	57,34	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443227	CDC	Active	2016-05-05	2024-11-02	42,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2443228	CDC	Active	2016-05-05	2024-11-02	6,32	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443229	CDC	Active	2016-05-05	2024-11-02	2,46	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443230	CDC	Active	2016-05-05	2024-11-02	9,8	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443231	CDC	Active	2016-05-05	2024-11-02	53,22	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443232	CDC	Active	2016-05-05	2024-11-02	33,96	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443233	CDC	Active	2016-05-05	2024-11-02	50,69	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443234	CDC	Active	2016-05-05	2024-11-02	34,05	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443235	CDC	Active	2016-05-05	2024-11-02	18,8	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443236	CDC	Active	2016-05-05	2024-11-02	1,13	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443237	CDC	Active	2016-05-05	2024-11-02	1,35	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443238	CDC	Active	2016-05-05	2024-11-02	15,1	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443239	CDC	Active	2016-05-05	2024-11-02	26,86	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443240	CDC	Active	2016-05-05	2024-11-02	36,9	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443241	CDC	Active	2016-05-05	2024-11-02	0,25	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443242	CDC	Active	2016-05-05	2024-11-02	14,22	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2443243	CDC	Active	2016-05-05	2024-11-02	46,03	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2445500	CDC	Active	2016-05-25	2025-05-24	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2445501	CDC	Active	2016-05-25	2025-05-24	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2456677	CDC	Active	2016-08-09	2025-08-08	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2456678	CDC	Active	2016-08-09	2025-08-08	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2456679	CDC	Active	2016-08-09	2025-08-08	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2456680	CDC	Active	2016-08-09	2025-08-08	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2456713	CDC	Active	2016-08-09	2023-08-08	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2456714	CDC	Active	2016-08-09	2023-08-08	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2457365	CDC	Active	2016-08-15	2023-08-14	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2457366	CDC	Active	2016-08-15	2023-08-14	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2457890	CDC	Active	2016-08-17	2025-08-16	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2457891	CDC	Active	2016-08-17	2025-08-16	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2457892	CDC	Active	2016-08-17	2023-08-16	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2458268	CDC	Active	2016-08-17	2025-08-16	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2458269	CDC	Active	2016-08-17	2025-08-16	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2458270	CDC	Active	2016-08-17	2025-08-16	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2458271	CDC	Active	2016-08-17	2025-08-16	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2458272	CDC	Active	2016-08-17	2025-08-16	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Dean Boudrias
2461488	CDC	Active	2016-09-08	2025-09-07	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2461489	CDC	Active	2016-09-08	2025-09-07	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2461490	CDC	Active	2016-09-08	2025-09-07	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2461491	CDC	Active	2016-09-08	2025-09-07	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2461492	CDC	Active	2016-09-08	2025-09-07	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2461493	CDC	Active	2016-09-08	2025-09-07	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2461494	CDC	Active	2016-09-08	2025-09-07	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2461495	CDC	Active	2016-09-08	2025-09-07	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2462745	CDC	Active	2016-09-19	2025-09-18	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2462746	CDC	Active	2016-09-19	2025-09-18	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2462747	CDC	Active	2016-09-19	2025-09-18	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2462748	CDC	Active	2016-09-19	2025-09-18	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2462749	CDC	Active	2016-09-19	2025-09-18	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2462750	CDC	Active	2016-09-19	2025-09-18	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2462751	CDC	Active	2016-09-19	2025-09-18	57,55	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2466091	CDC	Active	2016-10-17	2025-10-16	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Vorenus

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2466092	CDC	Active	2016-10-17	2025-10-16	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Vorenus
2468029	CDC	Active	2016-11-07	2025-11-06	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468030	CDC	Active	2016-11-07	2025-11-06	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468031	CDC	Active	2016-11-07	2025-11-06	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468032	CDC	Active	2016-11-07	2025-11-06	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468033	CDC	Active	2016-11-07	2025-11-06	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468034	CDC	Active	2016-11-07	2025-11-06	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468035	CDC	Active	2016-11-07	2025-11-06	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468036	CDC	Active	2016-11-07	2025-11-06	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468037	CDC	Active	2016-11-07	2025-11-06	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468038	CDC	Active	2016-11-07	2025-11-06	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468039	CDC	Active	2016-11-07	2025-11-06	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468040	CDC	Active	2016-11-07	2025-11-06	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468041	CDC	Active	2016-11-07	2025-11-06	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468042	CDC	Active	2016-11-07	2025-11-06	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2468043	CDC	Active	2016-11-07	2025-11-06	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2470586	CDC	Active	2016-12-07	2025-12-06	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Vorenus
2471188	CDC	Active	2016-12-22	2025-12-21	1,4	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471189	CDC	Active	2016-12-22	2025-12-21	30,83	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471190	CDC	Active	2016-12-22	2025-12-21	11,85	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471191	CDC	Active	2016-12-22	2025-12-21	3,86	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471192	CDC	Active	2016-12-22	2025-12-21	53,73	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471193	CDC	Active	2016-12-22	2025-12-21	54,35	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471194	CDC	Active	2016-12-22	2025-12-21	54,27	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471195	CDC	Active	2016-12-22	2025-12-21	50,14	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2471196	CDC	Active	2016-12-22	2025-12-21	55,7	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471197	CDC	Active	2016-12-22	2025-12-21	5,74	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471198	CDC	Active	2016-12-22	2025-12-21	55,47	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471199	CDC	Active	2016-12-22	2023-12-21	9,97	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471200	CDC	Active	2016-12-22	2025-12-21	21,3	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471201	CDC	Active	2016-12-22	2025-12-21	10,97	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2471202	CDC	Active	2016-12-22	2025-12-21	41,19	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Lamothe/Cantore
2472374	CDC	Active	2017-01-09	2026-01-08	11,3	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR DeKeyser/Chartrand
2472375	CDC	Active	2017-01-09	2026-01-08	10,47	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR DeKeyser/Chartrand
2477257	CDC	Active	2017-02-06	2024-02-05	57,54	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2477258	CDC	Active	2017-02-06	2024-02-05	57,54	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2480184	CDC	Active	2017-02-22	2024-02-21	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%GMR Globex
2480185	CDC	Active	2017-02-22	2024-02-21	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%GMR Globex
2480186	CDC	Active	2017-02-22	2024-02-21	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%GMR Globex
2480187	CDC	Active	2017-02-22	2024-02-21	57,54	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2480250	CDC	Active	2017-02-23	2024-02-22	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2480251	CDC	Active	2017-02-23	2024-02-22	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2480252	CDC	Active	2017-02-23	2024-02-22	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2480253	CDC	Active	2017-02-23	2024-02-22	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2480254	CDC	Active	2017-02-23	2024-02-22	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2480255	CDC	Active	2017-02-23	2024-02-22	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2480256	CDC	Active	2017-02-23	2024-02-22	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2480257	CDC	Active	2017-02-23	2024-02-22	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2480258	CDC	Active	2017-02-23	2024-02-22	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481131	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2481132	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481133	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481134	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481135	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481136	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481137	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481138	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481139	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481140	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481141	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481142	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481143	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481144	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481145	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481146	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481147	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481148	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481149	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481150	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481151	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481152	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481153	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481154	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481155	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481156	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2481157	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481158	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481159	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481160	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481161	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481162	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481163	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481164	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481165	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481166	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481167	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481168	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481169	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481170	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481173	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481175	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481176	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481177	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481178	CDC	Active	2017-02-27	2024-02-26	57,62	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481180	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481181	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481182	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481183	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481184	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481185	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2481186	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481187	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481188	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481189	CDC	Active	2017-02-27	2024-02-26	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481190	CDC	Active	2017-02-27	2024-02-26	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481191	CDC	Active	2017-02-27	2024-02-26	57,61	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481192	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481193	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481194	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481195	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481196	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481197	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481198	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481199	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481200	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481201	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481202	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481203	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481204	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481205	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481206	CDC	Active	2017-02-27	2024-02-26	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481207	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481208	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481209	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481210	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2481211	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481212	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481213	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481214	CDC	Active	2017-02-27	2024-02-26	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481215	CDC	Active	2017-02-27	2024-02-26	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481216	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481217	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481218	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481219	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481220	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481221	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481222	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Canadian Mining House/Cantore
2481223	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481224	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481225	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481226	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481227	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481228	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481229	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481230	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481231	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481232	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481233	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481234	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481235	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2481236	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481237	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481238	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481239	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481240	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481241	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481242	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481243	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481244	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481245	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481246	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481247	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481248	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481249	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481250	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481251	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481252	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481253	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481254	CDC	Active	2017-02-27	2024-02-26	57,63	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481255	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481256	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481257	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481258	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481259	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481260	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2481261	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481262	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481263	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481264	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481265	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481266	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481267	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481268	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481269	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481270	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481271	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481272	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481273	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481274	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481275	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481276	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481277	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481278	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481279	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481280	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481281	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481282	CDC	Active	2017-02-27	2024-02-26	57,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481283	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481284	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481285	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2481286	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481287	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481288	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481289	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481290	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481291	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481292	CDC	Active	2017-02-27	2024-02-26	57,65	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481293	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481294	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481295	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481296	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481297	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481298	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481299	CDC	Active	2017-02-27	2024-02-26	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2481300	CDC	Active	2017-02-27	2024-02-26	57,64	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2484903	CDC	Active	2017-03-17	2024-03-16	57,56	Ressources Cartier inc. (80277) 100 % (responsable)	2%NSR Michel & Gaétan Roby
2491126	CDC	Active	2017-04-28	2024-04-27	53,16	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491239	CDC	Active	2017-05-01	2024-04-30	41,46	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491240	CDC	Active	2017-05-01	2024-04-30	57,35	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491241	CDC	Active	2017-05-01	2024-04-30	57,52	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491242	CDC	Active	2017-05-01	2024-04-30	56,91	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491243	CDC	Active	2017-05-01	2024-04-30	51,51	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491244	CDC	Active	2017-05-01	2024-04-30	31,66	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491245	CDC	Active	2017-05-01	2024-04-30	30,18	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491246	CDC	Active	2017-05-01	2024-04-30	16,85	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2491247	CDC	Active	2017-05-01	2024-04-30	0,76	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491248	CDC	Active	2017-05-01	2024-04-30	0,36	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491249	CDC	Active	2017-05-01	2024-04-30	0,22	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491250	CDC	Active	2017-05-01	2024-04-30	10,44	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2491522	CDC	Active	2017-05-04	2024-05-03	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	1%NSR DeKeyser
2525102	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525103	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525104	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525105	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525106	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525107	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525108	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525109	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525110	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525111	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525112	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525113	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525114	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525115	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525116	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525117	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525118	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525119	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525120	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525121	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2525122	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525123	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525124	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525125	CDC	Active	2018-11-02	2023-11-01	57,68	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525126	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525127	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525128	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525129	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525130	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525131	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525132	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525133	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525134	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525135	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525136	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525137	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2525138	CDC	Active	2018-11-02	2023-11-01	57,67	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535859	CDC	Active	2019-04-08	2025-04-07	57,54	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535860	CDC	Active	2019-04-08	2025-04-07	57,54	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535866	CDC	Active	2019-04-08	2025-04-07	57,53	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535906	CDC	Active	2019-04-08	2025-04-07	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535907	CDC	Active	2019-04-08	2025-04-07	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535908	CDC	Active	2019-04-08	2025-04-07	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535909	CDC	Active	2019-04-08	2025-04-07	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535910	CDC	Active	2019-04-08	2025-04-07	57,6	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO

Title No	Title Type	Title Status	Registration Date	Expiration Date	Area (ha)	Owner	Royalties
2535911	CDC	Active	2019-04-08	2025-04-07	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535912	CDC	Active	2019-04-08	2025-04-07	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535913	CDC	Active	2019-04-08	2025-04-07	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535914	CDC	Active	2019-04-08	2025-04-07	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535915	CDC	Active	2019-04-08	2025-04-07	57,59	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535916	CDC	Active	2019-04-08	2025-04-07	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535917	CDC	Active	2019-04-08	2025-04-07	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535918	CDC	Active	2019-04-08	2025-04-07	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535919	CDC	Active	2019-04-08	2025-04-07	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535920	CDC	Active	2019-04-08	2025-04-07	57,58	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535921	CDC	Active	2019-04-08	2025-04-07	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535922	CDC	Active	2019-04-08	2025-04-07	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535923	CDC	Active	2019-04-08	2025-04-07	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO
2535924	CDC	Active	2019-04-08	2025-04-07	57,57	Ressources Cartier inc. (80277) 100 % (responsable)	1% CGMO