# Novador Project
# NI 43-101 Technical Report and Preliminary Economic Assessment
## Val-d'Or, Quebec

Effective Date: February 13, 2024

Prepared for:

Probe Gold Inc.
56 Temperance Street, Suite 1000
Toronto, ON, M5H 3V5, Canada

Prepared by:


Ausenco Engineering Canada ULC
15th Floor, 11 King Street West
Toronto, ON, M5H 4C7, Canada


List of Qualified Persons:


Renee Barrette, P. Eng., Ausenco Engineering Canada ULC
Jonathan Cooper, P. Eng., Ausenco Sustainability ULC
Aleksandar Spasojevic, P.Eng., Ausenco Sustainability ULC
Maude Lévesque Michaud, P. Eng., Lamont Inc.
Jesse Aarsen, P.Eng., Moose Mountain Technical Services
Marina Iund, P.Geo., InnovExplo Inc.
Vincent Nadeau-Benoit, P.Geo., InnovExplo Inc.
Martin Perron, P. Eng., InnovExplo Inc.
Simon Boudreau, P. Eng., InnovExplo Inc.
Elisabeth Tremblay, P.Geo., M.Sc.A, InnovExplo Inc.


**CERTIFICATE OF QUALIFIED PERSON**
**RENEE BARRETTE, P.ENG.**

I, Renee Barrette, P. Eng., certify that I am employed as a Principal Metallurgist with Ausenco Engineering Canada Inc ("Ausenco"), with an office address of 1155 Boulevard Robert-Bourassa, Montréal, Québec H3B 3A7.

1. This certificate applies to the technical report titled "Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment, Val-d'Or, Quebec" that has an effective date of February 13, 2024 (the "Technical Report").
2. I graduated from Laurentian University in 2001 with a Bachelor of Applied Science degree in Extractive Metallurgical Engineering.
3. I am a Professional Engineer registered with OIQ (No. 6019759).
4. I have practiced my profession for 23 years. I have been directly involved in the development, design, operation, and commissioning of mineral processing plants, focusing on Gold, Base Metals and other PGM projects, both domestic and internationally. To name a few specific examples, I have completed a due diligence review of a gold deposit with 4.1M Gold reserves near Val-d'Or, Quebec and completed design reviews to commissioning on a 17,000 mtpd Base Metals Project at a Sudbury, Ontario.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I visited the Novador project site on September 26, 2023 for one day.
7. I am responsible for Sections 1.1, 1.5, 1.6, 1.9, 1.10.1, 1.11, 1.13, 1.14, 1.15, 1.16, 1.17.1, 1.17.4, 1.17.6.1, 2.1, 2.2, 2.3.1, 2.4, 2.5.1, 2.6, 3, 12.5, 13, 17, 18.1,18.2,18.3, 18.4, 18.7, 18.8, 18.11, 18.12, 19, 21.2.10 (excluding 21.2.3, 21.2.9.1, and 21.3.2), 22, 25.2, 25.4, 25.5.1, 25.7, 25.8, 25.9.1.2, 25.9.1.4, 25.9.1.7, 25.9.2.2, 25.9.2.4, 25.9.2.5, 25.9.2.8, 26.1, 26.3, 26.6.1, and 27, of the Technical Report.
8. I am independent of Probe Gold as independence is defined in Section 1.5 of NI 43-101.
9. I have been involved with the Marban Project on August 22, 2022. I was the QP for the NI43-101 Technical Report and Prefeasibility Study for Marban Engineering in Val-d'Or, Quebec.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

Dated: March 26, 2024

"Signed and sealed"

Renee Barrette, P.Eng.

**CERTIFICATE OF QUALIFIED PERSON**
**JONATHAN COOPER, P.ENG.**

I, Jonathan Cooper, P. Eng., certify that I am employed as a Water Resources Engineer with Ausenco Sustainability ULC ("Ausenco"), with an office address of 11 King Street West, Suite 1500, Toronto, Ontario M5H 4C7.

1. This certificate applies to the technical report titled "Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment, Val-d'Or, Quebec" that has an effective date of February 13, 2024 (the "Technical Report").
2. I graduated from the University of Western Ontario with a Bachelor of Engineering Science in Civil Engineering in 2008, and University of Edinburgh with a Master of Environmental Management in 2010.
3. I am a Professional Engineer registered and in good standing with Order of Engineers of Quebec (temporary engineer permit #6067376), Professional Engineers Ontario (registration #100191626), Engineers and Geoscientists British Columbia (registration #37864) and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (registration # L4227).
4. I have practiced my profession for continuously for over 15 years with experience in the development, design, operation, and commissioning of surface water infrastructure. Previous projects that I have worked on that have similar features to the Novador Project are the Kwanika-Stardust for NorthWest Copper located in British Columbia, Colomac Gold Project located in the Northwest Territories and the Crawford Project located in Ontario.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I have not visited the Novador Project site.
7. I am responsible for Sections 2.2, 2.3.2, 18.9, 18.10, 25.5.3, 25.9.1.5.1, 25.9.2.6 and 27 of the Technical Report.
8. I am independent of Probe Gold Inc. as independence is defined in Section 1.5 of NI 43-101.
9. I have had no previous involvement with the Novador Project.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

Dated: March 26, 2024

"Signed and sealed"

Jonathan Cooper, P.Eng.

## CERTIFICATE OF QUALIFIED PERSON
## ALEKSANDAR SPASOJEVIC, P.ENG.

I, Aleksander Spasojevic, P.Eng., certify that I am employed as a Global Practice Lead, Geotechnical with Ausenco Sustainability ULC (“Ausenco”), with an office address of 1016B Sutton Drive, Suite 100, Burlington, ON, L7L 6B8, Canada.

1. This certificate applies to the technical report titled “Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment, Val-d’Or, Quebec” that has an effective date of February 13, 2024 (the “Technical Report”).
2. I graduated from the Faculty of Civil Engineering of Belgrade University, Belgrade, Serbia, 1989, 1994, 1999 with a BSc, MSc, and PhD.
3. I am a Professional Engineer, member of Professional Engineers Ontario, (License Number 100202017), Association of Professional Engineers and Geoscientists of Saskatchewan (registration number 68738), member of Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (No. L5376) and member of the Ordre des ingénieurs du Québec (#6069008).
4. I have practiced my profession for 35 years. I have been directly involved in the design of earthworks, stability of earth masses, design of staged construction, seepage control, piping stability, and the design of filters and barrier nd containment systems for landfill systems and tailings facilities. I acted as the QP for the design of access and ventilation shafts for Rio Tinto’s Lithium Jadar Mine in Serbia and NexGen Energy’s Rook I Arrow Uranium Mine in Saskatchewan, NI 43-101 report for the PEA level of design for Colomac Gold Mine at Indin Lake, NWT, NI 43-101 report for the PEA and PFS level design for Seabridge’s Gold Project at Courageous Lat, NWT, JORC report for the PFS level design of Fifteen Mile Stream Gold Project in Nova Scotia.
5. I have read the definition of “Qualified Person” set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for those sections of the Technical Report that I am responsible for preparing.
6. I have not visited the Novador Project site.
7. I am responsible for 1.10.2, 1.17.6.2, 2.2, 2.3.3, 18.5, 18.11, 25.5.2, 25.9.1.5.2, 26.6.2, and 27 of the Technical Report.
8. I am independent of Probe Gold as independence is defined in Section 1.5 of NI 43-101.
9. I have had no previous involvement with the Novador Project.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

March 26, 2024

“Signed and sealed”

Aleksandar Spasojevic, P.Eng.

## CERTIFICATE OF QUALIFIED PERSON
## MAUDE LÉVESQUE MICHAUD, P.ENG.

I, Maude Lévesque Michaud, P.Eng., certify that I am employed as a General Director with Lamont inc. ("Lamont"), with an office address of 51 Quidoz, Sainte-Thérèse, Qc, Canada, J7E4L3.

1. This certificate applies to the technical report titled "Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment, Val-d'Or, Quebec" that has an effective date of February 13, 2024 (the "Technical Report").
2. I graduated from Laval University, Quebec City, Qc, in 2010 with a B.Ing. in geological engineering, and from University of Quebec in Abitibi-Témiscamingue, Rouyn-Noranda, Qc, in 2016 with a M.Sc.A. in mineral engineering.
3. I am a registered member of the Ordre des Ingénieurs du Québec (OIQ #5015957).
4. I have practiced my profession for 13 years since graduation. I have been directly involved in permitting schedule and environmental studies, such as baselines and impact assessment studies. I was involved in many mining projects in Quebec as a consultant, from grassroots exploration fieldworks to more advanced projects.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I visited the Novador Project between January 31 and February 1, 2017 for a visit duration of two days.
7. I am responsible for 1.12,1.17.7, 2.2, 2.3.4, 20, 25.6, 25.9.1.6, 25.9.2.7, 26.1, 26.7, and 27 of the Technical Report.
8. I am independent of Probe Gold as independence is defined in Section 1.5 of NI 43-101.
9. I have been involved with the Val-d'Or East PEA dated September 07, 2021.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

March 26, 2024

"Signed and sealed"

Maude Lévesque Michaud, P.Eng.

# CERTIFICATE OF QUALIFIED PERSON
# JESSE AARSEN, P.ENG.

I, Jesse J. Aarsen, P. Eng., certify that I am a Principal – Mining with Moose Mountain Technical Services (MMTS), with an office address of #210 1510-2nd Street North, Cranbrook, BC Canada, V1C 3L2.

1. This certificate applies to the technical report titled "Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment, Val-d'Or, Quebec" that has an effective date of February 13, 2024 (the "Technical Report").
2. I graduated from the University of Alberta, Edmonton with a Bachelor of Science in Mining Engineering, Co-operative Program in 2002.
3. I am a Professional Engineer of Engineers and Geoscientists of BC (EGBC) #38709.
4. I have practiced my profession for 21 years since graduation. I have been directly involved in mining operations in Western Canada, including operations with snowfall and cold weather conditions. I have worked on and visited precious metals, base metals and coal mining projects throughout the world including Greenland, Mongolia, South America (Chile/Peru/Guyana), Central America (Panama) and North America (Mexico/USA/Canada). My relevant experience includes generation of mining plans and associated Reserves (where applicable) for Almaden's Ixtaca project, Seabridge's Courageous Lake project and Orla Mining's Cerro Quema project, all of which are similar to Novador.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I visited the Novador project site on September 27, 2021 for one day and inspected the road access to the site, railroad infrastructure between the Monique pit area and planned plant location, Monique existing pit and dump facilities, waste rock storage facility foundation conditions for the planned areas around Monique, existing UG access points, and watercourses in the planned mining areas (for diversion planning).
7. I am responsible for Sections 1.8,1.13, 1.14, 1.17.5, 2.2, 2.3.5, 15, 16, 18.6, 21.2.3, 21.2.9.1, 21.3.2, 25.3, 25.7, 25.9.1.3, 25.9.2.3, 26.1, 26.5, and 27 of the Technical Report.
8. I am independent of Probe Gold Inc. as independence is defined in Section 1.5 of NI 43-101.
9. I have been involved with the preparation of the Val-d'Or East PEA dated September 07, 2021.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

March 26, 2024

"Signed and sealed"

Jesse Aarsen, P.Eng.

# CERTIFICATE OF QUALIFIED PERSON
# MARINA IUND, P.GEO.

I, Marina Iund, P.Geo., M.Sc. (OGQ No. 1525, PGO No. 3123, NAPEG No. L4431), certify that I am employed as a Senior Resources Geologist by InnovExplo Inc., with an office address of 725, Boul. Lebourgneuf, Suite 310-312, Quebec City, Quebec, Canada, G2J 0C4.

1. This certificate applies to the technical report titled “Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment, Val-d'Or, Quebec” that has an effective date of February 13, 2024 (the “Technical Report”).
2. I graduated with a B.Sc. in geology from Université de Besançon (Besançon, France) in 2008. In addition, I obtained an M.Sc. in Resources and Geodynamics from Université d’Orléans, as well as a DESS’s degree in Exploration and Management of Non-renewable Resources from Université du Quebec à Montréal (Montreal, Quebec) in 2010.
3. I am a member of the Ordre des Géologues du Quebec (OGQ No. 1525), the Association of Professional Geoscientists of Ontario (PGO No. 3123), and the Northwest Territories and Nunavut Association of Professional Engineers and Professional Geoscientists (NAPEG licence No. L4431).
4. I have practiced my profession in mineral exploration, mine geology and resource geology for a total of 13 years since graduating from university. I acquired my expertise with Richmont Mines Inc. and Goldcorp. I have been a project geologist and then a senior geologist in mineral resources estimation for InnovExplo Inc. since September 2018.
5. I have read the definition of “Qualified Person” set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfil the requirements to be a “Qualified Person” for those sections of the Technical Report that I am responsible for preparing.
6. I visited the property that is the subject of this report from October 19 to 20, 2022.
7. I am co-author of and share responsibility for Sections 1.5,1.7, 1.16, 1.17.3, 2.2, 2.3.6, 2.4, 2.5.2, 11, 12 (excluding 12.5), 14, 25.1, 25.9.1.1, 25.9.2.1, 26.1, 26.4, and 27 of the Technical Report.
8. I am independent of Probe Gold Inc. as independence is defined in Section 1.5 of NI 43-101.
9. I have had prior involvement with the property that is the subject of the Technical Report. I was QP for the NI 43-101 Technical reports entitled “NI 43 101 Technical Report and update of the Mineral Resource Estimate for the Monique Area, Novador Project, Quebec” (March 2, 2023) and the NI 43-101 Technical reports entitled “NI 43-101 Technical Report and Updated Mineral Resource Estimate for the Novador Project, Quebec” (July 13, 2023). I also worked at the Monique mine from June to September 2013, when it was an asset of Richmont Mines Inc.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

March 26, 2024
“Signed and sealed”
Marina Iund, P.Geo.

## CERTIFICATE OF QUALIFIED PERSON
## VINCENT NADEAU-BENOIT, P.GEO.

I, Vincent Nadeau-Benoit, P.Geo. (OGQ No. 1535, EGBC No. 54427, APGO No. 3889), certify that I was employed as a Senior Resources Geologist by InnovExplo Inc. with an office address of 560, 3e Avenue, Val-d'Or, Quebec, Canada, J9P 1S4, at the effective date of the Mineral Resource Estimate (July 13, 2023). I am currently employed by New Gold Inc. as a Senior Manager, Resource Geology with an office address of 181 Bay Street, Suite 3320 Toronto, Ontario, Canada, M5J 2T3.

1. This certificate applies to the technical report titled "Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment" that has an effective date of February 13, 2024 (the "Technical Report").
2. I graduated with a bachelor's degree in Earth and Atmospheric Sciences (Geology) from Université du Québec à Montréal (Montreal, Quebec) in 2010.
3. I am a member in good standing of the Ordre des Géologues du Québec (OGQ No. 1535), the Association of Professional Engineers and Geoscientists of British Columbia (EGBC, No. 54427), and the Association of Professional Geoscientists of Ontario (APGO, No. 3889)
4. I have practiced my profession continuously as a geologist for a total of 13 years since graduating from university during which time I have been involved in mineral exploration and mine geology projects for precious and base metal properties. I acquired my expertise with Royal Nickel Corporation (from 2011 to 2012) and Glencore (from 2012 to 2018). I was a consulting Project Geologist and then a Senior Geologist in mineral resources estimation for InnovExplo Inc. between August 2018 and August 2023; working on multiple type of precious (mainly gold) and base metal deposits around the world. Since August 2023, I am currently employed by New Gold Inc. as a Senior Manager, Resource Geology.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I visited the property that is the subject of this report on May 9, 2023.
7. I am co-author of and share responsibility for sections 1.5, 1.7, 1.17.3, 2.2, 2.3.7, 2.4, 2.5.2, 11, 12 (excluding 12.5), 14, 25.1, 25.9.1.1, 25.9.2.1, 26.1, 26.4, and 27 of the Technical Report.
8. I am independent of Probe Gold Inc. as independence is defined in Section 1.5 of NI 43-101.
9. I have had prior involvement with the property that is the subject of the Technical Report. I was QP for the NI 43-101 Technical reports entitled "NI 43-101 Technical Report and Updated Mineral Resource Estimate for the Novador Project, Quebec" (July 13, 2023).
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief,

11. 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 those sections of the Technical Report not misleading.

March 26, 2024

“Signed and sealed”

Vincent Nadeau-Benoit, P.Geo.

INNOVEXPLO

# CERTIFICATE OF QUALIFIED PERSON
## MARTIN PERRON, P.ENG.

I, Martin Perron, P. Eng. (OIQ No.109185) certify that I am employed as Director of Geology by InnovExplo Inc., with an office address of 725, Boulevard Lebourgneuf, Suite 317, Quebec City, Quebec, Canada, G2J 0C4.

12. This certificate applies to the technical report titled "Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment, Val-d'Or, Quebec" that has an effective date of February 13, 2024 (the "Technical Report").
13. I graduated with a Bachelor's degree in Geological Engineering from Université du Québec à Chicoutimi (UQAC, Ville de Saguenay, Quebec) in 1992.
14. I am a member of the Ordre des Ingénieurs du Québec (OIQ No. 109185).
15. I have practiced my profession in mining geology, mineral exploration, consultation and resource estimation, mainly in gold, base metals and potash, and accessory in graphite and rare earth elements for a total of thirty (30) years since graduating from university. During my career, I have held multiple positions, starting as a Mine Geologist, a Geological Mining Coordinator, a Senior Geological Engineer, a Geology Superintendent, an Engineering Superintendent, a Technical Services Superintendent, a Director of Resources Estimation and a Director of Geology, as well as being Qualified Person since 2010. My expertise was acquired while working with Placer Dome, Cambior, Breakwater Resources, Genivar, Alexis Minerals, Richmont Mines, Agrium, Roche Ltee, Goldcorp, Newmont and IAMGOLD. I have been the Director of Geology for InnovExplo Inc. since October 2021.
16. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
17. I have not visited the property for the purpose of the Technical Report.
18. I am co-author of and share responsibility for sections 1.5, 1.7, 1.16, 1.17.3, 2.2, 2.3.8, 2.4, 2.5.2, 14, 25.1, 25.9.1.1, 25.9.2.1, 26.1, 26.4, and 27 of the Technical Report.
19. I am independent of Probe Gold Inc. as independence is defined in Section 1.5 of NI 43-101.
20. I have had prior involvement with the property that is the subject of the Technical Report. I was QP for the NI 43-101 Technical reports entitled "NI 43-101 Technical Report and Updated Mineral Resource Estimate for the Novador Project, Quebec" (July 13, 2023).
21. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

March 26, 2024

"Signed and sealed"

Martin Perron, P.Eng.

## CERTIFICATE OF QUALIFIED PERSON
## SIMON BOUDREAU, P.ENG.

I, Simon Boudreau, P. Eng. (OIQ No. 132338), certify that I am employed as Senior Mine Engineer by InnovExplo Inc., with an office address of 560 3e Avenue, Val-d'Or, Quebec, Canada, J9P 1S4.

1. This certificate applies to the technical report titled "Novador Project NI 43-101 Technical Report and Preliminary Preliminary Economic Assessment" that has an effective date of February 13, 2024 (the "Technical Report").
2. I graduated with a Bachelor's degree in mining engineering from Université Laval (Quebec City, Quebec) in 2003.
3. I am a member in good standing of the Ordre des Ingénieurs du Québec (No. 132338).
4. I have practiced my profession in mining engineering, mining production, and consultation, mainly in gold and base metals, for a total of twenty-one (21) years since graduating from university. During my career, I have held multiple positions, starting as a Mine Engineer, a Mining Estimator, a Chief Engineer, a Technical Services Manager, a Project Manager, a General Manager and a Consulting Engineer as well as being a Qualified Person since 2019. My expertise was acquired while working with Inmet, High River Gold, Dumas Contracting, and as an independent consultant. I have been Senior Mining Engineer for InnovExplo Inc. since June 2019.
5. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
6. I have not visited the property that is the subject of this Technical Report.
7. I am co-author of and share responsibility for Sections 1.5, 1.7, 1.16, 2.2, 2.3.9, 2.4, 2.5.2, 14.13, and 27 of the Technical Report.
8. I am independent of Probe Gold Inc. as independence is defined in Section 1.5 of NI 43-101.
9. I have had prior involvement with the property that is the subject of the Technical Report. I was QP for the NI 43-101 technical report entitled "NI 43 101 Technical Report and up-date of the Mineral Resource Estimate for the Monique Area, Novador Project, Quebec" (March 2, 2023) and the NI 43-101 Technical reports entitled "NI 43-101 Technical Report and Updated Mineral Resource Estimate for the Novador Project, Quebec" (July 13, 2023).
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

March 26, 2024

"Signed and sealed"

Simon Boudreau, P.Eng.

## CERTIFICATE OF QUALIFIED PERSON
## ELISABETH TREMBLAY, P.GEO., M.SC.A

I, Elisabeth Tremblay, P.Geo., M.Sc.A. (OGQ No. 439), certify that I am employed as Senior Geologist by InnovExplo Inc., with an office address of 859, Boulevard Jean-Paul Vincent, Bureau 201, Longueuil, Quebec, Canada, J4G 1R3.

1. This certificate applies to the technical report titled “Novador Project NI 43-101 Technical Report and Preliminary Economic Assessment, Val-d’Or, Quebec” that has an effective date of February 13, 2024 (the “Technical Report”).
2. I graduated with a Bachelor's degree in Geology (B.Sc) from Université du Québec à Montréal (Montreal, Quebec) in 1994. In addition, I obtained a Master’s degree in Earth Sciences (M.Sc.A.) from Université du Québec à Chicoutimi (Chicoutimi, Quebec) in 1998.
3. I am a member in good standing of the Ordre des Géologues du Québec (OGQ #439), the Association of Professional Geoscientists of Ontario (PGO #3971), and the Association of Professional Engineers and Geoscientists of British Columbia (EGBC #59491).
4. I have practiced my profession continuously as a geologist for a total of 27 years since graduating from university. During that time, I have been involved in mineral exploration for precious and base metal properties in Canada and occasionally in Latin America. I acquired my expertise with Falconbridge and several junior mining companies. I have been a Senior Geologist for InnovExplo Inc. since October 2022.
5. I have read the definition of “Qualified Person” set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfil the requirements to be a “Qualified Person” for those sections of the Technical Report that I am responsible for preparing.
6. I have not visited the property that is the subject of this Technical Report.
7. I am the principal author and assume responsibility for Sections 1.2, 1.3, 1.4, 1.17.2, 2.2, 2.3.10, 2.5.2, 4, 5, 6, 7, 8, 9, 10, 23, 26.1, 26.2, and 27 of the Technical Report.
8. I am independent of Probe Gold Inc. as independence is defined in Section 1.5 of NI 43-101.
9. I have had prior involvement with the property that is the subject of the Technical Report. I was QP for the NI 43-101 technical report entitled “NI 43 101 Technical Report and update of the Mineral Resource Estimate for the Monique Area, Novador Project, Quebec” (March 2, 2023) and the NI 43-101 Technical reports entitled “NI 43-101 Technical Report and Updated Mineral Resource Estimate for the Novador Project, Quebec” (July 13, 2023). I also worked for Monarch Mining Corporation, which owned the Monique Property, from 2017 to 2020.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. 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 those sections of the Technical Report not misleading.

March 26, 2024

“Signed and sealed”

Elisabeth Tremblay, P.Geo., M.Sc.A

## Important Notice

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# 1 SUMMARY

## 1.1 Introduction

Probe Gold Inc. (Probe) commissioned Ausenco Engineering Canada ULC. (Ausenco) to compile a preliminary economic assessment (PEA) of the Novador Project, previously known as the "Val D'Or East Project". The PEA was prepared in accordance with the Canadian disclosure requirements of National Instrument 43-101 (NI 43-101) and the requirements of Form 43-101 F1.

The responsibilities of the engineering consultants and firms who are providing qualified persons are as follows:

- Ausenco managed and coordinated the work related to the report. Ausenco developed the PEA-level design and cost estimate for the process plant, general site infrastructure, site water management infrastructure, and tailings facility. Ausenco also compiled the overall cost estimate and completed the economic analysis.
- Moose Mountain Technical Services (MMTS) designed the open pit and underground mine production schedules, and prepared the mine capital and operating costs.
- InnovExplo Inc. (InnovExplo) completed the work related to property description, accessibility, local resources, geological setting, deposit type, exploration work, drilling, exploration works, sample preparation and analysis, data verification, and mineral resource estimate.
- Lamont Inc. (Lamont) completed the work related to the environmental studies and permitting.

## 1.2 Property Description

The Property is located in northwestern Quebec, approximately 26 km east of the city of Val-d'Or.

The Project is very close to TransCanada Highway 117. A CN railway line crosses the south-eastern part of the Property, connecting east through to Montreal and west through the Ontario Northland Railway to the North American rail network. Val-d'Or has a regional airport with regularly scheduled flights to and from Montreal and also acts as a hub for flights further north. Val-d'Or is a six-hour drive north of Montreal, and there is a daily bus service between Montreal and the other cities in the Abitibi region. The power lines and telecommunication systems can be easily accessible, with the power line feeding the Beaufor mine only 2 km away.

The Project encompasses three areas Pascalis, Courvan and Monique. The Project is 100% owned by Probe Gold and comprises 427 map-designated mining titles, two mining concessions and one mining lease covering a total area of 17,746.28 ha. Several royalties apply to the Project.

## 1.3 Geology and Mineralization

### 1.3.1 Geology

The Project lies in the southeastern part of the Archean Abitibi Greenstone Belt in the southern Superior Province of the Canadian Shield.

The Project is situated within the Val-d’Or mining camp, which lies within the eastern segment of the southern part of the Abitibi Subprovince at its boundary with the Pontiac Subprovince. In this region, the Larder Lake–Cadillac Fault Zones marks the separation between these two subprovinces. The orientation of the volcanic rocks on the Project is generally E-W trending and subvertical. The Project is mainly underlain by tholeiitic mafic volcanic rocks of the Dubuisson Formation in the north (Pascalis area), by tholeiitic lavas of the Jacola Formation in the centre-east and by felsic to mafic volcanics of the Val-d’Or Formation in the south (Monique area). The western portion of the Project (Courvan area) encompasses the eastern contact of the synvolcanic Bourlamaque Batholith. Throughout the central portion of the Project, the volcanic rocks are cross-cut by a series of gabbroic and mafic intrusions along an ENE trend. In the Pascalis area, a swarm of subvertical NNW-striking, metre-scale, diorite dykes cut across almost perpendicularly the volcanic units.

### 1.3.2 Mineralization

The gold-bearing zones are defined as mesothermal lode gold deposits. They generally consist of a complex system of veins composed of quartz, carbonate, albite and ± tourmaline with disseminated and/or blebby-cubic pyrite. The auriferous zones are commonly associated with shear zones and extensional fractures. Mineralization is concentrated in veins and/or adjacent lithologies strongly altered due to hydrothermal fluid circulation.

Two main geological settings control the gold mineralization in the Novador area. The first gold setting is found in the Bourlamaque batholith. Mineralization consists of quartz-tourmaline-carbonates-pyrite veins shallowly to moderately dipping to the south, hosted in the Bourlamaque granodiorite near the contact with the volcanic rocks of the Dubuisson formation. The Courvan deposits represent good examples of this style of mineralization. The second geological setting of the Novador area consists of quartz-tourmaline mesothermal veins found both inside and adjacent to small intrusives in the altered volcanic rocks. The latter are associated with east-west shear zones. The Pascalis and Monique gold trend zones represent good examples of this style of mineralization.

## 1.4 Exploration

Between 2016 and 2019, large-scale ground geophysical surveys (magnetic, IP, gradient, 3D IP) were conducted in the Pascalis, Monique and Courvan areas.

In the fall of 2017, Probe Gold performed line cutting and reconnaissance mapping to locate and summarily map the outcropping zones and to locate historical drill holes and infrastructure relics from historical production. Two geologists visited more than 46 outcrops, 9 on CM 28OPTB and 37 on CM 295.

During the summers of 2018 and 2019, Probe Gold completed a prospecting and sampling program covering the Pascalis and Courvan areas. Two geologists and three assistants visited 850 outcrops, and more than 1,000 geological measurements were taken.

During the summer of 2018, a mechanical stripping program was completed in the northwestern area of the New Béliveau gold deposit. Channel sampling and drone surveying were completed over a 1,200 $m^2$ stripped area.

In May and June 2021, a biochemical survey was completed along the northeastern portion of Probe Gold's Pascalis-Courvan-Monique areas. A total of 161 black spruce bark samples from 158 sites, spaced 150 or 300 m apart, were collected.

Probe Gold drilled 1,774 holes (501,219.24 m) on the Project from 2016 to 2022. The following table summarizes the issuer's annual drilling totals.

**Table 1-1: Summary of the 2016 to 2022 Drilling Programs**

| Year | Area/Claim Block | DDH Count | Meterage | DDH | Total DDH Length (m) |
|---|---|---|---|---|---|
| 2016 | Pascalis | 23 | 11,940.48 | PC-16-84 to 106 | 23 DDH 11,940.48 m |
| 2017 | Pascalis | 193 | 81,868.88 | PC-17-107 to 133<br>PC-17-135 to 300 | 193 DDH 81,868.88 m |
| 2018 | Monique | 14 | 4,783.10 | MO-18-01 to 14 | 328 DDH 111,598.18 m |
| | Pascalis | 230 | 81,200.88 | PC-18-301 to 531 | |
| | Courvan | 84 | 25,614.20 | CO-18-01 to 84 | |
| 2019 | Monique | 18 | 5,657.20 | MO-19-15 to 32 | 114 DDH 33,162.10 m |
| | Pascalis | 53 | 15,192.40 | PC-19-532 to 584 | |
| | Courvan | 43 | 12,312.50 | CO-19-85 to 127 | |
| 2020 | Monique | 71 | 18,233.70 | MO-20-33 to 96 | 219 DDH 65,010.95 m |
| | Pascalis | 91 | 27,796.65 | PC-20-585 to 675 | |
| | Courvan | 57 | 18,980.60 | CO-20-128 to 184 | |
| 2021 | Monique | 168 | 44,043.50 | MO-21-97 to 249 | 172 DDH 45,300.50 m |
| | Courvan | 4 | 1,257.00 | CO-21-185 to 188 | |
| 2022 | Monique | 358 | 81,595.05 | MO-22-250 to 549<br>MOD-22-01 to 03 | 725 DDH 152,338.15 m |
| | Pascalis | 225 | 40,925.40 | PC-22-676 to 900 | |
| | Courvan | 142 | 29,817.70 | CO-22-189 to 329 | |
| **Total** | | **1,774** | **501,219.24** | | |

In 2023, over 61,692 m of drilling have been completed at Novador. The 2023 program aimed to increase mineral resources and make new discoveries on the project. The 2023 drill holes are not included in the MRE 2023. The authors do not believe that the omission of these holes will materially affect the MRE 2023, and the decision to leave them out is in accordance with the current geological models.

## 1.5 Data Verification

Data verification included visits to the Project and an independent review of the data for selected drill holes (surveyor certificates, assay certificates, QA/QC program and results, downhole surveys, lithologies, alteration and structures).

The QPs believe their data verification has demonstrated the validity of the data and the project protocols. The QPs consider the Monique, Courvan and Pascalis databases valid and of sufficient quality to be used for the mineral resource estimate herein.

The QP regularly reviewed the metallurgical results that may impact the mineral resource estimation and/or metallurgical recovery mode. In the opinion of the QP, the data and assumptions used to estimate the metallurgical recovery model and the mineral resource estimates are sufficiently reliable for those purposes.

## 1.6 Metallurgical Testwork

Three metallurgical testwork programs were conducted between 2017 and 2023 to quantify metallurgical performance of the mineralized zones in the Novador properties. Several processing options, including particle sorting, flotation, gravity concentration, and cyanidation, were considered. The most recent testwork program included solid liquid separation and cyanide destruction testwork.

All samples exhibited free milling gold recoveries amenable to grinding through conventional semi-autogenous grinding (SAG) and ball mill grinding, gravity concentration, and cyanide leaching. Gravity concentration and cyanide leaching at a grind size $K_{80}$ of 70 µm was determined to be the optimum process option for this deposit. The samples were determined to be amenable to thickening and pressure filtration.

There is no evidence of any deleterious elements in significant quantities that would impair recovery or result in low-quality doré. Gold recoveries are expected to range between 95% and 96% at design and average life-of-mine grades.

## 1.7 Mineral Resource Estimation & Statement

The updated mineral resource estimate for the Project (the "2023 MRE") was prepared by Marina lund (P.Geo.), Vincent Nadeau-Benoit (P.Geo), Martin Perron (P.Eng.) and Simon Boudreau (P.Eng.), using all available information.

The mineral resources herein are not mineral reserves as they do not have demonstrated economic viability.

The QPs consider the 2023 MRE reliable and based on quality data, reasonable assumptions and parameters that follow CIM Definition Standards.

The QPs have classified the mineral resources in the 2023 MRE as Indicated and Inferred based on data density, search ellipse criteria, drill hole spacing and interpolation parameters. The QPs also believe the requirement of 'reasonable prospects for eventual economic extraction' has been met by having resources constrained by optimized pit-shell and

DSO stope designs and by applying a cut-off grade based on reasonable inputs amenable to potential in-pit and underground extraction scenarios.

The following table displays the results of the 2023 MRE combining potential open pit and underground mining scenarios at cut-off grades of 0.40 to 0.42 g/t Au (in-pit) and 1.43 to 2.05 g/t Au (underground).

**Table 1-2: Consolidated 2023 Mineral Resource Estimate for the Novador Project, by Mining Method**

| Area/ Category | Pit-Constrained Mineral Resources | | | Underground Mineral Resources | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnes | Au (g/t) | Ounces | Tonnes | Au (g/t) | Ounces | Tonnes | Au (g/t) | Ounces |
| Measured | 3,356,300 | 2.34 | 252,100 | 126,400 | 1.87 | 7,600 | 3,482,800 | 2.32 | 259,700 |
| Indicated | 56,297,200 | 1.49 | 2,690,600 | 7,811,000 | 2.38 | 596,700 | 64,108,200 | 1.59 | 3,287,300 |
| M&I | 59,653,600 | 1.53 | 2,942,700 | 7,937,400 | 2.37 | 604,300 | 67,591,000 | 1.63 | 3,547,000 |
| Inferred | 9,915,600 | 1.48 | 472,800 | 6,802,400 | 2.82 | 616,500 | 16,717,900 | 2.03 | 1,089,300 |

Notes to accompany the Mineral Resource Estimate: 1. These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The mineral resource estimate follows current CIM Definition Standards (2014) and CIM MRMR Best Practice Guidelines (2019). 2. The independent and qualified persons ("QPs") for the mineral resource estimate, as defined by NI 43-101, are Marina Iund, P.Geo. (Monique, Courvan SW, Courvan SE, Bussiere Mine, Bussiere and Creek deposits), Vincent Nadeau-Benoit, P.Geo. (New Béliveau and North deposits), Martin Perron, P.Eng. (all deposits) and Simon Boudreau, P.Eng. (all deposits except Highway and Bordure), all from InnovExplo Inc. The effective date is July 13, 2023. 3. For the Courvan SW, Courvan SE, Bussiere Mine, Bussiere, Creek, New Béliveau and North deposits, the 2023 MRE represents an update of the previous mineral resource estimate (the "2021 MRE") published by Raponi et al. (2021). The MRE for the Monique deposit has not been modified since the last update completed by InnovExplo in March 2023 (Iund et al., 2023). For the Highway, Bordure and Senore deposits, the 2021 MRE parameters and results were reviewed by the QP. As no new information was available and the 2021 MRE was deemed valid, the 2021 MRE results are reported unchanged. 4. The results are presented undiluted and are considered to have reasonable prospects of economic viability. 5. The mineral resource estimate is locally pit-constrained. The out-pit mineral resource met the standard of reasonable prospects for eventual economic extraction by applying constraining volumes to all blocks (potential underground long-hole extraction scenario) using DSO. 6. Monique, Courvan SW, Courvan SE, Bussiere Mine, Bussiere, Creek, New Béliveau and North deposits: The pit-constrained mineral resource estimate is reported at a 0.42 g/t Au cut-off grade for the Monique deposit and 0.40 g/t Au for the other deposits, both values above the base case cut-off grade of 0.26 g/t Au, which was calculated using the following parameters: mining cost = CA$2.97/t; mining overburden cost = CA$2.70/t; processing cost = CA$17.82/t; selling costs = CA$5.00/t; royalty = CA$8.59/oz to CA$45.22/oz; gold price = US$1,700/oz; USD/CAD exchange rate = 1.33; bedrock slope angle of 43° to 54°; and mill recovery = 95%. The use of a higher cut-off should allow in-pit mineralized waste (0.20-0.40 g/t Au; 0.20-0.42 g/t Au) to be selected for potential upgrade through an industrial sorter process. The underground mineral resource estimate is reported at a cut-off grade of 1.43 to 1.71 g/t Au. The underground mineral resource estimate was based on two mining methods depending on the orientation of the mineralization. The cut-off grade was calculated using the following parameters: mining cost = CA$81.00/t (long-hole) to CA$97.50/t (cut & fill); processing cost = CA$17.82/t; selling costs = CA$5.00/t; royalty = CA$8.59/oz to CA$45.22/oz; gold price = US$1,700/oz; USD/CAD exchange rate = 1.33; and mill recovery = 95%. 7. Bordure, Highway and Senore deposits: The pit-constrained mineral resource estimate is reported at a 0.40 g/t Au cut-off grade. The cut-off was calculated using the following parameters: gold price = US$1,600/oz; USD/CAD exchange rate = 1.33; mining cost = CA$3.00/t or CA$3.50/t; processing + G&A costs = CA$21.50/t; transport cost = $0.15/t.km; bedrock slope angle of 48° to 59°; and mill recovery = 95%. The underground mineral resource estimate is reported at a cut-off grade of 1.65 to 2.05 g/t Au. The underground mineral resource estimate was based on two mining methods depending on the orientation of the mineralization: long-hole retreat at a mining cost of CA$82/t and mechanized cut & fill at a mining cost of CA$110/t and using the same ground unit cost as for the pit-constrained scenario. 8. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs etc.). 9. The number of metric tons (tonnes) was rounded to the nearest thousand, following the recommendations in NI 43-101. Any discrepancies in the totals are due to rounding effects. The metal contents are presented in troy ounces (tonnes x grade / 31.10348). 10. The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues or any other relevant issue not reported in the Technical Report that could materially affect the Mineral Resource Estimate.

Using a series of performance tests, the issuer has demonstrated that industrial sorting technology works well with the type of mineralization found on the Project. By applying industrial sorting and very conservative gold recoveries to mineralized waste, additional mineral material can be extracted from the waste to add to the mineral resources. The following table presents the potential additional pit-constrained resource from industrial sorting.

**Table 1-3: Additional Pit-Constrained Resources from Industrial Sorting, Effective Date: July 13, 2023**

| Area | Resource Category | Tonnage (t) | Au | Ounces (oz) |
|---|---|---|---|---|
| Monique Gold Trend | Indicated | 16,427,578 | 0.32 | 166,900 |
| | Inferred | 6,305,600 | 0.28 | 56,500 |
| Courvan Gold Trend | Measured | 9,700 | 0.30 | 100 |
| | Indicated | 2,403,500 | 0.29 | 22,600 |
| | Measured & Indicated | 2,413,200 | 0.29 | 22,700 |
| | Inferred | 2,221,900 | 0.28 | 20,200 |
| Pascalis Gold Trend | Measured | 632,400 | 0.29 | 5,900 |
| | Indicated | 5,523,900 | 0.29 | 51,300 |
| | Measured & Indicated | 6,156,300 | 0.29 | 57,300 |
| | Inferred | 1,493,700 | 0.28 | 13,500 |

Notes: **1.** This additional pit-constrained Mineral Resource represents mineralized waste between cut-off grades of 0.20 g/t Au and 0.42 g/t Au for the Monique deposit and between 0.20 g/t Au and 0.4 g/t Au for the other deposits, exclusive of the pit-constrained Mineral Resource from Table 14-24. This lower cut-off was based on the following parameters: industrial sorting cost of CA$1.73/t, gold recovery in the industrial sorting process at 82% with an overall gold recovery with gravity and leaching at 68%, and mass recovery in the industrial sorting process at 42%. The industrial sorting results on this material indicate that a product above 0.42 g/t Au (Monique) or 0.4 g/t Au (other deposits) could potentially be achieved. **2.** For more details on the industrial sorting technique and parameters, see the "Val-d'Or East Project, NI 43-101 Technical Report & Preliminary Economic Analysis" dated October 20, 2021 (Raponi et al., 2021), available on SEDAR (www.sedar.com) under Probe Gold's issuer profile.

## 1.8 Mining Methods

This project is amenable to industry-standard open pit and underground mining practices. Open pit and underground mine designs, mine production schedules, and mine capital and operating costs have been developed for the Monique, Courvan North, Courvan South, Pascalis and Highway deposits at a scoping level of engineering. The mineral resource estimate (dated July 2023) forms the basis of the mine planning. Open pit activities are designed for approximately 14 years of operation (one year of pre-production, followed by approximately 13 years of mill feed). Underground activities are designed to take place concurrently, starting in Year 4 of mill feed and ending in Year 13 of mill feed. While open pit mining is completed in Year 11, open pit stockpile reclaim will also end in Year 13. Conventional drill/blast/load/haul open pit mining methods are suitable for the project location and local site requirements. Underground mining areas are accessed from declines driven from surface portals and are mined using the longhole retreat (LHR) method for the Monique deposit and mechanized cut-and-fill (MCF) method for the Courvan and Pascalis deposits.

The subsets of mineral resources contained within the designed open pits and underground stopes are summarized in Table 1-4. Equivalent gold cut-off grades used for each deposit and mining method are also shown for reference. This subset of mineral resources forms the basis of the mine plans and production schedule.

Note: The PEA is preliminary in nature and includes 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; there is no certainty that the results of the PEA will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

**Table 1-4: PEA Mine Plan Production Summary**

| Deposit | Mining Method | Mill Feed (Mt) | Mill Feed Au Grade (g/t) | Mill Feed Metal (koz) | Waste Rock (Mt) | Stripping Ratio (Waste Tonnes:Mill Feed Tonnes) | Calculated Cut-off Grade (g/t Au) |
|---|---|---|---|---|---|---|---|
| Monique | Open Pit | 42.4 | 0.94 | 1,278 | 298 | 7.0 | 0.21 |
| Pascalis | Open Pit | 14.2 | 1.24 | 564 | 102 | 7.2 | 0.21 |
| Courvan North | Open Pit | 6.4 | 1.07 | 222 | 57 | 8.8 | 0.21 |
| Courvan South | Open Pit | 4.5 | 0.89 | 129 | 46 | 10.1 | 0.21 |
| Highway | Open Pit | 0.4 | 0.95 | 11 | 2 | 4.6 | 0.29 |
| **Total Open Pit** | | **67.9** | **1.01** | **2,206** | **504** | **7.4** | **-** |
| Monique | Underground | 6.3 | 2.35 | 478 | - | - | 1.50 |
| Pascalis | Underground | 3.1 | 3.05 | 304 | - | - | 1.75 |
| Courvan | Underground | 3.0 | 3.80 | 364 | - | - | 1.75 |
| **Total Underground** | | **12.4** | **2.87** | **1,147** | **-** | **-** | **-** |
| **Total Open Pit and Underground** | | **80.3** | **1.30** | **3,353** | **504** | **-** | **-** |

Notes: **1.** Mill feed includes measured, indicated and inferred resources. **2.** The PEA mill feed estimates are a subset of the July 2023 mineral resource estimate and based on the open pit and underground mine engineering and technical information developed at scoping level for the Monique, Pascalis, Courvan and Highway deposits. **3.** PEA mill feed estimates are mined tonnes and in-situ grade; the reference point is the primary crusher. **4.** Cut-off grade estimates are based on US$1,700/oz, Au at a currency exchange rate of US$0.74 per C$1.00; 99.95% payable gold; C$3/oz refining and transportation; claim-based royalties ranging from 0% to 3% NSR or 0% to 1% GSR; recovery formulas are based on the location of the material source as follows: (1-(0.0179*AuHeadGrade+0.0121)/AuHeadGrade)-0.008 for Monique (except Felsic Porphyry), Courvan, North, 85.5% for Monique Felsic Porphyry (1-(MAX(0.0381*AuHeadGrade-0.0237,0.01)/AuHeadGrade))-0.008 for Béliveau; and (0.5+0.5*(0.9507-0.0874/AuHeadGrade/(1-0.5)))-0.008 for Highway; Processing and G&A costs of C$14/tonne. **5.** The open pit cut-off grade is NSR ≥ $14/t **6.** The underground cut-off grades are 1.50 g/t Au for Monique and 1.75 g/t Au for both Courvan and Pascalis. **7.** Estimates have been rounded and may result in summation differences.

Economic ultimate pit limits are determined using the Lerchs-Grossman algorithm. The ultimate pit limits are divided into smaller phases or pushbacks to target higher economic margin material earlier in the mine life. Geotechnical recommendations and 25 m double-lane roads are incorporated into the phase designs for each deposit. Single-lane ramps are implemented at the pit bottoms (maximum of three benches). Open pit contents are based on whole block contents using the block sizes as supplied to MMTS (6 m for Monique, 5 m for Highway, and 4 m for Courvan and Pascalis). These blocks are considered to have some amount of (unquantified) internal dilution, due to the nature of mineralization. As such, additional mining dilution is not included for this study.

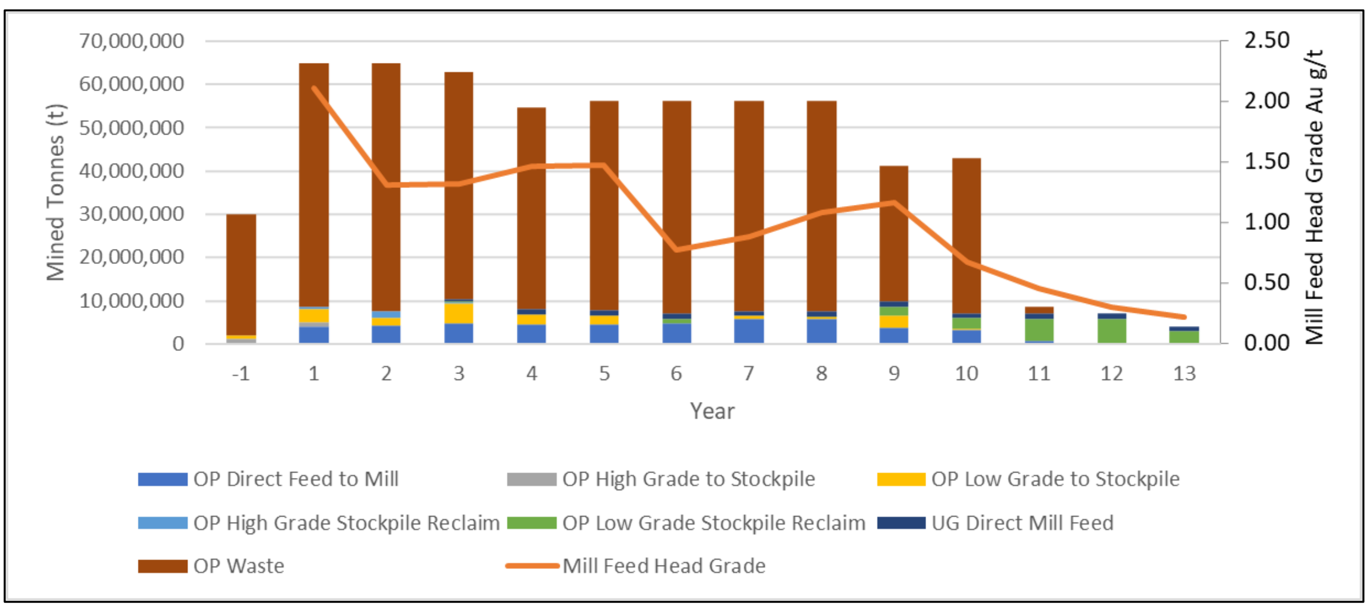
Underground stope inventories are determined using the stope shape optimizer (SSO) algorithm targeting material above 1.50 g/t Au for long hole retreat (LHR) mining method, and 1.75 g/t Au for mechanized cut-and-fill (MCF) mining method. Stopes shapes are constrained by the geotechnical offset recommendations from the base of the designed open pit limits, to provide pillars between the underground workings and the open pits. Underground mining dilution of 0.50 m per contact is applied to LHR stope contacts and dilution of 0.25 m per contact is added to the MCF stope contacts. For all stopes, regardless of mining method, an additional 3% dilution is added to allow for sloughing of backfill from previously filled stopes and/or mucking from floors. Mining recovery of 90% is applied to the LHR underground material and 95% to the MCF material.

An annual mill feed rate of 5,657 kt is targeted with an expansion to 7,008 kt in Year 6 of production, and is the basis used for the mining schedule. Mill feed is comprised of measured, indicated and inferred resources. The cut-off grade used in the mine schedule is NSR ≥ $14.00/t.

Stockpiling is utilized to maximize grades during the first years of production. A total of 80.3 Mt of material is processed at an average deliverable gold grade of 1.30 g/t for a mine production of 12.6 years. Open pit material comprises 85% of the total mill feed; the remaining is from underground mining. Total waste mined is 504 Mt. The majority is placed in external waste rock storage facilities (WRSF). Waste rock is also planned for construction of haul roads between the pit exits and the primary crusher, underground portals, underground backfill requirements, and the explosives facility foundation material. Topsoil and overburden will be placed in dedicated areas and kept salvageable for closure at the end of the mine life. All waste rock from the underground operations will be utilized for underground rock backfill.

The mine production schedule is summarized in Figure 1-1.

**Figure 1-1: Mine Production Schedule Summary**




Source: MMTS, 2024.

Open pit mine operations are planned as owner operated. The mining schedule assumes 355 operating days per year with two 12-hour shifts per day. An allowance of 10 shutdown days is included to allow for adverse weather conditions and other operational downtimes.

The open pit mining fleet will consist of electric and diesel-powered gear and will include the following:

- 230 mm hole electric production rotary drills
- 16 $m^3$ bucket electric hydraulic production shovels
- 12 $m^3$ bucket wheel loader for open pit and underground surface support
- 135 t payload rigid-frame haul trucks for production hauling
- ancillary and service equipment to support the mine operations.

In-pit dewatering systems will be established for each pit. All surface water and precipitation in the pits will be handled by submersible pumps and directed to external water management facilities near the pit limits.

Minor equipment maintenance will be performed in the field; major repairs and planned interval maintenance will be carried out in the shops near the process facilities.

Underground operations are planned to be carried out by the owner.

The Pascalis open pit is mined to completion early in the mine schedule. After completion, the mined-out Pascalis open pit will be utilized for tailings placement.

The planned open pit sequence of extraction over the life of mine is illustrated in Table 1-5.

**Table 1-5: Deposit Sequence of Extraction**

| Deposit Name and Type | Y-1 | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 | Y8 | Y9 | Y10 | Y11 | Y12 | Y13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Courvan North Open Pit | | | | | XX | XX | | | | | | | | |
| Courvan South East Open Pit | | | | | XX | | | | | | | | | |
| Courvan South West Open Pit | | | | | | | | | | XX | XX | XX | | |
| Courvan Underground | | | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX |
| Highway Open Pit | | | XX | | | | | | | | | | | |
| Monique North Phase Open Pit | | | XX | XX | XX | XX | | | | | | | | |
| Monique South Phase 1 Open Pit | | | | | | XX | XX | | | | | | | |
| Monique South Phase 2 Open Pit | | | | | | | XX | XX | XX | | | | | |
| Monique South Phase 3 Open Pit | | | | | | | | XX | XX | XX | XX | | | |
| Monique Underground | | | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX |
| Pascalis South Phase 1 Open Pit | XX | XX | | | | | | | | | | | | |
| Pascalis South Phase 2 Open Pit | XX | XX | XX | | | | | | | | | | | |
| Pascalis South Phase 3 Open Pit | XX | XX | XX | XX | | | | | | | | | | |
| Pascalis Underground | | | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX | XX |

Source: MMTS, 2024.

## 1.9 Recovery Methods

The project flowsheet was selected based on preliminary testwork and subsequent economic modelling. The unit operations selected are standard technologies typically used in gold processing plants. The proposed flowsheet uses a phased expansion approach in Year 6 to optimize project economics. The unit processes employed in each phase are as follows:

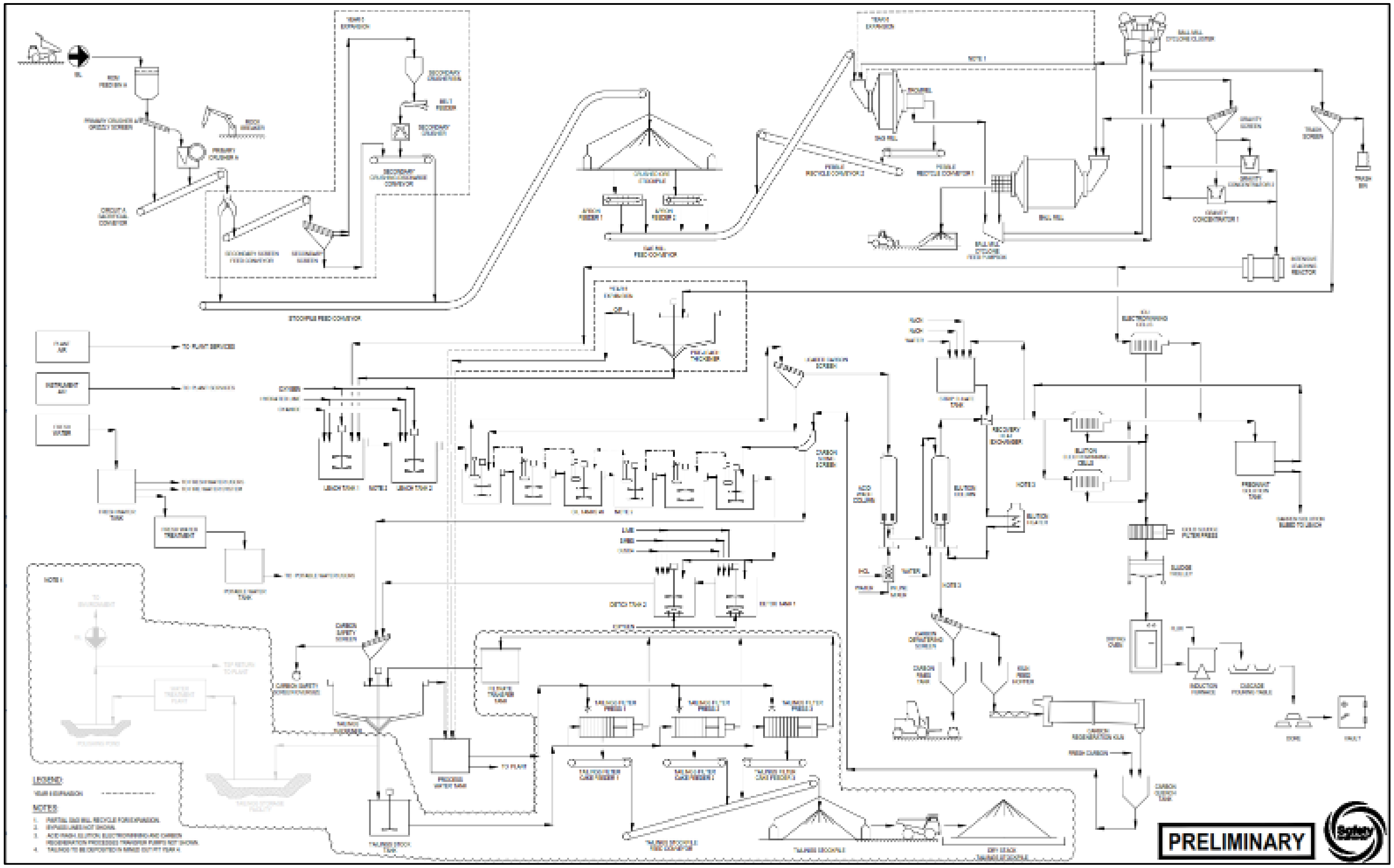
- Phase 1 (5.7 Mt/a) – Primary crushing of run-of-mine material, SAG and ball milling with cyclone classification, gravity recovery, followed by leach/carbon-in-leach (CIL) of the gravity tails and desorption with electrowinning to recover doré. Leach-adsorption tails will be treated to destroy the cyanide, before being thickened, filtered, and deposited onto a dry stack tailings stockpile. Tailings filtration ceases in Year 4 of operation with slurry tailings deposited in a mined-out open pit.
- Phase 2 (7.0 Mt/a) – Milling rate expansion achieved with the addition of a secondary crushing circuit, and a pre-leach thickener. The primary grind size, $K_{80}$, is coarsened (from 70 µm to 90 µm) to negate additional milling capacity capital investment.

The key process design criteria are listed below:

- Phase 1 is designed for a nominal throughput of 15,500 t/d or 5.7 Mt/a
- Phase 2 is designed for a nominal throughput of 19,201 t/d or 7.0 Mt/a
- crushing plant is designed to an availability of 65%
- grinding, leaching, elution, and cyanide reduction circuits are designed to an availability of 92%
- tailings filtration plant is expected to demonstrate an 84% availability.

Figure 1-2 below represents the overall process flowsheet.

**Figure 1-2: Overall Process Flow Diagram**




Source: Ausenco, 2023.

## 1.10 Project Infrastructure

### 1.10.1 General

The major project facilities include the access road, process plant, waste rock storage facility (WRSF), tailings management facilities, mill basin, mineralized material stockpile, and the effluent collection infrastructure and treatment plant. Support facilities also displayed include the gold room, assay and metallurgical laboratory, truckshop, maintenance shop and warehouse, office complex, and security gatehouse.

With the project's proximity to the site, there is access to multiple all-season roads, highways, and Canadian National (CN) railway paths. There is also Val-d'Or's regional airport with regular flights to and from Montreal. The location of the project allows for local and outsourced options for labour, supplies, and service providers required to efficiently develop and operate the mine.

### 1.10.2 Tailings Disposal

Ausenco evaluated disposal technologies and storage sites. Applying safety, terrain, and land usage criteria the selected technology is a filtered dry stack tailings facility (DSTF) and in-pit tailings disposal. The site for the DSTF is located 200 m from the plant site and was selected based on location and stable terrain deemed ideal for such infrastructure. The site has storage capacity to provide secure and permanent storage of 23.6 Mt of filtered tailings in the DSTF and 44.3 Mt of slurry tailings as in-pit tailings.

The filtered tailings will be transported to the DSTF by haul trucks and then spread and compacted using dozers and compactors in thin lifts to improve stability. The conceptual design for the facility uses bottom-up construction along with an extensive underdrain system to capture near-surface groundwater and seepage. The facility was designed in accordance with Canadian Dam Association (CDA) 2013 guidelines.

Based on the geotechnical parameters that were estimated and the DSTF configuration, an operating dry stack facility with an overall slope of 3:1 (H:V) was designed. Stability analyses were performed and the design has an adequate factor of safety (i.e., greater than 1.3) during operations. In addition, the ultimate facility has an acceptable long-term factor of safety greater than 1.5 and a pseudo-static factor of safety greater than 1.0.

The in-pit tailings disposal with utilize slurry deposition technology, including a barge water reclaim system. Slurry tailings will be spigotted around the pit to uniformly deposit tailings in the pit. Decant water, i.e. free water, will be pumped from the pit back to the process plant. Any excess water will be treated, if required, and released to the environment.

## 1.11 Markets and Contracts

It was assumed in this PEA that the Novador Project will produce gold in the form of doré bars. The market for doré is well-established and accessible to new producers. The doré bars will be refined in a certified North American refinery and the gold will be sold on the spot market.

No market studies have been conducted by Probe Gold or its consultants on the gold doré that will be produced at the Novador Project. Gold is a freely traded commodity on the world market and there is a steady demand from numerous buyers. Gold production is expected to be sold on the spot market. Terms and conditions included as part of the sales contracts are expected to be typical for this commodity. Gold is bought and sold on many markets, and it is not difficult to obtain a market price at any time. The gold market is liquid, with many buyers and sellers active at any given time.

## 1.12 Environmental, Permitting and Social Considerations

At the federal level, the *Impact Assessment Act* (IAA, 2019) indicates that projects designated by the Physical Activities Regulations (SOR/2019-285) are subjected to the environmental assessment procedure. Thus, an environmental assessment under the IAA is required for a project that involves the construction, operation, decommissioning, and abandonment of a new metal mine, other than a rare earth element mine, placer mine, or uranium mine, with a mineralized material production capacity of 5,000 t/d or more.

At the provincial level, the opening and operation of a gold mine that has a production capacity of 2,000 t/d or more triggers an environmental impact assessment and review procedure under the Regulation Respecting the Environmental Impact Assessment and Review of Certain Projects (Q-2, r.23.1) of the *Environment Quality Act* (EQA) for the emission of a ministerial decree. After that, authorizations under section 22 of the EQA must be obtained for the project activities. Moreover, the *Mining Act* (M-13.1) provides a framework for the mining lease, rehabilitation and restoration plan, and financial guarantee. The mining lease is required to extract mineralized material.

Since 2017, Probe Gold has initiated a series of environmental studies with different consultant firms to understand the actual environmental conditions of the project site. More recently, in 2022, Probe Gold mandated the consultant firm Groupe DDM to carry out field inventories for various biological components (vegetation and wetlands, birds, fish and water environments) (Groupe DDM, 2022a, 2022b, 2023). These inventories covered the three areas of the Novador Project, namely Pascalis, Courvan, and Monique. The environmental permitting process requires an understanding of the physical (surface water, groundwater, air, noise, etc.), biological (fauna and flora) and social (land and resource uses, archaeology, landscape, etc.) environments, and include an evaluation of the potential impacts of the project and proposed mitigation measures.

As part of the development of the Project, Probe Gold representatives held several information and consultation meetings with stakeholders and First Nation authorities. The engagement process implemented by Probe Gold made it possible to meet various stakeholders concerned by the Project, including municipal and regional authorities, development economic organizations, environmental groups, nearby cottagers and land users. Meetings were also held with representatives of the Anishnabe Nation Council of Lac Simon and the Abitibiwinni First Nation Council.

## 1.13 Capital Cost Estimate

The capital cost estimate conforms to Class 5 guidelines for a PEA-level estimate with ±50% accuracy according to the Association for the Advancement of Cost Engineering International (AACE International). The capital cost estimate was developed in Q4 2023 Canadian dollars based on Ausenco's in-house database of projects and studies, as well as experience from similar operations.

The estimate includes open pit and underground mining, processing, on-site infrastructure, tailings facilities, off-site infrastructure, project indirect costs, project delivery, Owner's costs, and contingency. The capital cost summary is presented in Table 1-6. The total initial capital cost for the Novador Project is C$602.2 million, and life-of-mine sustaining costs are C$817.5 million. Closure costs are estimated at C$63.7 million, with salvage credits of C$26.0 million. Note that closure costs and salvage credits are excluded from the summary table below.

**Table 1-6: Summary of Capital Costs**

| WBS | WBS Description | Initial Capital Cost (C$M) | Sustaining Capital Cost (C$M) | Total Capital Cost (C$M) |
|---|---|---|---|---|
| 1000 | Mining | 118.4 | 709.5 | 827.9 |
| 2000 | On-Site Infrastructure | 78.5 | 27.3 | 105.8 |
| 3000 | Process Plant | 259.7 | 10.2 | 269.9 |
| 4000 | Off-Site Infrastructure | 8.5 | 2.9 | 11.3 |
| | **Total Directs** | **465.1** | **749.9** | **1215.0** |
| 5000 | Project Indirects | 11.5 | 3.3 | 14.8 |
| 6000 | Project Delivery | 32.4 | 2.2 | 34.6 |
| 7000 | Owner's Cost | 23.2 | - | 23.2 |
| 8000 | Contingency | 70.0 | 62.1 | 132.1 |
| | **Total Indirects** | **137.1** | **67.7** | **204.8** |
| | **Project Totals** | **602.2** | **817.5** | **1419.7** |

## 1.14 Operating Cost Estimate

The operating cost estimate is presented in Q4 2023 Canadian dollars. The estimate was developed to have an accuracy of ±50%. The estimate includes mining, processing, and general and administration (G&A) costs. Table 1-7 provides a summary of the project operating costs.

The overall life-of-mine operating cost is C$3,576 million over 13 years, or an average of C$44.52/t of material milled. Of this total, processing and G&A account for C$923 million and mining accounts for C$2,653 million.

Common to all operating cost estimates are the following assumptions:

- Cost estimates are based on Q4 2023 pricing without allowances for inflation.
- For material sourced in US dollars, an exchange rate of 1.33 Canadian dollar to 1.00 US dollar was assumed.
- Estimated cost for diesel is C$1.30/L.
- The annual power costs were calculated using a unit price of C$0.07/kWh. This cost was provided by Probe Gold.

Open pit mine operating costs are built up from first principles and applied to the mine production schedule. Productivity and cost inputs are derived from manufacturer quotes and historical data collected by MMTS.

Underground mine operating costs assume operations will be carried out by in-house forces and are derived from historical data collected by MMTS.

**Table 1-7: Operating Cost Summary**

| Cost Area | Phase 1 | | Phase 2 | | LOM (total) | |
|---|---|---|---|---|---|---|
| | C$M/a | $/t milled | C$M/a | $/t milled | C$M/a | $/t milled |
| Mining | 219.4 | 40.38 | 194.5 | 29.27 | 2,653 | 33.03 |
| Process | 68.4 | 12.08 | 59.8 | 8.54 | 787 | 9.80 |
| G&A | 10.8 | 1.91 | 10.8 | 1.54 | 136 | 1.69 |
| **Total** | **298.6** | **54.38** | **265.1** | **39.35** | **3,576** | **44.52** |

## 1.15 Economic Analysis

The 2024 PEA is preliminary in nature and is partly based on 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. There is no certainty that the 2024 PEA based on these mineral resources will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The results of the economic analyses represent forward-looking information as defined under Canadian securities law. The results depend on inputs that are subject to known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here.

The project was evaluated using a discounted cash flow analysis based on a 5% discount rate. Cash inflows consisted of annual revenue projections. Cash outflows consisted of capital expenditures, including pre-production costs; operating costs; refining and transport costs; taxes; and royalties. These were subtracted from the inflows to arrive at the annual cash flow projections. Cash flows were taken to occur at the midpoint of each period. The economic analysis also used the following assumptions:

- Construction will take 18 months.
- The Project has a mine life of 12.6 years (the final year is a partial year).
- The results are based on 100% ownership.
- The Project will be capital cost funded with 100% equity (no financing cost assumed).
- All cash flows are discounted to the start of construction using a mid-period discounting convention.
- All metal products will be sold in the same year they are produced.
- Project revenue will be derived from the sale of gold doré.
- No contractual arrangements for refining currently exist.

The pre-tax NPV discounted at 5% is C$1,530 million; the IRR is 34.4%; and payback period is 3.5 years. On a post-tax basis, the NPV discounted at 5% is C$910 million; the IRR is 24.4%; and payback period is 4.4 years. A summary of project economics is shown in Table 1-8.

**Table 1-8: Economic Analysis Summary**

| Description | Unit | Life-of-Mine Total / Average |
|---|---|---|
| **General Assumptions** | | |
| Discount Rate | % | 5.0 |
| Gold Price | US$/oz | 1,750 |
| Exchange Rate | USD/CAD | 0.74 |
| Mine Life | years | 12.6 |
| Total Overburden and Waste Tonnes Mined | kt | 504,344 |
| Total Mill Feed Tonnes | kt | 80,317 |
| Total Underground Mill Feed Tonnes | kt | 12,418 |
| Total Open Pit Mill Feed Tonnes | kt | 67,899 |
| Strip Ratio | w:o | 7.43 |
| **Production** | | |
| Mill Head Grade | g/t | 1.30 |
| Mill Recovery Rate | % | 95.70 |
| Total Mill Ounces Recovered | koz | 3,210 |
| Total Average Annual Production | koz | 255 |
| **Transport, Refining, Royalties** | | |
| Gold Payable | % | 99.95 |
| Refining & Transport Cost | C$/oz Au | 2.50 |
| Net Equivalent Royalty After Buyback | % | 0.80 |
| **Operating Costs** | | |
| Open Pit Mining Cost | C$/t mined | 2.88 |
| Underground Mining Cost | C$/t mined | 88.07 |
| Processing Cost | C$/t milled | 9.80 |
| G&A Cost | C$/t milled | 1.69 |
| Total Operating Cost | C$/t milled | 44.52 |
| **Cash Costs and All-In Sustaining Costs** | | |
| Cash Costs*[1] | US$/oz Au | 841 |
| All-In Sustaining Cost (AISC)**[2] | US$/oz Au | 1,038 |
| **Capital Expenditures** | | |
| Initial Capital Cost | C$M | 602 |
| Sustaining Capital Cost | C$M | 818 |
| Closure Capital Cost | C$M | 64 |
| Salvage Value | C$M | (26) |
| **Economics** | | |
| Pre-Tax NPV @ 5% | C$M | 1,530 |
| Pre-Tax IRR | % | 34.4 |
| Pre-Tax Payback | years | 3.5 |
| Post-Tax NPV @ 5% | C$M | 910 |
| Post-Tax IRR | % | 24.4 |
| Post-Tax Payback | years | 4.4 |

Notes: ***1.** Cash costs consist of mining costs, processing costs, mine-level G&A, refining and transport charges and royalties. ****2.** AISC includes cash costs plus sustaining capital, closure costs, and salvage value.

A sensitivity analysis was conducted on the base case pre-tax and post-tax NPV and IRR of the project using the following variables: gold price, mill head grade, discount rate, exchange rate, initial capital costs, and operating costs.

## 1.16 Interpretation and Conclusions

In a combined pit and underground mining scenario, the project contains an estimated measured and indicated mineral resource of 67,591,000 t at 1.63 g/t Au for 3,547,000 ounces of gold and an inferred mineral resource of 16,717,900 t at 2.03 g/t Au for 1,089,300 ounces of gold.

Based on the assumptions and parameters presented in this report, the PEA shows positive economics (i.e., C$910 million post-tax NPV (5%) and 24.4% post-tax IRR). The PEA supports a decision to carry out additional detailed studies.

## 1.17 Recommendations

### 1.17.1 Introduction

The results presented in this technical report demonstrate that the Novador Project is technically and economically robust. It is recommended to continue developing through additional studies. The recommended budget totals C$14.7 million and the cost estimates for all works are summarized in Section 26.

### 1.17.2 Drilling

The authors recommend additional work be carried out to continue exploring the Property and enhance the economic potential of the Project. In addition to the programs executed in the first quarter of 2024, more drilling is recommended to test the extensions of the Pascalis, Courvan, and Monique deposits laterally and at depth and along their gold trends. Drilling is also warranted to test other known occurrences on the Property. The authors believe the character of the Property is of sufficient merit to justify a significant exploration program.

The authors believe that there is reasonable potential to find new discoveries on the Property. The authors recommend extending the Pascalis, Courvan, and Monique integrated geological and structural model for the overall Property and conducting additional exploration work (stripping, mapping, geophysics and drilling).

### 1.17.3 Mineral Resource Estimate

The authors recommend a complete update of the Bordure, Highway and Senore area and bring them to the new geological and engineering parameters used for the other deposits.

### 1.17.4 Metallurgy and Recovery Methods

Ahead of the next stage of the Novador Project, additional variability tests should be performed on minor deposits not covered in the current program to determine if they warrant inclusion into the mine plan.

Furthermore, grind size determination testwork should be conducted at smaller grind size intervals, with tests performed at 80 µm, 90 µm, and 100 µm to improve the data resolution. This should be supported with additional comminution testwork to establish the variability of hardness within the deposits. Dewatering testwork and reagent optimization in leaching and detoxification should also be confirmed in this program once target grind is optimized.

A single sample from the felsic porphyry domain of the Monique deposit was found to have anomalously low recovery compared to the body of available leaching tests. Additional testing should be completed on this minor domain to determine if this single lower recovery value is representative of the domain as a whole.

An additional sample that is representative of early mine life production should also be tested specifically to examine the metallurgical performance of the mill during the payback period of the project.

### 1.17.5 Mining Methods

MMTS recommends that a pre-feasibility study (PFS) level mining study is completed for the Novador Project. This study would the typical mine planning sequence of ultimate pit limit analysis, sensitivity analysis, detailed design, mine schedule optimization and costing. This PFS would also include a drilling and blasting study, detailed analysis of incremental UG mining areas, additional detail on WRSF build-up (including sequencing in the thicker clay areas), and ventilation details for UG mining.

### 1.17.6 Project Infrastructure

#### 1.17.6.1 Geotechnical

Ausenco makes the following site-wide geotechnical recommendations to support a PFS.

- Completion of seven 250-m geotechnical boreholes, 26 test pits, and geophysics in the areas of the DSTF, plant site, and other infrastructure (excluding open pits) and to investigate and confirm foundation conditions, along with depth to groundwater and to bedrock.
- Geotechnical laboratory program index testing, including compaction tests, mechanical strength tests, and permeability tests on foundation soils and potential borrow materials. The laboratory testing program to also confirm the physical characteristics of the filtered tailings, including strength, trafficability, and permeability tests at both low and very high confining stresses to represent the height of the DSTF.
- Development of site-wide, excluding open pits, factual and interpretative reports.

#### 1.17.6.2 DSTF and In-Pit Tailings Disposal

For the design of the DSTF and In-Pit Tailings Disposal for the PFS, Ausenco recommends the following:

- Confirm geochemical characterization of tailings and waste rock from additional waste characterization studies.
- Develop seepage predictions and seepage control measures for the DSTF and IPSF.

- Update the tailings deposition strategy to optimize material handling for DSTF and in-pit tailings disposal, including trafficability of material handling equipment for the DSTF, including stacking plan, in-pit deposition plan, and water management.
- The stability model should be reviewed and updated, as required, with consideration of the final stacking plan using updated data about the material properties of the tailings, and the foundations for both the DSTF and WRSF.
- Perform a liquefaction assessment with consideration of updated information on material properties and the updated stacking plan for the DSTF.
- Solicit budgetary quotes for earthworks and geosynthetics (i.e., geomembrane, geotextile, and piping) to get more accurate pricing for the next cost estimates.
- Develop material take-offs for capital, sustaining capital, and operating costs for DSTF.

#### 1.17.7 Environmental, Permitting and Social Considerations

With the filling of the Novador Project to an environmental assessment, both at the federal and provincial levels, the main following studies or activities should be carried out during the pre-feasibility phase. These studies or activities will also make possible to ensure that the development of the project limits the impacts on the receiving environment.

- Continue information and consultation activities with stakeholders, including First Nations.
- Continue the characterization of the physical environment (e.g., surface water, groundwater, soils, air quality, etc.).
- Continue the geochemical characterization of waste rock, mineralized rock, overburden, and tailings.
- Continue the baseline studies for the biological environment (e.g., fauna, flora, and species at risk).
- Document the land and resource uses, including the land and resource uses for traditional purposes by First Nations.
- Assess the potential impacts of the project on the physical, biological, and social environments.

# 2 INTRODUCTION

## 2.1 Introduction and Terms of Reference

Probe Gold Inc. (Probe) commissioned Ausenco Engineering Canada ULC. (Ausenco) to compile a preliminary economic assessment (PEA) of the Novador Project, previously known as the “Val D’Or East” project. The PEA was prepared in accordance with the Canadian disclosure requirements of National Instrument 43-101 (NI 43-101) and the requirements of Form 43-101 F1.

The responsibilities of the engineering consultants and firms who are providing qualified persons are as follows:

- Ausenco managed and coordinated the work related to the report. Ausenco developed the PEA-level design and cost estimate for the process plant, general site infrastructure, site water management infrastructure, and tailings facility. Ausenco also compiled the overall cost estimate and completed the economic analysis.
- Moose Mountain Technical Services (MMTS) designed the open pit and underground mine production schedules, and mine capital and operating costs.
- InnovExplo Inc. (InnovExplo) completed the work related to property description, accessibility, local resources, geological setting, deposit type, exploration work, drilling, exploration works, sample preparation and analysis, data verification, and mineral resource estimate.
- Lamont Inc. (Lamont) completed the work related to the environmental studies and permitting.

Readers are cautioned that the PEA is preliminary in nature. It includes 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 will be realized.

The report supports disclosures by Probe in a news release dated February 13, 2024, entitled, “Probe Gold Announces Updated PEA for Novador Project, Quebec; 23% Increase in Average Annual Production to 255,000 ounces, Pre-Tax NPV5% of C$1.53 billion, and Pre-Tax IRR Of 34.4%”.

## 2.2 Qualified Persons

Qualified persons (QPs) that contributed to this report are listed in Table 2-1.

**Table 2-1: Qualified Persons**

| Name | Professional Designation | Position at Company | Employer | Independent of Probe Gold? | Section Responsibilities |
|---|---|---|---|---|---|
| Renee Barrette | P. Eng. | Principal Metallurgist | Ausenco | Yes | 1.1, 1.5, 1.6, 1.9, 1.10.1, 1.11, 1.13, 1.14, 1.15, 1.16, 1.17.1, 1.17.4, 1.17.6.1, 2.1, 2.2, 2.3.1, 2.4, 2.5.1, 2.6, 3, 12.5, 13, 17, 18.1,18.2,18.3, 18.4, 18.7, 18.8, 18.11, 18.12, 19, 21.2.10, (excluding 21.2.3, 21.2.9.1, and 21.3.2), 22, 25.2, 25.4, 25.5.1, 25.7, 25.8, 25.9.1.2, 25.9.1.4, 25.9.1.7, 25.9.2.2, 25.9.2.4, 25.9.2.5, 25.9.2.8, 26.1, 26.3, 26.6.1, and 27 |
| Jonathan Cooper | P. Eng. | Senior Water Resources Engineer | Ausenco | Yes | 2.2, 2.3.2, 18.9, 18.10, 25.5.3, 25.9.1.5.1, 25.9.2.6 and 27 |
| Aleksandar Spasojevic | P.Eng. | Global Practice Lead, Geotechnical | Ausenco | Yes | 1.10.2, 1.17.6.2, 2.2, 2.3.3, 18.5, 18.11, 25.5.2, 25.9.1.5.2, 26.6.2, and 27 |
| Maude Lévesque Michaud | P. Eng. | General Director | Lamont | Yes | 1.12,1.17.7, 2.2, 2.3.4, 20, 25.6, 25.9.1.6, 25.9.2.7, 26.1, 26.7, and 27 |
| Jesse Aarsen | P.Eng. | President and Principal | MMTS | Yes | 1.8,1.13, 1.14,1.17.5, 2.2, 2.3.5, 15, 16, 18.6, 21.2.3, 21.2.9.1, 21.3.2, 25.3, 25.7, 25.9.1.3, 25.9.2.3, 26.1, 26.5, and 27 |
| Marina Iund | P.Geo. | Senior Resource Geologist | InnovExplo | Yes | 1.5,1.7, 1.16, 1.17.3, 2.2, 2.3.6, 2.4, 2.5.2, 11, 12 (excluding 12.5), 14, 25.1, 25.9.1.1, 25.9.2.1, 26.1, 26.4, and 27 |
| Vincent Nadeau-Benoit | P.Geo. | Senior Resource Geologist | InnovExplo | Yes | 1.5, 1.7, 1.17.3, 2.2, 2.3.7, 2.4, 2.5.2, 11, 12 (excluding 12.5), 14, 25.1, 25.9.1.1, 25.9.2.1, 26.1, 26.4, and 27 |
| Martin Perron | P. Eng. | Director Geology | InnovExplo | Yes | 1.5, 1.7, 1.16, 1.17.3, 2.2, 2.3.8, 2.4, 2.5.2, 14, 25.1, 25.9.1.1, 25.9.2.1, 26.1, 26.4, and 27 |
| Simon Boudreau | P. Eng. | Senior Engineer | InnovExplo | Yes | 1.5, 1.7, 1.16, 1.17.3, 2.2, 2.3.9, 14.13, and 27 |
| Elisabeth Tremblay | P.Geo. | Senior Geologist | InnovExplo | Yes | 1.2, 1.3, 1.4, 1.17.2, 2.2, 2.3.10, 2.5.2, 4, 5, 6, 7, 8, 9, 10, 23, 26.1, 26.2, and 27 |

## 2.3 QP Site Visits

### 2.3.1 Renee Barrette, P. Eng.

Renee Barrette visited site on September 25th, 2023. During the site visit, she reviewed the location of the future Monique pit and the current operations occurring at its location, the rail line south of the future process plant area, the esker, the watercourses in the planned mining areas, the old tailings facility, the location of the future tailings facility and the previous mine infrastructure.

### 2.3.2 Jonathan Copper, P. Eng.

Jonathan Copper did not visit the site.

### 2.3.3 Aleksander Spasojevic, P.Eng.

Aleksander Spasojevic did not visit the site.

### 2.3.4 Maude Lévesque Michaud, P. Eng.

Maude Lévesque Michaud visited the Novador Project site between January 31 and February 1, 2017. During the visit, she had an overview of the general site including the infrastructures of past operations and the core storage facilities.

### 2.3.5 Jesse Aarsen, P.Eng.

Jesse Aarsen visited the site for one day on September 27, 2021. During the visit he inspected the road access to the site, the railroad, the infrastructure between the Monique pit area and planned plant location, Monique existing pit and dump facilities, stockpiles foundation conditions for Monique planned locations, existing UG access points, and watercourses in the planned mining areas.

### 2.3.6 Marina Iund, P.Geo.

QP Marina Iund visited the project from October 19-20, 2022. On-site data verification included a general visual inspection of the property and the core storage facilities, a check of drill collar coordinates, and a review of selected mineralized core intervals, the QA/QC program, and the log descriptions of lithologies, alteration, and mineralization.

### 2.3.7 Vincent Nadeau-Benoit, P.Geo.

Vincent Nadeau-Benoit visited the issuer’s core logging facility on May 9, 2023. The visit included a visual inspection of the facility, a review of select mineralized core intervals, the QA/QC program and the log descriptions of lithologies, alteration and mineralization from the Courvan and Pascalis Gold Trends.

#### 2.3.8 Martin Perron, P. Eng.

Martin did not visit the site.

#### 2.3.9 Simon Boudreau, P. Eng.

Simon Boudreau did not visit the site.

#### 2.3.10 Elisabeth Tremblay, P.Geo.

Elisabeth Tremblay did not visit the site.

### 2.4 Effective Dates

This technical report has a number of significant dates as follows:

- Mineral resource estimate: July 13, 2023
- Financial analysis: February 13, 2024

The effective date of this technical report is February 13, 2024.

### 2.5 Sources of Information

#### 2.5.1 Previous Technical Reports

The Novador Project has been the subject of previous technical reports, as follows:

- NI 43-101 Technical Report and Updated Mineral Resource Estimate for the Novador Project, Quebec, InnovExplo, Effective Date: July 13th, 2023.
- NI 43-101 Technical Report and Update of the Mineral Resource Estimate for the Monique Area, Novador Project, Quebec, InnovExplo, Effective Date: January 16th, 2023.
- NI 43-101 Technical Report & Preliminary Economic Assessment, Quebec, Canada, Ausenco Engineering Canada, Effective Date: September 7th, 2021.
- NI 43-101 Technical Report of Val-D'Or East Property, Abitibi Greenstone Belt, Quebec, Canada, Geologica Groupe-Conseil Inc. and GoldMinds Geoservices, Effective Date: June 1st, 2021.

#### 2.5.2 Property Agreements, Mineral Tenure, Surface Rights and Royalties

The issuer supplied information about mining titles, option agreements, royalty agreements, environmental liabilities and permits. Neither the QPs nor InnovExplo are qualified to express any legal opinion concerning property titles, ownership, or possible litigation.

InnovExplo has reviewed the various agreements under which the issuer holds title to the Property's mineral claims; however, InnovExplo offers no legal opinion regarding their validity. A description of the Property, mineral titles and ownership thereof is provided only for general information.

## 2.6 Currency, Units, Abbreviations and Definitions

All units of measurement in this report are metric. Metals prices and economic returns are expressed in US dollars (symbol: US$; currency: USD); other costs are expressed in Canadian dollars (symbol: C$; currency: CAD) unless otherwise stated.

All material tonnes are expressed as dry tonnes (t) unless stated otherwise. A list of abbreviations and acronyms is provided in Table 2-1, and units of measurement are listed in Table 2-2.

### 2.6.1 Abbreviations and Acronyms

**Table 2-2: Abbreviations and Acronyms**

| Abbreviation | Description |
|---|---|
| AARL | Anglo-American Research Laboratories |
| Ai | Abrasion Index |
| AP | Acidification potential |
| ARD | Acid rock drainage |
| AW | Awaruite |
| BaseMet | Base Metallurgical Laboratories |
| BWi | Ball mill work index |
| CAD | Canadian dollar (symbol: C$) |
| CCME | Canadian Council of Ministers of the Environment |
| CCUS | Carbon capture, utilization and storage |
| CEAA | Canadian Environmental Assessment Act |
| CEAEQ | Centre d'expertise en analyse environnementale du Québec |
| CEQG | Canadian Environmental Quality Guidelines |
| CFE | Concentration of frequent effects |
| CIL | Carbon-in-Leach |
| CIP | Carbon-in-Pulp |
| $CN_{WAD}$ | Weak acid dissociable cyanide |
| CoG | Cut-off grade |
| CSQG | Canadian Sediment Quality Guidelines |
| CTEU | Centre technique des eaux usées |
| CTM | Clean technology manufacturing |
| CUC | Crawford Ultramafic Complex |
| $CuSO_4$ | Copper sulphate |
| CWi | Crusher work index |
| DFO | Department of Fisheries and Oceans Canada |
| DL | Detection limit |

| Abbreviation | Description |
|---|---|
| DTW | Down the hole |
| EA | Environmental Assessment |
| ECA | Environmental Compliance Approval |
| ECCC | Environmental and Climate Change Canada (Federal) |
| EGL | Effective grinding length |
| E-GRG | Extended Gravity Recoverable Gold |
| EIA | Environmental impact assessment |
| EQA | Environment Quality Act |
| ESA | Endangered Species Act |
| ETP | Effluent treatment plant |
| FEQG | Federal Environmental Quality Guidelines |
| GAT | Gravity Amenability Test |
| HADD | Harmful alteration, disruption or destruction |
| HARD | Half absolute relative difference |
| HZ | Heazlewoodite |
| IAA | Impact Assessment Act |
| IAAC | Impact Assessment Agency of Canada |
| ICP | Inductively Coupled Plasma |
| ILR | Intensive Leaching Reactor |
| ITC | Investment tax credit |
| JK DWT | JK Drop Weight Test |
| LOM | Life-of-mine |
| m | meter |
| MDDELCC | Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques |
| MDDEP | Ministère du Développement durable, de l'Environnement et des Parcs |
| MDMER | Metal and Diamond Mining Effluent Regulations |
| MECP | Ministry of Environment, Conservation and Parks |
| MELCC | Ministère de l'Environnement et de la Lutte contre les changements climatiques |
| MELCCFP | Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs |
| MEND | Mine Environment Neutral Drainage |
| MENV | Ministère de l'Environnement |
| MERN | Ministère de l'Énergie et des Ressources naturelles |
| MFFP | Ministère des Forêts, de la Faune et des Parcs |
| MIBC | Methyl Isobutyl Carbinol |
| MINES | Ministry of Mines |
| MDDELCC | Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques |
| ML | Metal leaching |
| MNRF | Ministry of Natural Resources and Forestry |
| MOU | Memorandum of Understanding |
| MRE | Mineral resource estimate |
| MRN | Ministère des Ressources naturelles |
| MRNF | Ministère des Ressources naturelles et des Forêts |

| Abbreviation | Description |
|---|---|
| MTCS | Ministry of Tourism, Culture and Sport |
| MTO | Ministry of Transportation Ontario |
| NaCN | Sodium cyanide |
| NAG | Not potentially acid generating |
| NNP | Net neutralization point |
| NP/AP | Neutralizing potential / acid potential |
| NPV | Net present value |
| NRCan | Natural Resources Canada |
| NSP | Net smelter price |
| NSR | Net smelter return |
| OEB | Ontario Energy Board |
| OEM | Original equipment manufacturer |
| OP | Open pit |
| OVB | Overburden |
| $P_{80}$ | 80% passing size |
| PAX | Potassium amylxanthate |
| PEA | Preliminary economic assessment |
| PFS | Prefeasibility study |
| PGA | Potential generator of acid |
| NP | Neutralization potential |
| PN | Pentlandite |
| PNN | Net neutralizing power |
| PSQG | Ontario Provincial Sediment Quality Guidelines |
| PWQO | Provincial Water Quality Objectives |
| QA/QC | Quality assurance/quality control |
| QEMSCAN | Quantitative evaluation of minerals by scanning electron microscopy |
| QP | Qualified person |
| ROM | Run-of-Mine |
| RWi | Bond rod mill work index |
| SAG | Semi autogenous |
| SARA | Species at Risk Act |
| SG | Specific gravity |
| SMBS | Sodium metabisulphite |
| $SO_2$ | Sulphur dioxide |
| SPLP | Synthetic precipitation leaching procedure |
| TC | Transport Canada |
| TCLP | Toxicity characteristic leaching procedure |
| TMF | Tailings management facility |
| TSF | Tailings storage facility |
| UG | Underground |
| USD | United States dollars (symbol US$) |
| W:O | Waste-to-ore ratio |

### 2.6.2 Units of Measurement

**Table 2-3: Unit of Measurement**

| Unit of Measurement | Description |
|---|---|
| % | percentage |
| (‘) | minute (plane angle) |
| “ | second (plane angle) |
| < | less than |
| > | greater than |
| ° | degree |
| °C | degree Celsius |
| µm | micron |
| µS/cm | micro-Siemens per centimetre |
| A | ampere |
| a | annum (year) |
| ac | acre |
| amsl | above mean sea level |
| B | Billion |
| cm | centimetre |
| cm/s | centimetre per second |
| $cm^2$ | square centimetre |
| $cm^3$ | cubic centimetre |
| d | day |
| d/a | days per year (annum) |
| d/wk | days per week |
| ft | feet |
| $ft^2$ | square foot |
| $ft^3$ | cubic foot |
| $ft^3/s$ | cubic feet per second |
| g | gram |
| G | gauss |
| $g/cm^3$ | grams per cubic centimetre |
| g/L | grams per litre |
| g/t | grams per tonne |
| GPM | US gallons per minute |
| GWh | Gigawatt hours |
| h | hour |
| h/a | hours per year |
| h/d | hours per day |
| h/wk | hours per week |
| ha | hectare (10,000 $m^2$) |
| hp | horsepower |
| k | one thousand |
| kg | kilogram |
| kg/h | kilograms per hour |
| $kg/m^2$ | kilograms per square metre |

| Unit of Measurement | Description |
|---|---|
| km | kilometre |
| km/h | kilometres per hour |
| $km^2$ | square kilometre |
| kPa | kilopascal |
| kt | thousand metric tonnes |
| kV | kilovolt |
| kW | kilowatt |
| kWh | kilowatt hour |
| kWh/a | kilowatt hours per year |
| kWh/t | kilowatt hours per tonne (metric tonne) |
| L | litres |
| L/m | litres per minute |
| lb | pounds |
| lb/ton | pounds per short ton |
| m | metres |
| M | million |
| $m^2$ | square metre |
| $m^3$ | cubic metre |
| mg | milligram |
| mg/L | milligrams per litre |
| min | minute (time) |
| mL | millilitre |
| mm | millimetre |
| Mt | million metric tonnes |
| MW | megawatt |
| MWh | megawatt hour |
| ng/g | nanogram/gram (ppb = parts per billion) |
| oz | ounce |
| ppb | parts per billion |
| ppm | parts per million |
| psi | pounds per square inch |
| rpm | revolutions per minute |
| s | second (time) |
| t | metric tonnes (1,000 kg) |
| µg/g | microgram/gram (ppm = parts per million) |
| µm | microns (micrometre) |
| V | volt |
| wk | week |

# 3 RELIANCE ON OTHER EXPERTS

## 3.1 Introduction

The QPs have relied upon other expert reports that provided information regarding royalties, environmental considerations, permitting, closure, social and community impacts, taxation, and marketing for sections of this report.

## 3.2 Taxation

The QPs have fully relied upon, and disclaim responsibility for, information supplied by experts retained by Probe Gold for information related to taxation as applied to the financial model as follows:

- From the tax model in the financial model received in an email titled, “Probe Gold – Novador PEA Financial and Tax Model (DRAFT)”, from Deloitte LLP’s Tax Manager, Rafael Segalin Zanella, on February 2nd, 2024.

This information is used in Section 1.15 and Section 22 of the report.

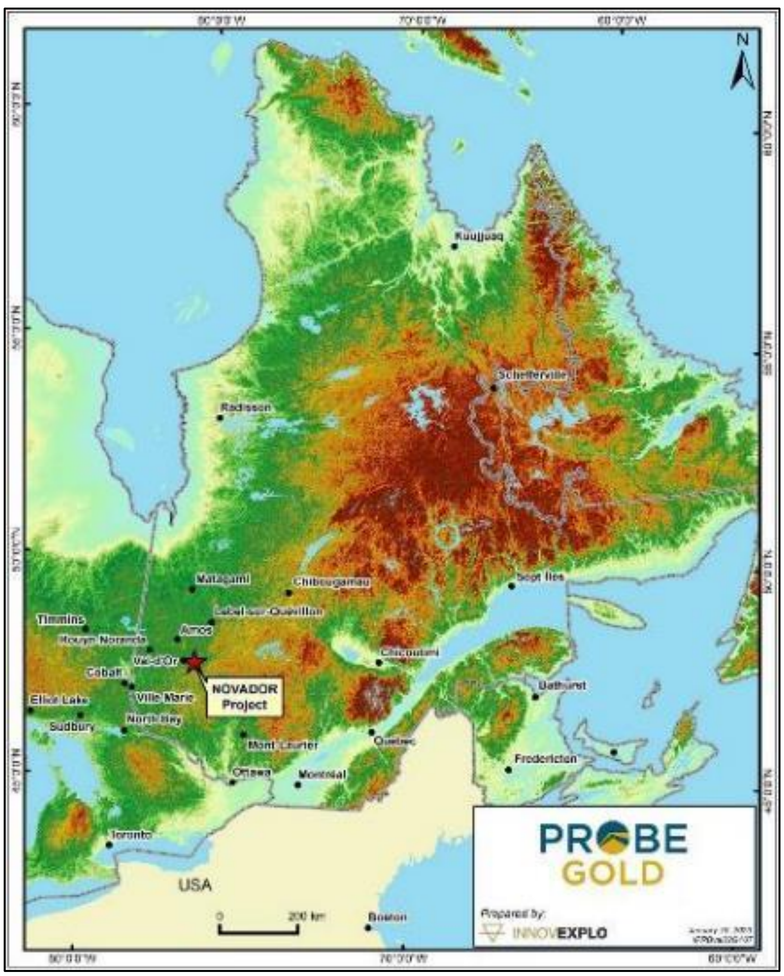
# 4 PROPERTY DESCRIPTION AND LOCATION

## 4.1 Location

The property is located in northwestern Quebec, approximately 20 km east of the city of Val-d'Or (Figure 4-1). The property is located in portions of the Louvicourt, Pascalis, Senneville, and Vauquelin townships on NTS map sheets 32C04 and 32C03. The approximate coordinates of the geographic centre of the property are 77°30'44.926" W and 48°10'34.771" N (UTM coordinates: 314000E and 5336000N, NAD 83, Zone 18U).

The QPs are not aware of any known significant factors, risks that may affect access, title or the right or ability to perform work on the Property.

**Figure 4-1: Location of the Novador Project in Quebec**




Source: InnovExplo, 2023

## 4.2 Mining Title Status

The issuer supplied mineral title status. InnovExplo verified the status of all mining titles using GESTIM, the Government of Quebec's online claim management system (https://gestim.mines.gouv.qc.ca).

The property encompasses three areas: Pascalis, Courvan, and Monique. The property is 100% owned by Probe Gold and comprises 427 map-designated mining titles, two mining concessions and one mining lease covering a total area of 17,746.28 ha (Figures 4-2 to Figure 4-5).

Table 4-1 presents a list of mineral titles with details of ownership, royalties, and expiration dates.

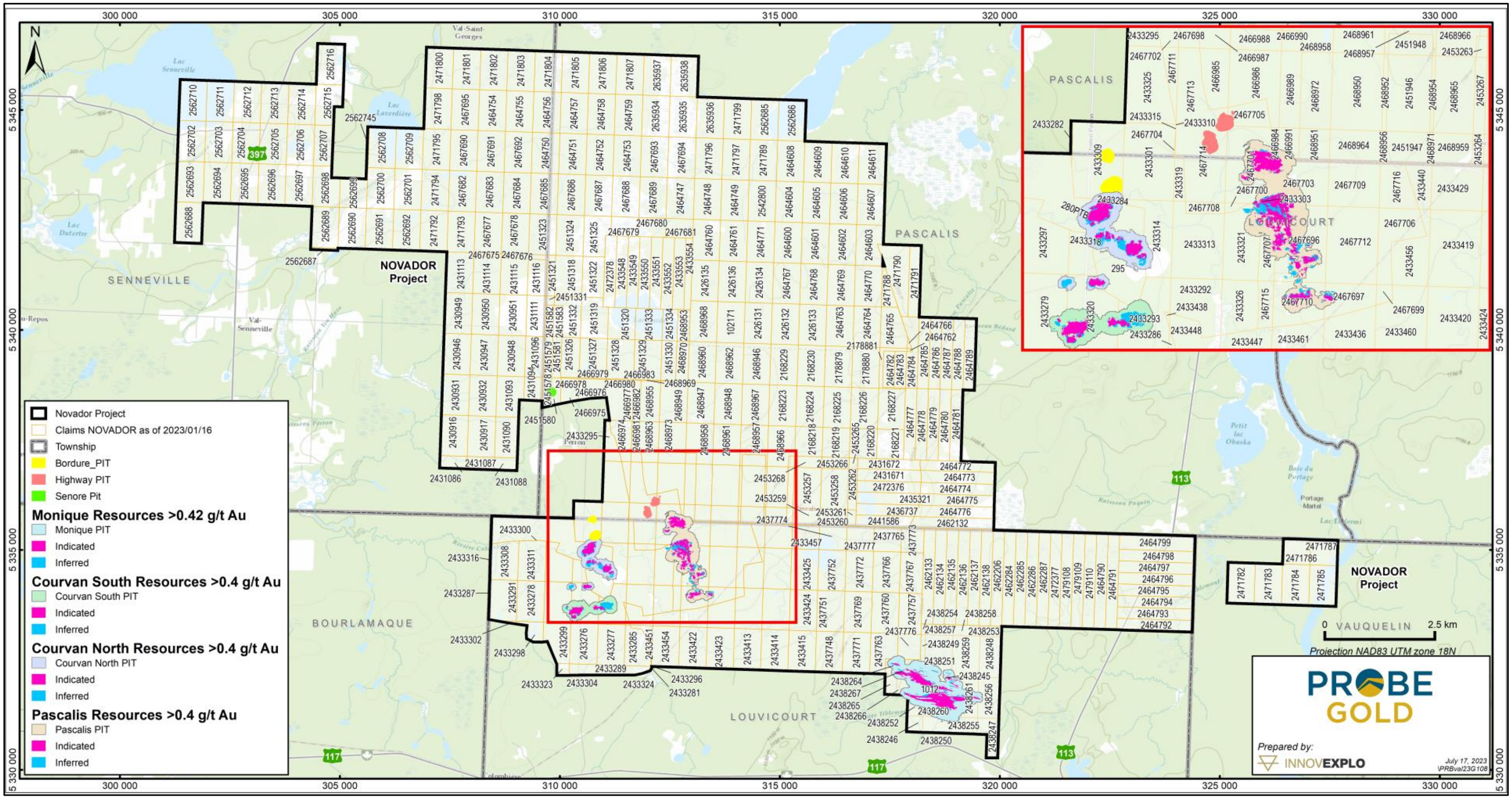
## 4.3 Ownership, Royalties and Agreements

Several royalties apply to the property. Table 4-1 lists the royalties and parties involved, and Figure 4-6 identifies the mining titles subject to royalties.

In January 2021, IAMGOLD entered into a Royalty Purchase and Sale Agreement with Triple Flag to sell, assign, transfer, and convey all IAMGOLD's (or its applicable subsidiaries') rights, titles, and interests in a portfolio of royalties. In April 2021, IAMGOLD completed selling its portfolio of 34 royalties to Triple Flag for $45.7 million. IAMGOLD obtained the royalty through an acquisition agreement dated March 17, 2008, between Adventure Gold Inc. (now Probe Gold) and Iamgold-Quebec Management Inc. (now IAMGOLD) with respect to a 2% net smelter returns (NSR) royalty in respect of the property comprised of the mining rights known as the Pascalis-Colombière property. Under the terms of the agreement, Probe Metals will retain the right at any time, at its discretion, to purchase one half (1%) of the royalty for $1,000,000 (the "Buy-Back Right"). In addition, pursuant to an assignment and transfer agreement dated September 14, 2016 between Probe Metals (now Probe Gold) and Richmont Mines Inc. to which Probe acquired, inter alia, two claims subject to a 2% NSR royalty in favour of IAMGOLD and to a notice of transfer dated September 15, 2016 between Probe and IAMGOLD, to which Probe acquired the Louvicourt-IAMGOLD property, and its covenant to perform all obligations under the Royalty Agreement.

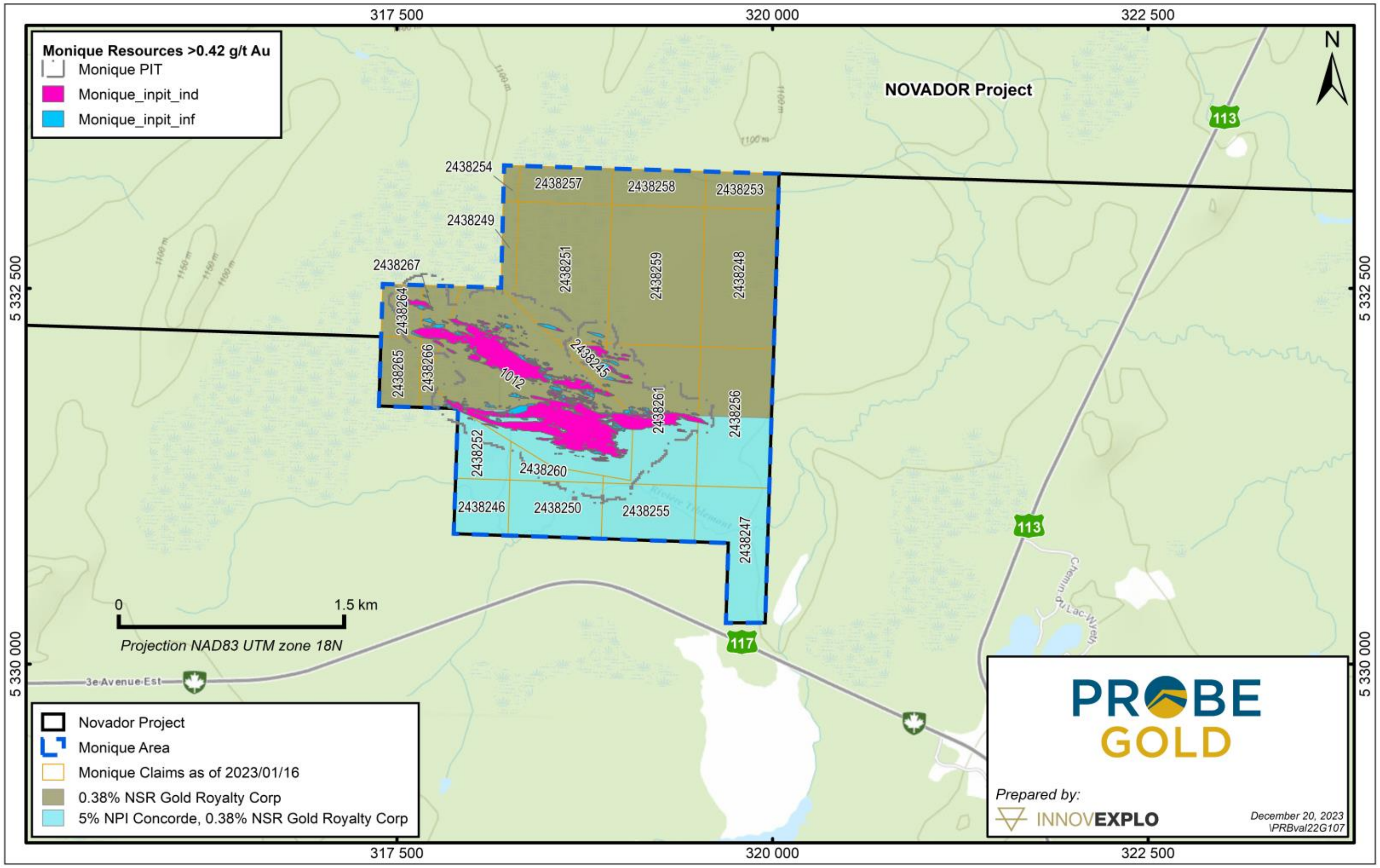
On November 2, 2023, Gold Royalty Corporation announced that it entered into an agreement to acquire a portfolio of 22 royalties (the "Portfolio") in Québec from SOQUEM (Société Québécoise d'exploration minière), a subsidiary of Investissement Québec, for C$1 million in common shares of the Company. The Portfolio includes a 0.38% NSR on the Monique property claims, which is now owned by Gold Royalty Corporation.

**Figure 4-2: Claim Map of the Novador Project**



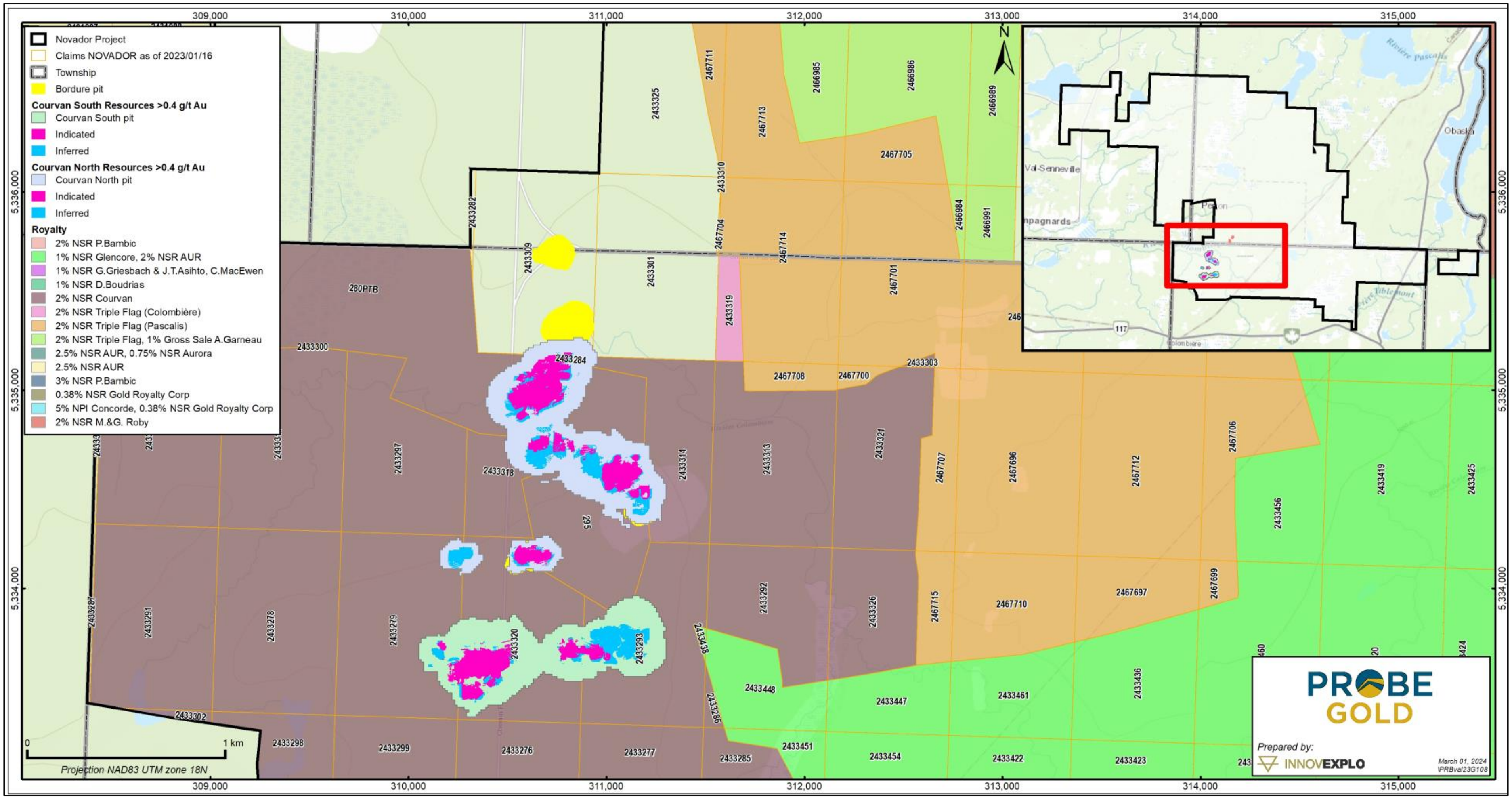

Source: InnovExplo, 2023

**Figure 4-3: Claim Map of the Monique Gold Trend**



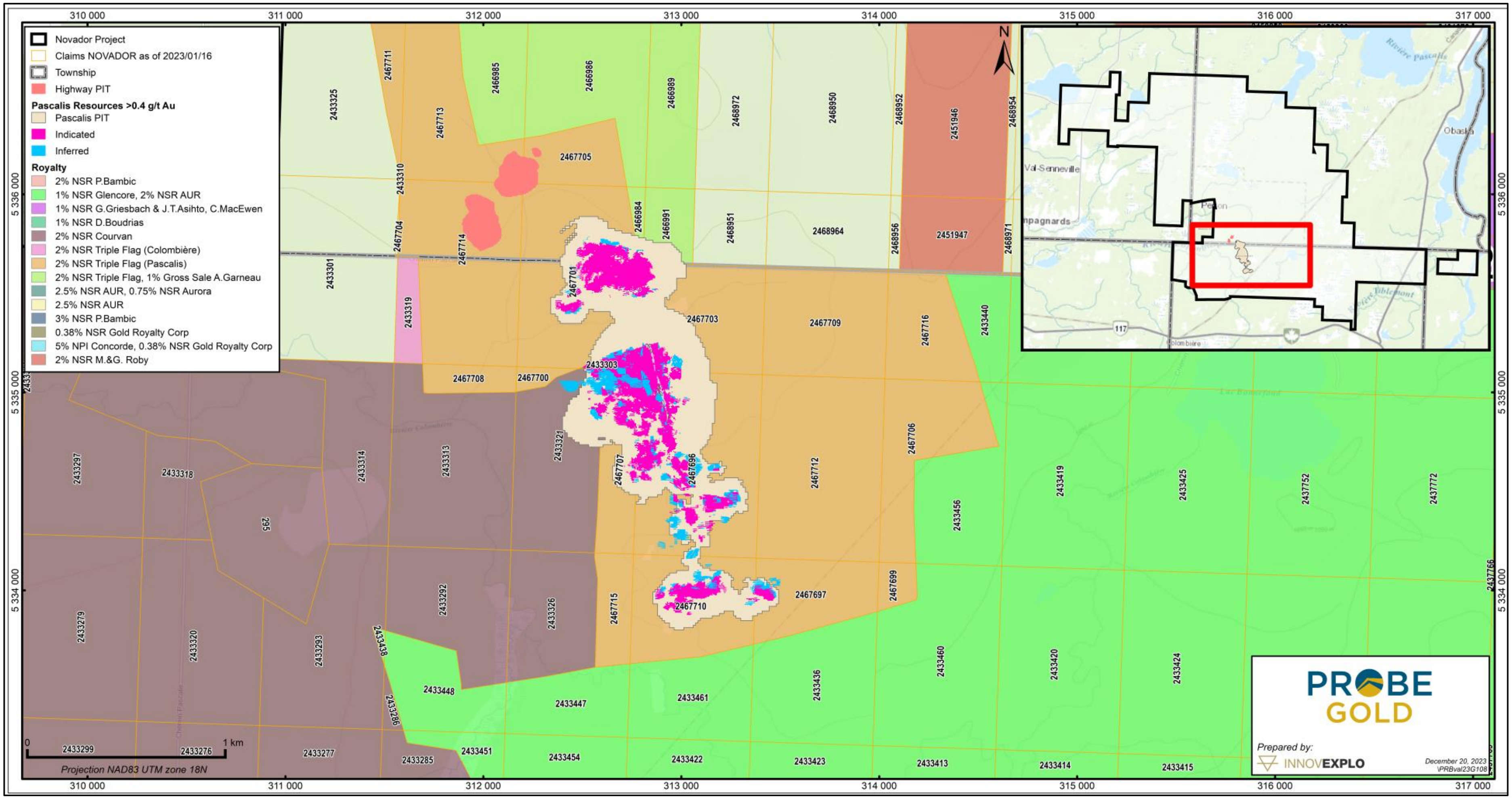

Source: InnovExplo, 2023

**Figure 4-4: Claim Map of the Courvan Gold Trend**




Source: InnovExplo, 2023

**Figure 4-5: Claim Map of the Pascalis Gold Trend**




Source: InnovExplo, 2023

**Table 4-1: Mining Titles and Royalties**

| Titre Type | Title ID | NTS | Area HA | Registry Date | Expiration Date | Owner | Total Credits (C$) | NSR |
|---|---|---|---|---|---|---|---|---|
| BM | 1012 | 32C03 | 99.41 | 20120214 | 20250213 | Probe Gold | 0.00 | 0.38% NSR Gold Royalty Corp. |
| CDC | 102171 | 32C04 | 57.42 | 20051114 | 20241113 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168218 | 32C03 | 41.76 | 20080730 | 20250729 | Probe Gold | 1,334.69 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168219 | 32C03 | 41.75 | 20080730 | 20250729 | Probe Gold | 2,888.74 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168220 | 32C03 | 41.74 | 20080730 | 20250729 | Probe Gold | 3,210.16 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168221 | 32C03 | 41.23 | 20080730 | 20250729 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168223 | 32C03 | 57.44 | 20080730 | 20250729 | Probe Gold | 2,234.06 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168224 | 32C03 | 57.44 | 20080730 | 20250729 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168225 | 32C03 | 57.44 | 20080730 | 20250729 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168226 | 32C03 | 57.43 | 20080730 | 20250729 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168227 | 32C03 | 56.45 | 20080730 | 20250729 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168229 | 32C03 | 57.43 | 20080730 | 20250729 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2168230 | 32C03 | 57.43 | 20080730 | 20250729 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2178879 | 32C03 | 57.43 | 20090203 | 20260202 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2178880 | 32C03 | 57.43 | 20090203 | 20260202 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2178881 | 32C03 | 13.00 | 20090203 | 20260202 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2426131 | 32C03 | 57.42 | 20150410 | 20240409 | Probe Gold | 0.00 | - |
| CDC | 2426132 | 32C03 | 57.42 | 20150410 | 20240409 | Probe Gold | 0.00 | - |
| CDC | 2426133 | 32C03 | 57.42 | 20150410 | 20240409 | Probe Gold | 0.00 | - |
| CDC | 2426134 | 32C03 | 57.41 | 20150410 | 20240409 | Probe Gold | 0.00 | - |
| CDC | 2426135 | 32C04 | 56.91 | 20150410 | 20240409 | Probe Gold | 0.00 | - |
| CDC | 2426136 | 32C04 | 57.41 | 20150410 | 20240409 | Probe Gold | 0.00 | - |
| CDC | 2430916 | 32C04 | 57.45 | 20150903 | 20260223 | Probe Gold | 40,509.60 | - |
| CDC | 2430917 | 32C04 | 57.45 | 20150903 | 20260223 | Probe Gold | 40,509.60 | - |
| CDC | 2430931 | 32C04 | 57.44 | 20150903 | 20260223 | Probe Gold | 39,301.43 | - |
| CDC | 2430932 | 32C04 | 57.44 | 20150903 | 20260223 | Probe Gold | 52,107.58 | - |
| CDC | 2430946 | 32C04 | 57.43 | 20150903 | 20260223 | Probe Gold | 52,111.71 | - |
| CDC | 2430947 | 32C04 | 57.43 | 20150903 | 20260223 | Probe Gold | 49,390.27 | - |
| CDC | 2430948 | 32C04 | 57.43 | 20150903 | 20260223 | Probe Gold | 55,311.53 | - |
| CDC | 2430949 | 32C04 | 57.42 | 20150903 | 20260223 | Probe Gold | 50,266.62 | - |
| CDC | 2430950 | 32C04 | 57.42 | 20150903 | 20260223 | Probe Gold | 49,701.05 | - |
| CDC | 2430951 | 32C04 | 57.42 | 20150903 | 20260223 | Probe Gold | 54,291.25 | - |
| CDC | 2431086 | 32C04 | 17.61 | 20150903 | 20260223 | Probe Gold | 11,942.09 | - |
| CDC | 2431087 | 32C04 | 17.66 | 20150903 | 20260223 | Probe Gold | 11,982.92 | - |
| CDC | 2431088 | 32C04 | 14.78 | 20150903 | 20260223 | Probe Gold | 9,630.45 | - |
| CDC | 2431090 | 32C04 | 48.05 | 20150903 | 20260223 | Probe Gold | 32,831.40 | - |
| CDC | 2431093 | 32C04 | 53.43 | 20150903 | 20260223 | Probe Gold | 53,244.21 | - |
| CDC | 2431094 | 32C04 | 22.44 | 20150903 | 20260223 | Probe Gold | 39,076.09 | - |
| CDC | 2431096 | 32C04 | 39.32 | 20150903 | 20260223 | Probe Gold | 48,889.19 | - |
| CDC | 2431111 | 32C04 | 39.57 | 20150903 | 20260223 | Probe Gold | 46,693.40 | - |
| CDC | 2431113 | 32C04 | 57.41 | 20150903 | 20260223 | Probe Gold | 49,337.78 | - |
| CDC | 2431114 | 32C04 | 52.35 | 20150903 | 20260223 | Probe Gold | 46,363.98 | - |
| CDC | 2431115 | 32C04 | 51.72 | 20150903 | 20260223 | Probe Gold | 45,734.55 | - |
| CDC | 2431116 | 32C04 | 35.20 | 20150903 | 20260223 | Probe Gold | 36,080.14 | - |
| CDC | 2431671 | 32C03 | 39.64 | 20150729 | 20240728 | Probe Gold | 470.86 | - |
| CDC | 2431672 | 32C03 | 33.59 | 20150729 | 20240728 | Probe Gold | 4,070.86 | - |
| CDC | 2433276 | 32C04 | 57.49 | 20151022 | 20240504 | Probe Gold | 277,233.46 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433277 | 32C04 | 57.49 | 20151022 | 20240504 | Probe Gold | 22,190.67 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433278 | 32C04 | 57.48 | 20151022 | 20240504 | Probe Gold | 67,352.71 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433279 | 32C04 | 57.48 | 20151022 | 20240504 | Probe Gold | 786,010.69 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433281 | 32C04 | 0.03 | 20151022 | 20240504 | Probe Gold | 5,928.76 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433282 | 32C04 | 1.03 | 20151022 | 20240504 | Probe Gold | 0.00 | - |
| CDC | 2433284 | 32C04 | 0.80 | 20151022 | 20240504 | Probe Gold | 283,413.50 | - |
| CDC | 2433285 | 32C04 | 46.31 | 20151022 | 20240504 | Probe Gold | 26,711.10 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433286 | 32C04 | 1.80 | 20151022 | 20240504 | Probe Gold | 14,790.33 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433287 | 32C04 | 1.18 | 20151022 | 20240504 | Probe Gold | 0.00 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433289 | 32C04 | 13.94 | 20151022 | 20240504 | Probe Gold | 10,591.70 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433291 | 32C04 | 57.37 | 20151022 | 20240504 | Probe Gold | 14,979.99 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433292 | 32C04 | 34.68 | 20151022 | 20240504 | Probe Gold | 22,812.44 | 2% NSR Courvan |
| CDC | 2433293 | 32C04 | 47.28 | 20151022 | 20240504 | Probe Gold | 387,301.35 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433295 | 32C04 | 23.69 | 20151022 | 20240504 | Probe Gold | 14,743.29 | - |
| CDC | 2433296 | 32C04 | 0.01 | 20151022 | 20240504 | Probe Gold | 5,922.05 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433297 | 32C04 | 45.32 | 20151022 | 20240504 | Probe Gold | 75,000.82 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433298 | 32C04 | 18.67 | 20151022 | 20240504 | Probe Gold | 5,006.87 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433299 | 32C04 | 47.22 | 20151022 | 20240504 | Probe Gold | 129,338.57 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433300 | 32C04 | 0.01 | 20151022 | 20240504 | Probe Gold | 0.00 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433301 | 32C04 | 57.24 | 20151022 | 20240504 | Probe Gold | 68,708.24 | - |
| CDC | 2433302 | 32C04 | 1.61 | 20151022 | 20240504 | Probe Gold | 0.00 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433303 | 32C04 | 0.65 | 20151022 | 20240504 | Probe Gold | 260,743.68 | 2% NSR Courvan |
| CDC | 2433304 | 32C04 | 15.37 | 20151022 | 20240504 | Probe Gold | 11,071.08 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433308 | 32C04 | 53.41 | 20151022 | 20240504 | Probe Gold | 13,652.50 | 2% NSR, 1% purchase for $500k Louvem |

| Titre Type | Title ID | NTS | Area HA | Registry Date | Expiration Date | Owner | Total Credits (C$) | NSR |
|---|---|---|---|---|---|---|---|---|
| CDC | 2433309 | 32C04 | 56.71 | 20151022 | 20240504 | Probe Gold | 892,591.47 | - |
| CDC | 2433310 | 32C04 | 0.01 | 20151022 | 20240504 | Probe Gold | 5,922.05 | - |
| CDC | 2433311 | 32C04 | 56.78 | 20151022 | 20240504 | Probe Gold | 14,782.21 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433313 | 32C04 | 50.92 | 20151022 | 20240504 | Probe Gold | 179,941.08 | 2% NSR Courvan, 2% NSR Triple Flag (part of claim) |
| CDC | 2433314 | 32C04 | 33.20 | 20151022 | 20240504 | Probe Gold | 14,048.10 | 2% NSR Louvem (except part of C007781, C007143) |
| CDC | 2433315 | 32C04 | 0.01 | 20151022 | 20240504 | Probe Gold | 5,922.05 | - |
| CDC | 2433316 | 32C04 | 1.28 | 20151022 | 20240504 | Probe Gold | 0.00 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433318 | 32C04 | 18.53 | 20151022 | 20240504 | Probe Gold | 526,738.75 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433319 | 32C04 | 6.68 | 20151022 | 20240504 | Probe Gold | 270,818.67 | 2% NSR Triple Flag |
| CDC | 2433320 | 32C04 | 52.12 | 20151022 | 20240504 | Probe Gold | 732,131.92 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433321 | 32C04 | 39.70 | 20151022 | 20240504 | Probe Gold | 910,760.14 | 2% NSR Courvan |
| CDC | 2433323 | 32C04 | 7.62 | 20151022 | 20240504 | Probe Gold | 8,473.09 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433324 | 32C04 | 10.92 | 20151022 | 20240504 | Probe Gold | 9,579.33 | 2% NSR, 1% purchase for $500k Louvem |
| CDC | 2433325 | 32C04 | 47.65 | 20151022 | 20240504 | Probe Gold | 46,603.89 | - |
| CDC | 2433326 | 32C04 | 27.60 | 20151022 | 20240504 | Probe Gold | 275,046.15 | 2% NSR Courvan |
| CDC | 2433413 | 32C03 | 57.49 | 20151016 | 20240427 | Probe Gold | 199,556.05 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433414 | 32C03 | 57.49 | 20151016 | 20240427 | Probe Gold | 115,450.07 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433415 | 32C03 | 57.49 | 20151016 | 20240427 | Probe Gold | 113,885.45 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433419 | 32C03 | 57.47 | 20151016 | 20240427 | Probe Gold | 103,987.81 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433420 | 32C03 | 57.48 | 20151016 | 20240427 | Probe Gold | 114,440.52 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433422 | 32C04 | 57.49 | 20151016 | 20240427 | Probe Gold | 215,169.60 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433423 | 32C04 | 57.49 | 20151016 | 20240427 | Probe Gold | 131,946.02 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433424 | 32C03 | 57.48 | 20151016 | 20240427 | Probe Gold | 113,092.82 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433425 | 32C03 | 57.47 | 20151016 | 20240427 | Probe Gold | 109,321.72 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433429 | 32C03 | 34.05 | 20151016 | 20240427 | Probe Gold | 66,994.53 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433436 | 32C04 | 36.10 | 20151016 | 20240427 | Probe Gold | 95,081.17 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433438 | 32C04 | 0.58 | 20151016 | 20240427 | Probe Gold | 15,537.01 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433440 | 32C03 | 12.95 | 20151016 | 20240427 | Probe Gold | 36,431.06 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433447 | 32C04 | 19.76 | 20151016 | 20240427 | Probe Gold | 105,955.47 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433448 | 32C04 | 21.01 | 20151016 | 20240427 | Probe Gold | 50,764.76 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433451 | 32C04 | 11.18 | 20151016 | 20240427 | Probe Gold | 33,814.75 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433454 | 32C04 | 57.48 | 20151016 | 20240427 | Probe Gold | 135,752.31 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433456 | 32C03 | 28.28 | 20151016 | 20240427 | Probe Gold | 53,655.08 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433457 | 32C03 | 34.20 | 20151016 | 20240427 | Probe Gold | 53,739.99 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433460 | 32C03 | 53.29 | 20151016 | 20240427 | Probe Gold | 152,353.84 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433461 | 32C04 | 26.16 | 20151016 | 20240427 | Probe Gold | 141,965.27 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2433548 | 32C04 | 42.61 | 20150924 | 20240923 | Probe Gold | 0.00 | - |
| CDC | 2433549 | 32C04 | 42.63 | 20150924 | 20240923 | Probe Gold | 0.00 | - |
| CDC | 2433550 | 32C04 | 42.60 | 20150924 | 20240923 | Probe Gold | 0.00 | - |
| CDC | 2433551 | 32C04 | 42.71 | 20150924 | 20240923 | Probe Gold | 0.00 | - |
| CDC | 2433552 | 32C04 | 42.61 | 20150924 | 20240923 | Probe Gold | 0.00 | - |
| CDC | 2433553 | 32C04 | 42.54 | 20150924 | 20240923 | Probe Gold | 0.00 | - |
| CDC | 2433554 | 32C04 | 25.22 | 20150924 | 20240923 | Probe Gold | 0.00 | - |
| CDC | 2435321 | 32C03 | 37.45 | 20151221 | 20241220 | Probe Gold | 0.00 | 1% NSR C. MacEwen |
| CDC | 2436737 | 32C03 | 36.13 | 20160205 | 20250204 | Probe Gold | 0.00 | 1% NSR C. MacEwen |
| CDC | 2437748 | 32C03 | 57.49 | 20160406 | 20240408 | Probe Gold | 72,920.52 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437751 | 32C03 | 57.48 | 20160406 | 20240408 | Probe Gold | 74,542.01 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437752 | 32C03 | 57.47 | 20160406 | 20240408 | Probe Gold | 69,398.21 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437757 | 32C03 | 47.90 | 20160406 | 20240408 | Probe Gold | 63,337.05 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437760 | 32C03 | 57.48 | 20160406 | 20240408 | Probe Gold | 69,010.59 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437763 | 32C03 | 48.19 | 20160406 | 20240408 | Probe Gold | 138,212.06 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437765 | 32C03 | 34.61 | 20160406 | 20240408 | Probe Gold | 37,184.72 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437766 | 32C03 | 57.47 | 20160406 | 20240408 | Probe Gold | 54,173.61 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437767 | 32C03 | 47.89 | 20160406 | 20240408 | Probe Gold | 50,797.90 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437769 | 32C03 | 57.48 | 20160406 | 20240408 | Probe Gold | 72,130.60 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437771 | 32C03 | 57.49 | 20160406 | 20240408 | Probe Gold | 72,140.54 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437772 | 32C03 | 57.47 | 20160406 | 20240408 | Probe Gold | 71,340.48 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437773 | 32C03 | 28.94 | 20160406 | 20240408 | Probe Gold | 34,727.26 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437774 | 32C03 | 34.35 | 20160406 | 20240408 | Probe Gold | 35,526.59 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437776 | 32C03 | 29.96 | 20160406 | 20240408 | Probe Gold | 103,124.09 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2437777 | 32C03 | 34.49 | 20160406 | 20240408 | Probe Gold | 37,266.82 | 1% NSR Glencore, 2% NSR AUR |
| CDC | 2438245 | 32C03 | 4.99 | 20160422 | 20260124 | Probe Gold | 112,941.65 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438246 | 32C03 | 13.33 | 20160422 | 20260124 | Probe Gold | 33,929.68 | 0.38% NSR Gold Royalty Corp., 5% NP Concorde |
| CDC | 2438247 | 32C03 | 31.96 | 20160422 | 20260124 | Probe Gold | 73,084.93 | 0.38% NSR Gold Royalty Corp., 5% NP Concorde |
| CDC | 2438248 | 32C03 | 45.19 | 20160422 | 20260124 | Probe Gold | 97,842.02 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438249 | 32C03 | 6.24 | 20160422 | 20260124 | Probe Gold | 28,930.50 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438250 | 32C03 | 22.97 | 20160422 | 20260124 | Probe Gold | 60,237.08 | 0.38% NSR Gold Royalty Corp., 5% NP Concorde |
| CDC | 2438251 | 32C03 | 53.72 | 20160422 | 20260124 | Probe Gold | 269,779.48 | 0.38% NSR Gold Royalty Corp. |

| Titre Type | Title ID | NTS | Area HA | Registry Date | Expiration Date | Owner | Total Credits (C$) | NSR |
|---|---|---|---|---|---|---|---|---|
| CDC | 2438252 | 32C03 | 12.99 | 20160422 | 20260124 | Probe Gold | 33,293.45 | 0.38% NSR Gold Royalty Corp., 5% NP Concorde |
| CDC | 2438253 | 32C03 | 11.72 | 20160422 | 20260124 | Probe Gold | 27,757.37 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438254 | 32C03 | 2.46 | 20160422 | 20260124 | Probe Gold | 21,857.04 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438255 | 32C03 | 23.07 | 20160422 | 20260124 | Probe Gold | 60,424.22 | 0.38% NSR Gold Royalty Corp., 5% NP Concorde |
| CDC | 2438256 | 32C03 | 45.13 | 20160422 | 20260124 | Probe Gold | 133,396.18 | 0.38% NSR Gold Royalty Corp., 5% NP Concorde (part of claim) |
| CDC | 2438257 | 32C03 | 14.84 | 20160422 | 20260124 | Probe Gold | 45,023.55 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438258 | 32C03 | 14.89 | 20160422 | 20260124 | Probe Gold | 45,117.11 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438259 | 32C03 | 57.49 | 20160422 | 20260124 | Probe Gold | 182,241.72 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438260 | 32C03 | 7.45 | 20160422 | 20260124 | Probe Gold | 31,194.76 | 0.38% NSR Gold Royalty Corp., 5% NP Concorde |
| CDC | 2438261 | 32C03 | 48.05 | 20160422 | 20260124 | Probe Gold | 773,016.92 | 0.38% NSR Gold Royalty Corp., 5% NP Concorde (part of claim) |
| CDC | 2438264 | 32C03 | 9.30 | 20160422 | 20260211 | Probe Gold | 305,268.12 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438265 | 32C03 | 12.28 | 20160422 | 20260211 | Probe Gold | 84,642.76 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438266 | 32C03 | 5.47 | 20160422 | 20260211 | Probe Gold | 47,271.46 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2438267 | 32C03 | 7.09 | 20160422 | 20260211 | Probe Gold | 493,169.64 | 0.38% NSR Gold Royalty Corp. |
| CDC | 2441586 | 32C03 | 33.17 | 20160414 | 20250413 | Probe Gold | 0.00 | 1% NSR G. Griesbach |
| CDC | 2451318 | 32C04 | 57.41 | 20160726 | 20250920 | Probe Gold | 16,033.94 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451319 | 32C04 | 54.75 | 20160726 | 20250920 | Probe Gold | 17,924.84 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451320 | 32C04 | 44.36 | 20160726 | 20250920 | Probe Gold | 2,654.83 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451321 | 32C04 | 22.21 | 20160726 | 20250920 | Probe Gold | 13,743.58 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451322 | 32C04 | 45.79 | 20160726 | 20250920 | Probe Gold | 15,772.79 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451323 | 32C04 | 57.40 | 20160726 | 20250920 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451324 | 32C04 | 57.40 | 20160726 | 20250920 | Probe Gold | 961.26 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451325 | 32C04 | 51.34 | 20160726 | 20250920 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451326 | 32C04 | 38.03 | 20160726 | 20250920 | Probe Gold | 18,396.40 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451327 | 32C04 | 56.30 | 20160726 | 20250920 | Probe Gold | 3,126.39 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451328 | 32C04 | 56.18 | 20160726 | 20250920 | Probe Gold | 9,389.55 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451329 | 32C04 | 56.09 | 20160726 | 20250920 | Probe Gold | 3,419.11 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451330 | 32C04 | 30.64 | 20160726 | 20250920 | Probe Gold | 2,090.98 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451331 | 32C04 | 3.99 | 20160726 | 20250920 | Probe Gold | 14,270.01 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451332 | 32C04 | 42.84 | 20160726 | 20250920 | Probe Gold | 18,396.40 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451333 | 32C04 | 44.33 | 20160726 | 20250920 | Probe Gold | 0.00 | 2% NSR,1% purchase for C$1 million |
| CDC | 2451334 | 32C04 | 24.56 | 20160726 | 20250920 | Probe Gold | 0.00 | 2% NSR 1% purchase for C$1 million |
| CDC | 2451578 | 32C04 | 13.16 | 20160726 | 20240827 | Probe Gold | 106,176.01 | 3% NSR 1.5% purchase for C$2 million |
| CDC | 2451579 | 32C04 | 18.11 | 20160726 | 20240827 | Probe Gold | 116,305.41 | 3% NSR 1.5% purchase for C$2 million |
| CDC | 2451580 | 32C04 | 13.17 | 20160726 | 20240827 | Probe Gold | 106,240.44 | 3% NSR 1.5% purchase for C$2 million |
| CDC | 2451581 | 32C04 | 18.66 | 20160726 | 20240827 | Probe Gold | 115,079.57 | 3% NSR 1.5% purchase for C$2 million |
| CDC | 2451582 | 32C04 | 13.85 | 20160726 | 20240827 | Probe Gold | 107,349.87 | 3% NSR 1.5% purchase for C$2 million |
| CDC | 2451583 | 32C04 | 14.58 | 20160726 | 20240827 | Probe Gold | 103,309.55 | 3% NSR 1.5% purchase for C$2 million |
| CDC | 2451946 | 32C03 | 48.80 | 20160726 | 20251028 | Probe Gold | 33,720.81 | - |
| CDC | 2451947 | 32C03 | 19.87 | 20160726 | 20251028 | Probe Gold | 5,982.99 | - |
| CDC | 2451948 | 32C03 | 13.37 | 20160726 | 20251028 | Probe Gold | 27,710.86 | - |
| CDC | 2453257 | 32C03 | 57.45 | 20160726 | 20251028 | Probe Gold | 3,773.84 | - |
| CDC | 2453258 | 32C03 | 57.45 | 20160726 | 20251028 | Probe Gold | 4,070.86 | - |
| CDC | 2453259 | 32C03 | 23.26 | 20160726 | 20251028 | Probe Gold | 6,190.68 | - |
| CDC | 2453260 | 32C03 | 23.11 | 20160726 | 20251028 | Probe Gold | 5,442.42 | - |
| CDC | 2453261 | 32C03 | 7.20 | 20160726 | 20251028 | Probe Gold | 0.00 | - |
| CDC | 2453262 | 32C03 | 17.98 | 20160726 | 20251028 | Probe Gold | 5,178.55 | - |
| CDC | 2453263 | 32C03 | 3.41 | 20160726 | 20251028 | Probe Gold | 4,242.42 | - |
| CDC | 2453264 | 32C03 | 5.23 | 20160726 | 20251028 | Probe Gold | 5,982.99 | - |
| CDC | 2453265 | 32C03 | 4.92 | 20160726 | 20251028 | Probe Gold | 5,178.55 | - |
| CDC | 2453266 | 32C03 | 15.70 | 20160726 | 20251028 | Probe Gold | 4,186.24 | - |
| CDC | 2453267 | 32C03 | 12.68 | 20160726 | 20251028 | Probe Gold | 6,190.68 | - |
| CDC | 2453268 | 32C03 | 15.69 | 20160726 | 20251028 | Probe Gold | 4,242.42 | - |
| CDC | 2462132 | 32C03 | 48.75 | 20160913 | 20250912 | Probe Gold | 0.00 | 1% NSR purchase for $500,000 |
| CDC | 2462133 | 32C03 | 56.88 | 20160913 | 20250912 | Probe Gold | 16,138.36 | 1% NSR purchase for $500,000 |
| CDC | 2462134 | 32C03 | 56.90 | 20160913 | 20250912 | Probe Gold | 19,115.28 | 1% NSR purchase for $500,000 |
| CDC | 2462135 | 32C03 | 56.91 | 20160913 | 20250912 | Probe Gold | 19,115.28 | 1% NSR purchase for $500,000 |
| CDC | 2462136 | 32C03 | 56.92 | 20160913 | 20250912 | Probe Gold | 18,232.01 | 1% NSR purchase for $500,000 |
| CDC | 2462137 | 32C03 | 56.94 | 20160913 | 20250912 | Probe Gold | 6,804.35 | 1% NSR purchase for $500,000 |
| CDC | 2462138 | 32C03 | 56.95 | 20160913 | 20250912 | Probe Gold | 6,804.35 | 1% NSR purchase for $500,000 |
| CDC | 2462206 | 32C03 | 57.01 | 20160914 | 20250913 | Probe Gold | 3,144.59 | 1% NSR purchase for $500,000 |
| CDC | 2462284 | 32C03 | 56.94 | 20160915 | 20260914 | Probe Gold | 0.00 | 1% NSR purchase for $500,000 |
| CDC | 2462285 | 32C03 | 57.00 | 20160915 | 20260914 | Probe Gold | 0.00 | 1% NSR purchase for $500,000 |
| CDC | 2462286 | 32C03 | 57.02 | 20160915 | 20260914 | Probe Gold | 0.00 | 1% NSR purchase for $500,000 |
| CDC | 2462287 | 32C03 | 57.04 | 20160915 | 20260914 | Probe Gold | 0.00 | 1% NSR purchase for $500,000 |
| CDC | 2464600 | 32C03 | 57.40 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464601 | 32C03 | 57.40 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464602 | 32C03 | 57.40 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464603 | 32C03 | 54.81 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |

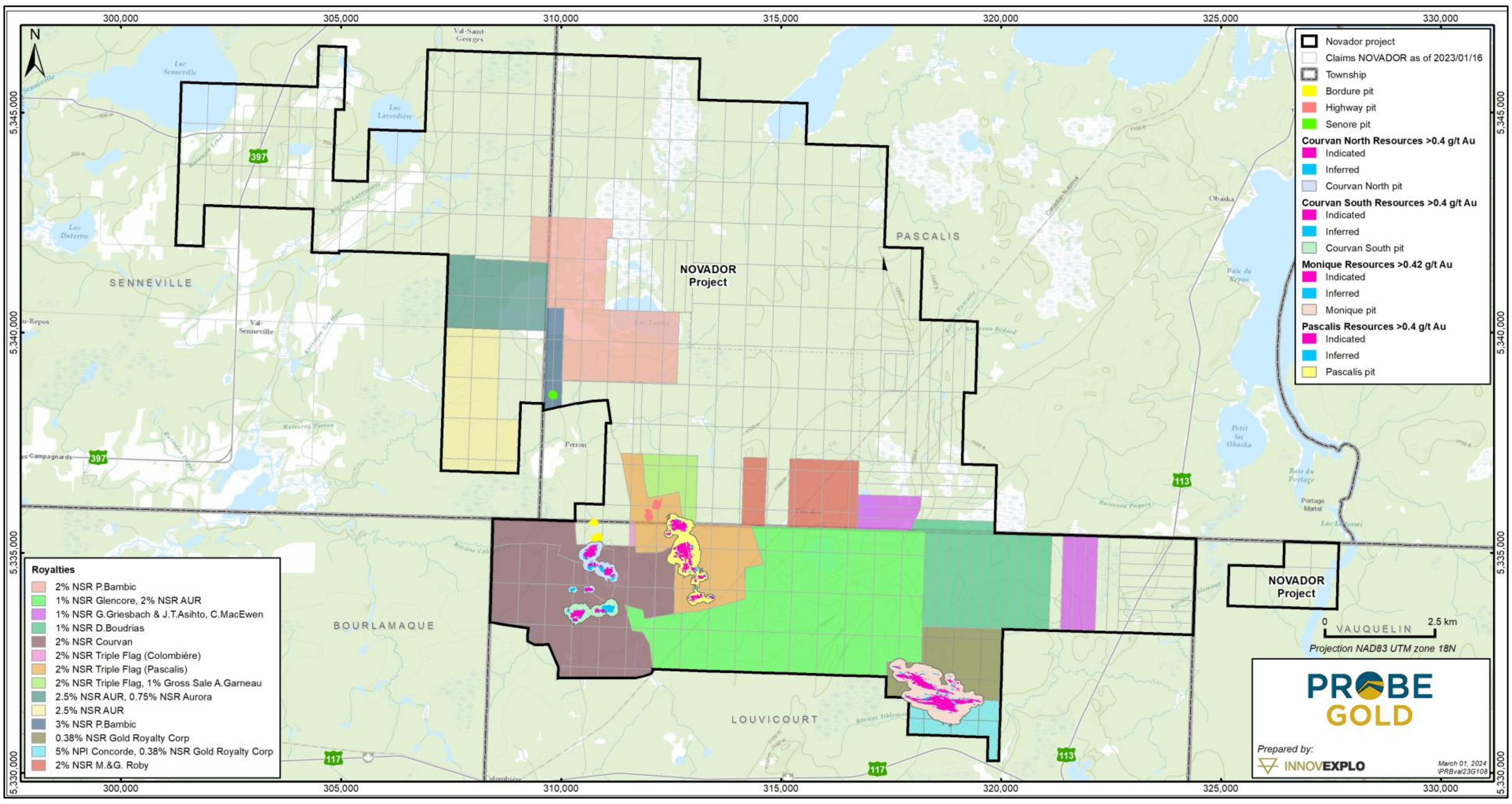
| Titre Type | Title ID | NTS | Area HA | Registry Date | Expiration Date | Owner | Total Credits (C$) | NSR |
|---|---|---|---|---|---|---|---|---|
| CDC | 2464604 | 32C03 | 57.39 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464605 | 32C03 | 57.39 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464606 | 32C03 | 57.39 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464607 | 32C03 | 57.39 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464608 | 32C03 | 57.38 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464609 | 32C03 | 57.38 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464610 | 32C03 | 57.38 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464611 | 32C03 | 57.38 | 20160927 | 20250926 | Probe Gold | 0.00 | Coyle-Gagnon |
| CDC | 2464747 | 32C04 | 57.39 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464748 | 32C04 | 57.39 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464749 | 32C04 | 57.39 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464750 | 32C04 | 57.38 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464751 | 32C04 | 57.38 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464752 | 32C04 | 57.38 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464753 | 32C04 | 57.38 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464754 | 32C04 | 57.37 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464755 | 32C04 | 57.37 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464756 | 32C04 | 57.37 | 20160929 | 20250928 | Probe Gold | 41.30 | - |
| CDC | 2464757 | 32C04 | 57.37 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464758 | 32C04 | 57.37 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464759 | 32C04 | 57.37 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464760 | 32C04 | 57.16 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464761 | 32C04 | 57.40 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464762 | 32C03 | 0.80 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464763 | 32C03 | 57.42 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464764 | 32C03 | 57.42 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464765 | 32C03 | 49.55 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464766 | 32C03 | 1.33 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464767 | 32C03 | 57.41 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464768 | 32C03 | 57.41 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464769 | 32C03 | 57.41 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464770 | 32C03 | 57.41 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464771 | 32C03 | 57.40 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464772 | 32C03 | 39.31 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464773 | 32C03 | 45.94 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464774 | 32C03 | 43.37 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464775 | 32C03 | 44.39 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464776 | 32C03 | 45.68 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464777 | 32C03 | 42.49 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464778 | 32C03 | 42.48 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464779 | 32C03 | 42.46 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464780 | 32C03 | 42.42 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464781 | 32C03 | 42.48 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464782 | 32C03 | 21.66 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464783 | 32C03 | 21.69 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464784 | 32C03 | 43.06 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464785 | 32C03 | 42.46 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464786 | 32C03 | 42.47 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464787 | 32C03 | 42.44 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464788 | 32C03 | 42.44 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464789 | 32C03 | 42.40 | 20160929 | 20250928 | Probe Gold | 0.00 | - |
| CDC | 2464790 | 32C03 | 57.08 | 20160929 | 20260928 | Probe Gold | 0.00 | - |
| CDC | 2464791 | 32C03 | 56.74 | 20160929 | 20260928 | Probe Gold | 0.00 | - |
| CDC | 2464792 | 32C03 | 44.90 | 20160929 | 20240928 | Probe Gold | 0.00 | - |
| CDC | 2464793 | 32C03 | 44.81 | 20160929 | 20240928 | Probe Gold | 458.00 | - |
| CDC | 2464794 | 32C03 | 44.82 | 20160929 | 20240928 | Probe Gold | 458.00 | - |
| CDC | 2464795 | 32C03 | 44.90 | 20160929 | 20240928 | Probe Gold | 458.00 | - |
| CDC | 2464796 | 32C03 | 44.85 | 20160929 | 20240928 | Probe Gold | 458.00 | - |
| CDC | 2464797 | 32C03 | 44.85 | 20160929 | 20240928 | Probe Gold | 242.42 | - |
| CDC | 2464798 | 32C03 | 44.90 | 20160929 | 20240928 | Probe Gold | 0.00 | - |
| CDC | 2464799 | 32C03 | 60.97 | 20160929 | 20240928 | Probe Gold | 0.00 | - |
| CDC | 2466974 | 32C04 | 27.77 | 20161220 | 20251116 | Probe Gold | 32,317.90 | - |
| CDC | 2466975 | 32C04 | 21.86 | 20161220 | 20251116 | Probe Gold | 23,064.53 | - |
| CDC | 2466976 | 32C04 | 27.52 | 20161220 | 20251116 | Probe Gold | 24,503.92 | - |
| CDC | 2466977 | 32C04 | 54.21 | 20161220 | 20251116 | Probe Gold | 51,691.25 | - |
| CDC | 2466978 | 32C04 | 0.74 | 20161220 | 20251116 | Probe Gold | 21,976.81 | - |
| CDC | 2466979 | 32C04 | 1.13 | 20161220 | 20251116 | Probe Gold | 6,805.02 | - |
| CDC | 2466980 | 32C04 | 1.25 | 20161220 | 20251116 | Probe Gold | 13,841.55 | - |
| CDC | 2466981 | 32C04 | 12.07 | 20161220 | 20251116 | Probe Gold | 15,833.21 | - |
| CDC | 2466982 | 32C04 | 16.19 | 20161220 | 20251116 | Probe Gold | 17,189.26 | - |
| CDC | 2466983 | 32C04 | 0.37 | 20161220 | 20251116 | Probe Gold | 5,232.63 | - |
| CDC | 2466984 | 32C04 | 2.20 | 20161220 | 20241009 | Probe Gold | 6,918.29 | 1% gross sale |
| CDC | 2466985 | 32C04 | 22.65 | 20161220 | 20241009 | Probe Gold | 44,080.84 | 1% gross sale |

| Titre Type | Title ID | NTS | Area HA | Registry Date | Expiration Date | Owner | Total Credits (C$) | NSR |
|---|---|---|---|---|---|---|---|---|
| CDC | 2466986 | 32C04 | 43.41 | 20161220 | 20241009 | Probe Gold | 57,214.17 | 1% gross sale |
| CDC | 2466987 | 32C04 | 9.47 | 20161220 | 20241009 | Probe Gold | 7,859.72 | 1% gross sale |
| CDC | 2466988 | 32C04 | 15.52 | 20161220 | 20241009 | Probe Gold | 9,378.11 | 1% gross sale |
| CDC | 2466989 | 32C04 | 23.12 | 20161220 | 20241009 | Probe Gold | 12,168.68 | 1% gross sale |
| CDC | 2466990 | 32C04 | 6.24 | 20161220 | 20241009 | Probe Gold | 7,049.07 | 1% gross sale |
| CDC | 2466991 | 32C04 | 9.61 | 20161220 | 20241009 | Probe Gold | 8,778.01 | 1% gross sale |
| CDC | 2467675 | 32C04 | 5.06 | 20161103 | 20251102 | Probe Gold | 15,206.41 | - |
| CDC | 2467676 | 32C04 | 5.70 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467677 | 32C04 | 57.40 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467678 | 32C04 | 57.40 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467679 | 32C04 | 26.94 | 20161103 | 20251102 | Probe Gold | 3,554.54 | - |
| CDC | 2467680 | 32C04 | 26.88 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467681 | 32C04 | 26.82 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467682 | 32C04 | 57.39 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467683 | 32C04 | 57.39 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467684 | 32C04 | 57.39 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467685 | 32C04 | 57.39 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467686 | 32C04 | 57.39 | 20161103 | 20251102 | Probe Gold | 5,333.61 | - |
| CDC | 2467687 | 32C04 | 57.39 | 20161103 | 20251102 | Probe Gold | 4,387.69 | - |
| CDC | 2467688 | 32C04 | 57.39 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467689 | 32C04 | 57.39 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467690 | 32C04 | 57.38 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467691 | 32C04 | 57.38 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467692 | 32C04 | 57.38 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467693 | 32C04 | 57.38 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467694 | 32C04 | 57.38 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467695 | 32C04 | 57.38 | 20161103 | 20251102 | Probe Gold | 0.00 | - |
| CDC | 2467696 | 32C04 | 57.47 | 20161220 | 20250714 | Probe Gold | 2,648,950.62 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467697 | 32C04 | 21.39 | 20161220 | 20250714 | Probe Gold | 474,754.20 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467698 | 32C04 | 6.01 | 20161220 | 20250714 | Probe Gold | 53,928.07 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467699 | 32C03 | 4.19 | 20161220 | 20250714 | Probe Gold | 46,910.01 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467700 | 32C04 | 2.26 | 20161220 | 20250714 | Probe Gold | 96,736.34 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467701 | 32C04 | 54.61 | 20161220 | 20250714 | Probe Gold | 2,919,301.88 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467702 | 32C04 | 5.99 | 20161220 | 20250714 | Probe Gold | 60,940.23 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467703 | 32C04 | 33.70 | 20161220 | 20250714 | Probe Gold | 1,054,486.32 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467704 | 32C04 | 0.22 | 20161220 | 20250714 | Probe Gold | 14,394.46 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467705 | 32C04 | 14.04 | 20161220 | 20250714 | Probe Gold | 360,932.23 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467706 | 32C03 | 29.20 | 20161220 | 20250714 | Probe Gold | 238,970.95 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467707 | 32C04 | 15.52 | 20161220 | 20250714 | Probe Gold | 1,207,215.87 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467708 | 32C04 | 6.55 | 20161220 | 20250714 | Probe Gold | 57,318.36 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467709 | 32C04 | 33.81 | 20161220 | 20250714 | Probe Gold | 516,884.26 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467710 | 32C04 | 31.32 | 20161220 | 20250714 | Probe Gold | 793,977.09 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467711 | 32C04 | 9.80 | 20161220 | 20250714 | Probe Gold | 91,091.80 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467712 | 32C04 | 57.47 | 20161220 | 20250714 | Probe Gold | 700,150.28 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467713 | 32C04 | 34.81 | 20161220 | 20250714 | Probe Gold | 553,914.39 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467714 | 32C04 | 50.79 | 20161220 | 20250714 | Probe Gold | 1,395,061.33 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467715 | 32C04 | 10.12 | 20161220 | 20250714 | Probe Gold | 386,113.21 | 2% NSR 1% purchase for C$1 million |
| CDC | 2467716 | 32C03 | 20.97 | 20161220 | 20250714 | Probe Gold | 174,389.67 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468946 | 32C03 | 57.43 | 20161220 | 20250320 | Probe Gold | 0.00 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468947 | 32C04 | 57.44 | 20161220 | 20250320 | Probe Gold | 2,690.69 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468948 | 32C04 | 57.44 | 20161220 | 20250320 | Probe Gold | 1,362.56 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468949 | 32C04 | 57.44 | 20161220 | 20250320 | Probe Gold | 2,690.69 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468950 | 32C04 | 57.46 | 20161220 | 20250320 | Probe Gold | 34,513.11 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468951 | 32C04 | 14.16 | 20161220 | 20250320 | Probe Gold | 100,950.33 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468952 | 32C03 | 5.01 | 20161220 | 20250320 | Probe Gold | 5,482.99 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468953 | 32C04 | 20.04 | 20161220 | 20250320 | Probe Gold | 0.00 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468954 | 32C03 | 3.65 | 20161220 | 20250320 | Probe Gold | 5,690.69 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468955 | 32C04 | 41.25 | 20161220 | 20250320 | Probe Gold | 2,690.69 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468956 | 32C03 | 2.10 | 20161220 | 20250320 | Probe Gold | 5,482.99 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468957 | 32C03 | 44.08 | 20161220 | 20250320 | Probe Gold | 2,690.69 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468958 | 32C04 | 51.21 | 20161220 | 20250320 | Probe Gold | 2,690.70 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468959 | 32C03 | 18.18 | 20161220 | 20250320 | Probe Gold | 6,366.16 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468960 | 32C04 | 57.43 | 20161220 | 20250320 | Probe Gold | 1,667.27 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468961 | 32C04 | 57.45 | 20161220 | 20250320 | Probe Gold | 2,690.70 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468962 | 32C04 | 57.43 | 20161220 | 20250320 | Probe Gold | 1,350.42 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468963 | 32C04 | 29.90 | 20161220 | 20250320 | Probe Gold | 2,483.00 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468964 | 32C04 | 23.65 | 20161220 | 20250320 | Probe Gold | 5,483.00 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468965 | 32C03 | 44.78 | 20161220 | 20250320 | Probe Gold | 2,690.70 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468966 | 32C03 | 54.03 | 20161220 | 20250320 | Probe Gold | 1,942.43 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468967 | 32C03 | 57.44 | 20161220 | 20250320 | Probe Gold | 1,808.85 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468968 | 32C04 | 57.30 | 20161220 | 20250320 | Probe Gold | 0.00 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468969 | 32C04 | 0.97 | 20161220 | 20250320 | Probe Gold | 4,781.72 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468970 | 32C04 | 26.79 | 20161220 | 20250320 | Probe Gold | 2,670.87 | 2% NSR 1% purchase for C$1 million |

| Titre Type | Title ID | NTS | Area HA | Registry Date | Expiration Date | Owner | Total Credits (C$) | NSR |
|---|---|---|---|---|---|---|---|---|
| CDC | 2468971 | 32C03 | 1.57 | 20161220 | 20250320 | Probe Gold | 5,482.99 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468972 | 32C04 | 34.33 | 20161220 | 20250320 | Probe Gold | 20,825.02 | 2% NSR 1% purchase for C$1 million |
| CDC | 2468973 | 32C04 | 41.92 | 20161220 | 20250320 | Probe Gold | 2,482.99 | 2% NSR 1% purchase for C$1 million |
| CDC | 2471782 | 32C03 | 57.47 | 20170105 | 20250104 | Probe Gold | 0.00 | - |
| CDC | 2471783 | 32C03 | 57.47 | 20170105 | 20250104 | Probe Gold | 0.00 | - |
| CDC | 2471784 | 32C03 | 57.47 | 20170105 | 20250104 | Probe Gold | 0.00 | - |
| CDC | 2471785 | 32C03 | 57.47 | 20170105 | 20250104 | Probe Gold | 0.00 | - |
| CDC | 2471786 | 32C03 | 35.81 | 20170105 | 20250104 | Probe Gold | 0.00 | - |
| CDC | 2471787 | 32C03 | 35.81 | 20170105 | 20250104 | Probe Gold | 0.00 | - |
| CDC | 2471788 | 32C03 | 19.57 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471789 | 32C03 | 57.38 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471790 | 32C03 | 72.76 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471791 | 32C03 | 42.50 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471792 | 32C04 | 57.40 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471793 | 32C04 | 57.40 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471794 | 32C04 | 57.39 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471795 | 32C04 | 57.38 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471796 | 32C04 | 57.38 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471797 | 32C04 | 57.38 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471798 | 32C04 | 57.38 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471799 | 32C04 | 57.37 | 20170105 | 20260104 | Probe Gold | 0.00 | - |
| CDC | 2471800 | 32C04 | 57.37 | 20170105 | 20240104 | Probe Gold | 354.84 | - |
| CDC | 2471801 | 32C04 | 57.37 | 20170105 | 20240104 | Probe Gold | 673.57 | - |
| CDC | 2471802 | 32C04 | 57.37 | 20170105 | 20240104 | Probe Gold | 673.57 | - |
| CDC | 2471803 | 32C04 | 57.37 | 20170105 | 20240104 | Probe Gold | 673.57 | - |
| CDC | 2471804 | 32C04 | 57.36 | 20170105 | 20240104 | Probe Gold | 673.57 | - |
| CDC | 2471805 | 32C04 | 57.36 | 20170105 | 20240104 | Probe Gold | 673.57 | - |
| CDC | 2471806 | 32C04 | 57.36 | 20170105 | 20240104 | Probe Gold | 673.57 | - |
| CDC | 2471807 | 32C04 | 57.36 | 20170105 | 20240104 | Probe Gold | 673.57 | - |
| CDC | 2472376 | 32C03 | 37.25 | 20170109 | 20260108 | Probe Gold | 0.00 | - |
| CDC | 2472377 | 32C03 | 57.05 | 20170109 | 20250108 | Probe Gold | 0.00 | - |
| CDC | 2472378 | 32C04 | 43.08 | 20170109 | 20260108 | Probe Gold | 4,515.11 | - |
| CDC | 2479108 | 32C03 | 57.05 | 20170215 | 20250214 | Probe Gold | 0.00 | 1% NSR G. Griesbach & J. T. Asihto |
| CDC | 2479109 | 32C03 | 57.05 | 20170215 | 20250214 | Probe Gold | 0.00 | 1% NSR G. Griesbach & J. T. Asihto |
| CDC | 2479110 | 32C03 | 57.06 | 20170215 | 20250214 | Probe Gold | 0.00 | 1% NSR G. Griesbach & J. T. Asihto |
| CDC | 2542800 | 32C03 | 57.39 | 20190828 | 20250827 | Probe Gold | 0.00 | - |
| CDC | 2562685 | 32C03 | 57.37 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562686 | 32C03 | 57.37 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562687 | 32C04 | 3.38 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562688 | 32C04 | 57.41 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562689 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562690 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562691 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562692 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562693 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562694 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562695 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562696 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562697 | 32C04 | 57.40 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562698 | 32C04 | 52.25 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562699 | 32C04 | 42.26 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562700 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562701 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562702 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562703 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562704 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562705 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562706 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562707 | 32C04 | 39.19 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562708 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562709 | 32C04 | 57.39 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562710 | 32C04 | 57.38 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562711 | 32C04 | 57.38 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562712 | 32C04 | 57.38 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562713 | 32C04 | 57.38 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562714 | 32C04 | 57.38 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562715 | 32C04 | 49.01 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562716 | 32C04 | 57.37 | 20200422 | 20250421 | Probe Gold | 0.00 | - |
| CDC | 2562745 | 32C04 | 3.13 | 20200422 | 20250421 | Probe Gold | 381.08 | - |
| CDC | 2635934 | 32C04 | 57.37 | 20220209 | 20250208 | Probe Gold | 0.00 | - |
| CDC | 2635935 | 32C04 | 57.37 | 20220209 | 20250208 | Probe Gold | 0.00 | - |
| CDC | 2635936 | 32C04 | 57.37 | 20220209 | 20250208 | Probe Gold | 0.00 | - |
| CDC | 2635937 | 32C04 | 57.36 | 20220209 | 20250208 | Probe Gold | 0.00 | - |

| Titre Type | Title ID | NTS | Area HA | Registry Date | Expiration Date | Owner | Total Credits (C$) | NSR |
|---|---|---|---|---|---|---|---|---|
| CDC | 2635938 | 32C04 | 57.36 | 20220209 | 20250208 | Probe Gold | 0.00 | - |
| CM | 280PTB | | 156.04 | 19360509 | | Probe Gold | 0.00 | 2% NSR, 1% purchase for $500 k Louvem |
| CM | 295 | | 37.40 | 19371220 | | Probe Gold | 0.00 | 2% NSR, 1% purchase for $500 k Louvem |
| | **430** | | **17,746.28** | | | | **$28,986,167.14** | |

**Figure 4-6: Novador Project NSR**




Source: InnovExplo, 2023.

## 4.4 Permits and Environmental Liabilities

There are no known pending environmental concerns or land claim issues with the project. It is understood and agreed upon that the project was received by Probe Gold “as is” and that Probe Gold will ensure all exploration programs on the project are conducted in an environmentally sound manner.

The authors are unaware of any environmental liabilities associated with the property mining titles. However, the authors have not conducted a thorough inspection of these claims. The exploration activities were planned to have a minimum impact on the environment.

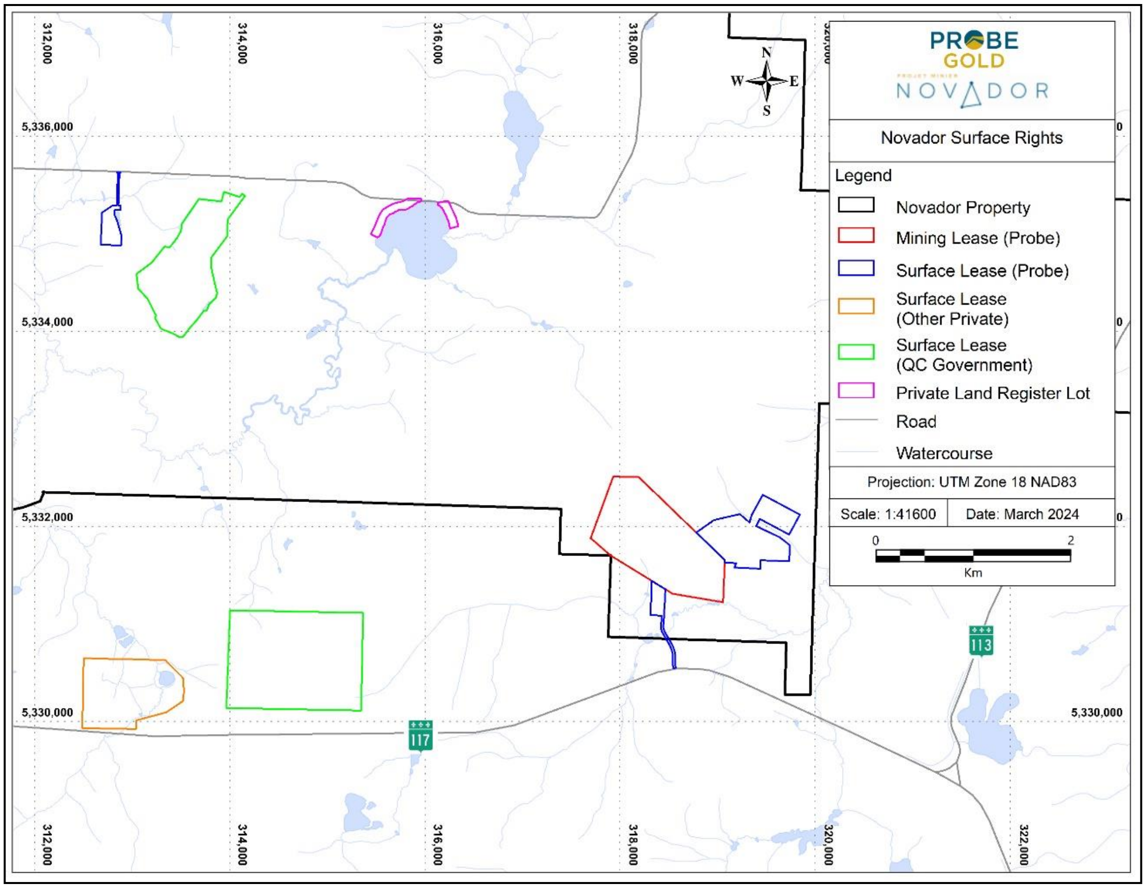
Probe Gold is responsible for obtaining all authorizations and permits from the provincial ministries of natural resources (MRNF) and the environment (MELCCFP), when applicable.

According to Québec's Mining Act (M-13.1), the proponent of a project must obtain approval for the location of mining infrastructures from the Minister of Natural Resources and Forestry or, in the case of a project subject to the environmental impact assessment and review procedure, from the Government of Québec. The Novador Project will be subject to the environmental assessment procedure and will therefore have to obtain the approval of the Government of Quebec for the locations of the mining infrastructures.

Figure 4-7 shows the nature of the surface rights for the eastern section of the Novador mining property. This figure shows the existing surface leases, private registered lots, and Monique's mining lease held by Probe. The rest of the land is public land.

To position mining infrastructures on public lands, authorization must be obtained from the Government of Quebec by obtaining a surface lease. The process is the same whether it is to position mining infrastructure on top of claims held by the proponent or on top of claims held by a third party. The proponent must provide a condemnation report to demonstrate that there is no economic resource near the surface of the area selected for mining infrastructure. When claims are held by a third party, it is strongly recommended that you discuss with the third party the proposed drilling and the results of the condemnation program. In addition, Article 212 of the Mining Act states that the mining right holder may not claim any compensation from another mining right holder for mining infrastructure on the land covered by his right, except in the case of a mining lease or a mining concession.

**Figure 4-7: Surface Rights for the Eastern section of the Novador Property**




Source: Probe, 2024.

## 4.5 Mine Site of the Former Monique Property

On November 6, 2013, the MRNF approved the March 2013 restoration plan for the mine site of the former Monique property filed by Groupe-Conseil Roche Ltée. Subsequently, in 2013-2014, Richmont Mines Inc. (Richmont) carried out partial reclamation work on the former Monique property, which included the following:

- removal of buildings and infrastructure
- safety lift around the pit
- scarification and revegetation of infrastructure areas
- sampling and analysis of water, sludge, and backfilling
- revegetation of the settling basin

- characterization study
- monitoring, groundwater analysis and annual report.

On July 24, 2020, the MRNF released Monarch Gold Corporation (now Monarch Mining Corporation) from closure obligations to restore the former Monique property and transferred the responsibility to Probe Gold.

## 4.6 Community Communication and Consultation

The issuer follows the current regulations of the city of Val-d'Or and the Government of Quebec regarding community consultation on exploration and drilling work.

## 4.7 Mining Title Status

The claim is the only valid exploration right in Québec. The claim gives the holder an exclusive right to search for mineral substances in the public domain, except for sand, gravel, clay and other loose deposits, on the land subjected to the claim.

The first term of a claim is three years. It can then be renewed for two-year periods, provided that the claim holder meets the conditions stipulated in the Mining Act, including the carrying out of exploration work, the nature and amount of which is established by regulation.

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

This section was modified and updated from Raponi et al. (2021).

## 5.1 Accessibility

The project can be easily reached from Val-d'Or by travelling approximately 20 km east along Highway 117. The former L.C. Béliveau mine site is about 8 km from Highway 117, 6 km north on Chemin Perron, and then 2 km on Chemin Pascalis. Finally, a 200-m stretch of gravel road leads to the former mine site. The former Bussiere mine is located approximately 5 km on Perron Road and 0.4 km to the east. The former Monique mine is about 5 km further east on Highway 117, turning north on Chemin Carnegie for 0.5 km up to the security gate. All the roads are well maintained in all seasons. Several logging roads and trails run through the project, providing easy access to the interior (Figure 5-1).

The project is very close to TransCanada Highway 117. A CN railway line crosses the southeastern part of the property, connecting east side through Montreal and the west through the Ontario Northland Railway to the North American rail network. Val-d'Or has a regional airport with regularly scheduled flights to and from Montreal. The airport also acts as a hub for flights further north. Val-d'Or is a six-hour drive northwest of Montreal, and there is a daily bus service between Montreal and the other cities in the Abitibi region. The powerlines and telecommunication systems can be easily accessible, with the powerline feeding the Beaufor mine only 2 km away.

## 5.2 Climate

The climate of the Val-d'Or area is continental subarctic sub-humid (Robitaille and Saucier, 1998). Winters are long and cold, and summers are short. The hottest month is July (17.4°C), and the coldest month is January (-17.2°C) (Government of Canada, 2017a). The temperature is above the freezing point for approximately 162 days annually. Total annual rainfall is 929 mm, of which 73% is rain, and 27% is snow. The direction of prevailing winds is southwest most of the year.

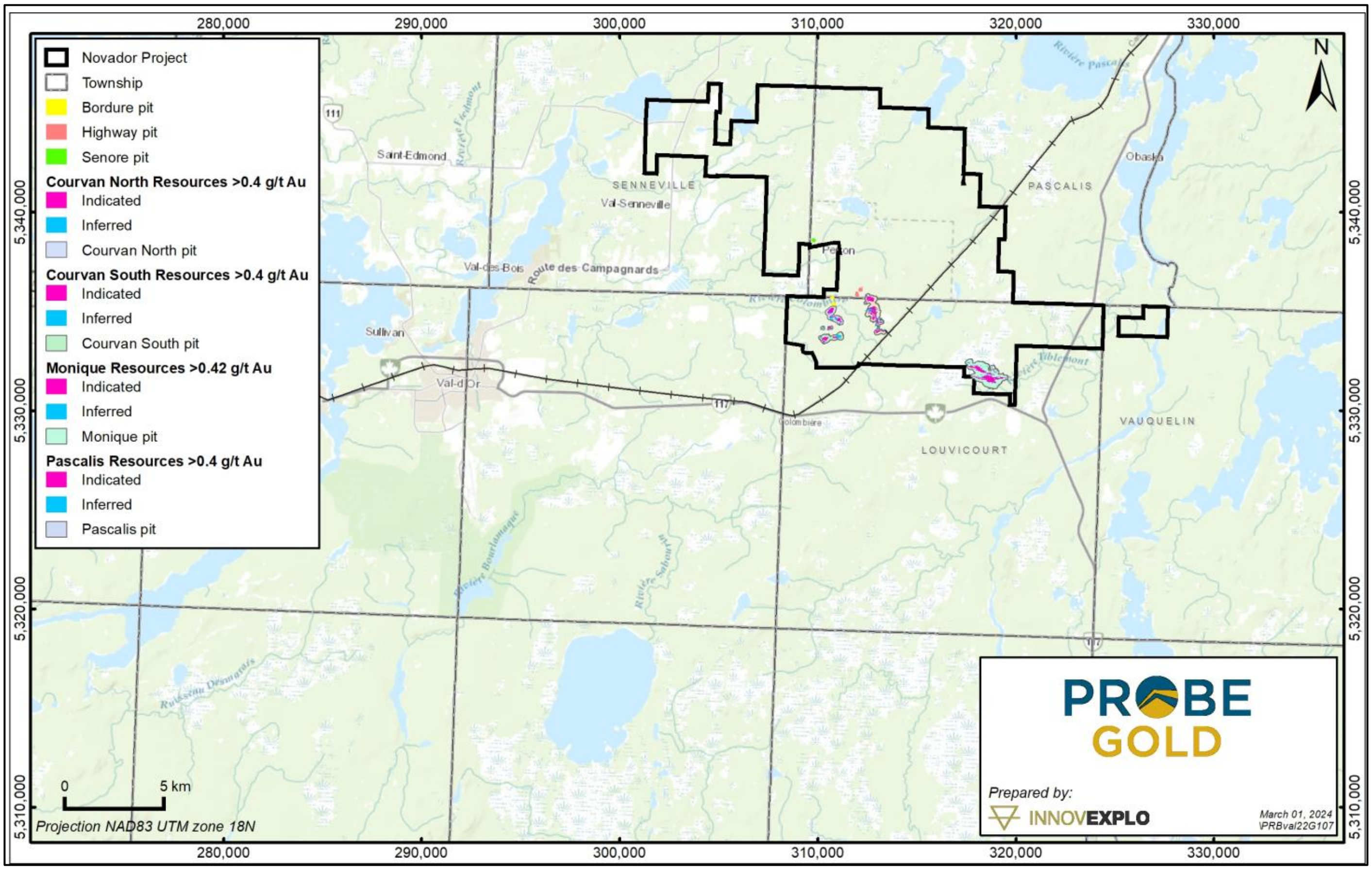
The best operating season for basic exploration work (i.e., prospection, mapping, line cutting, geophysical and geochemical surveys, and stripping) is over a four-month period from approximately July to October. Ideal winter drilling conditions last from early January to the end of March.

## 5.3 Local Resources

Val-d'Or was founded in the 1920s and has been a mining service centre since its inception. Val-d'Or, with a population of approximately 32,000, is a modern city and one of the largest communities in the Abitibi region of Quebec, with a long and rich mining heritage.

Supplies, labour, and service providers are readily available in the general area (Amos, Rouyn-Noranda, and Val-d'Or). Local resources include commercial laboratories, a federal government underground mining research office, construction contractors, drilling companies, exploration service companies, engineering and various other consultants, equipment vendors, and suppliers.

**Figure 5-1: Topography and Accessibility of the Novador Project**




Source: InnovExplo, 2023.

## 5.4 Infrastructure

The former L.C. Béliveau mine includes a three-compartment shaft measuring 1.83 m x 1.83 m x 340 m deep (5 t bucket), approximately 1,625 m of drifting on five levels, ventilation raises, 660 m of ramp down to the 90 m level. A secure fenced-in site is used to store the drill core.

The former Bussiere mine on the Courvan trend includes a 245 m deep shaft and more than 3,000 m of drifting on five levels.

The former Senore mine includes a 152 m deep exploration shaft on three levels.

The former Monique mine includes a 440 m x 350 m wide x 95 m deep open pit partially filled with water, as well as one rock pile and an overburden stockpile. A gate secures road access to the Monique open pit and mining lease.

Several mining operations and gold mills are currently active in the proximity of the property, as follows:

Aurbel Gold Mill – Held by Eldorado Gold Corporation (Eldorado). Located 6 km (straight line) from the Monique area and has a capacity of 1,500 t/d, which can be upgraded to 2,500 t/d.

- Beacon Gold Mill – Held by Monarch Mining Corporation. Located 6 km away and has a capacity of 750 t/d (upgradeable).
- Sigma-Lamaque Gold Mine and Mill – Held by Eldorado. Located 24 km away and has a capacity of 2,200 t/d, which can be upgraded to 5,000 t/d.
- Goldex Mine and Mill Operation – Held by Agnico-Eagle. Located 39 km away and has a capacity of 8,000 to 10,000 t/d.
- Kiena Mine and Mill Facility – Held by Wesdome Gold. Located 45 km away and has a capacity of 2,000 t/d.
- Camflo Mill – Held by Agnico-Eagle. Located 60 km away and has a capacity of 1,600 t/d.
- Canadian Malartic Mine and Mill Facility – Held by Agnico-Eagle. Located 70 km away and has a capacity of 55,000 t/d.

## 5.5 Physiography

The topographic relief on the project is rather flat, ranging from 315 to 355 metres above sea level (masl). The area is characterized by low ridges and hills flanked by generally flat areas of glacial outwash and swamps. Overburden thickness varies from 0 m to 35 m, with local concentrations of outcrops in a uniformly flat forested plain. The overburden is relatively thin on the different gold zones: 0 m to 3 m for Highway, 0 m to 10 m for New Béliveau, 5 m to 10 m for the North Zone and the deposits on the Courvan gold trend, and 5 m to 40 m for the Monique zones. It consists mainly of sand, gravel, and glacial moraine.

# 6 HISTORY

The following section was taken and modified from Raponi et al. (2021).

Table 6-1 at the end of this chapter provides a complete listing of historical work on the project. The documents used to compile the table were taken from the SIGÉOM (MRNF) database or technical reports filed by past owners.

## 6.1 Courvan-Pascalis-Senore Areas

The first claims in the project area were staked in the fall of 1930. In the southeast part of the Pascalis area, the first gold occurrences were discovered in 1931. In 1931 and 1932, Noranda excavated a series of trenches and drilled five drill holes on what eventually became known as the No. 1 and No. 2 showings under an option agreement at the time. In 1936, Pascalis Gold Mines completed several drill holes on the No. 1 showing, which is today the site of the former L.C. Béliveau mine and the current New Béliveau deposit. The results from the trenches and drill holes were not sufficiently interesting to justify further work. Between that time and the opening of the mine, various companies conducted exploration programs for gold and base metals in the Béliveau area. Work included prospecting and geological mapping, diamond drilling, soil geochemistry, and ground geophysics (e.g., MAG, EM, VLF, IP).

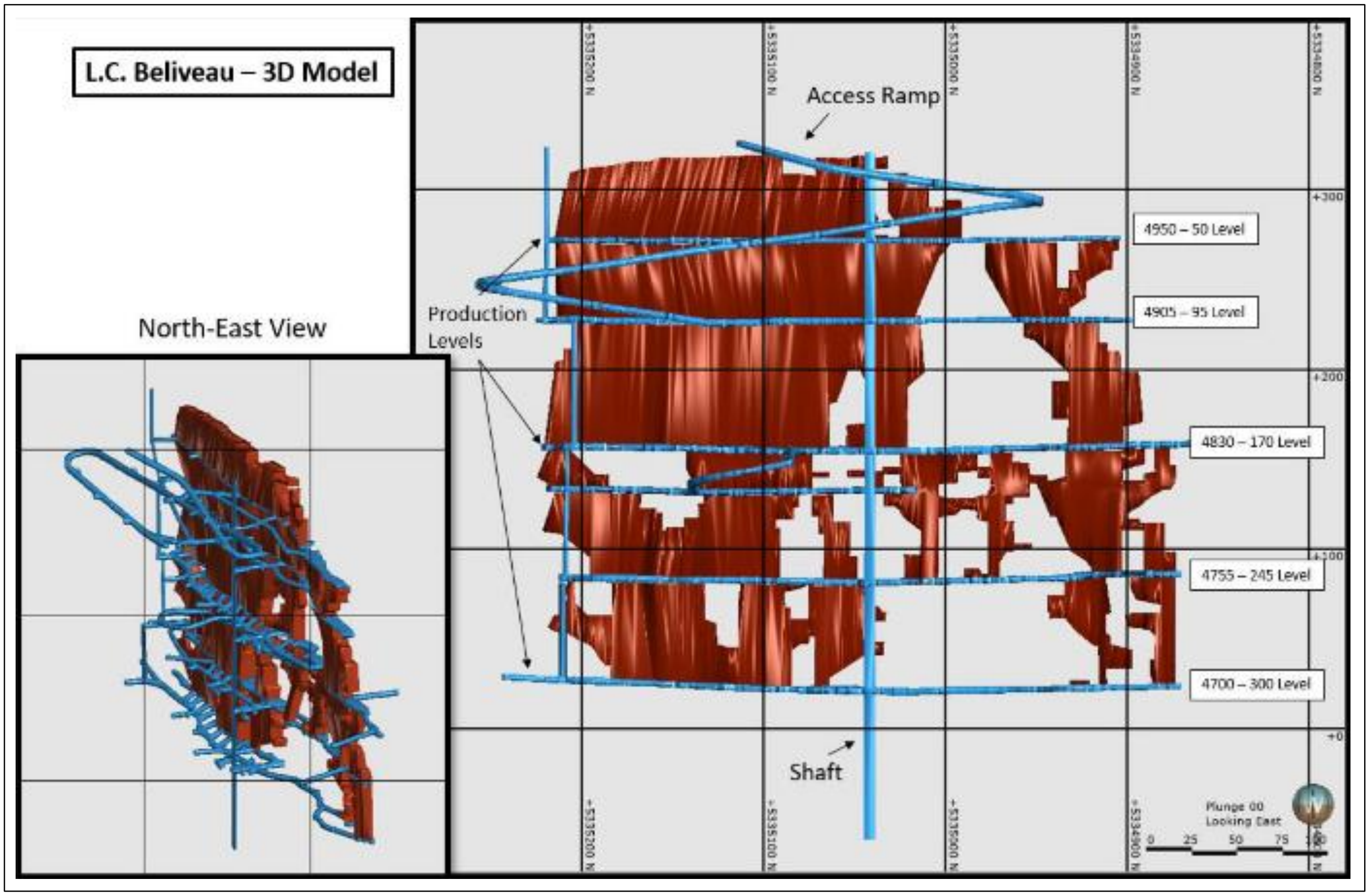
The first exploration work reported on the Courvan area was completed by Bussiere and Massicotte (prospectors) in 1930. In 1932, the Bussiere Mining Company Limited was created, and a shaft was sunk to 206 m. Québec Gold Mining Corporation took control of the mine in 1933. The Bussiere deposit was first mined between 1932 and 1935. Cournor Mining Company reopened the mine from 1937 to 1942, producing 25,971 oz from Bussiere and Creek zones for a total historical gold production of 41,682 oz. In 1942, a forest fire destroyed the surface mining infrastructure and offices, forcing the permanent closure of the underground mine. After the mine shut down, various companies conducted exploration programs for gold and base metals in the Courvan area, particularly on the Southwest Zone.

### 6.1.1 Former L.C. Béliveau Mine

Commercial production at the L.C. Béliveau mine began on September 1, 1989. The mine ceased operations in October 1993 after producing 166,936 oz of gold. During the pre-production period from October 1988 to August 1989, 4,789 oz of gold was produced for a total production of 171,725 oz of gold recovered and sold.

A three-compartment shaft measuring 1.83 m x 1.83 m x 340 m depth (5 t t skip) and approximately 1,625 m of drifting on five levels was excavated. Mined stopes extend over more than 300 m vertically by up to 225 m long x 10 m wide. The stopes were not backfilled. Figure 61 shows the distribution of open stopes and pillars in cross-section. These underground mine workings are still accessible.

**Figure 6-1: 3D View of Stopes and Drifts in the Former L.C. Béliveau Mine**




Source: Probe Gold, 2021.

### 6.1.1.1 Geotechnical

Various studies were conducted to determine the competency of the rock mass before starting mining operations. Core samples were taken and tested at Golder Associates laboratory in 1985. A classification scheme rock mass rating of 78 was obtained, indicating a very good quality rock mass, and allowing large excavation spans to be developed with minimum support.

The magnitude of groundwater inflows is consistent with a relatively unfractured rock mass that is intrinsically impermeable apart from major discontinuities. The inflow rate was expected to remain low (Golder, 1985).

### 6.1.1.2 Metallurgy and Processing

A significant number of metallurgical campaigns were carried out on mineralized material from the former L.C. Béliveau mine, first by SOQUEM Inc. (SOQUEM) from 1983 to 1985 and then by Cambior Inc. (Cambior) from 1987 to 1988.

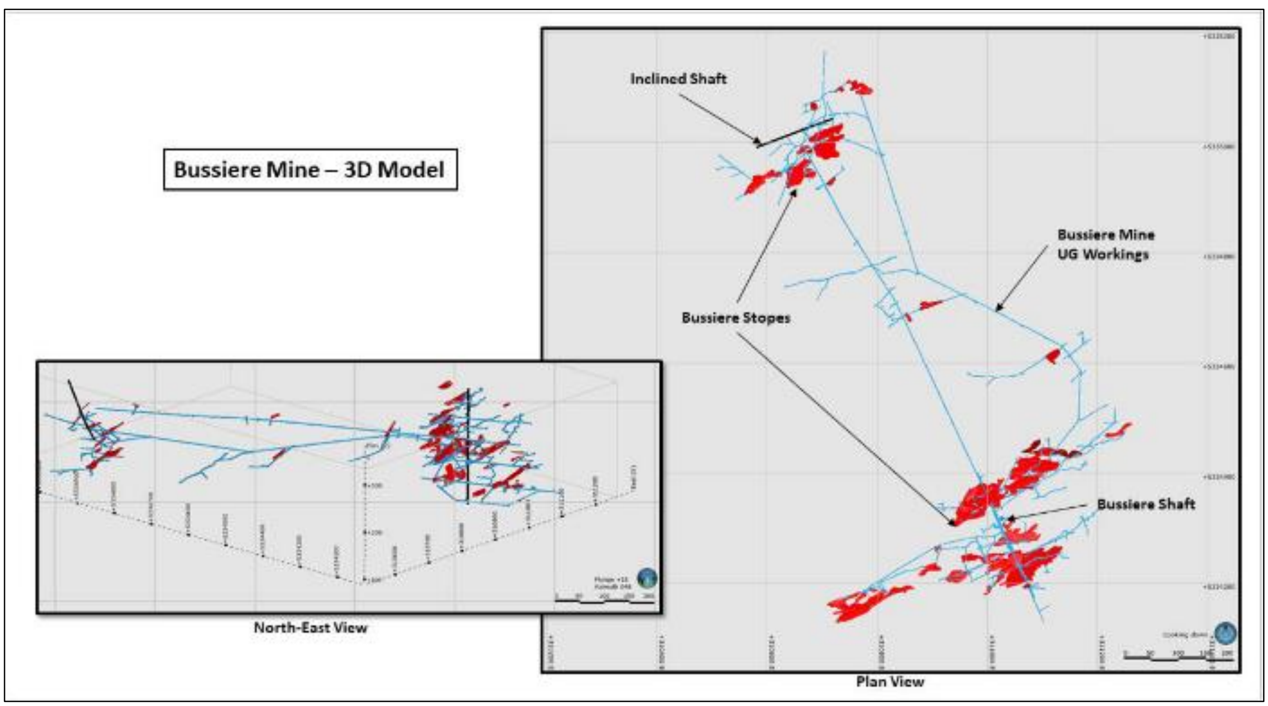
### 6.1.2 Former Bussiere Mine

Mining concessions 295 and 280PTB host the historical Bussiere mine that produced 41,682 oz of gold between 1932 and 1942 from 224,547 tonnes of mineralized material with an average recovered grade of 5.77 g/t Au.

More than 40 mineralized zones were extracted up to a vertical depth of 236 m, each yielding between 45,000 and 77,000 tonnes. At the Bussiere mine, extraction was done through a 245 m deep shaft on five production levels (61, 107, 152, 198 and 236 m) at a production rate of 136 t/d. Room and pillar was the principal mining method due to the shape of the deposit, which is composed of tabular zones dipping gently to the north. Amalgamation was used between 1932 and 1935, with a recovery rate of only 75%. When the mine re-opened in 1937, cyanidation was introduced to process the ore, and the gold recovery climbed to 98%.

Mineralized material from the Bussiere mine came from two main zones: Bussiere and Creek. The Creek Zone is situated below the Colombiere River, approximately 900 m north of the main shaft. The zone is connected to the Bussiere mine workings by a cross-cut drift developed off the 650 level at a depth of 198 m. An inclined vent shaft was also used to extract mineralized material, with stations built at 137 and 168 m depth. Most of the mineralized material extracted from the mine during the last two years of production came from the Creek Zone and veins 674, 678 and 696, which were discovered during the development of the cross-cut drift. Following the 1942 forest fire, the mineralized material left in place became the subject of numerous resource estimates (that are not compliant with NI 43-101 guidelines)—the most notable was completed by Jean Lavallée in 1962. Figure 6-2 shows the underground development and stoping areas of the historical Bussiere mine.

**Figure 6-2: 3D View of Stopes and Drifts in the Former L.C. Béliveau Mine**



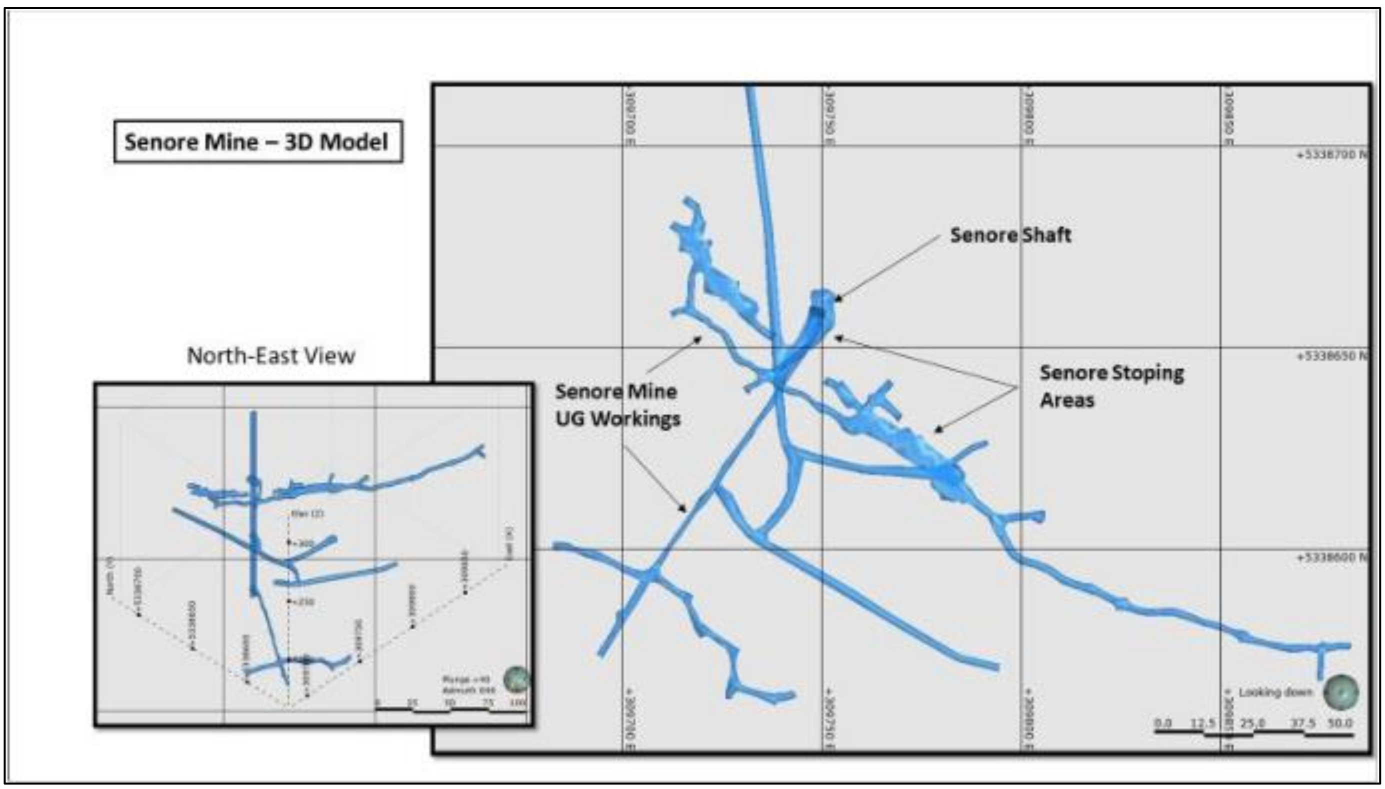

Source: Probe Gold, 2021.

### 6.1.3 Former Senore Mine

According to the latest technical report on the former Senore property (Charboneau, 2008), gold was discovered on the former Senore property in 1932 where a shaft was sunk. Subsequently, 5,791 m of diamond drilling was carried out between 1936 and 1939 by Senore Gold Mines Ltd. The discovery vein was reported to extend for over 183 m, striking north at 55°W and dipping 55° to the southwest. This quartz vein forms the core of a 6 m wide shear zone traced for 275 m along strike. The quartz core was reported to average 1.5 m in width with an average grade of 8.36 g/t Au based on six holes drilled to a depth of 76 m (Norrie, 1939).

Between 1939 and 1940, a 152 m shaft was sunk on the Discovery Zone, with levels at 66, 115 and 165 m (originally 200, 350 and 500 ft). A composite plan of the underground workings (Figure 6-3) shows that the main development was on a northwest-striking vein dipping 55° to the southwest. It also shows a long cross-cut on the 115 m level extending at least 133 m north of the main vein, suggesting that drilling had defined at least one other target to the north of the shaft. At least 26 underground diamond drill holes were drilled at the 66 m and 165 m levels (Ross, 1940 & 1941).

**Figure 6-3: 3D View of Stopes and Drifts in the Former Senore Mine**




Source: Probe Gold, 2021.

The former property appears to have lain dormant until 1973, when it was acquired by El Coco Explorations Ltd. (El Coco). Between 1973 and 1979, El Coco conducted magnetic and VLF-EM surveys, basal till geochemistry, and diamond drilling of nine holes totalling 1,253 m, which resulted in the discovery of the North Zone. Three additional drill holes were situated outside the present property in Senneville Township to the west (Bergmann, 1973, 1974, 1975a, 1975b, 1976, 1977, 1978a, 1978b and 1979).

## 6.2 Former Monique Property

The first exploration work on the former Monique property dates to the mid-1940s when Starlight Mines Limited (Starlight) completed a magnetic survey. The first gold occurrences were discovered in 1945 during a diamond drill hole campaign by Starlight. They drilled six holes for 1,630 m in the southern part of the former property, and the best gold value was 1.4 g/t Au over 7.6 m. During the same period, Courmont Gold Mines Ltd (Courmont) completed a magnetic survey that covered the northern part of the former Monique property. In 1946, Courmont drilled 17 holes (4,326 m), and the best gold value was 21.0 g/t Au over 0.94 m.

SOQUEM drilled three holes (549 m) in 1978 to test induced polarization anomalies. Interesting gold values were intersected at that time in holes 838-1 (10.28 g/t Au over 0.3 m and 7.20 g/t Au over 0.91 m) and 838-3 (4.11 g/t Au over 1.52 m and 5.48 g/t Au over 1.25 m).

Société Minière Louvem Inc. (Louvem) optioned the former property from SOQUEM in 1983 and drilled 42 holes (12,358 m) in 1984 to test the gold zones discovered on the former property in 1983. Several gold zones were discovered: A, B West, B East and C.

In 1987, a magnetic survey was completed on the former property by Exploration Monicor Inc. (Monicor), the new owner of the property. A total of 17,682 m of diamond drilling was completed, comprising 69 new holes and 2 deepened holes. The objective was to test the lateral and depth extensions of the known gold zones. The G Zone, a new gold-bearing structure, was discovered. In 1989, two diamond drilling programs of 66 holes and 25 holes were completed by Monicor.

In 1989, a metallurgical and mineralogical study of the gold mineralization of the former Monique property was completed by the Centre de Recherches Minérales (CRM) for Cambior. The study's objective was to test whether mineralized material from Monique could be processed at Cambior’s mill on their Béliveau mine site.

In August 1990, three vertical HQ-size diamond drill holes were completed to obtain material for metallurgical testing. Over the 1992 to 2003 period, no exploration work was conducted on the former Monique property.

Richmont started its first exploration program in 2004. In 2007, Geopointcom was mandated by Richmont to complete preliminary modelling of the A, B, G and J gold-bearing zones and to prepare a mineral resource estimate (D’Amours, 2007) on the former Monique property.

In 2011, Richmont completed an 8,117 m exploration drill program on the G and J zones on the former Monique property.

The results of these programs were presented in the first NI 43-101 technical report on the former Monique property (Vincent, 2012). Richmont began site preparation for a bulk sampling program in late 2012. Overburden excavation began in February 2013, and commercial production commenced on October 1, 2013.

## 6.3 Former Monique Mine

Richmont extracted a bulk sample to confirm the gold recovery for the G Zone mineralization and the grade estimation in the Monique geological block model. Site preparation for the bulk sampling program started in late 2012, and blasting of the bulk sample occurred on May 14, 2013. A total of 8,494 t of G Zone mineralization was processed in Richmont's Camflo mill near Malartic, Québec, from May 28 to June 3, 2013, which produced 717 oz of gold with a recovery of 95.1%. The calculated head grade of the bulk sample was 2.76 g/t. The second half of the bulk sample was processed from July 1 to 9, 2013, producing 950 oz of gold with a recovery of 96%. The bulk sample on the G Zone mineralization confirmed the block model and the gold recovery rate at the Camflo mill. The Camflo mill was a Merrill-Crowe conventional-type mill with circuits for crushing, grinding, gold cyanidation, and precipitation using zinc powder.

Infill drilling was completed concurrently in 2013.

Commercial production at the Monique mine began on October 1, 2013, and the mine ceased operations on January 17, 2015. A total of 660,655 t grading 2.47 g/t Au was extracted from the mine for 51,488 oz of in-situ gold. The ore was processed at the Camflo mill.

**Table 6-1: Historical Work on the Novador Project**

| Year | Company | Work Description | Other Records | References |
|---|---|---|---|---|
| 1930 | Buissières & Massicotte Prospectors | Acquisition of the Bussières mine property | Courvan area | P. Trudel, 1986 MB-86-23 |
| 1931 | Treadwell-Yukon | Property option of the Bussières mine property diamond drilling, trenching | Courvan area | P. Trudel, 1986 MB-86-23 |
| 1931-1932 | Noranda Mines Ltd. | Trenches five DDH | Discovery of No. 1 and No. 2 showings in SW part (Pascalis Area) | Internal documents, GM 08491, GM 42239 |
| 1932-1935 | Treadwell-Yukon & Buissières Mining Co. Ltd. | First period of production of the historical Bussières mine | 91,580 t @ 5.34 g/t Au for a total of 15,711 ounces of gold (Courvan area) | P. Trudel, 1986, MB-86-23 |
| 1932 | Buissières Mining Co. Ltd. | Shaft sinking to 206 m; development of 4 levels (61, 107, 152 & 198 m); | Beginning of the production in October of the historical Bussières mine (100 short tons/day) | P. Trudel, 1986, MB-86-23 |
| 1933 | Buissières Mining Co. Ltd / Quebec Gold Mining Corp. | Historical Bussières mine | Rate of production increased to 150 st / day. Control of the mine passes from Treadwell-Yukon to Quebec Gold Mining Corp. (Courvan area) | P. Trudel, 1986, MB-86-23 |
| 1935 | Quebec Gold Mining Corp. | Bussières mine closure due to lack of profitability | Courvan area | P. Trudel, 1986, MB-86-23 |
| 1932 | Senore Gold Mines (Resenor) | Discovery of Resenor (Senore) deposit (Pascalis area) | The discovery vein was reported to extend for a length of over 183 m (600 ft) striking N 55° W and dipping 55° to the SW. This quartz vein forms the core of a 6 m wide shear zone which had been traced for 275 m along strike. The quartz core was reported to average 1.5 m in width with an average grade of 8.36 g/t Au, based on six drill holes, to a depth of 76 m.<br>A composite plan of the underground works shows that the main development was on a northwest-striking vein dipping at 55° to the SW. It also shows a long crosscut on the 115 m level extending at least 133 m north of the main vein, suggesting that drilling had defined at least one other target to the north of the shaft. This may have been the 104 Zone. | GM 08460, GM 08459, GM 08462A, GM 09462C, GM 08426A, GM 08507, GM 08457, GM 08458, GM 14573 |
| 1936-1939 | | Trenching 5,791 m of DDH | | |
| 1939-1940 | | A 152 m shaft sunk with levels 66, 115 and 165 m | | |
| 1940-1941 | | 26 UG DDH (U1 to 26,1 to 6) from levels 66 and 166 m | | |
| 1945-1947 | | Geophysical surveys (mag & resistivity) with 1,560 m of surface DDH | | |
| 1936 | Pascalis Gold Mines | Several DDH completed on the No.1 showing (Now former L.C. Béliveau mine). Prospecting, geological mapping, trenching, diamond drilling, soil geochemistry and ground geophysics (MAG, EM, VLF, IP). One shaft sunk on the former Pascalis property. UG developments have been made in gold-bearing structures on several levels, namely 625, 825, 1025, 1250 and 1500 ft. Boreholes were also made UG | 3 holes were drilled on the Highway showing (24A,25A,26A – 983 m). Best intercepts include: 24A: 9.6 g/t Au / 5.4 m, 10.3 g/t Au / 0.3 m; 26.1 g/t Au / 0.4 m & 26A: 1.4 g/t Au / 0.4 m. The work was abandoned in 1942 because of the war and for other unexplained reasons. | Internal documents. GM 08489-A to C, GM 39210, GM 09747 |
| 1937-1942 | Cournor Mining Corp. | Second period of production of Bussières mine | 101,512 t @ 4.11 g/t Au for a total of 13,560 oz of Gold | P. Trudel, 1985 |
| 1937 | | Shaft dewatering, construction of a new mill (cyanidation process), resumption of the production | Cournor Mining Company Acquires Bussières Mining Co. | |
| 1939 | | Amalgamation with Beaufor Mining Corp. Construction of a 900 m long cross-cut drift from the 198 m level towards the north to explore the Creek Zone | Start of the exploitation of the Beaufor and Bussières mines simultaneously | |
| 1940 | | Shaft deepening to 245 m; development of the 236 m level; completion of the 900 m long cross-cut drift; construction of a vent shaft at the Creek Zone with two stations (137 & 168 m) | | |
| 1942 | | All the Bussières ore is now from the Creek Zone | A fire destroys the mine offices and the warehouse in March. Closure of the mine in July | |
| 1938 | Beaufor Mining Corporation | UG development and drill hole location plans | Pascalis area | GM 39204 |
| 1940 | Cournor Mining Co. | 61 DDH (10,350 m) Bussières mine, Creek and SW zones | Courvan area | Internal documents |
| 1945 | Courtmont Gold Mines Ltd. | Diamond drill hole log (DDH No-1). | Monique area | GM 08389 |
| | Courtmont Gold Mines Ltd. / Koulomzine, Geoffroy, Brossard Co. | Magnetometer Survey | Monique area | GM 31880 |
| 1945 | Starlight Mines Ltd | Magnetic survey. Six DDH (No-1 to No.6) 1,630 m | Best results obtained 1.4 g/t Au over 7.6 m (Monique area) | GM 08350-A, GM 08350-B |
| 1945-1946 | Cournor Mining Corp. | 55 DDH (9,562 m) mainly on the SW zone, located approximately 1 km SW of Bussières main shaft | Courvan area | V-1946-COU-01 (internal document) |
| 1947 | Courtmont Gold Mines Ltd. | 17 DDH totalling 4,326 m (Monique area) | Best result: 21 g/t Au over 0.94 m | GM 00107 |
| 1948 | Dome Exploration Canada | 1 DDH in lot 41 Monique area Assessment Report | Ultramafic lavas were intersected but no gold value was reported and there are no drill logs | GM 00474 |
| 1951 | Quebec Asbestos Corp. | 31 DDH (1,234 m) and ground magnetic surveys over an asbestos-bearing peridotite | Option on five claims owned by Cournor Mining Company | GM 02198 |
| 1956 | | 30 DDH (5,137 m) to test the asbestos-bearing peridotite | | GM 04941 |
| 1959-1964 | Camflo-Mattagami Mines Ltd – Hoyles Claims Option | Monique area magnetometer survey. 4 DDH (C-1 to C-4 totalling 1,179 m) | Ultramafic lavas were intersected. Assays were not reported but visible gold in few small quartz veinlets is mentioned in the drill logs | GM 08679, GM 09012-A, GM 09012-B, GM 11054, GM 13206, GM 15935 |

| Year | Company | Work Description | Other Records | References |
|---|---|---|---|---|
| 1959 | Pascalis Gold Mines | Mapping on the No. 1 and No. 2 and Highway showings | Pascalis area | Internal documents |
| 1963-1965 | | 11,840 m of DDH and 3 percussion DDH | | Internal documents |
| 1963-1964 | Courvan Mining Corp. | 47 DDH (C-56 à C-102; 13,592 m) completed on SW Zone | Best result: DDH 66A: 2,7g/t Au / 0,4 m & 1,4 g/t Au / 0, 8 m (located in the area of the former Lucien Béliveau mine) | GM 13396, GM 13647, GM 14035, GM 17505, GM 14113, GM 14126, GM 15459 |
| 1965 | | 4 DDH (C-103, 104, 105 & C-109; 1,225 m) on the Bussières mine | Courvan area | GM 16846, GM 17505 |
| 1967 | | 2 DDH (e, C-114 & C-115 m; 241 m) | Courvan area | GM 21557 |
| 1968 | | EM Turam and magnetometric surveys (45-km-lines N-S grid) | The survey showed the presence of several anomalies, one of which could very well be the expression of a sulphide deposit | GM 24026 |
| 1968 | First National Uranium Mines Ltd. | IP Survey (Monique area) | Several anomalies were detected | GM 23924, GM 23923 |
| | First National Uranium Mines Ltd. | Magnetic, EM & IP Survey on Starlight Group of claims (Monique area) | Several anomalies were detected | GM 23923 |
| | Agar and Hoyles Claims | Airborne geophysical survey (Monique area) | Ultramafic units were detected by this survey | GM 23137 |
| | Courvan Mining Co Ltd. / Sullico Mines Ltd. | IP Survey | Courvan area | GM 23138 |
| 1969 | Courvan Mining Corp. | 9 DDH (C-116 à C-124; 1,440 m) | Drilling to test the IP and geophysical anomalies. Courvan area | GM 25333, GM 25808 |
| 1968 | Belra Explorations Ltd. | 1 DDH (B-1; 231.65 m) | SE corner Pascalis area | GM 24030 |
| 1968 | Belra Explorations Ltd. | Airborne and Ground EM survey. Geological survey | (SE corner Pascalis area). One anomaly was detected but not located on the property | GM 24031 |
| | Geotechnical Development Company Limited | Geological survey. Ground mag survey Pascalis and Senneville Townships | Iso dynamic contour using geological outcrop and magnetic survey | GM 58998 |
| | Dome Exploration Canada – Agar-Hoyles Option | Turam Electromagnetic and Magnetometer Surveys (Monique area) Input survey | Several anomalies were detected | GM 24626, DP 042 |
| 1971 | Abitibi Metals Mines Ltd.<br>Claims Lamothe Claims Tremblay | 2 DDH (DDH AM-1, AM-2; 611 m). (Monique area) | Best gold intersection: 5.83 g/t over 0.3 m (AM-2) | GM 26881, GM 27796 |
| 1971 | Canex Aerial Exploration Ltd. | Geological & Geophysical Surveys, Pascalis Township | East part of Pascalis area | GM 26814 |
| 1973 | Senore Gold Mines | Former Senore property summary report. Reserves evaluation | Half south part of Senore claim group. Historical estimate of 181,400 t at 8,6 g/t Au on the Resenor Zone (non compliant NI 43-101) | GM 61114 |
| 1974 | Falconbridge Nickel Mines Ltd | Ground EM + mag on the New Pascalis Gold mines property | Highly anomalous values observed. A second zone of high magnetic intensity occurs at the Highway showing. The anomalous responses have been grouped into 3 categories and potential targets were submitted: A (mag, VLF & CEM), B (VLF, CEM) and C (VLF) | GM 29813 |
| | Valdex Mines Inc. / Magloire Bérubé Consulting | Electromagnetic Survey (Monique Area) | Several anomalies were detected | GM 29534 |
| 1974-1975 | Canadian Johns-Manville Co. Ltd., | 10 DDH logs Courvan (CV-74-1 to CV-74-6 & CV-75-1 to CV-75-4; 750 m) | To test the IP and geophysical anomalies | GM 30750 |
| 1976 | Courvan Mining Co Ltd | 11 DDH (C-76-1 to C-76-11; 1,057 m) | Courvan area | GM 32319 |
| 1977 | Courvan Mining Corp. | 2 DDH (C-77-1 and C-77-2; 432 m) | Courvan area | GM 32915 |
| 1980 | | 10 DDH (C-125 to C-134; 2,014 m) | Courvan area | GM 36973 |
| 1976 | El Coco Explorations Ltd. | Evaluation Report on Claims acquired in Pascalis Township | Pascalis area | GM 61086 |
| 1973-1979 | | Magnetic and VLF surveys, basal till geochemistry. 9 DDH totalling 1,253 m on the NW area | Discovery of the North Zone | GM 34700, GM 33574, GM 32987, GM 31049, GM 34555, GM 32116, GM 32010, GM 1086, GM 29906, GM 61087 |
| 1978 | | Technical report reserve evaluation report | Historical Resource for Resenor deposit. | GM 41895 |
| 1983 | | 18 DDH (3,132 m) to the discovery of the North Zone | | Internal documents |
| 1977 | SEREM Limited | Geological & geophysical surveys on Input-Abitibi project | Pascalis Township | GM 33234 |
| 1978-1979 | Société Minière Louvem Inc. / Soquem | 3 DDH (DDH S-261 to S-263; 800 m; 2 DDH (838-02 and 838-03; 388 m); 1 DDH (838-04; 251 m) | Monique area | GM 34224, GM 35506, GM 35050 |
| 1981 | Soquem | Option of the Bussières property. IP Survey. 91 percussion DDH and 15,000 m² of stripping | (Pascalis area). Many weak chargeability anomalies detected and some of them seems to be associated with low resistivity corresponding to shear zones in the bedrock. 6 holes were recommended | GM 38286 |
| 1982 | C. Lamothe | EM Survey | Lots 14 to 24, Range 3, middle part of the Pascalis area, Pascalis Township | GM 39495 |
| | Soquem | 5 DDH (932-81-1, 932-81-6 to -9; 867 m) | North of the Courvan area and west part of the Pascalis area. 5/9 DDHs were drilled. Best result: 1.9 g/t Au / 1.3 m (932-81-9) | GM 38287 |
| | Soquem | IP + mag survey. Ground mag+EMH+IP surveys on Showing No. 1 | Mid west end of the Pascalis area. Drilling is recommended. | GM 38856, GM 40063 |
| | Villebon Resources Ltd. | Evaluation of the property | Middle part of the Pascalis area. Pascalis Township | GM 40333 |
| | Soquem | Validation and re-interpretation of former geophysical surveys | An IP survey is recommended. (Monique area) | GM 39680 |

| Year | Company | Work Description | Other Records | References |
|---|---|---|---|---|
| 1983 | Villebon Resources Ltd. | Report on a humic geochemical survey 25 DDH (VP-82-1 to 7, VP 83-8 to 26; 2,356.4 m) | Pascalis Township. Best result: 8.7 g/t Au / 2.2 m (VP 83-13) | GM 40647, GM 40332 |
| 1983 | Beach Gold Mine Ltd. | Geophysical Surveys on Beach Gold Mines Ltd. | Pascalis Township | GM 39872 |
| | El Coco Explorations Ltd. | Magnetometer survey | El Coco property (Pascalis Township) | GM 39896 |
| | Soquem | Humus geochemical survey on the former Pascalis project (Pascalis area) | A total of 1995 humus samples were taken for this survey. A systematic sampling of 584 samples was done between L20 and L59. 13 anomalies were detected. Values up to 1000ppb Au were hit on anomalies corresponding to historical showings | GM 40062 |
| | Soquem / Jean-Marie Hubert | IP survey (dipole-dipole) | Middle part of Pascalis area. No new information was detected from the previous survey done in 1982 | GM 40276 |
| | Villebon Resources Ltd / Phoenix Geophysics Lt | IP survey | Middle part of Pascalis area | GM 40334 |
| | Villebon Resources Ltd / H. Ferderber Geophysics Ltd | EM, ground magnetic Surveys | Middle part of Pascalis area | GM 40335 |
| | Société en commandite Metalor "A"/ Boileau & Gauthier, ingénieur-conseils | IP and resistivity surveys | Senore area | GM 40906 |
| | Soquem / Magloire Bérubé | Drilling (10,339 m) | | GM 40907 |
| | | Dipôle-dipôle IP survey. 7 DDH (1,407 m) (935-83-01 to 935-83-07) & 16 DDH (3,440 m) | Courvan area | GM 39914, GM 40275, GM 40510, GM 41825 |
| | | Helicopter-Borne Survey - Vemex, Monique & Courvan projects. Louvem optioned the property from SOQUEM and drilled 5 DDH (1,176 m) (Monique area) | Several gold zones intersected by hole 05-83C; 9.69 g/t Au over 0.61 m, 4.32 g/t Au over 1.35 m, 21.01 g/t Au over 1.45 m, 13.92 g/t Au over 0.37 m and 8.26 g/t Au 1.46 m | GM 40755, GM 41827 |
| | | 2 DDH (963- 83-1 & 2; 311 m). Ground EM and geological surveys. Algar Project – Pascalis area | Best result: 1.68 g/t Au / 0.4 m (83-2) | GM 40696 |
| 1984 | Soquem | UG exploration (666 m ramp, 625 m, drifts and 160 m raises), 2,576 m surface drilling and 9,810 m UG | | Internal documents |
| | Soquem / Claude Gobeil | Exploration program on Laverdière property | NE part of the Pascalis area | GM 41257 |
| | Soquem / Jean-Marie Hubert | Geophysical surveys on Laverdière property | NE part of the Pascalis area | GM 41258 |
| | Sullivan Mines Inc. | Exploration program on Villebon property (Pascalis Township) | Middle part of the Pascalis area | GM 41864 |
| | Soquem / Explorations K.G.A. Inc. | Refraction seismic survey | Pascalis area | GM 42103 |
| | Courvan Mining Co. Ltd. / Québec Ministry of Energy and Resources | Study on volumes and assays for several mineralized zones of the former Courvan property. Notes on New Pascalis - Senore - Perron | | GM 41253, GM 41895 |
| | Société Minière Louvem Inc. | 14 DDH on Courvan (84-02-01 to 84-02-14; 2,527 m) | | GM 42481, GM 62884, GM 41287, GM 42095, GM 62883 |
| | | 37 DDH, 1 extension and 4 wedges (12,088 m) on the Monique area | Several gold zones were discovered: A, B West, B East and C | |
| | | 2 DDH (962-84-03 & 04; 495 m) | Project Algar /Pascalis Township | |
| 1985 | Louvem / Sagax | PPL IP survey (19.8 km-lines) | NW part of the Courvan area | GM 43401 |
| | Soquem / Alain P. Boudreault | Geological and geochemical (humus sampling surveys Ip survey on Algar property) | Best results: Garneau, DDH 962-84-03 with 3.9g/tau/0.5, DDH 962-84-04 with 4.9 g/t au / 0.6 m, algar showing with 0.17 g/t au and NW showing. geochemical values vary between 9 to 36 ppb Au and assay samples up to 1.2 g/t au and 2.2% Cu. 113 ppb was obtained on rhyolitic block | GM 43361, |
| | Soquem / Jean-Marie Hubert | Geophysical surveys on Laverdière property | North and NE part of the Pascalis area | GM 41973 |
| | Soquem / Claude Gobeil | Exploration program on Laverdière property | North and NE part of the Pascalis area | GM 42338 |
| | Société Minière Louvem Inc. | 10 DDH on Monique property (85-1 to 85-10; 2,549 m) main auriferous zone. Sampling of the basal till 101 DDH (1,377 m). Summary of Monique deposit geology (Quebec prospectors association conference) | Drilling was to test the extension of the known gold zones | GM 62882, GM 62885, GM 62886 |
| 1986 | Soquem / Géomines Ltée / Edwin Gaucher | Geophysical survey complements on Laverdière property | NE part of the Pascalis area | GM 42675 |
| | Soquem / Claude Gobeil | Exploration work on Laverdière property | NE part of the Pascalis area | GM 42838 |
| | Soquem / Alain P. Boudreault | Exploration program | Middle part of Pascalis Area | GM 43303 |
| | Soquem / Jean-Marie Hubert | Induced polarization survey on Colombière and Algar properties | Middle part of Pascalis Area | GM 43360 |
| | Les Mines Garne "Au" Inc. | Geophysical surveys on Pascalis Township (Garne "Au" property) | Middle east part of Middle part of Pascalis Area | GM 43736 |
| | Société Minière Louvem Inc. | 21 DDH on Courvan (85-02-01 to 85-02-08 & 86-02-01 to 86-02-13; 4,190 m). | Best results: 52.0 g/g Au / 0.6 m (02-85-02), 4.1 g/t Au / 2.0 m (02-85-03), 8.9 g/t Au / 1.4 m (02-85-06), 6.5 g/t Au / 2.7 m (02-85-07), 43.9 g/t Au / 0.9 m (02-86-03) | GM 43399, V-1987-LVM-02 (Document interne) |

| Year | Company | Work Description | Other Records | References |
|---|---|---|---|---|
| | Société Minière Louvem Inc. / Sagax Geophysics Inc | IP Survey | Courvan Area | GM 43401 |
| | Québec Ministry of Energy and Resources | Geology of Bussières mine | Courvan area | MB-86-23 |
| 1987-1988 | M.C. Lamothe | 1 DDH (CRM-02; 79 m) | middle part of the Pascalis area | GM 49777 |
| | Exploration Monicor inc. | 20 DDH (02-87-01 à 02-87-11 & 02-88-12 à 02-88-20; 7,318 m) | Courvan area | R-1988-MON-01 (internal document) |
| | | Magnetic survey. 1987 - 68 DDH (17,678 m), 1 wedge drilled, and 2 DDH were deepened (83-05F and 84-13) 1988 - 43 DDH (10,394 m) in-house studies on the A & B zones to evaluate the feasibility of an UG or open-pit operation | New owner of the Monique property. Drilling program was to test the lateral and depth extensions of the known gold zones. The G Zone, was discovered | Internal report |
| | Beaufield Resources Inc. | 30 DDH | Middle east and SE part of Pascalis area | GM 46102 |
| | Claims Audet | Magnetic survey was completed covering the Albert Audet property (half north of Lots 39 to 41 R IX) | North of Monique gold deposit | GM 47820 |
| 1987-1992 | Cambior Inc. / Pierre Ouelette | 8 DDH (COL-89-19 to 26; 2,170 m) | Pascalis area. Best intercepts: 89-22: 15.6 g/t Au /0.4 m; 89-23: 2.7 g/t Au / 1.3 m; 89-24: 1.1 g/t Au / 0.8 m; 89-25: 1 g/t Au / 0.8 m. | GM 49559 |
| | Cambior Inc. | VLF and IP Surveys. 36 DDH (8,844 m) over all the property | Pascalis area | Internal documents |
| | Cambior Inc. | UG exploration program | Bulk sample of 23,160 mt = 4.28 g/t Au with a 96% recovery) ==> 300 m shaft was sunk (reserves calculated totalling 1,161,068 mt at 3.24 g/t Au) | Internal documents |
| | Cambior / Val d'Or Geophysics | Ground gradiometric + mag + VLF survey | Pascalis area. The mag survey identified many EW to NE-SW M to UM sub outcropping masses. A NE-SW fault is also present. The EM-VLF survey identified a structural pattern-oriented EW. | GM 48230 |
| | Cambior Inc. | 14 DDH (88-01 to 15, 88-17; 4,018 m) | Courvan area | GM 48256 |
| | Cambior Inc., New Pascalis Mines Ltd. | Geological survey | Mapping of former Courvan, Colombière, Pascalis and Algar properties. | GM 49535 |
| | Cambior Inc. | IP survey | 2 areas were surveyed (Pascalis area) on the SE grid, 2 areas of high resistivity caused by the bedrock. No IP anomaly was detected. In the North part, 2 areas of high resistivity caused by the bedrock. 2 IP anomalies were detected in the bedrock indicating occurrence of mineralization | GM 49373 |
| | Cambior Inc. | 14 DDH (COL-91-27 to COL-91-40; 4,251 m) | Pascalis area | GM 51531 |
| 1989-1990 | Québec Ministry of Energy and Resources | Study of Bacillus cereus on soils over Monique deposit | | MB 89-45 |
| | Exploration Monique Inc., Société Minière Louvem Inc., Soquem | 89 DDH (22,516 m) Monique Area | Discovery of the K and L zones | GM 49924 |
| 1990-1991 | Centre de Recherches Minérales (CRM) / Cambior | A mineralogical study of the gold mineralization of the Monique. Three vertical HQ size DDH (344 m) on the G Zone to obtain material for metallurgical testing | Objective is to test if the Monique's mineralized material could be treated at their mill on the Lucien Béliveau mine site | Delisle (1991); Wilhémy (1990) |
| | Centre de Recherches Minérales (CRM) / Gestion Explo-Mines | Metallurgical tests on Monique's gold mineralizaed material. | Direct cyanidation of the mineralized material grinded at 75% -200 mesh shows a recovery of 96.7% after 24 hours, from material with a head grade of 5.2 g/t Au | |
| 1991 | Monterval | Geotechnical study of the G Zone crown pillar zone with 9 geotechnical DDH (106.88 m) | Piezometers were installed in 4 of these 9 holes. To evaluate the grade of the G Zone crown pillar | Monterval (1991) |
| | Exploration Monique | 12 DDH (728 m) | | Husson (1990) |
| | Claims Audet | Magnetic survey was completed covering the Albert Audet property | North of Monique gold deposit | GM 51059 |
| 1993 | Hyder Gold Inc. | 3 DDH (P-92-01 to 03; 549 m) | Eastern end of the Pascalis area | GM 51830 |
| 1995 | Explorations Carat Inc. / Claims Robert | Line-cutting and EM and magnetic surveys | Middle part of the Pascalis area | GM 53648 |
| 1997 | Jean-Baptiste Lavoie / Jacques Munger Ingénieur-géologue conseil | Magnetic and EM (VLF) surveys trenching | Middle part of the Pascalis area (J.B.L. property) | GM 56249, GM 57175 |
| | Léo Audet / Jacques Munger Ingénieur-géologue conseil | HEM (Max-Min) surveys. Soil geochemical surveys | Eastern part of the Pascalis area (Pascalis-Audet property) | GM 56293, GM 56294 |
| | Donald Trudel | 2 DDH (97-4 and 97-6; 129.37 m) | Middle part of the on Pascalis area | GM 56308 |
| | Ghislaine Fournier Property | Prospection and geological mapping IP survey | Middle part of the on Pascalis area | GM 57172, GM 57173 |
| | Amblin Resources Inc | Magnetic survey | West part of Senore area | GM 54778 |
| 1998 | Quebec mining exploration assistance program | Exploration field works | Middle part of the Pascalis area | GM 55805 |

| Year | Company | Work Description | Other Records | References |
|---|---|---|---|---|
| | Géola Conseil en Exploration / Donald Trudel | IP survey | Middle part of the Pascalis area | GM 55806 |
| 1999 | Exploration Aubut Inc. | Geological surveys on East & West showings | Middle part of the Pascalis area | GM 56568 |
| | Amblin Resources Inc. | IP and resistivity reconnaissance survey | West part of Senore area. IP survey show numerous chargeability anomalies. Those few which coincide with magnetic highs may be caused by magnetite, which may or may not cause an IP effect | GM 56617 |
| 2001 | Globex Mining Entreprises | Mag survey | SW part of Senore area | GM 58736 |
| 2003 | Claims Bambic | Mag survey | SW part of Senore area | GM 60331 |
| 2004 | Exploration Malartic-Sud Inc. | Drilling (4 DDH PA-04-01 to 04; 894 m). Magnetic survey | Pascalis area | GM 61899, GM 61596 |
| | Thelon Ventures Ltd. | Line cutting, Ground mag + IP surveys. 6 DDH (SE-04-01 to 06; 738 m) | SW part of Senore area. SE04-01 and 02 drilled on the Resenor Zone and SE-04-03 on the North Zone. Best assays: 7.75 g/t / 0.17 m and 14.30 g/t Au / 0.44 m (SE-04-01). | GM 61767, GM 61766 |
| 2004-2007 | Richmont Mines | 6 DDH (3,238 m) | Interesting gold values were intersected in the G Zone (1.38 g/t Au over 2.0 m and 4.86 g/t Au over 3.4 m) and in the J Zone (4.21 g/t Au over 2.6 m and 7.09 g/t Au over 3.0 m). (Monique area) | Internal documents |
| | | 1 DDH (MO-04-07: 660 m) | To test the J Zone at depth. Best results: 5.12 g/t Au / 2.0 m and 1.99 g/t Au / 4.3 m (Monique area) | |
| | | | | |
| | | 5 DDH (CO-06-01 à CO-06-05,382 m) | Courvan area | |
| | | 2 DDH (COL-2004-01 & 02; 801 m) | Colombière area | |
| 2006-2008 | TSR Resources Inc. | Heliborne Mag - EM (TDEM) & versatile time domain (VTEM) Surveys. Reconnaissance mapping. 19 DDH (TSR-07-01 to 19; 589.35 m) | Northern part of the Pascalis area | GM 63724, GM 64468, GM 63018, GM 63313, GM 63019 |
| 2008 | Golden Valley Mines | Magnetometry and IP surveys | Northern part of the Pascalis area. (Lac Laverdière property) | GM 63905 |
| | Adventure Gold Inc. | Exploration report. 2 DDH (BN-08-01 & 02; 426 m) | Western part of the Pascalis area. (Beaufor North property) | GM 64206 |
| 2010 | Adventure Gold Inc. | 2008-2009 Exploration works on the Senore Area. 13 DDH (SE-08-07 to 16 and SE-09-17 to 19; 5,253 m) | Senore Area | GM 65328 |
| | X-Ore Resources | Field work program | Middle part of the Pascalis area | GM 65135 |
| 2010-2011 | Richmont Mines | Condemnation (4,202 m, 22 DDH) and a definition (8,117 m, 47 DDH) drilling program on the G and J zones. 18 exploration DDH (3,632 m) | Monique area | Adam et al., 2013, Vincent, 2012 |
| 2012 | X-Ore Resources | Resistivity, IP and Mag GPS surveys | Middle part of the Pascalis area | GM 66470 |
| 2012-2013 | Richmont Mines | Two IPower 3D surveys. Definition drilling: 4 DDH in 2012 and 9 DDH in 2013 (1,089 m). Exploration program: 13 DDH (4,549 m). Site preparation for the bulk sampling program started in late 2012 and the excavation of the overburden started in February 2013 | In the first survey, the G and J zones showed a resistivity anomaly with no chargeability and few other anomalies were detected in the extension of known gold zones. The second IPower 3D survey, detected a few more anomalies in the northern and eastern sections of the Monique area. | Internal documents. (Adam et al., 2013) |
| | | | | |
| 2013 | Adventure Gold Inc. | Report and the filing of the statutory works | Pascalis area | GM 67905 |
| 2014-2016 | | Exploration work (prospecting, channel sampling and drilling). 15 DDH (2,966 m) | Probe Metals Inc. acquired Adventure Gold Inc. in June 2016 | GM 69704 |
| 2014 | Richmont Mines | Monique open-pit operation | Milled: 23,307 oz of gold. Stockpile: 157,000 t at 1.81 g/t Au and 54,700 t at 2.67 g/t Au | DV 2015-01 |
| 2015 | | Closure of the Monique open-pit operation | The stockpile was processed until 2016. A total (pre-production and commercial production) of 660,665 t were milled at an average of 2.47 g/t Au and 51,488 oz of gold were recovered from 2013 to 2016 | DV 2016-01. (Beauregard et al., 2021) |
| | | 3 DDH (COL-2015-01 to COL-2015-03; 1200 m) | Pascalis area | GM 70182 |
| 2016 | Ministère de l'Énergie et des Ressources Naturelles | Geological map: Val-Senneville | | Pilote et al., 2016 – CG-2016-14 |
| | | Geological map: Lac Thiblemont | | Pilote et al., 2016 – CG-2016-10 |

# 7 GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 Abitibi Greenstone Belt

The project is in the southern Superior Province of the Canadian Shield, which forms the core of the North American continent (Figure 7-1). The project lies in the Val-d'Or mining camp in the Southern Volcanic Zone in the southeastern part of the Archean Abitibi Greenstone Belt (AGB).

The AGB comprises east-trending synclines containing volcanic rocks and intervening domes cored by synvolcanic and/or syntectonic plutonic rocks (gabbro-diorite, tonalite and granite), separated by east-trending turbiditic wacke bands (MERQ-OGS, 1984; Ayer et al., 2002a; Daigneault et al., 2004; Goutier and Melançon, 2007). The volcanic and sedimentary strata usually dip vertically and are separated by abrupt, variably dipping east-trending faults. Some of these faults, such as the Porcupine-Destor Fault Zone (PDFZ), display evidence of overprinting deformation events, including early thrusting and later strike-slip and extension events (Goutier, 1997; Benn and Peschler, 2005; Bateman et al., 2008). Two ages of unconformable successor basins are observed: widely distributed fine-grained clastic rocks in early Porcupine-style basins, followed by Timiskaming-style basins composed of coarser clastic sediments and minor volcanic rocks, largely proximal to major strike-slip faults such as the Porcupine-Destor and Larder Lake–Cadillac Fault Zones (LLCFZ), and other similar regional faults in the northern AGB (Ayer et al., 2002a; Goutier and Melançon, 2007). The AGB is intruded by numerous late-tectonic plutons composed mainly of syenite, gabbro and granite, with lesser lamprophyre and carbonatite dykes. Commonly, the metamorphic grade in the Abitibi Greenstone Belt varies from greenschist to subgreenschist facies (Jolly, 1978; Powell et al., 1993; Dimroth et al., 1983b; Benn et al., 1994), except in the vicinity of most plutons where the metamorphic grade corresponds mainly to the amphibolite facies (Jolly, 1978).

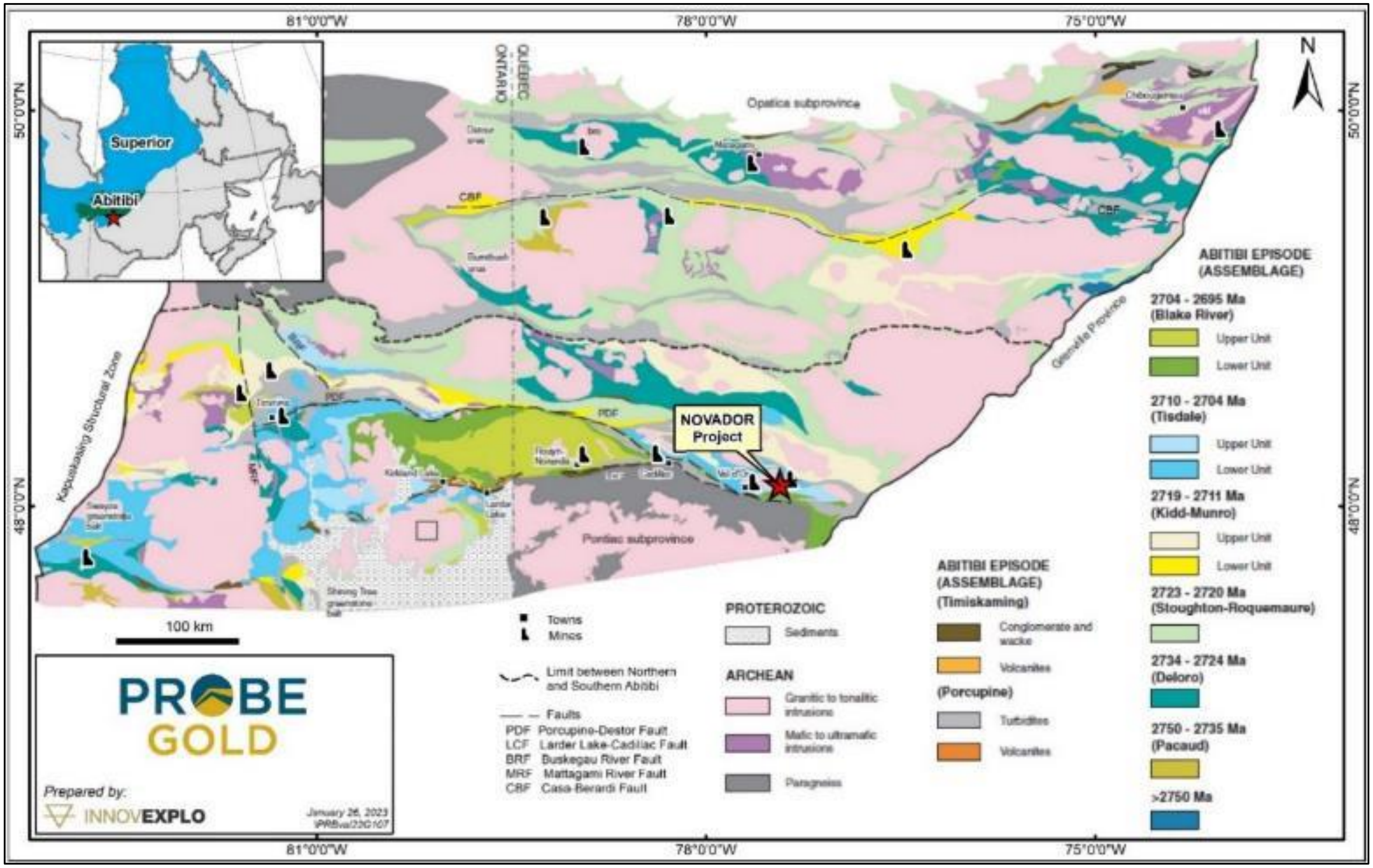
The AGB successor basins are of two types: (1) laterally extensive basins corresponding to the Porcupine Assemblage, with early turbidite-dominated units (Ayer et al., 2002a); and (2) later and aerially more restricted alluvial-fluvial or Timiskaming-style basins (Thurston and Chivers, 1990).

The geographic limit between the northern and southern parts of the AGB has no tectonic significance but is similar to the limits between the internal and external zones of Dimroth et al. (1982) and those between the Central Granite-Gneiss and Southern Volcanic Zones of Ludden et al. (1986). The boundary between the Northern and Southern parts passes south of the greywackes of the Chicobi and Scapa Groups, with a maximum depositional age of 2698.8 ± 2.4 Ma (Ayer et al., 1998, 2002b).

The Abitibi Subprovince is bounded to the south by the LLCFZ, a major crustal structure separating the Abitibi and Pontiac Subprovinces (Chown et al., 1992; Mueller et al., 1996a; Daigneault et al., 2002, Thurston et al., 2008).

The Abitibi Subprovince is bounded to the north by the Opatica Subprovince, a complex plutonic-gneiss belt formed between 2800 and 2702 Ma (Sawyer and Benn, 1993; Davis et al. 1995). It mainly comprises strongly deformed and locally migmatized tonalitic gneisses and granitoid rocks (Davis et al., 1995).

**Figure 7-1: Map of the Abitibi Greenstone Belt**




Source: InnovExplo, 2023.

## 7.2 Regional Geology

The geology of the Val-d'Or area was previously described by Latulippe (1976), Imreh (1984), and by Rocheleau et al. (1987). The stratigraphic scheme from these authors was subdivided into two principal groups: the Lower Malartic Group (containing the La Motte-Vassan, Jacola, and Dubuisson Formations) located in the northern portion, and the Upper Malartic Group (containing the Val-d'Or and Héva Formations) located in the southern portion of the region. Two major deformation zones border the Lower and Upper Malartic Groups, the LLCFZ to the south and the Garden Island Tectonic Zone (GITZ) to the north.

The sedimentary units of the Cadillac and Pontiac groups are found to the south and those of the Garden Island Formation to the north, associated with the breaks. South of the Malartic Group, the Piché Group, intercalated in the Cadillac and Pontiac, forms tectonic slices marking the LLCFZ. The Piché Group is defined by a high proportion of magnesian basaltic and komatiitic flows for which the primary textures have been largely destroyed by schistosity and coeval alteration that transformed these to talc-chlorite-carbonate schists.

Work by the MRNF (MB 98-01, DV 99-03) and a PhD thesis by Russell Scott (2005) have led to an updated subdivision of the local stratigraphy. The Malartic Block is subdivided into two stratigraphic groups based on regional tectonics and volcano-sedimentary stratigraphy, namely the Malartic Group ('lower' from the historical division) and the Louvicourt Group ('upper' from the historical division). The Malartic Group, at the base, corresponds to an Archean Ocean platform in an extensional regime associated with mantle plume volcanism (Scott, 2005). It consists essentially of variable ratios of komatiitic to tholeiitic basaltic lavas and cogenetic sills and dykes. It is divided into three formations: La Motte-Vassan, Dubuisson, and Jacola. The overlying Louvicourt Group represents a change in tectonic regime—a shift from a divergent zone to a convergent (subduction) zone, forming an arc complex. This group, which may reach 7.5 km thick, is subdivided into two formations, Val-d'Or (3.5 to 5.5 km) and Héva (1.5 to 2 km). The units generally trend E-W with a steep dip, commonly to the north, the strata being overturned.

The Dubuisson Formation, composed of tholeiitic and komatiitic lavas, is represented by a series of sequential suites of flows, mainly basaltic with komatiites, magnesian basalts, and picritic flows. The Jacola Formation is a deep-water subaqueous plain composed of tholeiitic lavas with komatiites and magnesian basalts. The transition between the Jacola and Val-d'Or formations, composed of mafic to felsic rocks, is gradual and characterized by the appearance of very thick volcaniclastic deposits of tholeiitic affinity. The project straddles rocks of the Dubuisson Formation to the north and rocks of the Jacola Formation to the south.

An intimate relationship between the Jacola, Val-d'Or and Héva formations illustrates the evolving tectonic regime. The Jacola Formation occurs at the base of the sequence, a deep marine environment in an extensional regime (mid-ocean ridge) controlled by mantle plume volcanism. There is some overlap between the onset of arc construction (Val-d'Or Formation) and the waning stages of plume volcanism (Jacola Formation). Finally, lavas associated with arc volcanism were buried by abundant lavas produced by tectonic rifting (Héva Formation). Volcanism evolved from a mantle plume rift shifting to a subduction-related setting.

The Val-d'Or Formation is a subaqueous volcano-sedimentary arc comprising several mafic-to-felsic volcanic sequences. The felsic units are discontinuous and interstratified in the mafic-intermediate units and show tholeiitic to moderate calc-alkaline affinities. Many felsic units are associated with massive sulphide deposits and locally strong synvolcanic metasomatism.

The Héva Formation comprises bimodal effusive volcanic rocks with local volcaniclastic deposits. It includes iron-rich tholeiitic basalts and differentiated synmagmatic sills. Mafic units are intercalated with thin, intermediate to felsic pyroclastic units and bedded volcaniclastic sediments. A distinct marker horizon at the contact between the Val-d'Or and Héva formations, traced over 30 km, consists of dark grey magnetic, spherulitic felsic lavas of tholeiitic affinity.

Several large granitoid intrusions have been emplaced into the local stratigraphy. The Bourlamaque Batholith is a synvolcanic granitoid intrusion (2700 ± 1 Ma) interpreted as the source of volcanism for the Val-d'Or Formation. Compositionally described as quartz diorite to tonalite (Na rich) with a transitional affinity, it lies west of the project. The batholith hosts several gold deposits, including the Beaufor and Lac Herbin mines and several past producers (Sullivan, Ferderber/Belmoral, Dumont, Dorval, and Courvan). The Bevcon Pluton, more differentiated than the Bourlamaque Batholith and younger (2680 ± 5 Ma), was introduced higher up in the stratigraphy as the alkaline monzonitic East Sullivan stock (Central Post; 2684 ± 1 Ma). In the area, numerous alkaline granodioritic to tonalitic intrusives are also present, as well as subconformable to unconformable subvolcanic to post-kinematic sills and a suite of pre- to late-tectonic quartz-feldspar porphyry dykes.

The Malartic and Louvicourt Groups have an overall homoclinal, E-W subvertical attitude. The sequence becomes younger in age to the south. Recent geological work where interference fold patterns are observed demonstrates that at least two phases of major folding (related to D1 and D2) have affected the supracrustal rocks in the Val-d'Or area. The first episode involved folding about the N-S fold axis, whereas the second dominant folding event re-folded the sequence forming E-W fold axes and axial planes. Along with folding, the D2 deformation event is characterized by a regional E-W subvertical schistosity which may form small to extensive and wide anastomosing shear zones (Desrochers and Hubert, 1996). A late D3 event is outlined by a sparse crenulation cleavage, mostly superimposed on strongly schistose rocks and by a set of NNW- and NE-trending brittle faults.

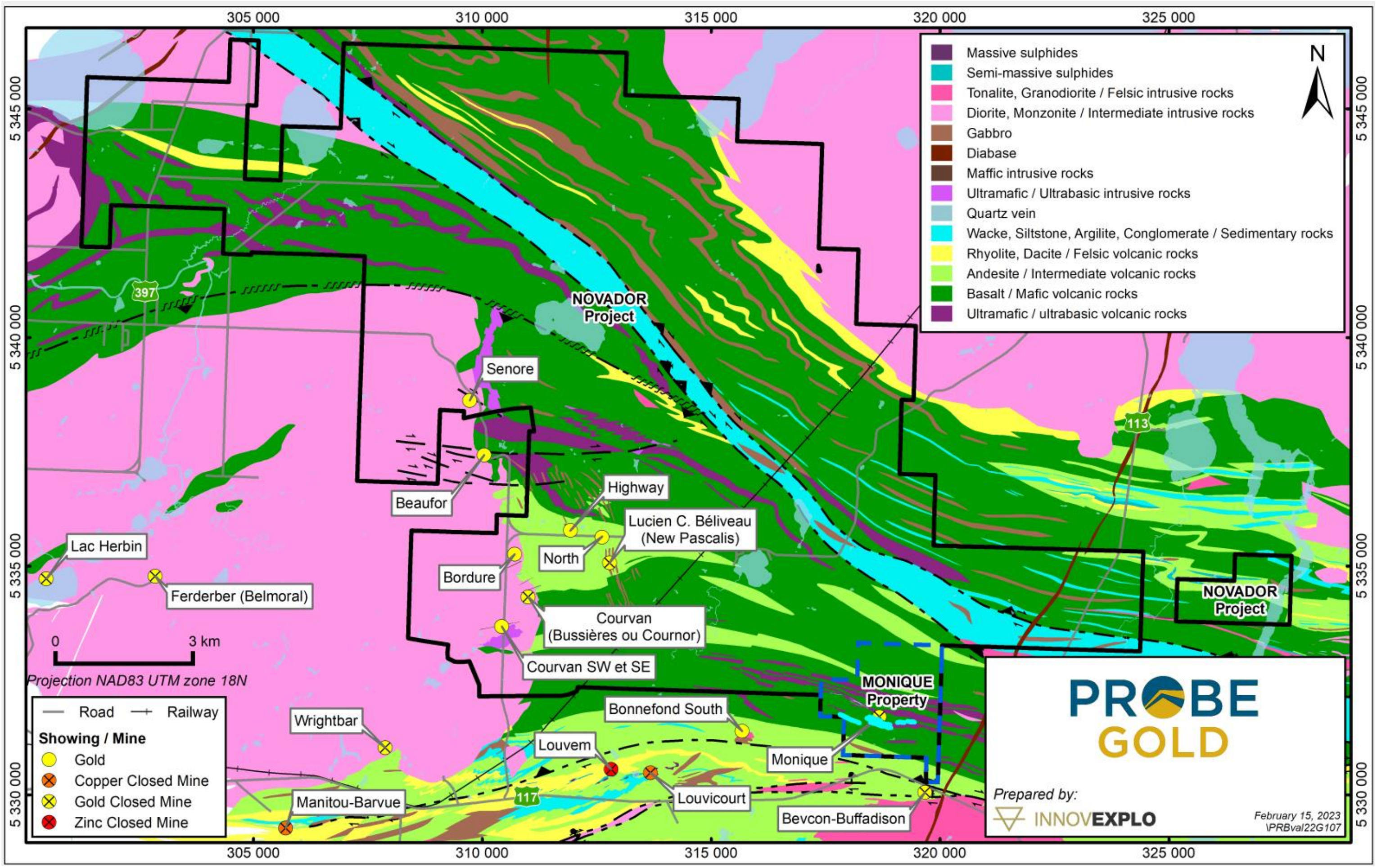
The metamorphic grade of the Malartic Group volcanic stratigraphy is middle greenschist facies, as indicated by a chlorite-epidote-carbonate mineral assemblage in mafic rocks. The regional metamorphic grade increases towards the south to upper greenschist facies near the LLCFZ and to amphibolite facies further south.

## 7.3 Local Geology

The project is situated within the Val-d'Or mining camp, which lies within the eastern segment of the southern part of the Abitibi Subprovince at its boundary with the Pontiac Subprovince. In this region, the LLCFZ marks the separation between these two subprovinces. The orientation of the volcanic rocks on the project is generally E-W trending and subvertical. The project is mainly underlain by tholeiitic mafic volcanic rocks of the Dubuisson Formation in the north (Pascalis area), by tholeiitic lavas of the Jacola Formation in the centre-east and by felsic to mafic volcanics of the Val-d'Or Formation in the south (Monique area). The western portion of the project (Courvan area) encompasses the eastern contact of the synvolcanic Bourlamaque Batholith. The contact of the batholith is documented to be moderately dipping to the east, suggesting that this intrusion remains present eastward under the volcanic rocks toward the Pascalis area (Jebrak et al., 1991). Throughout the central portion of the project, the volcanic rocks are cross-cut by a series of gabbroic and mafic intrusions along an ENE trend. In the Pascalis area, a swarm of subvertical NNW-striking, metre-scale, diorite dykes cut across almost perpendicularly the volcanic units.

From south to north, the project is underlain by the Val-d'Or Formation (VDF), Jacola Formation (JF), Dubuisson Formation (DF), La Motte-Vassan Formation (LVF), the Garden Island Group (GIG) and the Landrienne Formation (LAN). The main intrusions are the Bourlamaque, Pascalis-Tiblemont, and La Corne batholiths with several gabbroic dykes and sills (Figure 7-2).

**Figure 7-2: Local Geology of the Novador Project**




Source: InnovExplo, 2023.

#### 7.3.1 Volcanic, Volcaniclastic and Sedimentary Units

##### 7.3.1.1 Val-d'Or Formation

The VF (2704 ± 2 Ma) is 1 to 3 km thick and comprises volcaniclastic submarine deposits formed by autoclastic and/or pyroclastic mechanisms. These deposits include 1 to 20 m of brecciated and pillowed andesite flows with feldspar and hornblende porphyries. The flows are intercalated with amalgamated volcaniclastic beds 5 to 40 m thick. The pillows exhibit a variety of forms, from strongly amoeboid to lobed. Lobed pillows are 1 to 10 m long and 0.5 to 1.5 m wide and have a vesicularity index of 5% to 40%. The volcaniclastic beds are composed of lapilli tuff, lapilli and blocks tuffs, and to a lesser extent, fine to coarse tuffs.

##### 7.3.1.2 Jacola Formation

The JF (2706 ± 2) lies north of the VDF. It consists of a cyclic package comprising, from bottom to top, komatiitic flows, basalts, and mafic volcaniclastics. The sequences may be complete or truncated. Komatiitic lavas are observed as massive flows with local spinifex textures, but primary textures are generally destroyed by dynamic metamorphism. Magnesian basalts are also present along whit the komatiite units. Ultramafics are easily identified by their characteristic pale-medium grey colour. Basaltic flows are massive, pillowed and sometimes in the form of flow breccias and hyaloclastites. In the centre of the project (enclosing the A, B and I zones), there is a wide unit of mafic to intermediate volcaniclastics varying from debris flows to coarse lapilli-blocky tuffs.

##### 7.3.1.3 Dubuisson Formation

The DF (2708 ± 2 Ma) consists mainly of pillowed and massive basalt with various interbedded komatiitic flows (Imreh, 1980). Ultramafic and mafic flows are similar to those described in the LVF (see below) but in different proportions. A thick unit of mafic volcanoclastic rocks (agglomerate) is observed on the project in the Pascalis area.

##### 7.3.1.4 La Motte-Vassan Formation

The LVF crops out on the north side of Lac De Montigny. Its thickness is variable, up to a maximum of 6 km. It consists of komatiites, tholeiitic basalts, and magnesian basalts. The base of the sequence is mostly represented by komatiites with some minor intercalated basalt. However, a decrease in the proportion of komatiites is observed toward the top of the sequence (Imreh, 1984). Komatiites are mainly found in two morphofacies: (1) classic sheet flow with spinifex textures or tube-shaped flows; and (2) mega-pillows. The basalt flows are usually massive or pillowed; more rarely, they are brecciated (Imreh, 1980). The age of the LVF (2714 ± 2 Ma) suggests it may be contemporaneous with the upper part of the Kidd-Munro Assemblage.

##### 7.3.1.5 Landrienne Formation

The LF is composed of abundant ultramafic lavas, mafic-felsic volcanics (Sanschagrin and Leduc 1979, Goutier 1997), and numerous tonalitic to monzonitic intrusions. These units are oriented E-W and have a moderate to low dip towards the north. They show a polarity systematically facing south. Two of the rhyolitic complexes of this formation, which define tholeiitic suites, yielded U-Pb zircon ages of 2718.7 ± 0.7 Ma and 2716.2 ± 0.8 Ma (V. McNicoll in Pilot et al., 2009). These ages and the close spatial association observed between ultramafic lavas and rhyolitic complexes of this formation evoke several significant comparisons with the Kidd Munro assemblage (Bleeker et al., 1999; Berger, 2002; Ayer et al., 2002).

#### 7.3.1.6 Garden Island Group

The GIG mainly comprises sandstone, siltstone, and mudstone with graded thin beds (1 to 15 cm thick). Some thin lenses of petromict conglomerate were observed at the far western end of the project. Within the latter, the pebbles and subrounded clasts are often flattened and mostly composed of felsic to mafic volcanic fragments and some felsic intrusive fragments. On the project, the GIG sedimentary units consist of argillites, greywackes, and conglomerates that mark a discontinuity where they lie in contact with volcanics. These units should be carefully prospected at or near their contact zones. Like at the Éléonore gold mine (Newmont Corporation), the permeable sediments play an important buffer role when in contact with younger massive intrusives.

### 7.3.2 Intrusive Units

#### 7.3.2.1 Diorite Dykes Swarm and Sills

Along the Pascalis Gold Trend, the gold mineralization is spatially associated with a main swarm of NNW-trending subvertical microdiorite dykes. The metric to deca-metric diorite dykes are homogeneous, massive and fine-grained. The fact that the diorite dykes have a calc-alkaline affinity precludes any genetic link with mafic country rocks of tholeiitic affinity assigned to the Dubuisson Formation. Several E-W trending diorite dykes crosscut the microdiorite NNE dykes and the Bourlamaque Batholith.

#### 7.3.2.2 Gabbroic Dykes and Sills

Some lenses of gabbro (locally diorite) are often observed within the volcanic units with occasional sulphides of pyrite and/or pyrrhotite. These units are medium-grained and ferromagnesian-rich in composition. On the project, the gabbro dykes and/or sills were observed to be in contact with their host mafic volcanics in the eastern part of the project; they could most probably be co-magmatic with the Pascalis-Tiblemont Batholith.

#### 7.3.2.3 Porphyritic Dykes

Two main types of subvertical E-W-trending porphyritic felsic diorite dykes are observed within the project. The first type consists of metric grey-green porphyritic dykes with feldspars phenocrysts up to 7 mm, observed in the New Béliveau and Monique areas. The other type is more homogeneous and medium-grained (2 mm). These dykes are commonly altered with their ferromagnesian minerals bleached.

#### 7.3.2.4 Bourlamaque Batholith

The Bourlamaque Batholith consists mainly of homogeneous quartz diorite and tonalite, the latter comprising sodic-rich rocks containing up to 25 % blue quartz in the Courvan area. It is locally crosscut by dioritic, mafic, and aplitic dykes (Taner and Trudel, 1989; Belkabir et al., 1993; Vu, 1985). In some areas, the batholith underwent strong mineralogical transformation owing to regional deformation and metamorphism (regional greenschist facies). As a result, facies may be distinguished as undeformed to highly foliated and hydrothermally altered facies, i.e., there are areas of undeformed rocks grading into foliated zones of more intense deformation that form mylonitic shear zones in which the quartz diorite and tonalite were completely recrystallized and chloritized. These chlorite-rich shear zones developed from the Bourlamaque rocks are commonly (but not necessarily) close to dykes of melanocratic and generally schistose diorite interpreted by Vu (1985) and Robert et al. (1994) as spatially associated with the main mineralized material zones in the Ferderber (Belmoral), Dumont and Beaufor gold mines. This relationship is seen in the Courvan area.

#### 7.3.2.5 Pascalis-Tiblemont Batholith

This elliptical intrusion covers 340 km$^2$ and is oriented NW-SE. It is generally differentiated, varying from tonalite to diorite in the central part to gabbro-diorite to gabbro in the margin of the batholith. The Pascalis-Tiblemont Batholith is mainly dominated by gabbroic to dioritic intrusive facies in the far eastern part of the property.

#### 7.3.2.6 La Corne Batholith

This intrusive unit is in the far limit northwest of the project. The La Corne Batholith comprises several intrusive phases between 2680 and 2642 Ma. The early facies, which are the most common, consist of diorite, granodiorite, and hornblende monzonite. The molybdenum (Mo) mineralization in the Preissac Lake area is associated with this early phase. The late phase, representing the central-northern part of the batholith, is composed of biotite monzogranite and muscovite-biotite monzogranite, dated at 2642 Ma (Machado et al., 1991). The northern part of the batholith is particularly rich in amphibolitized enclaves. This late phase contains most of the spodumene pegmatites in this area, including a former lithium mine.

### 7.3.3 Structural Features

#### 7.3.3.1 Pascalis Gold Trend

The Pascalis Gold Trend encompasses the New Béliveau, North and Highway deposits. The general orientation of the volcanic units is N270° to N290°, with a steep to subvertical dip to the north. The mineralized zones are controlled by E-W to ENE-oriented structures, consisting of shear zones moderately to steeply dipping south and subvertical faults (e.g., New Béliveau northern fault). These structures controlling the mineralization extend from the Bourlamaque Batholith eastward into the volcanic rocks, crosscutting a large NNW-trending dyke swarm associated with the Pascalis Gold Trend. The New Béliveau, North and Highway deposits are characterized by large, shallowly south-dipping stacked quartz-tourmaline-carbonate-pyrite gold vein envelopes that cut the dykes, volcanic rocks and a magnetic gabbro intrusion (Highway deposit). The mineralized zones are developed within complex E-W to ENE-trending shear zone systems. The extensional veins formed by the infilling of extensional fractures, and the shear veins are subparallel to these gold-bearing structures. The mineralization in the trend is cross-cut by a series of syn- to late-tectonic trending faults, which are particularly well-documented in the former L.C. Béliveau mine where they offset diorite dykes with a sinistral movement and metre-scale displacements. More significant displacements probably occur along strike but are not measured. The recent drilling at New Béliveau has identified several large faults that appear to offset the diorite dyke and vein mineralization styles.

#### 7.3.3.2 Courvan Gold Trend

In the Courvan area, the contact between the volcanic rocks and the Bourlamaque Batholith is intersected and displaced by a series of ENE-oriented structures, consisting of syn-mineralization moderate to low angle shear zones and major early to late faults steeply dipping to the north to subvertical. The Courvan deposits are mainly composed of extensional quartz-tourmaline-carbonate veins envelopes developed between these low- to moderate-angle shear structures hosted in highly foliated and altered zones within the granodiorite. Unlike the Pascalis Gold Trend deposits, which only contain mineralized zones dipping to the south, the structural data shows that the Courvan gold-bearing veins mainly dip shallowly to the north and locally to the south. In the case of the Southeast deposits, the mineralized zones dip only to the south. Mineralized shear veins moderately to steeply dipping north are also noted with the ENE structures within the batholith. At Courvan, many of the dioritic dykes that crosscut the Bourlamaque tonalite have an orientation subparallel to the ENE structures but dip between 45° to 75° in the opposite direction, to the south. They are displaced by the ENE structures and can also host extensional or shear-extension quartz-tourmaline-carbonate veins. The ENE structures and diorite dykes are two elements that exerted significant control on the setting of gold mineralization in the Courvan deposits.

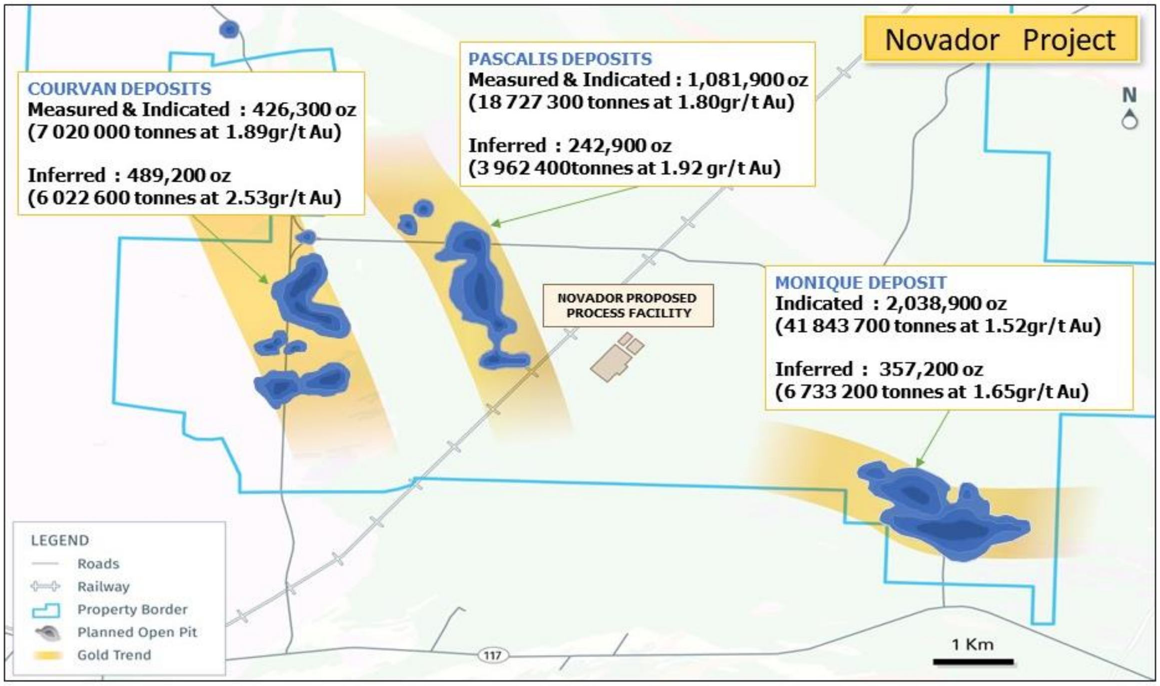
#### 7.3.3.3 Monique Gold Trend

The orientation of the lithological contacts is N270°E to N292°E, with a steep 75° to 85° dip to the north. The Monique Gold Trend is characterized by large deformation zones roughly parallel to the rock units. The trend reaches up to 50 m wide. Strongly sheared and altered feldspar porphyritic diorite dykes and lamprophyres are often observed within the gold-bearing shear zones. Mineralized gold-rich zones are associated with shear development and overprint them with mineral replacements along strong veining. Several fault zones with gouge can be seen in places; however, many are late faults not associated with the mineralization events and crosscut the mineralized zones and host lithologies at high angles. The observed folding is minor in terms of intensity and size, with open folds mostly under 1 m wavelength or 5 to 20 cm intrafoliation folds associated with a small crenulation.

## 7.4 Mineralization

Most of the gold deposits on the project have been delineated in three areas: Pascalis, Courvan and Monique (Figure 7-3). This section describes the mineralization in each of these areas. The gold-bearing zones are defined as mesothermal lode gold deposits. They generally consist of a complex system of veins composed of quartz, carbonate, albite and ± tourmaline with disseminated and/or blebby-cubic pyrite. The auriferous zones are commonly associated with shear zones and extensional fractures. Mineralization is concentrated in veins and/or adjacent lithologies strongly altered due to hydrothermal fluid circulation.

**Figure 7-3: Gold Zones on the Novador Project**




Source: Probe Gold, 2023. MRE 2023.

### 7.4.1 Pascalis Gold Trend

The Pascalis Gold Trend hosts the New Béliveau, North Zone and Highway deposits. The New Béliveau and North Zone deposits are centred on a series of NNW-trending subvertical intermediate dykes, forming a swarm over 3 km long, 1 km wide and 1 km deep (Figure 7-4). The dyke swarm played an important role in the setting of gold mineralization for both deposits, consisting of structurally controlled quartz-tourmaline-carbonate-pyrite veins hosted in fine-grained intermediate dykes, basalts and intermediate to mafic volcanoclastic rocks. The mineralization in the Highway deposit is similar but is hosted in a distinct magnetic gabbro intrusion. Intermediate dykes and the gabbro intrusion are younger and intersect the volcanic units.

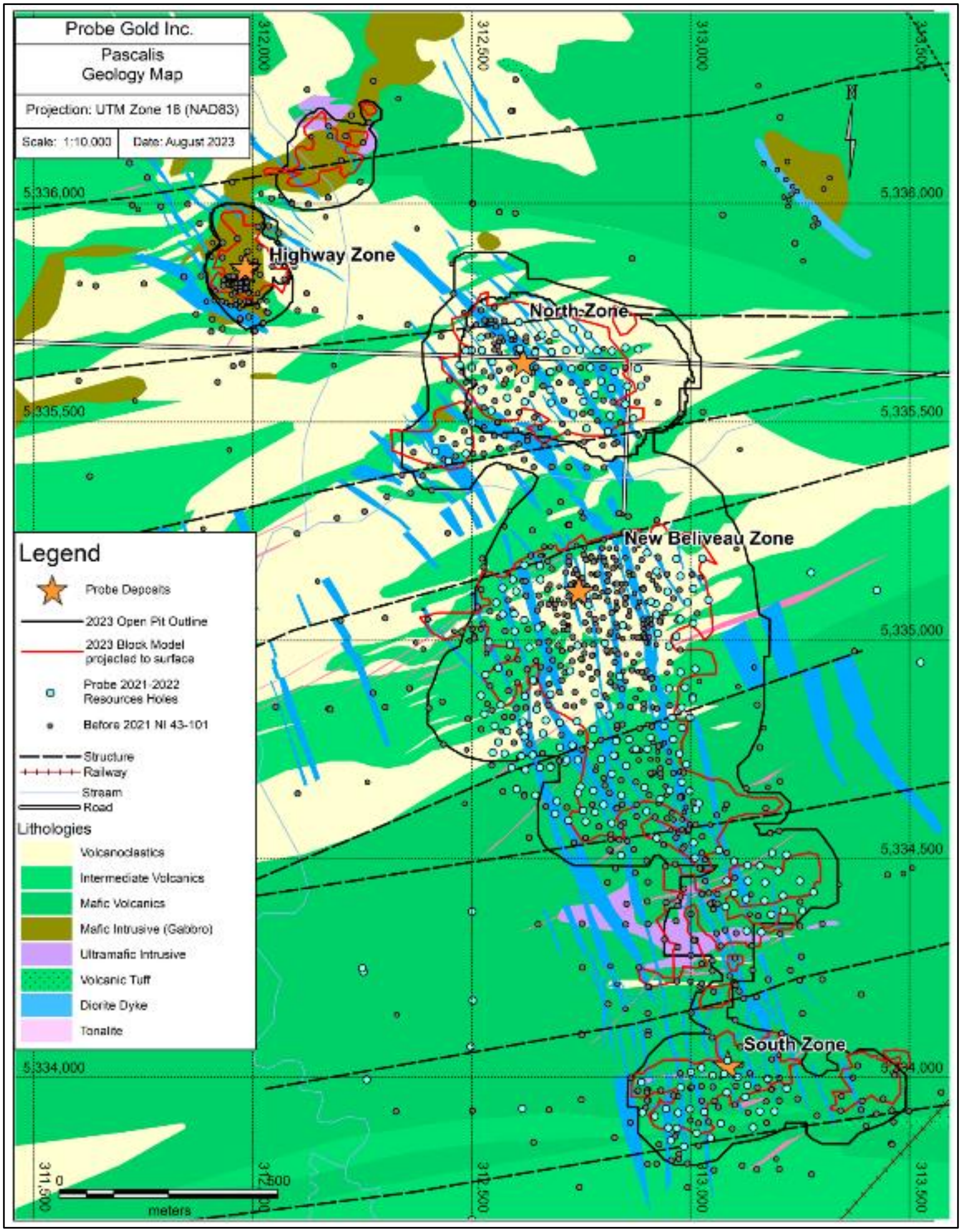
The New Béliveau deposit, which encompasses the past-producing L.C. Béliveau mine, is hosted within a subvertical microdiorite dyke oriented N345° and perpendicular to the trend of volcanic formations. It is located about 2 km east of the Bourlamaque Batholith margin. At the former L.C. Béliveau mine, three parallel dykes (West, Main and East) constitute the main swarm of diorite dykes. The thickness of individual dykes varies from 5 to 15 m individually but may reach 30 m combined. At the mine, 90% of the veins and gold mineralization is hosted within the Main dyke. With an average thickness of 10 m, the mineralized zones were originally traced to a vertical depth of 580 m and over a strike length of 300 m. A ductile-brittle fault zone cuts and ends the mine to the north. Although its displacement is unknown, it exhibits oblique striations plunging to the west, suggesting a possible sinistral movement with uplift of the south block relative to the north block, suggesting an extension at depth towards the west.

Since 2008, at least 27 parallel microdiorite dykes have been identified by drilling and mapping. The New Béliveau deposit has historically been divided into different zones. However, drilling completed by Probe Metals/Probe Gold has established connections between the Main Béliveau mine area and the historical “Zone 2” and the 2017 “South Zone” discovery, located southward. The New Béliveau deposit is now continuous for a strike length of over 1,400 m and has been defined locally to a depth of 1,100 m. The deposit is bounded to the north and south by subparallel ENE-trending faults. Three other subparallel E-W to ENE-oriented faults divide the deposit into four structural blocks that result in minor lateral offsets of the diorite dykes.

The gold mineralization is associated with quartz-tourmaline-pyrite veins and the surrounding altered wall rocks (Figure 7-5). The deposits are composed of multiple superimposed mineralized envelopes with a tabular shape shallowly dipping to the south. Two main types of gold-bearing veins can be observed in the mineralized zones. The dominant system consists of sigmoidal extensional veins, oriented E-W and shallowly to moderately dipping 10° to 60° to the south. They represent about 80% of the mineralized veins. The second type comprises shear veins developed along moderately to subvertical shear zones. A third set is also recognized: subhorizontal and weakly mineralized veins representing less than 5% of the vein material.

The extensional and shear veins from 3 to 20 m thick tabular shaped mineralized envelopes with orientations varying between 90° to 110° and dips of 25° to 35° to the south. They can reach a few hundred metres laterally in an E-W direction as well as in the axis of the dip. The mineralized zones are composed of 5% to 30% centimetric to metric quartz-tourmaline-carbonate veins associated with 1% to 2% fine to coarse euhedral pyrite along vein margins, locally reaching up to 5% to 10% and, more rarely, with traces of chalcopyrite. Pyrite is mainly found in the altered immediate wallrock and, to a lesser proportion, within the veins. The alteration is composed of tourmaline-silica-carbonates in the intermediate dykes or silica-sericite-albite-carbonates in volcanic rocks (basalts, agglomerates) and the Highway gabbro intrusion (Figure 7-6, Figure 7-7 and Figure 7-8). Free gold grains can be observed in veins and at the surface or in fractures within coarse euhedral pyrite crystals.

**Figure 7-4: Pascalis Gold Trend Geology and Mineralization**

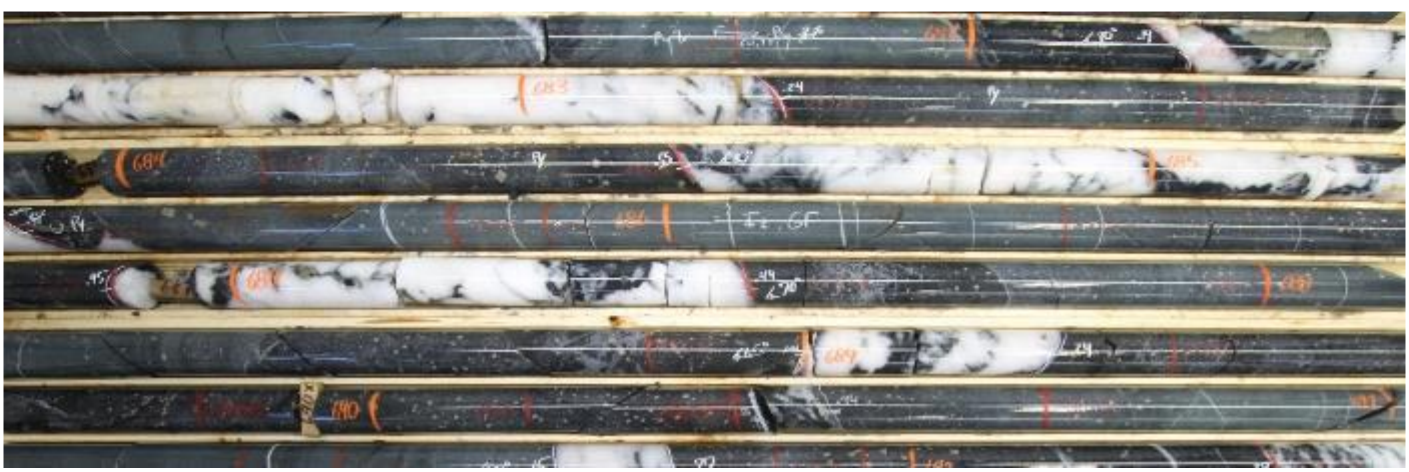



Source: Probe Gold, 2023.

**Figure 7-5: New Béliveau Rock Exposures**


Notes: A: Outcrop west of the former Béliveau mine showing shallow-dipping south mineralized veins in volcanics; B: Extensional veins in a dyke near the former Béliveau mine; C: Shear vein cross-cutting a dyke and volcanics; D: High-grade gold mineralization in a diorite dyke – 80% tourmaline and 15% pyrite. Source: Probe Gold, 2021.

**Figure 7-6: Example of the Dyke Zone**

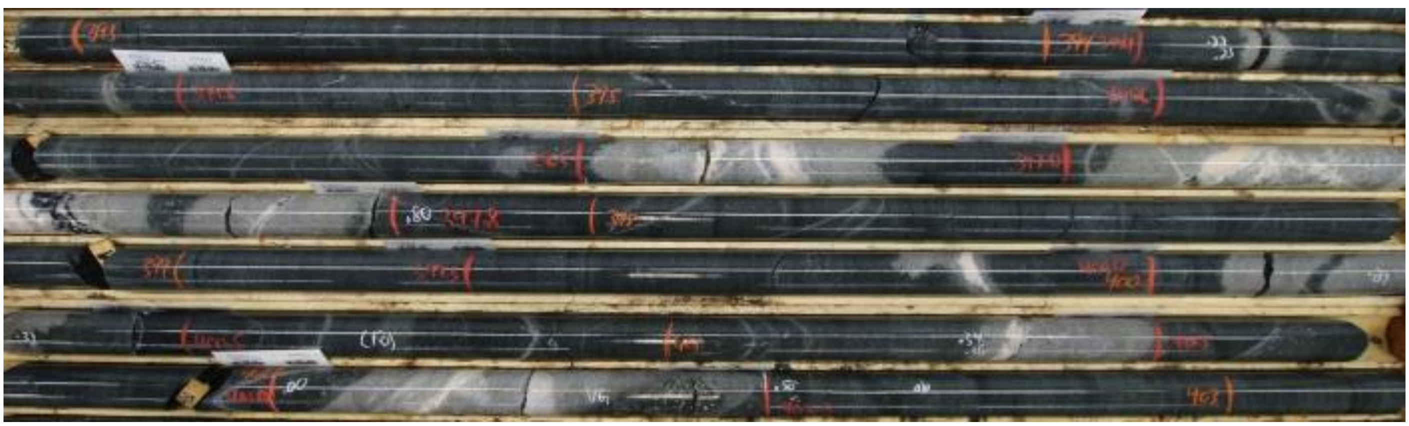


Notes: Extension of the Main Dyke at depth in the New Béliveau deposit showing quartz-tourmaline-carbonate veins with coarse pyrite and tourmaline-silica-carbonate alteration (PC-17-197: 681-692.5m, 5.49 g/t Au over 8.46 m between 682.19 m to 690.65 m). Source: Probe Gold, 2021.

**Figure 7-7: Example of the Volcanic Zone from the North Deposit**

Notes: Quartz-tourmaline-carbonate veins with pyrite and silica-sericite-carbonate alteration hosted in mafic volcanoclastic rock, namely agglomerate (PC-18-328: 4.25 g/t Au over 8.70 m between 305.3 m to 314 m). Source: Probe Gold, 2021.

**Figure 7-8: Quartz-Tourmaline-Carbonates Veins**



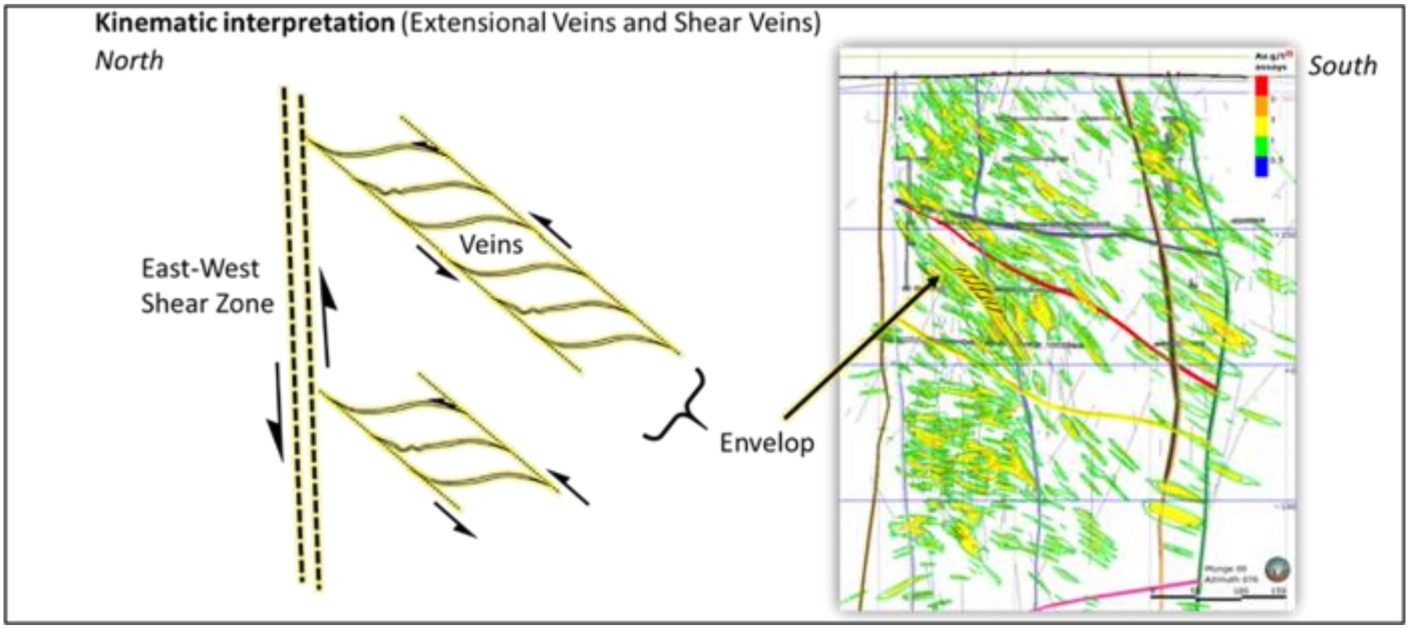
Notes: Drill core showing coarse pyrite and silica-sericite-albite-carbonate alteration hosted in the Highway gabbro intrusion (PC-17-187ext, 6.29 g/t Au over 13.40 m between 389.10 m to 402.50 m). Source: Probe Gold, 2021.

The host lithology in the New Béliveau and North Zone deposits is used to distinguish two types of gold mineralization, dyke and volcanic zones, respectively, representing about 40% and 60% of the in-pit resource by volume.

Three dyke zones and 57 volcanic zones were interpreted from the surface to 900 m depth in the New Béliveau deposit, and 25 volcanic and 3 dyke zones up to 500 m depth in the North deposit. All the deposits remain open to the west, east, south and at depth. The volcanic mineralized zones intersect the intermediate dykes at an almost perpendicular angle. The intensity of fracturing and the frequency of gold veins generally increase in and near the intermediate dykes, due to their higher rock competency compared to the adjacent volcanic rocks. Pyrite concentration and grain size and the gold grades associated with intermediate dykes are, on average, higher than in volcanic rocks. The size of euhedral pyrite crystals increases significantly and easily reaches 1 to 2 cm in the dyke-style mineralization. The New Béliveau and North Zone deposits are therefore composed of subvertical dyke and shallow-dipping volcanic zones, delimited to the north and south by E-W to ENE structures (Figure 7-9).

The Highway showing was the first significant gold occurrence discovered on the project in 1931. It lies 1,000 m northwest of the former L.C. Béliveau. The gold mineralization is like the vein system at the New Béliveau deposit, with the notable exception that veins are hosted within a competent gabbroic unit instead of diorite dykes. The mineralized system comprises 24 subparallel tabular zones dipping 30° to 40° to the south and striking N075 to N090. Two zones steeply dipping to the south were also interpreted. For now, the Highway gold system can be traced over 400 m E-W by 500 m N-S and to a depth of 500 m. The Highway Zone remains open to the south, east, and at depth.

**Figure 7-9: 3D Structural Model of the New Béliveau Deposit, Looking East**




Source: Probe Gold, 2023.

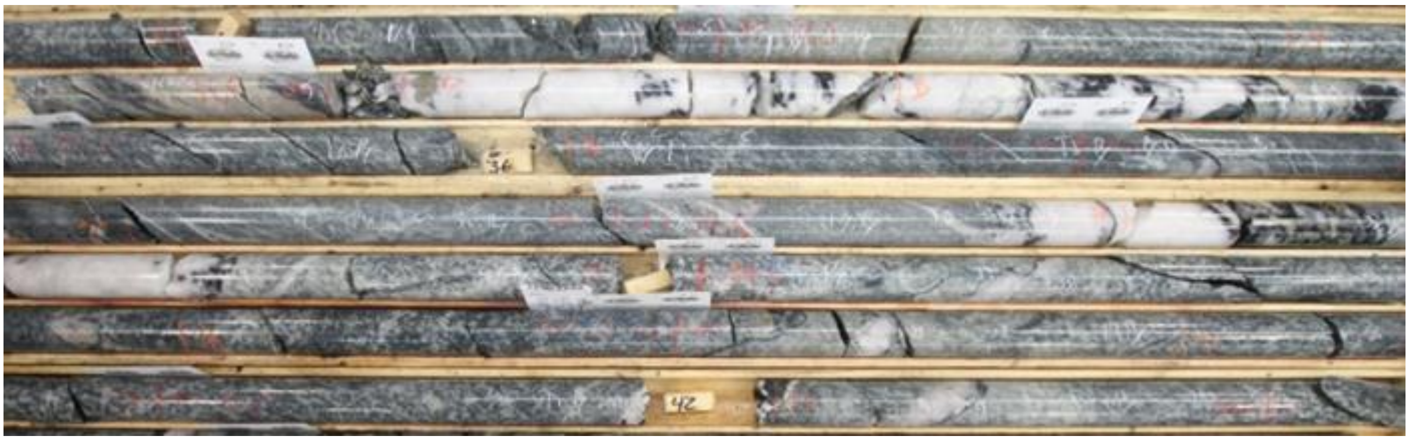
### 7.4.2 Courvan Gold Trend

The Courvan Gold Trend (CGT) extends 2.5 km along the eastern margin of the Bourlamaque Batholith and up to 2 km inside the southern part of the intrusion (Figure 7-10). The trend contains the Bussières, Creek, Bordure, Southwest, and Southeast deposits. The latter is open to the west, north, south and at depth. Gold mineralization is structurally controlled by several major shear zones and faults, striking 250-260° and dipping 75° to the north to subvertical, dividing the CGT into structural blocks.

The mineralized zones consist of envelopes containing 5% to 30% centimetric to metric quartz-tourmaline-carbonates-pyrite ± chalcopyrite veins, mainly in extension, with a subhorizontal to moderate dip to the north or the south in the case of the Southeast deposit (Figure 7-11). Gold-bearing veins are primarily hosted in a granodiorite phase of the Bourlamaque Batholith and, to a lesser extent, in metre-scale E-W oriented sheared diorite dykes that cut across the granodiorite intrusion. Typical mineralization is composed of 1% to 10% pyrite and rare chalcopyrite contained within veins and the altered wallrocks (silica, sericite, carbonates ± K-feldspar-albite) over a thickness of a few centimetres to a few metres. High grades are often associated with the presence of coarse pyrite clusters and/or locally native gold, like the Beaufor mine (Figure 7-12).

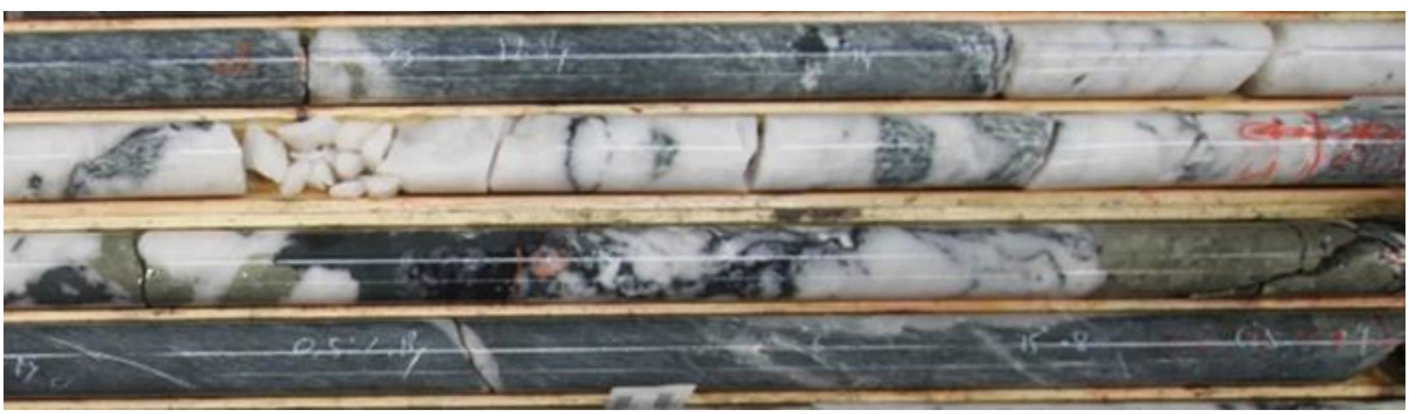
High-grade zones are also locally associated with quartz-tourmaline-carbonates-pyrite hydrothermal breccias (Figure 7-13). Free gold is sometimes found on the surface of coarse pyrite crystals or along internal fractures. Chalcopyrite is the second notable metallic mineral in the mineralized zones. Historical production records show that silver was produced from the mine at a gold-to-silver ratio of 7:1.

**Figure 7-10: Typical Courvan Mineralized Zone**



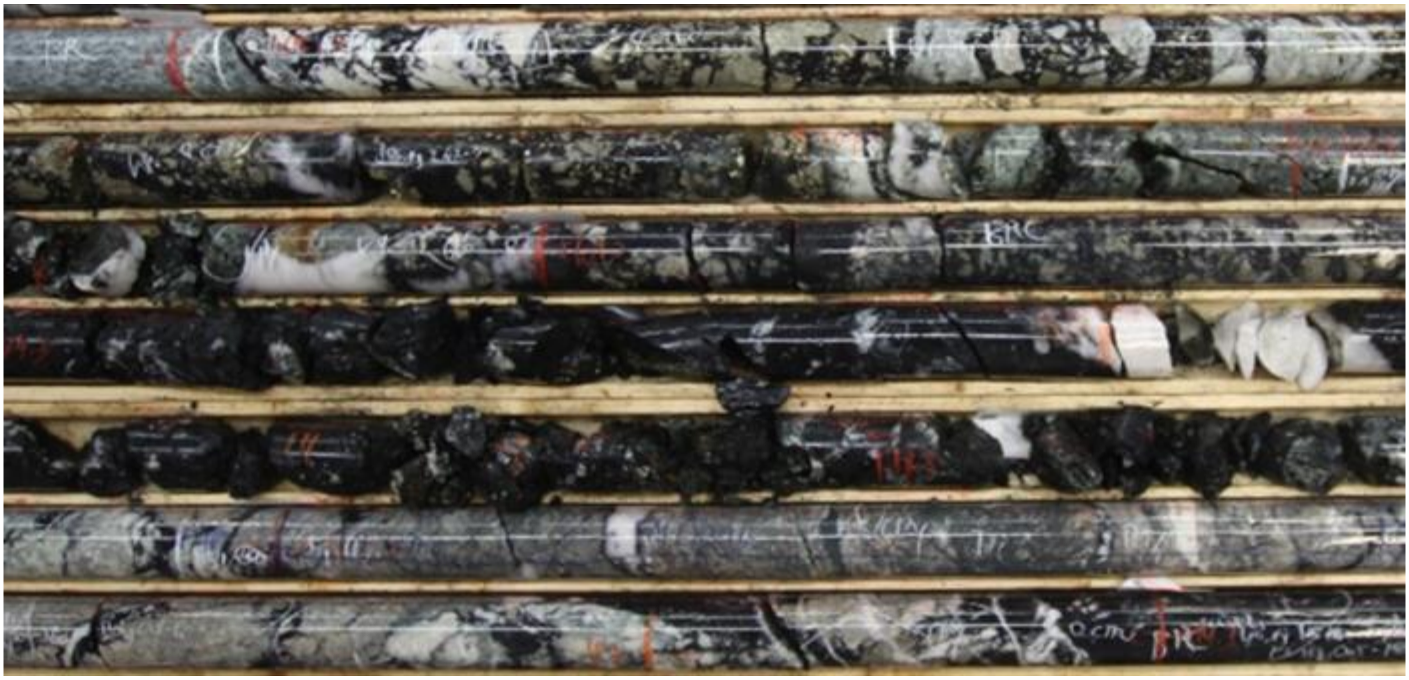
Notes: Quartz-tourmaline-carbonate veins with coarse pyrite and silica-sericite-K feldspar-carbonate alteration in the Bussiere Zone (CO-18-31: 5.08 g/t Au over 8.00 m between 33.50 m to 41.50 m). Source: Probe Gold, 2021.

**Figure 7-11: High-Grade Decimetric Pyrite Blebby Masses in Quartz-Tourmaline-Carbonates Veins in Creek Zone**



Notes: Hole CO-18-59: 17.1 g/t Au over 1.50 m between 64.10 m to 65.60 m. Source: Probe Gold, 2021.

**Figure 7-12: High-Grade Quartz-Tourmaline-Carbonate-Pyrite Hydrothermal Breccia in the Creek Zone**



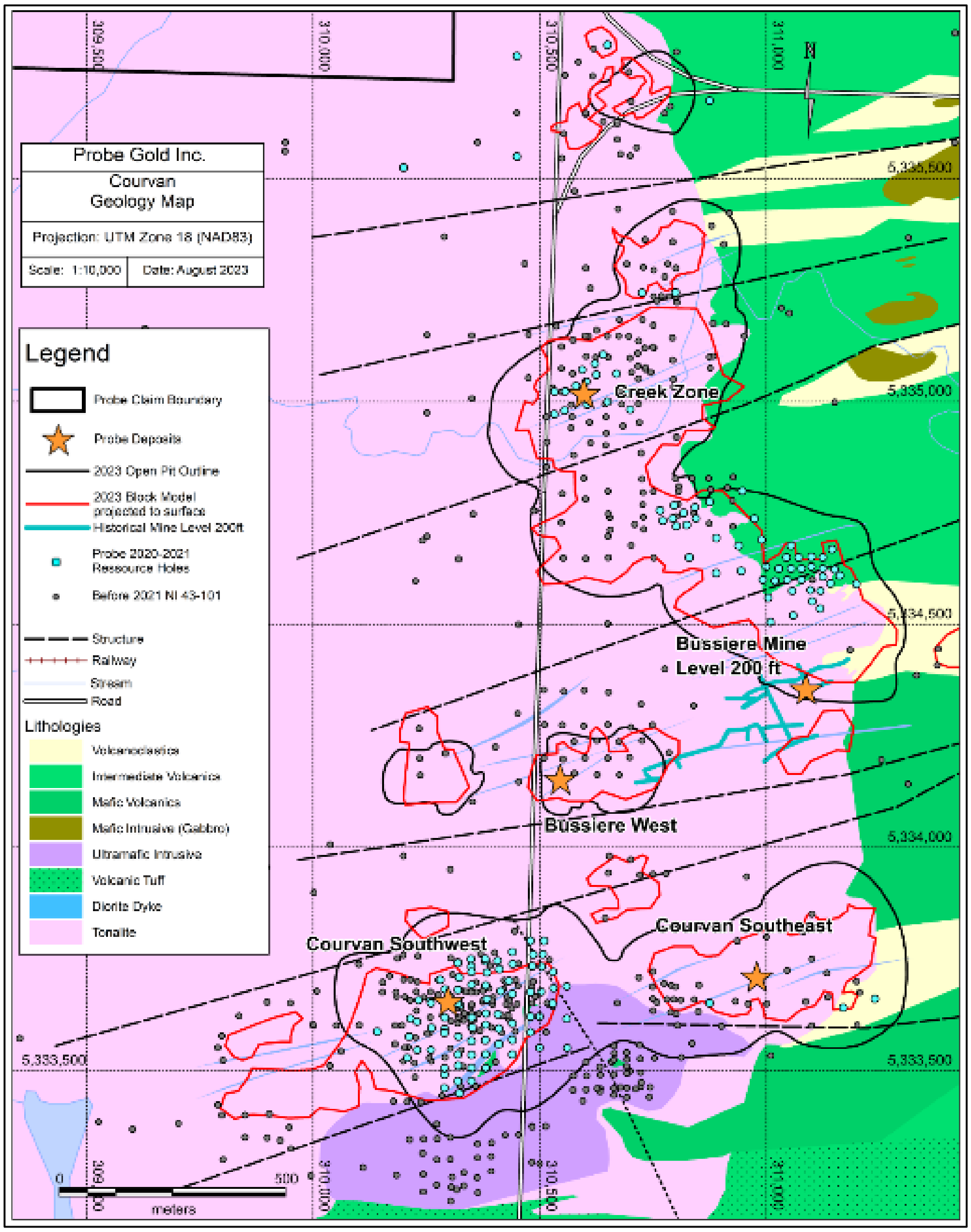
Notes: Hole CO-18-64: 9.6 g/t Au over 9.1 m between 105.00 m to 111.00 m. Source: Probe Gold, 2021.

**Figure 7-13: Mineralized Veins in a Diorite Dyke**

Notes: Hole CO-18-39: 0.35 g/t Au over 3.00 m between 173.00 m to 176.00 m. Source: Probe Gold, 2021.

Quartz-tourmaline-carbonate veins form echelon networks with a subhorizontal to moderate dip to the north. When the frequency and grade of individual veins are high enough, they can form tabular mineralized envelopes with an average thickness of 3 to 15 m and strike up to a few hundred metres in an E-W direction and in the dip direction. A second set of gold veins subparallel to the shear zones is also observed. They have an average direction at N250° and a dip of 70° towards the northwest. Historically, they represented a small proportion of the mineralized material extracted from the Bussières mine. The mineralized zones are primarily hosted in the Bourlamaque granodiorite and show rather limited extensions in the volcanic rocks. The vein systems seem to develop better in the granodiorite, which offers greater competence than the volcanic rocks. Diorite dykes injected into the granodiorite can also contain mineralized veins, but they represent less than 2% of the mineralized zones in the deposits (Figure 7-14).

**Figure 7-14: Courvan Gold Trend Geology and Mineralization**

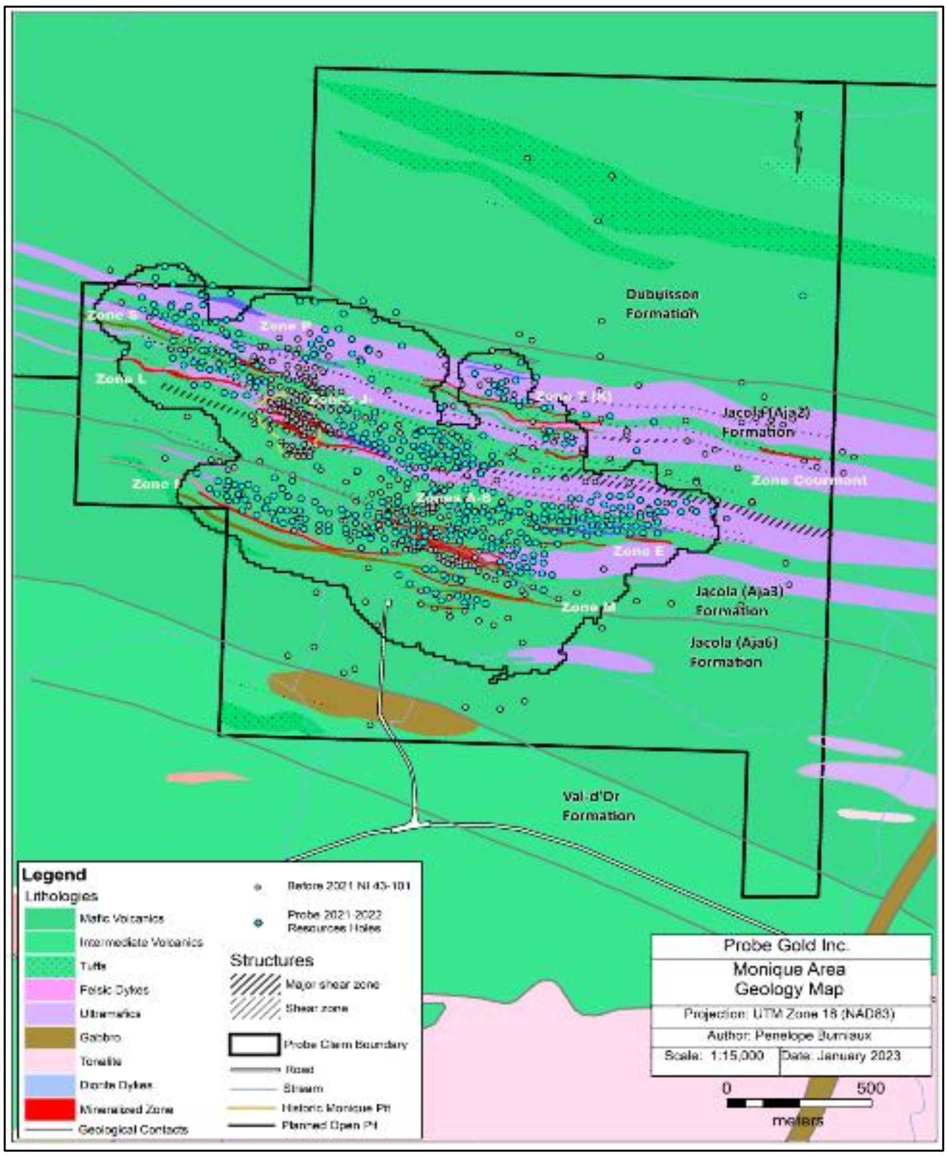



Source: Probe Gold, 2021.

### 7.4.3 Monique Gold Trend

The Monique Gold Trend hosts 17 major gold zones, including the G Zone from the former Monique open pit mine and numerous other gold occurrences intersected by drilling. Inside the trend, gold-bearing zones are related to mesothermal lode gold deposits and are found principally along two main WNW-trending subparallel deformation corridors in the Jacola Formation. The corridors are ~150 to 200 m wide and extend 2.5 km along strike (Figure 7-15). The G-J-P deformation corridor is in the central part of the project and roughly follows the contact between an ultramafic unit to the north and basalts to the south. This corridor contains the former Monique open pit.

**Figure 7-15: Monique Gold Zones and Local Geology**




Source: Probe Gold, 2023.

The second, the A-B-I-M corridor, passes approximately 150 m to the south, encompassing the upper portion of the southern volcanic domain composed of mafic to andesitic-basalt flows, volcaniclastics and hyaloclastites. Both corridors are injected by multiple feldspar (± quartz) porphyritic intermediate dykes, metre-scale in thickness, and centimetre- to metre-scale (2-3 m wide) lamprophyres, often containing gold mineralization. The interpreted mineralized zones have general orientations of N270-290° with dips of 70° to 82 ° to the north.

The mineralized zones of the Monique Gold Trend consist of extensional veins, shear veins and/or a stockwork of quartz-carbonate-albite ± tourmaline veins carrying disseminated to coarse pyrite. The gold-bearing zones are commonly associated with shear zones, faults and extensional fractures. Mineralization is concentrated around veins and in adjacent lithologies, which are strongly altered due to related hydrothermal alteration. The mineralized zones are found mainly in massive volcanic units and close to intrusions exhibiting carbonate, albite, sericite-fuchsite and silica alteration. The quartz vein systems are mainly subparallel to the strata, dyke/sills and deformation zones. Gold is generally associated with 1% to 5% finely disseminated pyrite, and visible gold is common in the quartz and carbonate veins and veinlets. The zones generally vary in thickness between 2 to 10 m and reach up to 30 m. Mineralized zones can extend more than 900 m laterally, and they have been traced by drilling to a vertical depth of up to 600 m.

Three main structural types/events of gold-bearing mineralization are observed: (1) early replacements and sheared/folded veins subparallel to shear zones; (2) vein-veinlet arrays associated with Riedel shears, detachment surfaces and late faults/fractures 5° to 25° relative to the shear foliation, and (3) extensional/conjugated subhorizontal veins secant to the shear envelope.

The first stage is characterized by carbonate-fuchsite-chlorite-albite-silica replacements and quartz shear veins containing fine-grained disseminated light brownish-yellow pyrite, which commonly forms millimetre-scale irregular blebby masses. This mineralization is cross-cut by quartz-iron dolomite-albite vein arrays and stockworks characterized by a low degree of deformation/folding. The wallrock is bleached by the same carbonate-albite-sericite assemblage but differs with fine to coarse clear yellow hypidiomorphic pyrite. Notably, the lamprophyre intrusions swarms (minette and vogesite) predate the first gold event but are crosscut by (and thus older than) the vein/veinlet arrays. Generally, 1% to 7% pyrite is found within the veins and up to 15% in the iron dolomite-albite-sericite wallrocks. The presence of free gold in these veins is common. This main mineralization stage accounts for >90% of the gold content in the Monique claim block.

Finally, a typical Val-d’Or-style quartz-tourmaline-carbonate vein set is found mainly in extensional low-angle fractures and small shear extension structures crosscutting the first and second gold events. This late tourmaline vein system accounts for less than 5% of the gold mineralization. Pyrite and gold contents vary with alteration minerals in the host rocks; however, gold content strongly correlates with the amount of pyrite.

Based on the host lithology, four main types of mineralization are observed in the Monique gold trend as described below:

1. The most significant mineralization in terms of resource volume (55%) is hosted in basaltic lavas and magnesian basaltic volcaniclastics: Zones A, B, G and M (Figure 7-16). The predominant alterations in the walls of the quartz-carbonate-albite ± tourmaline veins are composed of magnesium-iron carbonate, albite and sericite ±fuschite. Pyrite is found in the veins and wallrocks. Decimetric to 2.5-m-thick felsic feldspar porphyritic diorite dykes are closely associated with this mineralization type, rarely lamprophyres. Intrusions are also mineralized.

2. The mineralization hosted in wide (up to 15 m) altered feldspar porphyritic diorite dykes (Zones A, B, I and portion of J) represents about 15% of the gold mineralization. Mineralization consists of 1% to 3% disseminated pyrite associated with quartz-carbonate-albite vein arrays and lesser tourmaline veins. The alteration in the porphyritic diorites is particularly strong, as shown by long-lasting pervasive carbonatation, albitization and sericitization bleaching the ferromagnesian minerals, accompanied by some fuchsite, silica and local hematitization (Figure 7-17).

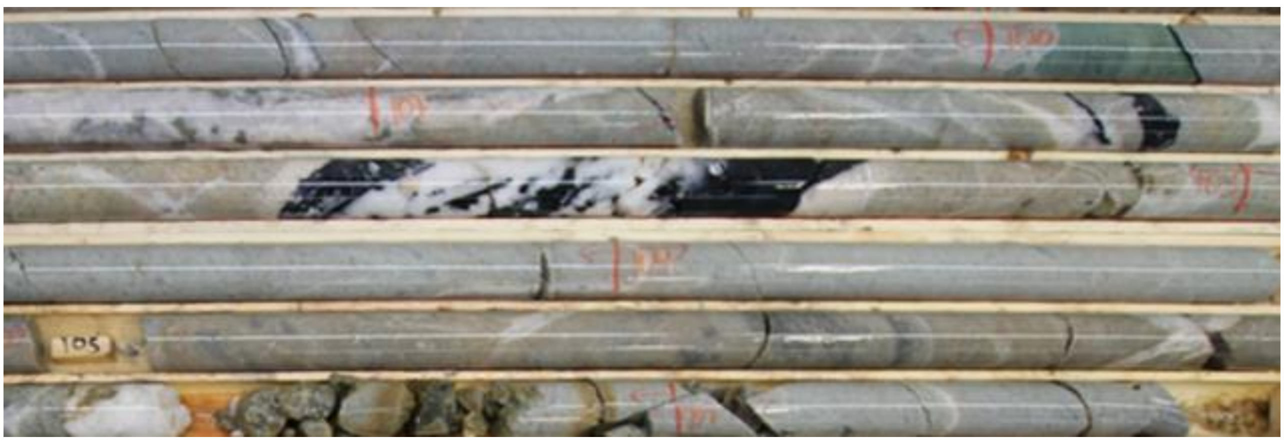
3. The J Zone is found in strongly deformed and sheared ultramafic volcanic rocks hosting felspar porphyritic diorite and lamprophyre swarms. Mineralization comprises (a) 1-2% disseminated pyrite with centimetre- to metre-wide quartz-carbonate-fuchsite shear veins along the schistosity (grades are generally lower in this type of mineralization) and (b) later veins of quartz-albite-iron carbonate and cubic pyrite crosscutting the lamprophyres (Figure 7-18), representing approximately 20% of the gold mineralization. The komatiite/intrusion type contains fewer tourmaline veins.

4. Gold mineralization in the P and A zones (eastern side) is hosted in an association of synvolcanic gabbro dykes and mafic volcanic. Again, pyrite is found in quartz-iron-dolomite-albite ± late tourmaline veins and sericitized, carbonatized and albitized wallrocks (Figure 7-19 and Figure 7-20). This type accounts for approximately 10% of the volume of mineralization.

**Figure 7-16: M Zone in Basalts**

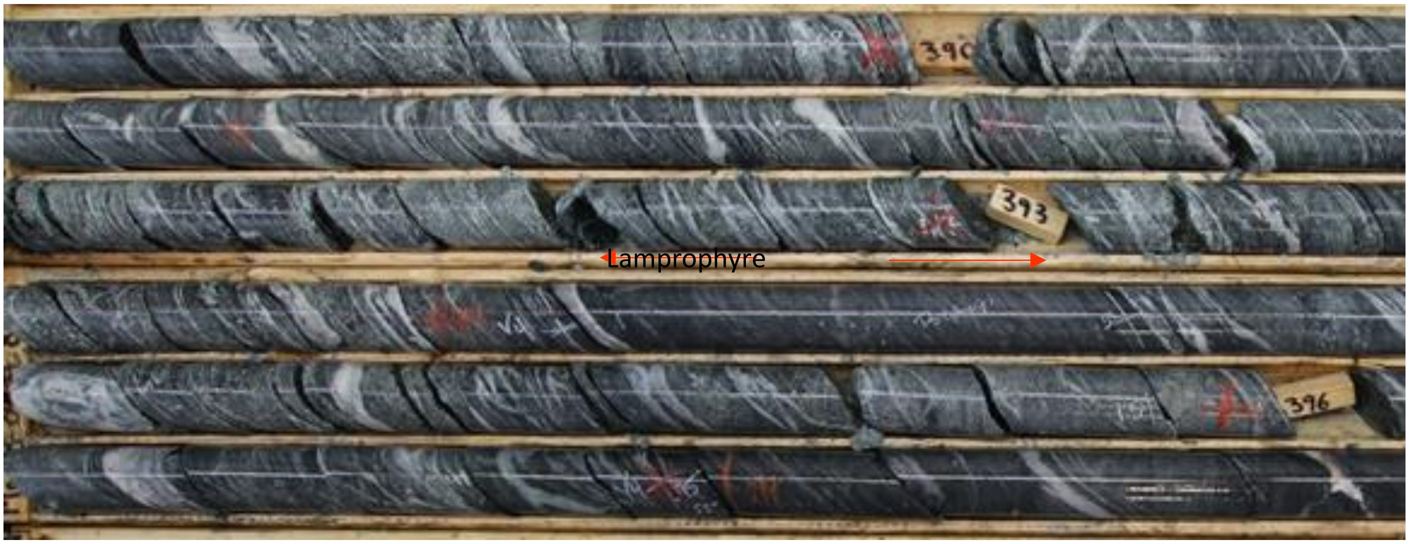
Note: Hole MO-19-16: part of an interval grading 5.9 g/t Au over 11.5 m between 184.00 m to 195.50 m. Source: Probe Gold, 2021.

**Figure 7-17: I Zone in Felsic Feldspar Porphyritic Diorite**



Note: Hole MO-20-41: 7.8 g/t Au over 7.00 m between 100.00 m to 107.00 m. Source: Probe Gold, 2021.

**Figure 7-18: J Zone in Ultramafic Volcanics and Lamprophyre Intrusion**

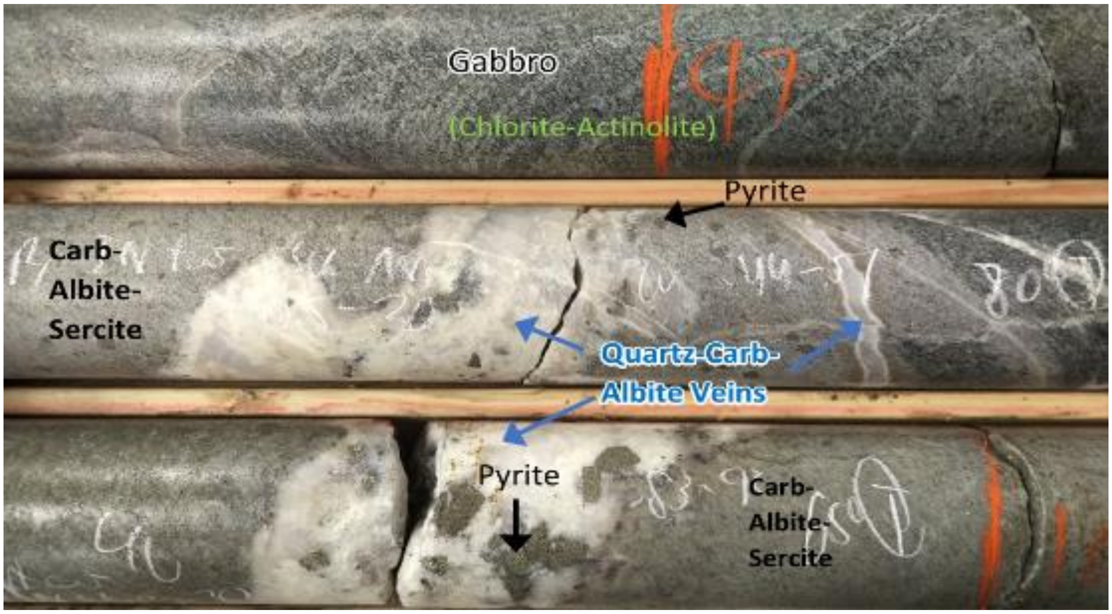



Note: Hole MO-18-09: 0.9 g/t Au over 7.00 m between 390.00 m to 397.00 m. Source: Probe Gold, 2021.

**Figure 7-19: P Zone in a Gabbro Intrusion**

Note: Hole MO-20-53: 2.4 g/t Au over 5.70 m between 87.60 m to 93.30 m. Source: Probe Gold, 2021.

**Figure 7-20: Close-up of Quartz-Albite-Carbonate-Pyrite Mineralization (Second Gold Event) in a Gabbro Intrusion (P Zone)**

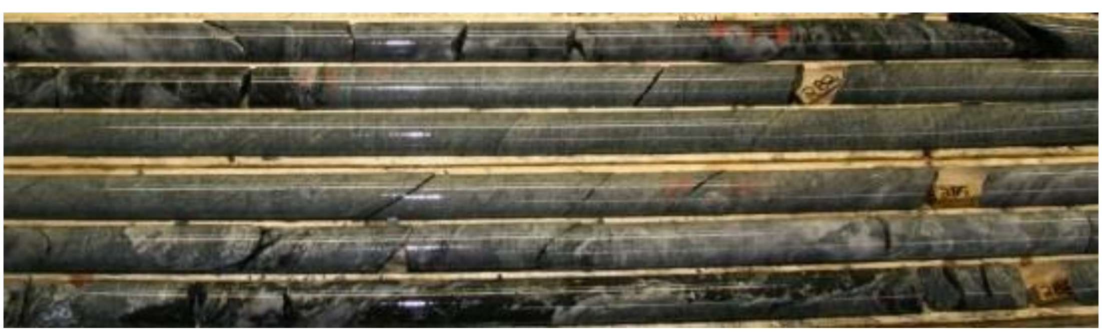



Source: Probe Gold, 2021.

### 7.4.4 Senore Zones

The Senore gold zones are located in the northwestern part of the project, within the Bourlamaque Batholith, near the contact with volcanic rocks. Several shear zones host the vein-type mineralization, with orientations of 125°/55° south or 070°/90°. The mineralized zones range from 1 m up to 20 m thick and are intersected to maximum vertical depths of 220 m. Gold mineralization is associated with centimetric to decimetric blebs of pyrite in quartz-carbonate-tourmaline veins. Diorite dykes are locally present in the shear zones. Mineralization consists of less than 3% pyrite, pyrrhotite, and disseminated chalcopyrite. Traces of fuchsite and molybdenite are also observed in the deformed quartz diorite-tonalite (Figure 7-21).

**Figure 7-21: Sheared Diorite Dyke and Quartz Veins in the Senore zones**



Note: Hole: SE-08-09 between 280.50 to 288.00 m. Source: Probe Gold, 2021.

# 8 DEPOSIT TYPES

The following was taken and modified from Raponi et al. (2021).

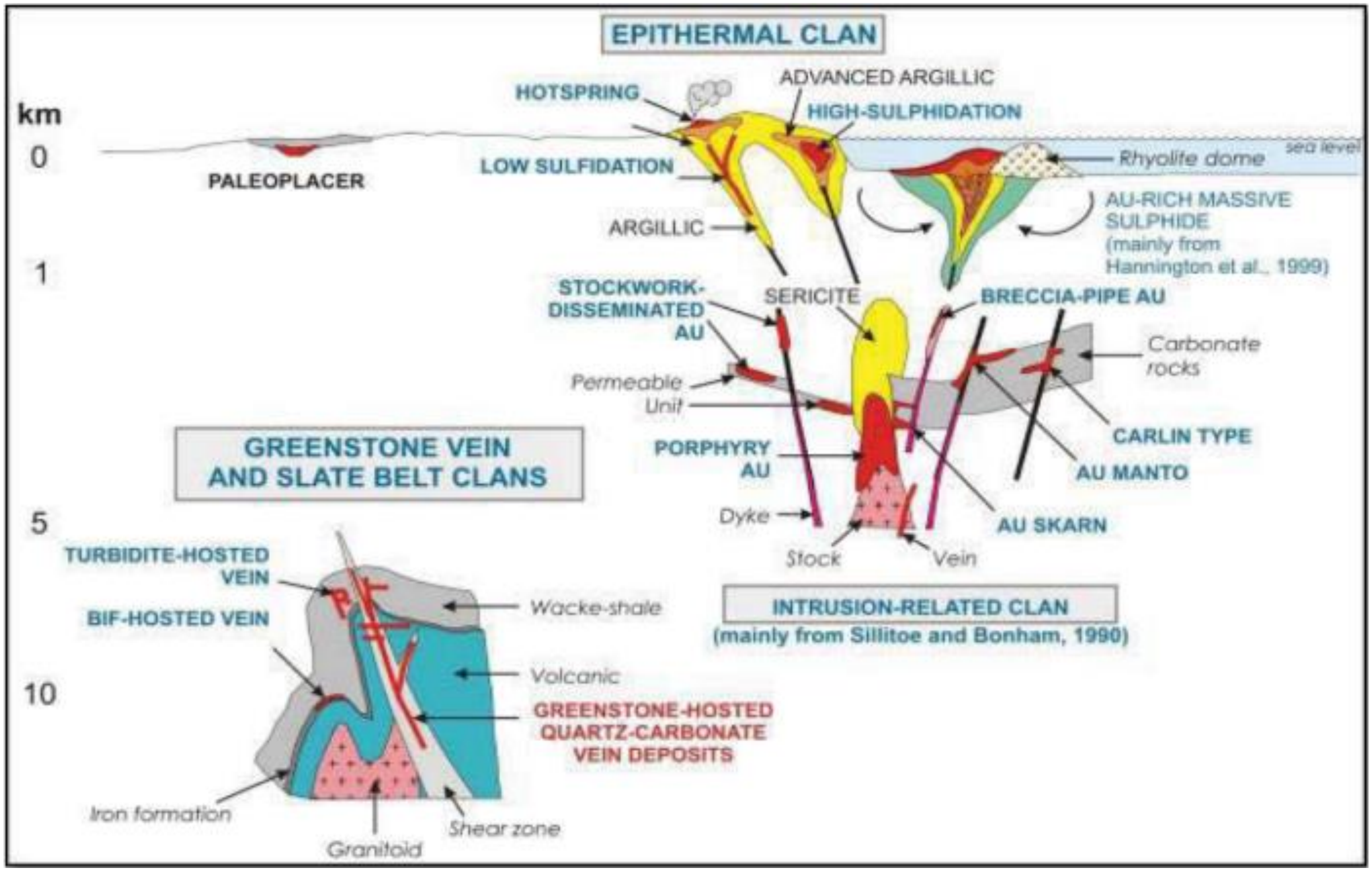
The Val-d’Or mining camp is well known for its lode gold deposits and copper, zinc, silver, and gold volcanogenic (VMS) deposits. The project area is no exception. Within the Val-d’Or mining camp, approximately 37 mines have produced more than 25 Moz of gold from 140 Mt milled. The data cannot be compiled in detail because several of the mines operated under different names at different times, and in some cases, two or more mines were incorporated into a single operation. Copper and zinc were also produced from five base metal mines. Most of the historical production comes from orogenic lode-type gold deposits extracted by underground mines. The Sigma-Lamaque mines alone extracted 55,913,187 t at 5.3 g/t Au for 9,498,880 oz (Girard et al., 2017). More recently, in 2019, Eldorado Gold began commercial production at Triangle Zone of the Lamaque mine, which contains proven and probable reserves of 4,087,000 tonnes at 7.25 g/t Au totalling 953,000 ounces (Eldorado Gold, 2019). The QPs have not verified the publicly available information. Nearby mineralized occurrences do not necessarily indicate that the property hosts similar types of mineralization.

Gold mineralization from the Val-d'Or mining camp has been classified as greenstone-hosted quartz-carbonate vein deposits or mesothermal or late-orogenic lode gold deposits associated with shear zones or extensional fractures (Figure 8-1). The mineralization is associated with regional features (e.g., the Cadillac-Larder Lake Tectonic Zone, regional drag folds, and structural splays) and syn- to late-tectonic intrusive rocks. Except for deposits within the large Bourlamaque batholith, gold mineralization is commonly associated with small intrusives and dykes aged 2,694 ±2 Ma to 2,680 ±4 Ma. The different styles of mineralization range from disseminated sulphide deposits to quartz-tourmaline gold-bearing veins and vein stockwork zones, and the deposits range from early to late tectonic.

Generally, lode gold deposits (gold from bedrock sources) occur dominantly in terranes with an abundance of volcanic and clastic sedimentary rocks of a low to medium metamorphic grade (Poulsen, 1996). Greenstone-hosted quartz-carbonate vein deposits are a subtype of lode-gold deposits (Poulsen et al., 2000). They correspond to structurally controlled, complex epigenetic deposits hosted in deformed metamorphosed terranes (Dubé and Gosselin, 2007).

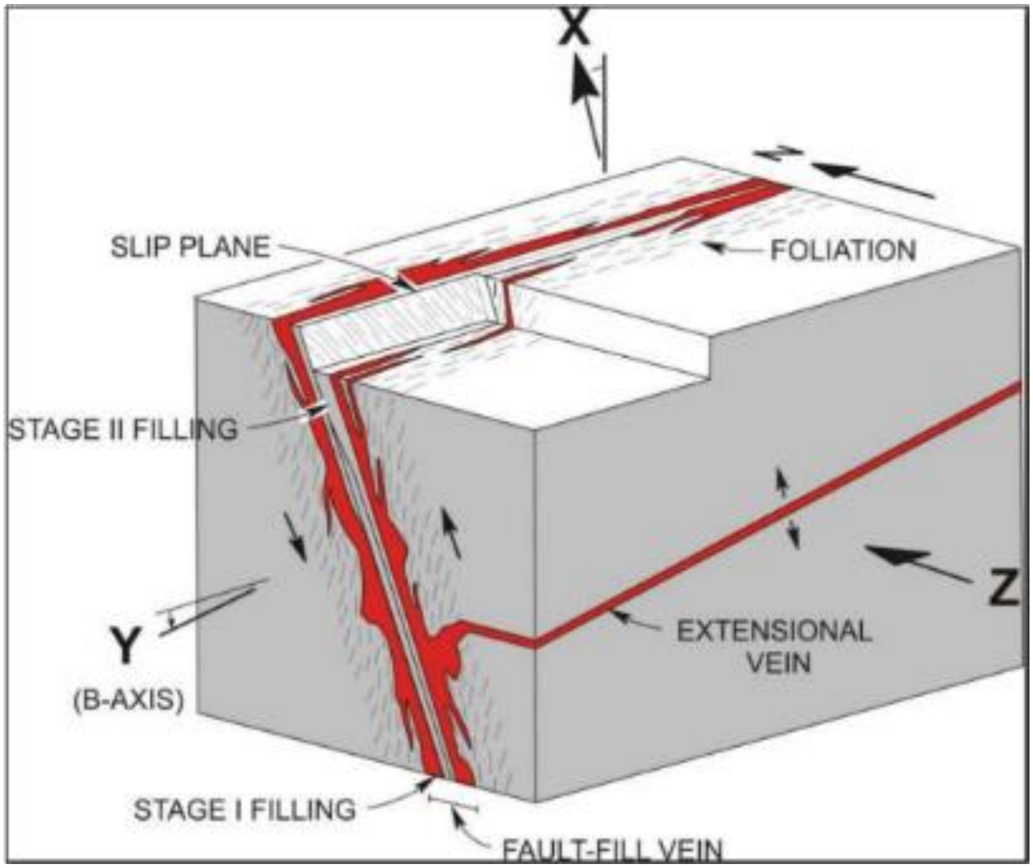
Greenstone-hosted quartz-carbonate vein deposits consist of simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults with locally associated shallow-dipping extensional veins and hydrothermal breccias. They are hosted by greenschist to locally amphibolite facies metamorphic rocks of dominantly mafic composition and formed at intermediate depth in the crust (5 to 10 km). They are distributed along major compressional to trans-tensional crustal-scale fault zones (Figure 8-2) in deformed greenstone terranes of all ages but are more abundant and significant, in terms of total gold content, in Archean terranes. Greenstone-hosted quartz-carbonate veins are thought to represent a major component of the greenstone deposit clan (Dubé and Gosselin, 2007). They can coexist regionally with iron formation-hosted vein and disseminated deposits and turbidite-hosted quartz-carbonate vein deposits.

**Figure 8-1: Inferred Crustal Levels of Gold Deposition showing Different Types of lode Gold Deposits and the Inferred Deposit Clan**




Source: Dubé et al., 2001; Poulsen et al., 2000.

**Figure 8-2: Schematic Diagram of the Geometric Relationships between the Structural Elements of Veins and Shear Zones and the Deposit-Scale Strain Axes**




Source: Robert, 1990.

Two main geological settings control the gold mineralization in the Novador area. The first gold setting is found in the Bourlamaque batholith. Most gold deposits within the Bourlamaque batholith are classified as mesothermal vein-type, which is believed to have formed at 1 to 3 km depth (Poulsen, 1995). The best example is the Beaufor mine, located approximately 2 km north of the project. Since commercial production began in the 1930s, 4,854,000 t at an average grade of 7.5 g/t Au were produced, for a total of 1,169,000 oz of gold recovered (Pelletier et al., 2017). The QPs have not verified the publicly available information. Nearby mineralized occurrences do not necessarily indicate that the property hosts similar types of mineralization. Mineralization consists of quartz-tourmaline-carbonates-pyrite veins shallowly to moderately dipping to the south, hosted in the Bourlamaque granodiorite near the contact with the volcanic rocks of the Dubuisson formation. As for the Courvan claim block deposits located further south, most of the Beaufor mineralized zones are also located near this contact. The main gold-bearing veins are closely associated with the presence of dioritic dykes intersecting the granodiorite and pre-dating the mineralization. At the scale of the deposit, the setting of mineralization is controlled by faults oriented at N110° with a steep dip to the north (e.g., Perron fault, Beaufor fault) and shear zones oriented at N070° moderately to steeply dipping south (e.g., Central, South and West Shear faults). Gold veins seem to intensify when these two structural families meet (Richard, 2011). The Ferderber mine (Belmoral) is located approximately 8 km west of the old Bussiere mine (Courvan) inside the Bourlamaque batholith and the Ferderber shear corridor. This gold-bearing ductile shear zone has a N070° direction and an average dip of 65° to 70° to the southeast. The Ferderber mine produced 1,703,425 tonnes at 6.89 g/t Au between 1979 and 1994 for a total of 362,000 ounces of gold (Rigg, 2017). The mineralized zones of the Ferderber mine are composed of quartz-tourmaline-carbonates-pyrite ± chalcopyrite veins confined within the shear zone. The mineralization is mainly hosted in a sheared and altered granodiorite and shreds of sheared mafic rocks.

The second geological setting of the Novador area consists of quartz-tourmaline mesothermal veins found inside and adjacent to small intrusives in the altered volcanic rocks. The latter are associated with east-west shear zones. The gold zones in the Pascalis and Monique trend represent good examples of this style of mineralization. The mineralization observed in the Monique pit area also shows similarities with the mineralization of the old Kerr-Addison mine in Ontario, where the gold in competent rocks is found in proximity to ultramafic units near major deformation zones.

# 9 EXPLORATION

This section was modified and updated from Raponi et al. (2021).

## 9.1 Pascalis, Monique and Courvan – Ground Geophysical Survey

Large-scale ground geophysical surveys (e.g., magnetic, IP, gradient, 3D IP) were conducted in the Pascalis, Monique, and Courvan areas between 2016 and 2019. The first phase of the survey started in 2016 and focused on determining the continuity of gold-bearing structures mined on the former Lucien-Béliveau gold mine, located 20 km east-northeast of Val-d'Or. A total of 240.975 line-km of magnetics and 220.825 line-km of pole-dipole induced polarization (IP) (a=25 m, n=1 to 20) were completed in the Pascalis area between August 1 and November 29, 2016. Seventeen drill targets were recommended to test some of the IP axes delineated during the survey (Simard, 2017).

In 2017, the surveys were extended toward the southeast and east from the existing grid. The covered area encompassed part of the former Pascalis property to the west and the former Bonnefond and Monique properties to the east. A total of 240.375 line-km of magnetics and 227.125 line-km of IP (a=25 m, n=1 to 20) were completed during the second phase from January 31 to June 20, 2017. Twenty-four drill targets were proposed to investigate some of the IP axes delineated by these surveys and whose mineral potential could not be ascertained based on the available information (Simard, 2018).

In 2018, Probe Gold decided to expand the geophysical coverage of the Pascalis and Monique areas by adding new blocks of lines to the existing 2016-2017 grid towards the northwest and southwest. In total, 118.5 line-km of magnetics and 101 line-km of IP were completed between February 2 to June 1, 2018. The same electrode array (a= 25 m, n= 1 to 20) was used in 2017 on the Bonnefond and Monique areas and for the 2018 survey on the grids northwest and south of the Lucien Béliveau deposit. The objective of these surveys was to enhance the mineral potential of the many showings that have been mapped in these areas and to delineate new exploration targets. GL Géoservices of Rouyn-Noranda carried out all the line-cutting and magnetics surveys, and Géophysiques TMC of Val-d'Or carried out the IP survey. Seven drill targets were proposed to investigate certain IP axes delineated in the newly surveyed area and whose mineral potential could not be ascertained based on the available information (Simard, 2018).

From June 2018 to June 2019, Probe Gold completed a gradient survey that covered the Pascalis and Courvan gold trends. In total, 116 line-km of gradient survey and 24 line-km of detailed 2D quantitative sections were completed utilizing a combination of pole-dipole induced polarization and gradient data. The gradient survey was carried out by Matrix GeoTechnologies Ltd. from Toronto, Ontario (Desormeaux and Beh, 2019; Beauregard et al., 2019).

In 2019, an IP survey (OreVision® and IPower3D®) on the project focused on the Pascalis and Courvan gold trends. Chargeability anomalies were detected where previous IP surveys were free of anomalies (Beauregard et al., 2019).

The Monique gold trend, a mineralized zone located in the southeastern portion of the project, was investigated in 2020 using Abitibi Geophysic's OreVision3D® configuration. The survey covered 54 lines (L 72+00E to L 125+00E), oriented 017° north, aiming to map the resistivity and chargeability properties of the geological formations within the Monique and southern part of the Pascalis grid of the project. The lines range from 1,012.5 m to 2,775 m long and are spaced every 100 m. The parameters used by Abitibi Geophysics for this survey (a = 37.5 m, n = 1 to 30) allowed the

3D inversions to be pushed to an approximate depth of 480 m below the surface. Quality control performed on the collected OreVision3D® data validated 97.7% of the recorded readings. The validated data were subjected to a 3D inversion using the Geosoft DC-IP VOXI platform. The purpose of the inversion was to better characterize the position, geometry, and physical parameters of the highlighted conductive, resistive, and polarizable sources. From the resulting resistivity and chargeability models, Abitibi Geophysics generated contour maps of resistivity and chargeability and vertical sections as Oasis Montaj map files. These results were integrated with existing geophysical data to produce a 3D model, which was used to guide geological modelling, prospecting and drill targeting (Phaneuf, 2020).

## 9.2 Pascalis and Courvan – 3D Structural Model

This section was mostly taken and modified from Beauregard et al. (2019) and Raponi et al. (2021).

During the summer of 2018, Stephane Faure (PhD, P.Geo.) of InnovExplo carried out 3D structural modelling. The methodology and objectives of this study were to (1) acquire data (measure length, thickness, orientation and dip) for the veins, faults, shears, schistosity, dykes and stratification; (2) observe and describe the structures, dykes and alterations; (3) establish the relative chronology between the structural features; (4) perform a structural analysis and synthesis for each structural domain and areas of economic interest; (5) build a 30 fault model in Leapfrog for the Béliveau-Highway-Courvan SE areas; and (6) propose a geological model for the historical L.C. Béliveau mine. The main highlights from this study are outlined below.

- Béliveau Area – First 3D fault model and gold vein architecture of the historical L.C. Béliveau mine. The quartz-tourmaline (QZ-TL) vein envelopes are mostly constrained in N350 trending dykes (type I). The veins dip variably between 15° and 60° (mean of 40°) between steep N070 trending faults. East-west trending intermediate dykes (Type II) crosscut type I dykes and developed pervasive iron carbonate alteration. The QZ-TL veins crosscut both type I and II dykes and carbonate alteration and appear late in the structural history.
- Highway Area – The bulk of the gold mineralization occurs in a multiphase ultramafic to intermediate plug as N080-trending subvertical tabular disseminated pyrite and carbonatized zones parallel to the schistosity and in close spatial association with type II dykes. The QZ-TL veins parallel the vertical N080 schistosity and shears but dip at 55° south-southeast.
- Courvan Southeast (Courvan SE) – A N070 fault crosscuts the Bourlamaque batholith and extends straight to the L.C. Béliveau mine. QZ-TL veins occur south of the fault.

In 2020, Probe Gold contracted InnovExplo to produce new lithological and structural models for the Courvan area and to update the Pascalis model. Using these models, Probe Gold geologists created 3D mineralization envelopes.

Four main lithological units were identified from the 3D Courvan geological compilation: the Bourlamaque batholith, basalt, an ultramafic plug, and a series of diorite dykes. The main structural features are E-W to WSW-ENE oriented ductile-brittle faults and shear zones. The 3D model shows the geological features (brittle faults, diorite dykes, basalt / Bourlamaque batholith contact) that control and constrain the gold mineralization.

Six main lithological units were identified using the 3D Pascalis geological compilation: diorite dyke swarm, basalt, agglomerate, gabbro, pyroxenite plugs, and FP-QFP dykes. The main structural features are E-W to WSW-ENE oriented ductile-brittle faults and shear zones. The 3D model shows the geological features that control and constrain the gold mineralization, including brittle faults, shears, diorite dykes and the Highway gabbro intrusion.

For Courvan and Pascalis, mineralization models (envelopes) were based on a multivariable approach that included gold intercepts of > 2.0 m and above 0.5 g/t Au and favourable vein types, alteration, and mineralization. These envelope orientations were based on structural data (e.g., Televiewer, oriented core, and historically mined stopes). Following this compilation, InnovExplo concluded that gold envelopes at 500 ppb (0.5 g/t Au) resulting from the mineralization models could be used as domains for the upcoming mineral resource estimate. Contact plots suggest that these envelopes constrain the higher values within each zone and could be used as a hard boundary between the high and low values. The lithological, structural and mineralization models could also support future exploration programs.

## 9.3 Pascalis and Courvan – Prospecting, Mapping and Sampling Program

In the fall of 2017, Probe Gold performed line cutting and reconnaissance mapping to locate and summarily map the outcropping zones and to locate historical drill holes and infrastructure relics from historical production. Two geologists visited more than 46 outcrops, nine on CM 28OPTB and 37 on CM 295. The mapped outcrops are mainly of granodioritic composition. Dioritic dykes cutting the Bourlamaque batholith are generally carbonated, chloritized, locally silicified, and may be associated with shear zones or faults. The 2017 work identified areas of high potential on the two mining concessions in the Courvan area on the property (Désormeaux and Gagnon, 2017).

During the summers of 2018 and 2019, Probe Gold completed a prospecting and sampling program covering the Pascalis and Courvan areas. Two geologists and three assistants visited 850 outcrops, and more than 1,000 geological measurements were taken. Sampling consisted of 32 gold assays, 149 gold + multielement package, and 437 gold + whole rock analysis. Bedrock exposures are limited in most prospected sectors in the northern part of the Pascalis area. The best gold values appear to be mainly concentrated in the north of the Highway Zone, north of the Creek Zone and close to the Southeast Zone. Another 10 days of fieldwork were also completed by two geologists in 2019, mapping several outcrop areas identified as potential exploration targets. The best gold values were 10.1 g/t Au, 9.3 g/t Au and 4.3 g/t Au (Beauregard et al., 2019).

## 9.4 Mechanical Stripping

During the summer of 2018, a mechanical stripping program was completed in the northwestern area of the New Béliveau gold deposit. Channel sampling and drone surveying were completed over a 1,200 $m^2$ stripped area. The new stripping was positioned over the main dyke swarm 400 m west of the former L.C. Béliveau Mine, exposing east-west gold structures (shear zones and veins) and their geological relationships with volcanics and north-south dykes. A total of 109 samples were taken for 107 line-metres. Each channel sample is 4 to 8 cm thick by 7 to 13 cm deep. The average length is approximately 1 m. The best results were 14.2 g/t Au over 3 m and 12.6 g/t Au over 1 m (Beauregard et al., 2019).

## 9.5 Biochemical Survey (Spruce Bark Sampling)

Tree bark sampling can be a useful tool when exploring for gold in areas with little to no bedrock exposure due to thick overburden. Due to the significant overburden over much of the property, a black spruce bark sampling program was completed along the northeastern portion of the Pascalis-Courvan-Monique areas in May and June 2021.

Probe Gold’s personnel from the company’s office and core shack in Val-d’Or conducted the spruce bark sampling program. At each sample site, a tree that met the parameters was selected. The bark was collected using a stainless-steel metal scraper, gently scraping bark off the tree's circumference into a plastic dustpan with a semicircle cut out (to rest against the curve of the tree trunk). Approximately 75 g of bark was collected and placed in a brown paper envelope. Each sample site was recorded as a Garmin GPS waypoint. After sampling, a photo of the tree was taken, showing the sample bag and GPS waypoint screen beside it. Detailed observations were recorded regarding the tree size and surrounding environmental characteristics. Additionally, duplicates were collected approximately every 50 samples (i.e., sample tag numbers 50 and 100). Three duplicates were taken during this sampling program.

A total of 161 black spruce bark samples from 158 sites, spaced 150 or 300 m apart, were collected. The area of tighter sample spacing was used to cover select geophysical anomalies and/or overburden-covered areas adjacent to outcrops with noted alteration and mineralization close to the contact between the Pascalis-Tiblemont batholith and adjacent volcanic rocks.

All samples were processed at Actlabs Laboratories Ltd. in Ancaster (Ontario) using the laboratory’s modified 2G package. The 2G package uses acid to dissolve the dry vegetation samples, which are then analyzed using inductively coupled plasma-mass spectrometry (ICP-MS) to detect very low concentrations of desired elements. The spruce bark sampling results have identified several areas of interest where multiple metallic mineral anomalies overlap. Many of the more significant gold results occur in the north-to-northeastern margin of the project, where the Pascalis-Tiblemont batholith is present, and include some overlap with elevated Cu, Ni, and Pb values. One sample in that area (B146056) returned values among the highest percentiles for a wide range of elements, including Au, As, Ba, Bi, Cr, Cu, Fe, Mo, Pb, Sn, Ti, and W (Laurin et al., 2021).

# 10 DRILLING

This section summarizes Probe Gold's drilling activities on the property since August 2016. A drilling campaign was underway as of the effective date of this report.

Drilling data was provided by the issuer's geology team or obtained by the QPs during their site visits and subsequent discussions. Much of what is contained in this section was taken and modified from past and recent technical reports and press releases published by the issuer.

Highlights of historical drilling by the former owners, including at Senore, are presented in Section 6.

## 10.1 2016 to 2022 Drilling Programs on the Novador Project

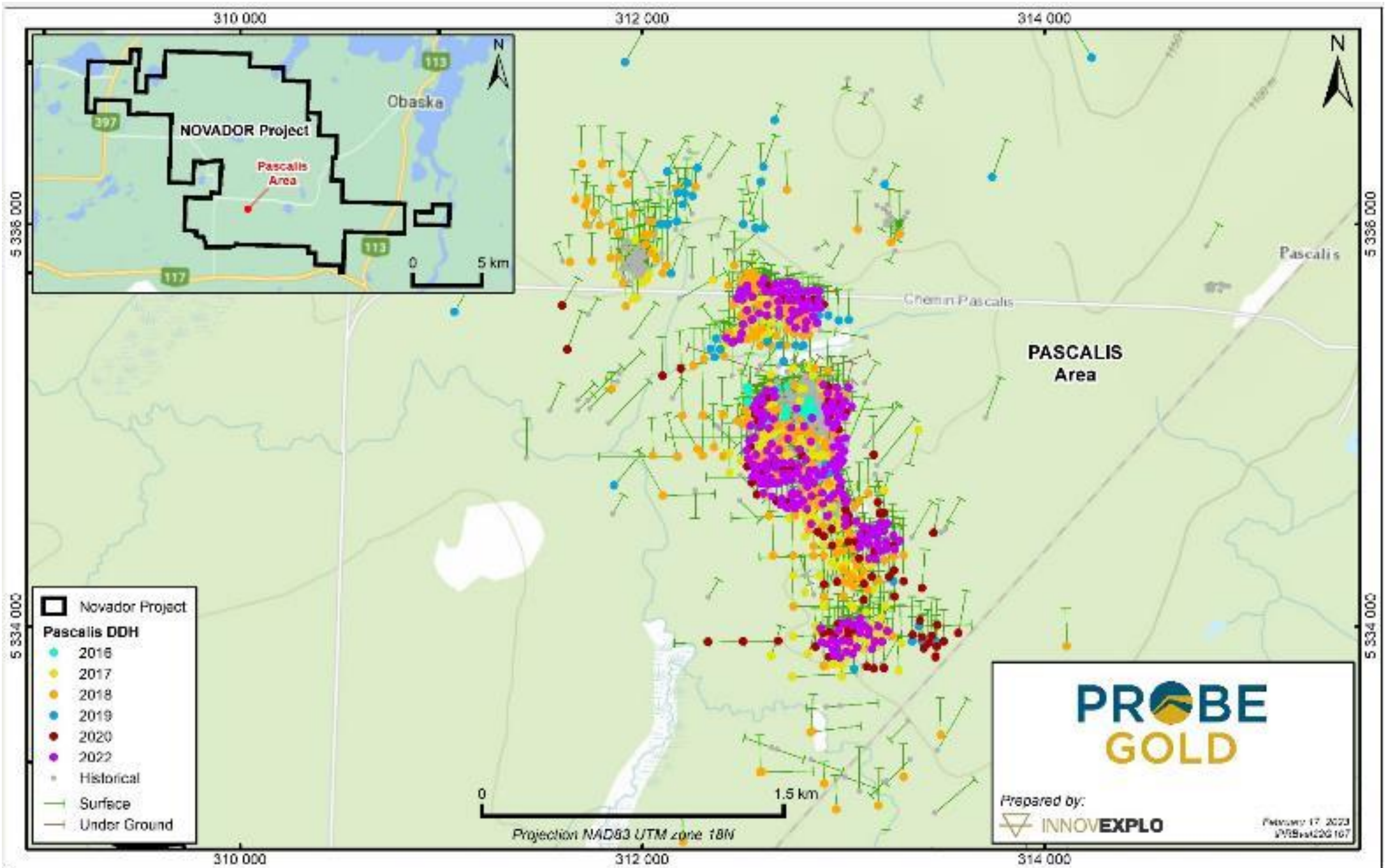
Probe Gold drilled 1,774 diamond drill holes (501,219.24 m) on the project from 2016 to 2022. Table 10-1 summarizes the annual drilling totals.

Figure 10-1 shows the positions of the holes by year on the Pascalis claim block, including Highway. Figure 10-2 shows the holes by year on the Monique claim block. Figure 10-3 shows the holes by year on the Courvan claim block, including Bordure.

**Table 10-1: Summary of the 2016 to 2022 Drilling Programs**

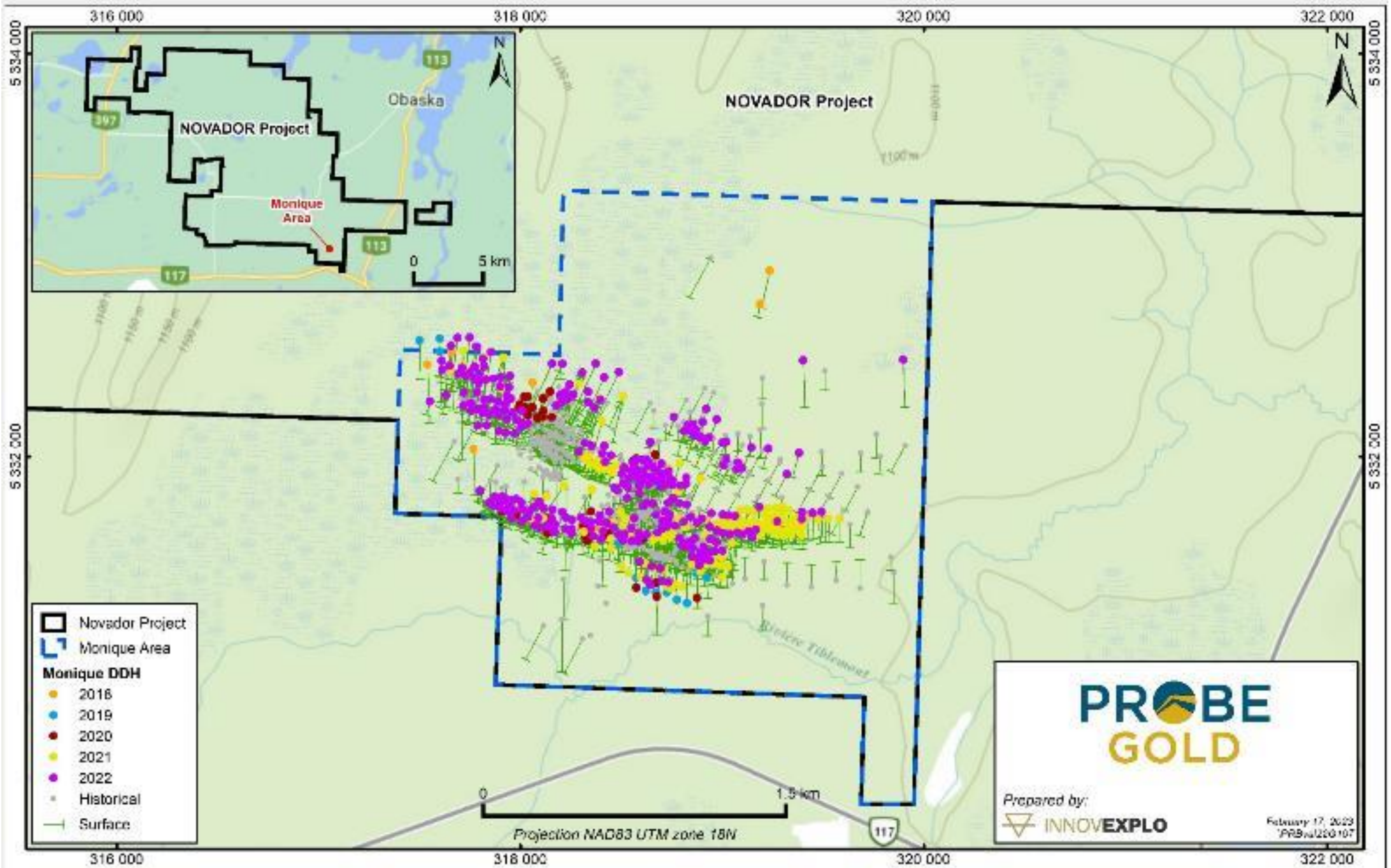
| Year | Area/Claim Block | DDH Count | Meterage | DDH | Total DDH Length (m) |
|---|---|---|---|---|---|
| 2016 | Pascalis | 23 | 11,940.48 | PC-16-84 to -106 | 23 DDH<br>11,940.48 m |
| 2017 | Pascalis | 193 | 81,868.88 | PC-17-107 to -133<br>PC-17-135 to -300 | 193 DDH<br>81,868.88 m |
| 2018 | Monique | 14 | 4,783.10 | MO-18-01 to -14 | 328 DDH<br>111,598.18 m |
| | Pascalis | 230 | 81,200.88 | PC-18-301 to -531 | |
| | Courvan | 84 | 25,614.20 | CO-18-01 to -84 | |
| 2019 | Monique | 18 | 5,657.20 | MO-19-15 to -32 | 114 DDH<br>33,162.10 m |
| | Pascalis | 53 | 15,192.40 | PC-19-532 to -584 | |
| | Courvan | 43 | 12,312.50 | CO-19-85 to -127 | |
| 2020 | Monique | 71 | 18,233.70 | MO-20-33 to -96 | 219 DDH<br>65,010.95 m |
| | Pascalis | 91 | 27,796.65 | PC-20-585 to -675 | |
| | Courvan | 57 | 18,980.60 | CO-20-128 to -184 | |
| 2021 | Monique | 168 | 44,043.50 | MO-21-97 to -249 | 172 DDH<br>45,300.50 m |
| | Courvan | 4 | 1,257.00 | CO-21-185 to -188 | |
| 2022 | Monique | 358 | 81,595.05 | MO-22-250 to -549<br>MOD-22-01 to -03 | 725 DDH<br>152,338.15 m |
| | Pascalis | 225 | 40,925.40 | PC-22-676 to -900 | |
| | Courvan | 142 | 29,817.70 | CO-22-189 to -329 | |
| **Total** | | **1,774** | **501,219.24** | | |

**Figure 10-1: Holes Drilled on the Pascalis Area from 2016 to 2022**



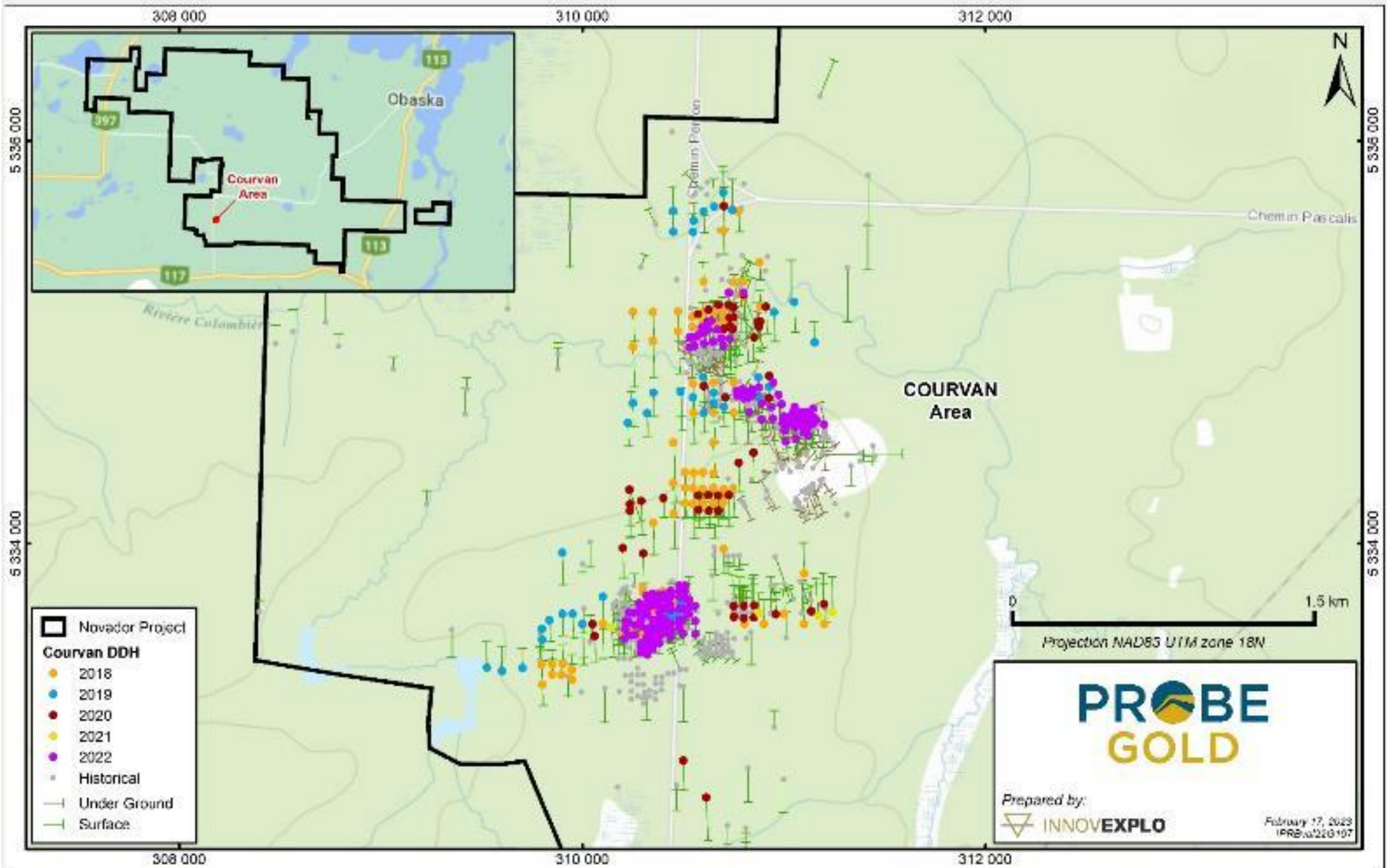

Source: InnovExplo, 2023.

**Figure 10-2: Holes Drilled on the Monique Area from 2018 to 2022**




Source: InnovExplo, 2023.

**Figure 10-3: Holes Drilled on the Courvan Area from 2018 to 2022**




Source:InnovExplo, 2023.

### 10.1.1 2016 Drilling Program

In 2016, Probe Gold drilled 23 holes for a total of 11,940.48 m. They were mainly drilled west of the former L.C. Béliveau mine. This program focused entirely on further defining and expanding the New Béliveau deposit.

A new high-grade gold zone was intersected in a diorite dyke returning intervals of up to 12.6 g/t Au over 7.3 m in hole PC-90. Mineralization was consistently intersected between 400 and 800 m deep and could represent a significant new gold zone. A second high-grade gold zone hosted by a diorite dyke was intersected in hole PC-16-100, which returned two intervals of 1.12 g/t Au uncut over 0.7 m and 25.5 g/t Au over 0.8 m, forming part of a larger interval of vein mineralization averaging 92.7 g/t Au over 8.7 m.

Mineralization was intersected between 272.3 and 281 m (downhole depth), representing the richest drilling intercept ever encountered in the Pascalis area. In addition, near-surface mineralization continued to be demonstrated with some mineralized intervals in the first 150 m vertically, with the best intercept returning 2.0 g/t Au over 143 m, including 35.1 g/t Au over 4.2 m, in hole PC-90.

Table 10-2 presents the significant results of the 2016 program.

**Table 10-2: Significant Results of the 2016 Drilling Program**

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Corridor |
|---|---|---|---|---|---|
| PC-16-86 | 41.50 | 67.00 | 25.50 | 2.50 | Int. Volcanics |
| PC-16-88 | 166.00 | 182.00 | 16.00 | 3.00 | Int. Volcanics |
| PC-16-90 | 4.80 | 157.80 | 143.00 | 2.00 | Int. Volcanics |
| incl. | 94.40 | 98.50 | 4.20 | 35.10 | Int. Volcanics |
| PC-16-100 | 272.30 | 281.00 | 8.70 | 92.70 | Diorite Dyke |
| incl. | 279.20 | 279.90 | 0.70 | 1,122.00 | Diorite Dyke |
| PC-16-103 | 235.00 | 250.00 | 15.00 | 1.70 | Int. Volcanics |
| PC-16-104 | 299.90 | 303.50 | 3.60 | 7.20 | Diorite Dyke |
| PC-16-105 | 665.00 | 676.50 | 11.50 | 4.20 | Diorite Dyke |
| PC-16-106 | 130.30 | 134.40 | 4.10 | 5.70 | NB/Volcanics |

### 10.1.2 2017 Drilling Program

In 2017, Probe Gold drilled 193 drill holes for 81,868.88 m on the New Béliveau, Highway, North, and South zones. The drill program focused on expansion and exploration drilling in and around the New Béliveau gold deposit and other gold zones along a 2.5 km strike length within the Pascalis Gold Trend. The results confirmed the continuity of gold mineralization and the expansion potential of the New Béliveau deposit, with gold intersections in most of the infill and expansion drill holes. Drilling also indicated a newly identified, sub-vertical shear structure trending northeast across the deposit that hosts new high-grade results and the 2016 high-grade discovery containing 1,122 g/t Au over 0.7 m in hole PC-16-100.

Table 10-3 presents the significant results of the 2017 program.

**Table 10-3: Significant Results of the 2017 Drilling Program**

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Corridor |
|---|---|---|---|---|---|
| PC-17-123 | 263.10 | 283.60 | 20.50 | 2.20 | NB/Dyke |
| incl. | 274.00 | 276.60 | 2.60 | 15.50 | NB/Dyke |
| PC-17-136 | 596.50 | 605.40 | 8.90 | 12.30 | NB/Dyke |
| PC-17-143 | 145.50 | 170.00 | 24.50 | 4.20 | South Ips/Volcanics-Dyke |
| incl. | 147.50 | 159.90 | 12.40 | 7.40 | South Ips/Volcanics-Dyke |
| PC-17-168 | 126.70 | 186.60 | 59.90 | 2.00 | NZ/ Volcanics and Dyke |
| incl. | 126.70 | 133.90 | 7.20 | 8.20 | NZ/ Volcanics and Dyke |
| PC-17-180 | 315.50 | 319.00 | 3.50 | 27.00 | SZ/Volcanics |
| PC-17-182 | 126.90 | 227.40 | 100.50 | 1.10 | NB/Dyke-Volcanics |
| incl. | 174.70 | 209.50 | 34.80 | 2.30 | NB/Volcanics |
| incl. | 205.70 | 209.50 | 3.80 | 18.10 | NB/Volcanics |
| PC-17-197 | 387.70 | 704.00 | 316.30 | 1.50 | NB/Dyke-Volcanics |
| incl. | 538.30 | 595.70 | 57.40 | 3.00 | NB/Dyke |
| incl. | 682.20 | 690.70 | 8.50 | 5.50 | NB/Dyke |
| PC-17-207 | 7.40 | 90.50 | 83.10 | 3.00 | NB/Dyke |
| incl. | 16.70 | 30.30 | 13.60 | 5.30 | NB/Dyke |
| incl. | 44.20 | 49.70 | 5.50 | 5.90 | NB/Dyke |
| incl. | 61.50 | 72.90 | 11.40 | 10.80 | NB/Dyke |
| PC-17-250 | 136.00 | 137.00 | 1.00 | 42.30 | HW/Volcanics |
| PC-17-288 | 83.00 | 103.00 | 20.00 | 2.20 | NB/Volcanic |
| incl. | 83.00 | 89.00 | 6.00 | 6.00 | NB/Volcanic |
| PC-17-293 | 186.00 | 200.00 | 14.00 | 5.30 | NB/Dyke |

### 10.1.3 2018 Drilling Program

In 2018, Probe Gold carried out another major diamond drilling program of 111,598.18 m in 328 holes, primarily focusing on the potential expansion of the New Béliveau gold deposit to the north, west, east, and south of its current limits, as well as other gold zones on the property. The drilling program successfully expanded and extended the delineation of the known resource in the New Béliveau area and upgraded the resource categories. Highlights include near-surface intercepts grading 4.9 g/t Au over 4 m (PC-18-311); intervals of 9.7 g/t Au over 5.5 m, 5.1 g/t Au over 7.0 m and 3.0 g/t Au over 11.0 m (PC-18-301) at depth; and thick zones of lower grade material in the North Zone deposit at shallow depths.

Drilling done on the Courvan area allowed the identification of 12 new gold structures over an area of 2.5 km by 1 km around the old Bussiere mine, all located within a short distance of the issuer's current resources. Highlights include near-surface intersections grading 9.6 g/t Au over 9.1 m (CO-18-64) and 3.2 g/t Au over 10.0 m (CO-18-59) in the Creek Zone and three new discoveries grading 4.0 g/t Au over 7.0 m (CO-18-36), 4.9 g/t Au over 9.0 m (CO-18-48) and 5.1 g/t Au over 8.0 m (CO-18-31) all north of the former Bussiere mine.

In the Monique area, results showed significant new discoveries northwest of the former Monique open-pit gold mine and southwest of the A and B gold zones. Of the 14 holes, 7 were designed to test a large and under-explored area north, west and northwest of the former Monique open pit along the mineralized trend. The best assay results were from hole MO-18-03 at 159 m depth (downhole), which returned 24.8 g/t Au over 2.2 m in a larger interval grading 5.9 g/t Au over 10.5 m.

Five holes were drilled to test a weak IP anomaly located 50 to 200 m southwest of the historical A and B gold zones, returning significant results between the surface and 130 m depth. Gold mineralization is associated mainly with felsic dykes cross-cutting mafic volcanics. Holes MO-18-14, MO-18-11 and MO-18-10 returned the best intercepts grading, respectively: 3.8 g/t Au over 7.0 m, 1.1 g/t Au over 41.2 m and 2.4 g/t Au over 12.8 m.

Table 10-4 presents the significant results of the 2018 program in the Pascalis, Monique and Courvan areas.

**Table 10-4: Significant Results of the 2018 Drilling Program in the Pascalis, Monique and Courvan Areas**

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Corridor |
|---|---|---|---|---|---|
| PC-18-301 | 561.50 | 564.50 | 3.00 | 5.20 | NB/Dyke |
| incl. | 750.00 | 812.50 | 62.50 | 2.30 | NB/Dyke |
| incl. | 750.00 | 761.00 | 11.00 | 3.00 | NB/Dyke |
| incl. | 766.50 | 772.00 | 5.50 | 9.70 | NB/Dyke |
| incl. | 776.00 | 783.00 | 7.00 | 5.10 | NB/Dyke |
| PC-18-311 | 91.00 | 132.00 | 41.00 | 4.90 | NB/Dyke |
| incl. | 123.00 | 132.00 | 9.00 | 20.50 | NB/Dyke |
| incl. | 130.00 | 131.00 | 1.00 | 174.80 | NB/Dyke |
| PC-18-391 | 154.00 | 201.00 | 47.00 | 2.80 | NB/Dyke |
| incl. | 154.00 | 160.70 | 6.70 | 8.60 | NB/Dyke |
| PC-18-393 | 135.30 | 234.30 | 99.00 | 1.40 | NB Dyke/Volcanics |
| incl. | 135.30 | 139.60 | 4.30 | 17.60 | NB Volcanics |
| incl. | 180.70 | 182.90 | 2.20 | 12.70 | NB Dyke |
| PC-18-399 | 103.50 | 176.80 | 73.30 | 1.40 | NZ Dyke |
| incl. | 104.50 | 109.70 | 5.20 | 3.90 | NZ Dyke |
| Inc | 129.30 | 134.50 | 5.20 | 4.30 | NZ Dyke |
| PC-18-401 | 131.30 | 340.50 | 209.20 | 1.00 | NB Dyke |
| incl. | 261.00 | 306.50 | 45.50 | 3.20 | NB Dyke/Volcanic |
| PC-18-416 | 136.40 | 223.00 | 86.60 | 1.00 | North Zone / Volcanics & Dyke |
| incl. | 148.30 | 151.30 | 3.00 | 4.80 | North Zone / Dyke |
| PC-18-422 | 44.20 | 45.20 | 1.00 | 53.30 | New Béliveau / Volcanics |
| | 101.50 | 162.60 | 61.10 | 2.20 | New Béliveau / Volcanics & Dyke |
| incl. | 160.60 | 162.60 | 2.00 | 39.40 | New Béliveau / Dyke |
| PC-18-477 | 108.50 | 136.50 | 28.00 | 1.00 | New Béliveau South / Dyke |
| | 250.00 | 275.20 | 25.20 | 2.20 | New Béliveau South / Dyke |
| incl. | 268.20 | 275.20 | 7.00 | 4.70 | New Béliveau South / Dyke |
| PC-18-529 | 29.00 | 35.50 | 6.50 | 6.70 | North Zone/Dyke |
| MO-18-03 | 158.50 | 169.00 | 10.50 | 5.90 | NW of OP / UM Rocks |
| incl. | 162.80 | 165.00 | 2.20 | 24.80 | NW of OP / UM Rocks |
| MO-18-04 | 363.00 | 367.00 | 4.00 | 5.00 | NW of OP / UM Rocks |
| MO-18-09 | 175.00 | 177.00 | 2.00 | 20.50 | N of OP / UM Rocks |
| MO-18-10 | 108.00 | 120.80 | 12.80 | 2.40 | SW of AB / Felsic Dyke |
| MO-18-11 | 86.00 | 127.20 | 41.20 | 1.10 | SW of AB / Felsic Dyke |
| MO-18-14 | 94.00 | 101.00 | 7.00 | 3.80 | SW of AB / Felsic Dyke |
| CO-18-25 | 69.30 | 76.70 | 7.40 | 5.20 | North of Creek Zone |
| incl. | 74.60 | 76.70 | 2.10 | 15.60 | North of Creek Zone |
| CO-18-31 | 33.50 | 41.50 | 8.00 | 5.10 | Bussiere West |
| CO-18-36 | 282.00 | 289.00 | 7.00 | 4.00 | North of Creek Zone |
| CO-18-48 | 218.00 | 227.00 | 9.00 | 4.90 | North of Creek Zone |
| CO-18-59 | 61.50 | 71.50 | 10.00 | 3.20 | Creek Zone |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Corridor |
|---|---|---|---|---|---|
| CO-18-64 | 105.20 | 114.30 | 9.10 | 9.60 | Creek Zone |
| CO-18-73 | 144.00 | 174.00 | 30.00 | 3.90 | Southwest Zone |
| | 146.00 | 147.00 | 1.00 | 72.10 | Southwest Zone |
| CO-18-78 | 113.30 | 117.30 | 4.00 | 16.70 | Creek Zone |
| incl. | 116.30 | 117.30 | 1.00 | 57.80 | Creek Zone |

### 10.1.4 2019 Drilling Program

The 2019 program continued with expansion and infill drilling of the main resource areas at Pascalis, Courvan and Monique. A total of 114 holes were drilled for 33,162.10 m. Most concentrated on or near the Pascalis, Courvan and Monique gold trends. The most notable drilling results were from the newly outlined Courvan trend with high-grade intercepts returning 9.6 g/t Au over 9.1 m (CO-18-64) and 6.8 g/t Au over 5.3 m (CO-19-107), 3.9 g/t Au over 30 m (CO-18-73), surrounding the former Bussiere mine. A new gold zone was also discovered southeast of the former Monique open pit, with the discovery hole grading 7.6 g/t Au over 10.0 m (MO-19-18) and 5.9 g/t Au over 11.5 m (MO-19-16). The Pascalis gold trend continued to show strong open-pit potential with positive drill results throughout the year.

Table 10-5 presents the significant results of the 2019 program in the Pascalis, Monique and Courvan areas.

**Table 10-5: Significant Results of the 2019 Drilling Program in the Pascalis, Monique and Courvan Areas**

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Corridor |
|---|---|---|---|---|---|
| PC-19-541 | 155.50 | 160.70 | 5.20 | 2.40 | HW / Gabbro |
| PC-19-552 | 88.20 | 97.70 | 9.50 | 1.20 | HW / Ultramafic |
| PC-19-559 | 213.30 | 228.90 | 15.60 | 4.81 | Northeast Extension |
| incl. | 220.50 | 221.50 | 1.00 | 27.30 | Northeast Extension |
| PC-19-565 | 88.20 | 99.50 | 11.30 | 3.34 | New Béliveau South |
| incl. | 93.50 | 94.50 | 1.00 | 26.40 | New Béliveau South |
| incl. | 98.50 | 99.50 | 1.00 | 9.21 | New Béliveau South |
| PC-19-595 | 33.00 | 41.00 | 8.00 | 2.11 | New Béliveau SE |
| CO-19-97 | 163.00 | 176.20 | 13.20 | 2.00 | Bussiere Zone |
| CO-19-106 | 128.50 | 145.60 | 17.10 | 1.00 | Southwest Zone |
| incl. | 138.50 | 140.60 | 2.10 | 5.10 | Southwest Zone |
| | 207.50 | 233.00 | 25.50 | 1.20 | Southwest Zone |
| CO-19-107 | 190.20 | 195.50 | 5.30 | 6.80 | Southwest Zone |
| | 191.20 | 194.20 | 3.00 | 11.70 | Southwest Zone |
| incl. | 191.20 | 192.20 | 1.00 | 25.10 | Southwest Zone |
| | 207.50 | 233.00 | 25.50 | 1.20 | Southwest Zone |
| CO-19-113 | 172.80 | 174.80 | 2.00 | 8.21 | Southwest Zone |
| CO-19-118 | 194.20 | 195.20 | 1.00 | 12.30 | Creek Zone |
| | 222.00 | 223.00 | 1.00 | 4.24 | Creek Zone |
| CO-19-126 | 19.50 | 20.50 | 1.00 | 14.71 | Creek Zone |
| MO-19-16 | 184.00 | 195.50 | 11.50 | 5.90 | AB Parallel Zone / Volcanics |
| incl. | 184.00 | 185.00 | 1.00 | 24.50 | AB Parallel Zone / Volcanics |
| incl. | 193.50 | 194.50 | 1.00 | 33.00 | AB Parallel Zone / Volcanics |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Corridor |
|---|---|---|---|---|---|
| MO-19-18 | 158.00 | 168.00 | 10.00 | 7.60 | AB Parallel Zone / Volcanics |
| MO-19-22 | 298.30 | 302.30 | 4.00 | 5.40 | AB Parallel Zone / Volcanics |
| incl. | 298.30 | 300.30 | 2.00 | 7.40 | AB Parallel Zone / Volcanics |
| MO-19-32 | 258.40 | 270.80 | 12.40 | 3.10 | AB Parallel Zone / Volcanics |
| incl. | 258.40 | 259.40 | 1.00 | 6.00 | AB Parallel Zone / Volcanics |
| incl. | 269.80 | 270.80 | 1.00 | 11.90 | AB Parallel Zone / Volcanics |

#### 10.1.5 2020 Drilling Program

In 2020, 219 holes totalling 65,010.95 m were drilled on the Courvan, Pascalis, and Monique trends. The program focused on expanding and delineating the project’s current gold resources and defining potential new gold deposits within its regional land holdings.

Drilling in the Courvan area showed a new discovery west of the former Bussiere mine and deposit growth along the Courvan Gold Trend. The discovery drill hole (CO-20-129), 850 m west of the historical Bussiere mine shaft, intersected significant stacking of veins close to the surface with 1.3 g/t Au over 15.5 m. It also expanded the Bussiere West and Southeast zones along strike and at shallow depth. Drill hole CO-20-139 returned the best assay results from the Southeast Zone, with a high-grade interval of 8.9 g/t Au over 10.8 m. Three infill holes (CO-20-131 to CO-20-133) in the Creek Zone also returned very positive results with an intercept grading up to 6.8 g/t Au over 14.1 m. Holes CO-20-155 to -163 tested near-surface extensions of the stacked gold structures west of the Bussiere mine, while holes CO-20-170 to -172 tested north of it. The best results came from the northern extension of the former Bussiere mine gold system, which has seen limited drilling in the past. Holes CO-20-164 to -169 and extension holes CO-20-131 and -146 tested the Creek Zone near the surface to the east and its exploration potential at depth. The best results came from holes CO-20-146 and -131, with hole CO-20-146 intersecting 9.4 g/t Au over 12.2 m.

Drilling on the Pascalis Trend identified new mineralization within and near the margins of the Béliveau and North conceptual pits defined in the 2019 MRE. The best expansion drilling results came from the extensions to the west, south and east of the Béliveau deposit (56.1 g/t Au over 1.1 m in PC-20-638) and from the northeast extension of the North deposit (96.6 g/t Au over 0.5 m in PC-20-672). Infill drilling in the main dyke 500 m south of the former L.C. Béliveau Mine also returned significant results (11.0 g/t Au over 7.2 m in PC-20-658).

Drilling on the Monique Trend was successful in further delineating the gold zones. Hole MO-20-33 was designed to test the A and B gold zones at depth and intersected some of the best assay results from the A Zone, with a wide interval of 5.2 g/t Au over 14 m. Hole MO-20-41 tested the western extension of the I zone and intersected 4.5 g/t Au over 14.0 m at 80 m depth. Hole MO-20-39 intersected a new high-grade gold discovery parallel to the zone, returning 18.4 g/t Au over 2.3 m. The zone was intersected less than 25 m vertically from surface.

Table 10-6 presents the significant results of the 2020 program in the Pascalis, Monique and Courvan areas.

**Table 10-6: Significant Results of the 2020 Drilling Program in the Pascalis, Monique and Courvan Areas**

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock |
|---|---|---|---|---|---|
| CO-20-129 | 61.00 | 76.50 | 15.50 | 1.27 | Bussiere West Discovery |
| CO-20-131 | 473.50 | 475.90 | 2.40 | 4.98 | Creek Zone |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock |
|---|---|---|---|---|---|
| incl. | 475.20 | 475.90 | 0.70 | 9.16 | Creek Zone |
| CO-20-134 | 168.00 | 182.10 | 14.10 | 6.78 | Creek Zone |
| CO-20-139 | 161.30 | 165.40 | 4.10 | 2.92 | Southeast |
| CO-20-139 | 183.00 | 194.80 | 11.80 | 8.22 | Southeast |
| incl. | 184.00 | 185.00 | 1.00 | 9.14 | Southeast |
| incl. | 190.80 | 191.40 | 0.60 | 28.60 | Southeast |
| incl. | 191.40 | 192.10 | 0.70 | 42.10 | Southeast |
| incl. | 192.10 | 193.30 | 1.20 | 16.80 | Southeast |
| CO-20-146 | 752.80 | 765.00 | 12.20 | 9.42 | Creek Zone |
| incl. | 752.80 | 753.50 | 0.70 | 12.80 | Creek Zone |
| incl. | 755.20 | 756.10 | 0.90 | 63.30 | Creek Zone |
| incl. | 759.00 | 759.60 | 0.60 | 38.50 | Creek Zone |
| incl. | 759.60 | 760.30 | 0.70 | 14.40 | Creek Zone |
| CO-20-148 | 36.60 | 41.00 | 4.40 | 10.25 | Creek Zone |
| incl. | 37.70 | 39.00 | 1.30 | 32.20 | Creek Zone |
| CO-20-151 | 126.50 | 133.20 | 6.70 | 7.16 | Creek Zone |
| incl. | 131.20 | 132.20 | 1.00 | 8.14 | Creek Zone |
| incl. | 132.20 | 133.20 | 1.00 | 25.30 | Creek Zone |
| CO-20-171 | 164.90 | 177.90 | 13.00 | 7.50 | Bussiere East |
| incl. | 168.30 | 169.90 | 0.70 | 23.30 | Bussiere East |
| CO-20-172 | 53.50 | 57.50 | 4.00 | 6.15 | Bussiere East |
| incl. | 53.50 | 54.40 | 0.90 | 18.20 | Bussiere East |
| incl. | 55.40 | 56.40 | 1.00 | 6.14 | Bussiere East |
| PC-20-604 | 106.80 | 116.00 | 9.20 | 5.90 | New Béliveau South |
| PC-20-615 | 321.50 | 332.00 | 10.50 | 3.42 | New Béliveau South |
| incl. | 321.50 | 322.10 | 0.60 | 8.16 | New Béliveau South |
| incl. | 322.10 | 323.00 | 0.90 | 20.00 | New Béliveau South |
| PC-20-627 | 136.00 | 137.00 | 1.00 | 23.80 | New Béliveau South |
| PC-20-632 | 117.80 | 118.80 | 1.00 | 136.00 | New Béliveau |
| PC-20-637 | 195.70 | 197.00 | 1.30 | 20.39 | New Béliveau |
| PC-20-638 | 107.00 | 108.10 | 1.10 | 56.60 | New Béliveau |
| PC-20-644 | 18.50 | 21.50 | 3.00 | 8.24 | New Béliveau |
| PC-20-658 | 268.30 | 275.50 | 7.20 | 11.00 | New Béliveau South |
| PC-20-660 | 115.00 | 118.00 | 3.00 | 7.81 | New Béliveau |
| incl. | 115.00 | 116.00 | 1.00 | 15.20 | New Béliveau |
| PC-20-672 | 162.60 | 163.10 | 0.50 | 96.60 | North Zone |
| MO-20-33 | 699.00 | 713.00 | 14.00 | 5.16 | A / Volcanics & Felsic Intrusive |
| incl. | 703.00 | 706.10 | 3.10 | 15.04 | A / Felsic Intrusive |
| incl. | 709.30 | 713.00 | 3.70 | 5.79 | A / Volcanics & Felsic Intrusive |
| MO-20-39 | 26.50 | 28.80 | 2.30 | 18.39 | I / Felsic Intrusive |
| MO-20-41 | 94.00 | 108.00 | 14.00 | 4.45 | I / Volcanics & Felsic Intrusive |
| incl. | 100.00 | 102.00 | 2.00 | 7.97 | I / Felsic Intrusive |
| incl. | 105.00 | 107.00 | 2.00 | 18.30 | I / Felsic Intrusive |
| MO-20-43 | 56.00 | 78.50 | 22.50 | 1.39 | P/Diorite |
| incl. | 71.00 | 73.50 | 2.50 | 7.03 | P/Diorite |
| MO-20-44 | 31.80 | 67.10 | 35.30 | 1.10 | P/Diorite |
| incl. | 35.80 | 37.30 | 1.50 | 8.55 | P/Diorite |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock |
|---|---|---|---|---|---|
| incl. | 66.00 | 67.10 | 1.10 | 7.54 | P/Diorite |
| MO-20-47 | 195.90 | 198.90 | 3.00 | 13.97 | J/Volcanics |
| incl. | 195.90 | 196.90 | 1.00 | 34.30 | J/Volcanics |
| MO-20-48 | 266.30 | 271.40 | 5.10 | 8.10 | J/Diorite-Felsic Intrusive |
| MO-20-59 | 112.60 | 119.30 | 6.70 | 3.57 | I HW / Felsic Intrusive |
| incl. | 116.50 | 117.50 | 1.00 | 9.24 | I HW / Felsic Intrusive |
| MO-20-65 | 303.00 | 327.50 | 24.50 | 4.14 | J/ Volcanics - Felsic Intrusive |
| incl. | 303.00 | 312.50 | 9.50 | 9.20 | J/Volcanics - Felsic Intrusive |
| MO-20-70 | 65.00 | 67.90 | 2.90 | 20.79 | I / Felsic Dyke |
| MO-20-84 | 243.40 | 264.90 | 21.50 | 2.69 | J / Diorite |
| incl. | 251.90 | 255.90 | 4.00 | 8.48 | J / Diorite |
| MO-20-93 | 23.20 | 33.60 | 10.40 | 7.27 | I / Felsic Dyke |
| incl. | 27.40 | 28.00 | 0.60 | 81.70 | I / Felsic Dyke |

### 10.1.6 2021 Drilling Program

The 2021 program focused on resource expansion and conversion of the A, B, I and M zones in the southeastern part of the mining lease and at the J, G and L zones in the northwestern Monique area. The program comprised more than 168 holes totalling 44,300.5 m. The results confirmed grades in multiple mineralized zones and demonstrated the potential to define other potentially mineralized subvertical trending structures. Based on the historical mining at the former Monique gold mine and new results, it was determined that the mineralization in the main zone of the former mine continues at depth and to the west and east. A historical zone (E) has also been expanded at depth and to the west and east.

Table 10-7 presents the significant results of the 2021 program in the Monique area.

**Table 10-7: Significant Results of the 2021 Drilling Program in the Monique Area**

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| MO-21-97 | 214.30 | 220.00 | 5.70 | 9.60 | B / Volcanics |
| incl. | 218.10 | 219.00 | 0.90 | 30.40 | B / Volcanics |
| MO-21-97 | 310.00 | 323.60 | 13.60 | 4.50 | M / Volcanics |
| incl. | 311.00 | 313.80 | 2.80 | 10.10 | M / Volcanics |
| MO-21-98 | 186.90 | 206.00 | 19.10 | 4.80 | B / Volcanics |
| incl. | 195.70 | 196.70 | 1.00 | 83.30 | B / Volcanics |
| MO-21-98 | 331.80 | 348.80 | 17.00 | 1.20 | M / Volcanics |
| incl. | 343.00 | 347.00 | 4.00 | 3.80 | M / Volcanics |
| MO-21-99 | 202.50 | 210.50 | 8.00 | 2.10 | B / Volcanics |
| MO-21-99 | 351.80 | 370.50 | 18.70 | 5.30 | M / Volcanics |
| MO-21-101 | 427.20 | 472.00 | 44.80 | 1.50 | L / Volcanics + Felsic Int. |
| incl. | 436.80 | 443.00 | 6.20 | 3.50 | L / Volcanics + Felsic Int. |
| MO-21-102 | 500.80 | 511.70 | 10.90 | 1.90 | L / Volcanics + Felsic Int. |
| incl. | 506.00 | 506.90 | 0.90 | 11.10 | L / Volcanics + Felsic Int. |
| MO-21-103 | 372.50 | 374.50 | 2.00 | 21.80 | K / Volcanics |
| MO-21-106 | 94.70 | 110.70 | 16.00 | 1.60 | P / Volcanics + Diorite |
| incl. | 105.70 | 106.70 | 1.00 | 20.90 | P / Volcanics + Diorite |
| MO-21-114 | 577.00 | 610.30 | 33.30 | 1.40 | J / Volcanics |
| incl. | 577.00 | 581.80 | 4.80 | 6.50 | J / Volcanics |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| MO-21-115 | 477.10 | 481.20 | 4.10 | 7.20 | L / Felsic Int. |
| Inc | 477.80 | 478.70 | 0.90 | 29.50 | L / Felsic Int. |
| MO-21-117 | 26.10 | 80.10 | 54.00 | 0.90 | J / Volcanics + Felsic Int. |
| MO-21-120 | 34.00 | 69.70 | 35.70 | 1.30 | J / Volcanics + Diorite |
| MO-21-122 | 229.50 | 249.00 | 19.50 | 3.10 | B / Volcanics-Felsic dyke |
| incl. | 229.50 | 235.10 | 5.60 | 8.80 | B / Volcanics-Felsic dyke |
| MO-21-122 | 388.50 | 414.50 | 26.00 | 4.70 (cut)<br>7.50 (uncut) | M / Volcanics |
| incl. | 393.40 | 403.70 | 10.30 | 10.50 (cut)<br>17.70 (uncut) | M / Volcanics |
| incl. | 393.40 | 394.30 | 0.90 | 182.00 | M / Volcanics |
| MO-21-124 | 47.50 | 67.00 | 19.50 | 1.40 | A / Volcanics |
| MO-21-125 | 330.00 | 333.00 | 3.00 | 5.80 | I / Volcanics-Felsic dyke |
| MO-21-126 | 388.00 | 391.30 | 3.30 | 5.80 | M / Volcanics |
| MO-21-127 | 104.30 | 126.00 | 21.70 | 3.80 | A / Volcanics-Felsic dyke |
| incl. | 107.40 | 116.00 | 8.60 | 7.90 | A / Volcanics-Felsic dyke |
| MO-21-129 | 51.60 | 52.60 | 1.00 | 15.90 | E1 / Volcanics-Diorite |
| MO-21-129 | 378.00 | 408.00 | 30.00 | 2.00 | M / Felsic dyke-Volcanics |
| incl. | 391.30 | 399.00 | 7.70 | 5.50 | M / Felsic dyke-Volcanics |
| MO-21-130 | 307.50 | 323.10 | 15.60 | 1.60 | I / Volcanics |
| MO-21-130 | 442.60 | 452.00 | 9.40 | 2.00 | M / Volcanics-Felsic dyke |
| MO-21-133 | 299.0 | 304.5 | 5.5 | 4.2 | B / Volcanics |
| MO-21-134 | 115.00 | 126.00 | 11.00 | 1.50 | A / Volcanics-Felsic dyke |
| MO-21-135 | 557.50 | 566.20 | 8.70 | 3.00 | Ghw / Ultramafics |
| incl. | 562.30 | 566.20 | 3.90 | 6.30 | Ghw / Ultramafics |
| MO-21-137 | 28.50 | 51.10 | 22.60 | 1.10 | E1 / Diorite |
| MO-21-138 | 472.00 | 487.80 | 15.80 | 4.40 | B / Volcanics |
| incl. | 479.90 | 480.60 | 0.70 | 76.70 | B / Volcanics |
| MO-21-138 | 585.80 | 592.00 | 6.20 | 4.90 | M / Volcanics-Felsic dyke |
| incl. | 587.80 | 588.50 | 0.70 | 39.60 | M / Volcanics-Felsic dyke |
| MO-21-139 | 676.30 | 702.20 | 25.90 | 1.10 | M / Volcanics |
| incl. | 690.70 | 692.70 | 2.00 | 7.20 | M / Volcanics |
| MO-21-140 | 270.10 | 286.40 | 16.30 | 2.80 | J / Volcanics-Diorite |
| incl. | 275.10 | 285.40 | 10.30 | 3.80 | J / Volcanics-Diorite |
| MO-21-141 | 38.40 | 49.50 | 11.10 | 1.30 | New Zone / Volcanics |
| MO-21-142 | 645.00 | 649.00 | 4.00 | 6.00 | B / Volcanics |
| incl. | 648.00 | 649.00 | 1.00 | 15.40 | B / Volcanics |
| MO-21-143 | 296.80 | 310.20 | 13.40 | 1.70 | I / Volcanics-Felsic dyke |
| incl. | 299.80 | 304.70 | 4.90 | 3.80 | I / Volcanics-Felsic dyke |
| MO-21-149 | 289.80 | 293.80 | 4.00 | 12.20 | A / Infill |
| incl. | 291.80 | 292.80 | 1.00 | 43.80 | A / Expansion |
| MO-21-158 | 26.70 | 44.70 | 18.00 | 3.70 | E / Expansion |
| incl. | 40.80 | 41.70 | 0.90 | 22.90 | E / Expansion |
| MO-21-171 | 27.70 | 67.80 | 40.10 | 1.20 | J / Infill |
| MO-21-190 | 38.90 | 87.80 | 48.90 | 1.10 | B / Expansion |
| MO-21-195 | 16.70 | 61.60 | 44.90 | 0.90 | B / Infill |
| incl. | 51.80 | 55.10 | 3.30 | 5.00 | B / Infill |
| MO-21-195 | 208.00 | 218.00 | 10.00 | 5.60 | M / Expansion |
| incl. | 209.00 | 210.00 | 1.00 | 39.90 | M / Expansion |
| MO-21-198 | 272.60 | 288.60 | 16.00 | 6.00 | M / Expansion |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| incl. | 276.10 | 276.80 | 0.70 | 103.00 | M / Expansion |
| MO-21-201 | 24.20 | 124.40 | 100.20 | 1.00 | B / Infill |
| incl. | 103.80 | 104.40 | 0.60 | 29.00 | B / Infill |
| MO-21-207 | 114.30 | 127.50 | 13.20 | 5.80 | A / Expansion |
| incl. | 114.30 | 115.30 | 1.00 | 68.80 | A / Expansion |
| MO-21-211 | 28.60 | 104.20 | 75.60 | 0.80 | E+A / Expansion |
| MO-21-212 | 65.20 | 104.30 | 39.10 | 1.40 | A / Expansion |
| incl. | 78.00 | 83.00 | 5.00 | 5.90 | A / Expansion |
| MO-21-219 | 86.90 | 113.60 | 26.70 | 1.50 | A / Expansion |
| MO-21-219 | 341.50 | 356.00 | 14.50 | 2.10 | M / Expansion |
| MO-21-220 | 129.70 | 130.30 | 0.60 | 59.10 | E/ Expansion |
| MO-21-226 | 43.00 | 44.00 | 1.00 | 45.10 | E / Expansion |
| MO-21-226 | 289.40 | 297.20 | 7.80 | 2.60 | A / Expansion |
| MO-21-237 | 138.00 | 151.70 | 13.70 | 1.90 | E / Infill |
| MO-21-242 | 238.60 | 246.70 | 8.10 | 12.70 (cut)<br>17.20 (uncut) | B / Expansion |
| incl. | 238.60 | 239.50 | 0.90 | 141.00 | B / Expansion |
| MO-21-249 | 50.50 | 95.90 | 45.40 | 0.90 | E / Infill |

#### 10.1.7 2022 Drilling Program

The 2022 program focused on converting inferred resources to the indicated category while targeting significant expansions. Resource expansion mainly focused from surface to 500 m depth along the Monique Trend and over the Bussiere-Creek area of the Courvan Trend. The program, totalling 81,595 m in 358 holes in the Monique area, confirmed a large gold system 2.2 km long, 1 km wide and 600 m deep. The Monique Gold Trend zones are all open along strike and at depth.

The drill program on the Pascalis Gold Trend totalled 40,925 m in 225 holes. It has been successful in confirming the continuity of gold zones with infill drilling and expanding near-surface gold mineralization at both Béliveau and North deposits within the conceptual pits defined by the 2021 mineral resource estimate (“2021 MRE”).

The fall drill program at Courvan, totalling 29,818 m in 142 holes, was focused on both resource expansion and resource conversion drilling. To date, results from this drilling returned the largest intervals to date from the Courvan Trend, including 1.1 g/t Au over 113.0 m and 0.8 g/t Au over 154.3 m.

Table 10-8 presents the significant results of the 2022 program in the Monique, Pascalis, and Courvan areas.

**Table 10-8: Significant Results of the 2022 Drilling Program in the Monique, Pascalis, and Courvan Areas**

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| MO-22-250 | 237.80 | 241.70 | 3.90 | 8.90 | M / Infill |
| MO-22-260 | 189.50 | 210.60 | 21.10 | 1.60 | G / Infill |
| MO-22-261 | 45.70 | 64.00 | 18.30 | 1.90 | A / Expansion |
| MO-22-264 | 79.00 | 87.00 | 8.00 | 2.30 | A / Infill |
| MO-22-264 | 185.00 | 198.20 | 13.20 | 3.00 | I / Infill |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| MO-22-276 | 360.90 | 361.90 | 1.00 | 40.40 | P / Expansion |
| MO-22-277 | 96.40 | 112.80 | 16.40 | 6.00 | J / Expansion |
| MO-22-325 | 508.00 | 523.40 | 15.40 | 4.40 | J / Expansion |
| MO-22-336 | 327.80 | 328.50 | 0.70 | 341.00 | P / Expansion |
| MO-22-336 | 458.00 | 463.10 | 5.10 | 8.50 | G / Infill |
| MO-22-342 | 360.90 | 365.00 | 4.10 | 5.90 | A / Infill |
| MO-22-345 | 86.00 | 111.50 | 25.50 | 1.30 | I / Infill |
| MO-22-348 | 56.40 | 71.80 | 15.40 | 1.70 | I / Infill |
| MO-22-354 | 56.50 | 70.20 | 13.70 | 2.60 | I / Expansion |
| MO-22-356 | 455.50 | 477.60 | 22.10 | 1.30 | J / Expansion |
| MO-22-359 | 265.50 | 336.20 | 70.70 | 1.50 | J / Infill |
| incl. | 283.70 | 309.00 | 25.30 | 3.40 | J / Infill |
| MO-22-366 | 475.10 | 515.30 | 40.20 | 1.20 | G / Infill |
| incl. | 490.00 | 493.40 | 3.40 | 6.70 | G / Infill |
| MO-22-385 | 433.50 | 455.60 | 22.10 | 1.70 | B /Infill |
| MO-22-397 | 16.30 | 32.80 | 16.50 | 2.50 | K /Expansion |
| MO-22-410 | 137.30 | 153.60 | 16.30 | 2.40 | J / Expansion |
| MO-22-414 | 83.00 | 137.00 | 54.00 | 1.50 | J / Infill |
| MO-22-418 | 66.00 | 77.00 | 11.00 | 3.90 | A / Expansion |
| MO-22-419 | 465.70 | 473.10 | 7.40 | 18.20 | A / Infill |
| MO-22-423 | 46.50 | 83.60 | 37.10 | 1.00 | A / Expansion |
| MO-22-456 | 498.40 | 558.40 | 60.00 | 1.50 | A / Expansion |
| MO-22-457 | 280.50 | 317.40 | 36.90 | 1.10 | A / Infill |
| MO-22-465 | 69.50 | 107.80 | 38.30 | 2.20 | B / Infill |
| MO-22-466 | 68.10 | 92.50 | 24.40 | 2.30 | I / Infill |
| MO-22-467 | 138.50 | 140.80 | 2.30 | 32.10 | M / Expansion |
| MO-22-469 | 372.00 | 392.00 | 20.00 | 1.90 | M / Expansion |
| MO-22-475 | 22.60 | 45.50 | 22.90 | 19.20 (uncut) | J / Intermediate Dyke |
| MO-22-475 | 22.60 | 45.50 | 22.90 | 4.90 (cut) | J / Intermediate Dyke |
| MO-22-476 | 169.80 | 173.80 | 4.00 | 17.00 | M / Intermediate Dyke |
| MO-22-482 | 435.30 | 456.90 | 21.60 | 3.20 | A / Inter. Dyke / Volcanics |
| MO-22-484 | 76.00 | 120.00 | 44.00 | 1.80 | B / Volcanics |
| MO-22-499 | 90.00 | 127.30 | 37.30 | 2.40 | I / Inter. Dyke / Volcanics |
| MO-22-509 | 83.00 | 84.00 | 1.00 | 227.80 | Q / Gabbro |
| MO-22-510 | 102.00 | 103.00 | 1.00 | 64.00 | New / Volcanics |
| MO-22-530 | 146.80 | 168.70 | 21.90 | 2.00 | J / Inter. Dyke / Ultramafics |
| MO-22-541 | 482.00 | 502.50 | 20.50 | 3.50 | M / Volcanics |
| PC-22-701 | 43.5 | 53.0 | 9.5 | 3.2 | Infill / Béliveau |
| PC-22-701 | 160.0 | 168.2 | 8.2 | 2.1 | Infill / Béliveau |
| PC-22-725 | 6.0 | 50.0 | 44.0 | 3.9 | Infill / Béliveau |
| PC-22-725 | 148.0 | 195.0 | 47.0 | 0.5 | Infill / Béliveau |
| PC-22-730 | 110.7 | 113.6 | 2.9 | 10.1 | Infill / Béliveau |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| PC-22-732 | 305.4 | 327.1 | 21.7 | 2.7 | Infill / Béliveau |
| PC-22-732 | 374.0 | 376.0 | 2.0 | 7.8 | Infill / Béliveau |
| PC-22-734 | 191.8 | 192.8 | 1.0 | 156.0 | Expansion / Béliveau |
| PC-22-737 | 291.4 | 297.0 | 5.6 | 3.7 | Béliveau / Expansion |
| PC-22-757 | 223.0 | 225.0 | 2.0 | 34.8 | Béliveau / Expansion |
| PC-22-760 | 248.0 | 249.0 | 1.0 | 159.0 | Béliveau / Expansion |
| PC-22-765 | 91.0 | 110.3 | 19.3 | 1.2 | Béliveau / Infill |
| PC-22-781 | 310.0 | 311.0 | 1.0 | 60.2 | Béliveau / Infill |
| PC-22-783 | 153.5 | 154.5 | 1.0 | 198.0 | Béliveau / Infill |
| PC-22-783 | 255.0 | 257.0 | 2.0 | 6.6 | Béliveau / Expansion |
| PC-22-784 | 26.5 | 32.0 | 5.5 | 1.7 | North / Expansion |
| PC-22-784 | 69.0 | 89.7 | 20.7 | 3.2 | North / Infill |
| PC-22-787 | 292.0 | 304.6 | 12.6 | 1.9 | Béliveau / Infill |
| PC-22-787 | 330.6 | 344.6 | 14.0 | 1.0 | Béliveau / Infill |
| PC-22-788 | 41.0 | 58.0 | 17.0 | 2.2 | North / Infill |
| PC-22-788 | 140.0 | 150.0 | 10.0 | 1.5 | North / Infill |
| PC-22-788 | 193.5 | 207.0 | 13.5 | 1.1 | North / Expansion |
| PC-22-789 | 24.5 | 26.3 | 1.8 | 14.2 | Béliveau / Expansion |
| PC-22-802 | 10.0 | 25.0 | 15.0 | 1.7 | North / Infill |
| PC-22-802 | 39.0 | 48.0 | 9.0 | 3.8 | North / Infill |
| PC-22-802 | 97.5 | 105.0 | 7.5 | 1.4 | North / Infill |
| PC-22-804 | 25.3 | 26.3 | 1.0 | 23.0 | North / Expansion |
| PC-22-807 | 22.0 | 81.0 | 59.0 | 2.4 | North / Infill |
| incl. | 45.5 | 61.5 | 16.0 | 5.1 | North / Infill |
| PC-22-812 | 38.0 | 57.0 | 19.0 | 5.6 | North / Expansion |
| PC-22-812 | 108.5 | 119.4 | 10.9 | 8.2 | North / Infill |
| PC-22-813 | 80.8 | 104.3 | 23.5 | 1.1 | North / Infill |
| PC-22-821 | 16.4 | 73.0 | 56.6 | 1.5 | North / Infill |
| PC-22-822 | 7.0 | 15.0 | 8.0 | 4.2 | Béliveau / Infill |
| PC-22-824 | 202.5 | 212.5 | 10.0 | 2.2 | North / Expansion |
| PC-22-828 | 134.0 | 136.0 | 2.0 | 19.0 | Béliveau / Expansion |
| PC-22-830 | 96.0 | 126.5 | 30.5 | 1.1 | North / Infill |
| PC-22-831 | 103.3 | 105.2 | 1.9 | 19.5 | Béliveau / Infill |
| PC-22-833 | 84.5 | 93.0 | 8.5 | 4.1 | North / Expansion |
| PC-22-835 | 93.5 | 103.0 | 9.5 | 6.3 | Béliveau / Infill |
| PC-22-853 | 27.0 | 47.0 | 20.0 | 2.0 | North / Infill |
| PC-22-859 | 231.0 | 245.5 | 14.5 | 1.5 | South / Expansion |
| PC-22-864 | 176.1 | 191.0 | 14.9 | 1.4 | South / Expansion |
| PC-22-885 | 93.1 | 95.1 | 2.0 | 21.7 | South / Infill |
| PC-22-887 | 25.0 | 32.0 | 5.0 | 8.1 | South / Expansion |
| PC-22-887 | 25.0 | 58.3 | 33.3 | 1.8 | South / Expansion |
| PC-22-890 | 150.5 | 159.9 | 9.4 | 3.0 | South / Infill |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| PC-22-890 | 190.0 | 219.5 | 29.5 | 0.4 | South / Expansion |
| PC-22-893 | 91.0 | 92.0 | 1.0 | 10.2 | South / Infill |
| PC-22-893 | 136.4 | 152.6 | 16.2 | 1.8 | South / Infill |
| CO-22-189 | 179.5 | 293.0 | 113.5 | 1.1 | Infill |
| CO-22-195 | 153.0 | 211.0 | 58.0 | 0.5 | Infill |
| CO-22-195 | 245.5 | 250.0 | 4.5 | 2.4 | Expansion |
| CO-22-205 | 82.5 | 107.3 | 24.8 | 2.3 | Infill |
| incl. | 82.5 | 92.3 | 9.8 | 5.2 | Infill |
| CO-22-216 | 144.3 | 148.8 | 4.5 | 2.7 | Expansion |
| CO-22-216 | 228.0 | 270.0 | 42.0 | 1.3 | Expansion |
| CO-22-217 | 158.5 | 220.0 | 61.5 | 1.5 | Infill |
| CO-22-225 | 57.0 | 68.4 | 11.4 | 3.2 | Expansion |
| CO-22-232 | 23.5 | 56.0 | 32.5 | 2.7 | Expansion |
| CO-22-240 | 186.5 | 187.5 | 1.0 | 72.2 | Infill |
| CO-22-240 | 197.5 | 214.0 | 16.5 | 4.3 | Infill |
| CO-22-241 | 138.5 | 147.0 | 8.5 | 1.1 | Infill |
| CO-22-241 | 219.0 | 220.0 | 1.0 | 68.8 | Expansion |
| CO-22-242 | 25.4 | 26.4 | 1.0 | 19.3 | Expansion |
| CO-22-242 | 144.5 | 145.5 | 1.0 | 9.8 | Expansion |
| CO-22-245 | 48.5 | 202.8 | 154.3 | 0.8 | Infill |
| incl. | 48.5 | 75.1 | 26.6 | 2.4 | Infill |
| CO-22-265 | 91.8 | 95.3 | 3.5 | 13.1 | Infill |
| CO-22-295 | 274.0 | 290.9 | 16.9 | 4.5 | Expansion |
| CO-22-303 | 260.5 | 301.5 | 41.0 | 1.4 | Expansion |
| CO-22-303 | 287.1 | 299.5 | 12.4 | 3.9 | Expansion |

### 10.1.8 2023 Drilling Program

The 2023 program aimed to increase mineral resources and make new discoveries on the project. Probe Gold tested targets in the regional extensions of the Monique, Pascalis, and Courvan gold trends and other new areas of the property. Probe Gold also pursued an extensive expansion drill program to continue increasing the number of gold ounces within the Novador deposits, focusing on the potential for new mineralization within the current open pit shells and underground stopes.

Over 61,692 m of drilling have been completed at Novador in 2023:

- Monique deposit:
  - Expansion and infill: 33,261 m
  - Exploration: 10,960 m
- Pascalis deposit:
  - Expansion and infill: 6,753 m

  - Exploration: 1,541 m
- Courvan deposit:
  - Expansion and infill: 3,430 m
  - Exploration: 5,747 m.

At the effective date of this report, only the results for the Monique deposit were available.

The 2023 Monique drill program primarily focused on expanding the resource both inside and beneath the conceptual pit shell used in the current mineral resource estimate. This is achieved by targeting areas in the extension of the known gold zones characterized by higher grades and thickness. The program comprised 102 holes totalling 33,662 m. The new results continue to demonstrate growth and continuity of gold mineralization at the Monique deposit. The Monique Gold Trend zones remain open along strike and at depth.

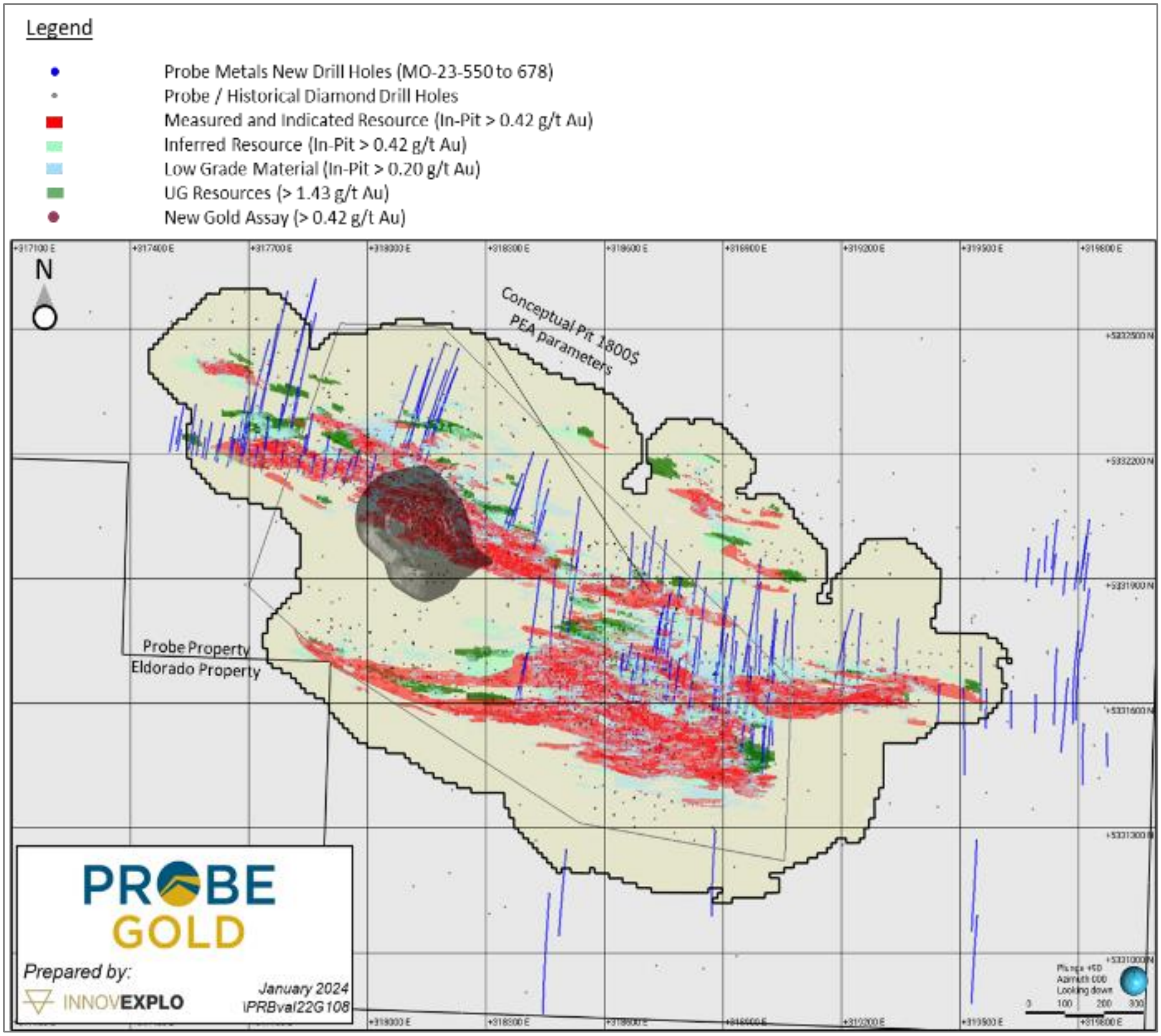
Ninety-seven holes drilled to identify or confirm in-pit mineralization returned gold intercepts over 0.42 g/t Au, which is above the cut-off grade used in the 2023 pit-constrained resource estimate. 69 holes returned gold intercepts with grade times thickness above 10.0 g/t Au. Results have returned gold intercepts from surface to 450 m vertical depth (Figure 10-4 and Table 10-9 of selected drill results below).

Five exploration holes drilled south of the conceptual pit intersected interesting parallel structures in which two holes returned low-grade gold value.

Results from the 2023 drilling campaign for the Pascalis and Courvan deposits where not available at the time of the report.

The 2023 drill holes are not included in the MRE 2023. The authors do not believe that the omission of these holes will materially affect the MRE 2023, and the decision to leave them out is in accordance with the current geological models.

**Figure 10-4: Holes Drilled on the Monique Area in 2023**




Source: InnovExplo, 2024

**Table 10-9: Significant Results of the 2023 Drilling Program in the Monique Area**

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| MO-22-488EXT | 550.6 | 575 | 24.4 | 3.8 | M/Infill |
| MO-23-550 | 272 | 306.3 | 34.3 | 2.1 | J/Infill |
| MO-23-551 | 83.3 | 91.5 | 8.2 | 1.2 | A/Infill |
| MO-23-551 | 102 | 103 | 1 | 15.5 | A/Expan |
| MO-23-552 | 132.5 | 145 | 12.5 | 1.3 | A/Infill |
| MO-23-552 | 394.9 | 408.5 | 13.6 | 0.8 | M/Infill |
| MO-23-553 | 217.5 | 238 | 20.5 | 3.3 | B/Infill |
| MO-23-553 | 373 | 400.4 | 27.4 | 2.1 | M/Infill |
| MO-23-555 | 366.5 | 371.4 | 4.9 | 4.7 | A/Infill |
| MO-23-556 | 49 | 53.5 | 4.5 | 3.1 | J/Expan |
| MO-23-556 | 212 | 274.5 | 62.5 | 1 | J + G/Infill |
| MO-23-557 | 201.5 | 210.7 | 9.2 | 1.3 | J/Expan |
| MO-23-558 | 125 | 129.5 | 4.5 | 7.2 | J/Expan |
| MO-23-558 | 399.5 | 405.4 | 5.9 | 5.4 | G/Expan |
| MO-23-559 | 528.7 | 536.7 | 8 | 4 | G/Expan |
| MO-23-560 | 509.4 | 522 | 12.6 | 4.1 | J/Infill |
| MO-23-562 | 203.5 | 219 | 15.5 | 1 | J/Infill |
| MO-23-562 | 233 | 258 | 25 | 0.5 | G/Infill |
| MO-23-564 | 166.8 | 186 | 19.2 | 1.6 | J/Infill |
| MO-23-566 | 126.4 | 151 | 24.6 | 1 | J/Infill |
| MO-23-567 | 156.1 | 172.5 | 16.4 | 1.1 | J/Infill |
| MO-23-571 | 129 | 154.5 | 25.5 | 1.1 | J/Infill |
| MO-23-572 | 307 | 312.7 | 5.7 | 2.1 | P/Infill |
| MO-23-572 | 405 | 487 | 82 | 0.8 | Q + J/Infill |
| MO-23-574 | 399 | 424 | 24.5 | 0.7 | J/Expan |
| MO-23-574 | 453 | 461 | 8 | 1.9 | J/Expan |
| MO-23-579 | 16.1 | 35.5 | 19.4 | 0.8 | P/Expan |
| MO-23-580 | 55 | 75 | 20 | 1.3 | J/Infill |
| MO-23-581 | 91 | 118 | 27 | 0.4 | J/Infill |
| MO-23-582 | 81 | 97 | 16 | 1.2 | Q/Infill |
| MO-23-583 | 359.5 | 379.5 | 20 | 1.3 | J/Infill |
| MO-23-585 | 315.2 | 358 | 42.8 | 0.5 | S/Expan |
| MO-23-585 | 482.2 | 490 | 7.8 | 3.4 | Q/Expan |
| MO-23-586 | 50.5 | 74.5 | 24 | 0.7 | J/Infill |
| MO-23-587 | 278 | 280 | 2 | 5.7 | S/Expan |
| MO-23-588 | 89 | 105.5 | 16.5 | 0.9 | J/Infill |
| MO-23-589 | 91.9 | 121 | 29.1 | 1 | J/Infill |
| MO-23-591 | 75 | 82.5 | 7.5 | 1.3 | J/Expan |
| MO-23-592 | 200.5 | 205 | 4.5 | 2.2 | J/Expan |
| MO-23-593 | 49 | 65 | 16 | 0.7 | J/Infill |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| MO-23-594 | 31 | 54.7 | 23.7 | 0.8 | J/Infill |
| MO-23-596 | 108 | 152 | 44 | 1 | J/Infill |
| MO-23-598 | 383 | 405 | 22 | 0.6 | P/Expan |
| MO-23-598 | 593 | 595 | 2 | 15.2 | G/Expan |
| MO-23-599 | 106.5 | 132.4 | 25.9 | 0.7 | G/Expan |
| MO-23-599 | 249.5 | 270 | 20.5 | 0.7 | J/Expan |
| MO-23-600 | 29.5 | 53.7 | 24.2 | 1 | J/Infill |
| MO-23-601 | 38.6 | 71 | 32.4 | 1 | J/Infill |
| MO-23-603 | 571.3 | 577.5 | 6.2 | 1.7 | A/Infill |
| MO-23-604 | 244.5 | 258.5 | 14 | 0.8 | Q/Expan |
| MO-23-606 | 131.5 | 143 | 11.5 | 1 | Q/Expan |
| MO-23-610 | 195.4 | 206.9 | 11.5 | 1.2 | J/Infill |
| MO-23-612 | 371 | 406.8 | 35.8 | 1.5 | A/Expan |
| MO-23-613 | 41.5 | 52.5 | 11 | 1 | P/Expan |
| MO-23-613 | 145.2 | 146.2 | 1 | 11.9 | Q/Expan |
| MO-23-613 | 197.3 | 265.3 | 68 | 1.2 | J/Infill |
| MO-23-614 | 425 | 436.9 | 11.9 | 2.3 | M/Infill |
| MO-23-615 | 178 | 179 | 1 | 15.2 | E/Expan |
| MO-23-616 | 289.9 | 299.3 | 9.4 | 5.4 | A/Infill |
| MO-23-616 | 401.7 | 404.5 | 2.8 | 5.3 | B/Infill |
| MO-23-616 | 446.5 | 465 | 18.5 | 1.7 | I/Infill |
| MO-23-616 | 526 | 530 | 4 | 26.9 | M/Infill |
| MO-23-617 | 235 | 244 | 9 | 3.2 | A/Infill |
| MO-23-617 | 475 | 491.9 | 16.9 | 1.6 | M/Infill |
| MO-23-620 | 31.5 | 45.5 | 14 | 0.9 | J/Infill |
| MO-23-620 | 321.7 | 322.5 | 0.8 | 63.1 | A/Infill |
| MO-23-622 | 185 | 198.5 | 13.5 | 0.7 | A/Infill |
| MO-23-623 | 61 | 63 | 2 | 7 | E/Expan |
| MO-23-625 | 56 | 90 | 34 | 3.4 | A/Infill |
| MO-23-626 | 144 | 159.2 | 15.2 | 0.8 | New/Expan |
| MO-23-626 | 211.5 | 212.3 | 0.8 | 44.8 | New/Expan |
| MO-23-626 | 537 | 539 | 2 | 16.6 | M/Expan |
| MO-23-626 | 373 | 391.3 | 18.3 | 6.4 | B/Infill |
| MO-23-627 | 347 | 353 | 6 | 4.9 | B/Infill |
| MO-23-628 | 159 | 192 | 33 | 1.3 | B/Infill |
| MO-23-628 | 353 | 368.9 | 15.9 | 2 | M/Expan |
| MO-23-629 | 70 | 102 | 32 | 0.7 | New/Expan |
| MO-23-630 | 152 | 154 | 2 | 9.8 | A/Infill |
| MO-23-630 | 223 | 270.9 | 47.9 | 1.9 | B/Infill |
| MO-23-631 | 136 | 153 | 17 | 0.6 | New/Expan |
| MO-23-632 | 250.8 | 255.4 | 4.6 | 2.5 | A/Infill |

| Hole ID | From (m) | To (m) | Core Length (m) | Au (g/t) | Zone/Host Rock or Target |
|---|---|---|---|---|---|
| MO-23-632 | 263 | 273.8 | 10.8 | 1.6 | B/Infill |
| MO-23-632 | 308.2 | 324.1 | 15.9 | 2 | I/Infill |
| MO-23-632 | 447 | 457.5 | 10.5 | 2 | M/Expan |
| MO-23-633 | 143 | 154 | 11 | 1.2 | New/Expan |
| MO-23-635 | 238 | 250 | 12 | 2.9 | B/Infill |
| MO-23-635 | 348 | 349.5 | 1.5 | 9.5 | New/Expan |
| MO-23-635 | 365 | 372 | 7 | 2.4 | M North/Ex |
| MO-23-635 | 393.1 | 421 | 27.9 | 3.3 | M/Infill |
| MO-23-637 | 122 | 141.5 | 19.5 | 1.6 | New/Expan |
| MO-23-639 | 59 | 60.5 | 1.5 | 18.9 | New/Expan |
| MO-23-645 | 239.5 | 252 | 12.5 | 4.7 | A/Infill |
| MO-23-645 | 371 | 388 | 17 | 4.8 | I/Infill |
| MO-23-645 | 484 | 491.7 | 7.7 | 1.9 | M/Expan |
| MO-23-646 | 242 | 243 | 1 | 32.7 | New/Expan |
| MO-23-646 | 326 | 327.5 | 1.5 | 8.8 | A/Infill |
| MO-23-647 | 25.5 | 27 | 1.5 | 6.2 | A/Expan |
| MO-23-647 | 397.4 | 415.8 | 18.4 | 3.4 | B//Infill |
| MO-23-647 | 467 | 470.5 | 3.5 | 3.3 | I/Expan |
| MO-23-647 | 547.5 | 564 | 16.5 | 1.8 | M/Expan |
| MO-23-648 | 83 | 103 | 20 | 1.5 | J/Expan |
| MO-23-649 | 319 | 338.5 | 19.5 | 1.6 | B/Infill |
| MO-23-650 | 249.9 | 257 | 7.1 | 1.6 | A/Expan |
| MO-23-650 | 618.3 | 626.3 | 8 | 3.2 | B/Expan |
| MO-23-650 | 724.8 | 736.6 | 11.8 | 2.7 | M/Expan |
| MO-22-488EXT | 550.6 | 575 | 24.4 | 3.8 | M |

Notes: All the new analytical results reported in this release and in this table, are presented in core length and cut to 100 g/t Au when needed. True width is estimated between 65 to 95 % of core length. Only grade times thickness above 10.0 g/t Au*m is reported.

## 10.2 Methodology and Planning

Most of the drill holes in the New Béliveau, North and Highway zones are planned on cross-sections and oriented north-south to intersect the ENE vein as close to perpendicular as possible to approximate true thickness. The drill holes have been planned in Geotic Mine 3D software from mid-2017 to 2019 and on cross-sections in Leapfrog Geo or Geotic Mine software since then. Most holes are drilled from south to north to follow the dyke-style mineralization along strike when outside the volcanic units. Some were drilled east-west to locate and evaluate dyke thickness or sub-vertical to evaluate the stacked vein system. The presence of mining infrastructure complicates drilling the extension below the former L.C. Béliveau mine. Drill hole spacing and locations were determined based on the density of previous historical surface and underground drilling to maximize the value of the new information collected.

At Courvan, the drill holes are oriented either north (to intersect south-dipping vein systems) or south (to intersect north-dipping vein systems). All drill holes at Courvan are planned to intersect vein systems at an optimal angle as close to true width as possible. Like Béliveau, the historical underground mining infrastructure sometimes complicates the drill hole planning at Courvan.

Due to the subvertical nature of the mineralization at Monique, planning was done on cross-sections oriented north-south in 2018 and, starting in 2019, mainly south to intersect the mineralized zones steeply dipping to the north. The spacing and location of all drill holes were influenced by the density of historical drilling and access limitations caused by swampy surface locations.

## 10.3 Geology and Analysis

According to a pre-established standard for the project, a detailed description of the drill core is carried out by or under the supervision of experienced and qualified personnel who are members of the OIQ or the OGQ, using Geotic Log core logging software before sampling. The drill core is logged at Probe Gold's core shack located in Val-d'Or. Various drilling parameters, including down-hole surveys, are also compiled in the database.

The geology controls the length and location of samples (i.e., the boundaries of geological units, alteration packages or mineralized zones). The sampled drill core intervals are sawn in half to preserve a core-witness sample. Once the sample results are received from the laboratories, the results are integrated into the geological database software.

## 10.4 Core Storage

For the 2016-2023 drilling programs, drill cores are stored at the former Béliveau or Monique mine sites or Probe Gold's office. Each stored core box is identified by an aluminium tag embossed with the unique drill hole information (hole number, box number and core interval stored in the box). Boxes belonging to individual drill holes are stored consecutively in a core rack or on pallets. An inventory is kept for each core rack and is copied into an electronic database by the geology department.

## 10.5 Collar Surveying

The spatial location of most historical data references the Cambior grid system, under which the heading used is geographic true north. This grid system was established by SOQUEM in 1981 for exploration programs and was also used after that in mining operations. It was the main reference grid for all underground and most surface historical data. The local grid references were converted into UTM coordinates (NAD83, Zone 18).

Procedures for surveying diamond drill hole collars from the surface have varied considerably across programs. The information from most programs is relatively complete and presented on the front page of the drill logs. The collar locations for holes drilled from 1937 to 1986 were originally determined from measurements with a chain on a cut grid. After 1986, all collars were surveyed by a technical team of Cambior staff and J.L. Corriveau and Associates Inc. using a high-precision GPS unit.

Since 2008, the holes have been spotted by Probe Gold's personnel using a GPS system. Once each drilling campaign is complete, the surveyor measures the final coordinates using a high-precision GPS unit. These data are entered into a handwritten drill hole registry and an electronic databank. Most of the casings have been left in place with an identification tag.

## 10.6 Down-Hole Surveying

Procedures for down-hole surveying have varied over time. Downhole surveying was conducted mainly with a Tropari, with some acid tests until 2008. Cambior mainly used acid tests to survey underground holes. During the 2008-2023 surface drilling programs, the deviation was measured using a multi-shot instrument such as a Flexit SmartTool or Reflex EZ-Shot, with readings taken every 30 m down the hole and azimuth readings referenced to magnetic north while drilling. After completion of the hole, the driller pulls out the rod and surveys the hole every 3 m with the multi-shot instrument. This information is downloaded on a USB key and transferred directly into the database. Data are verified for magnetic interference and validated. All north directions in the database are true north.

# 11 SAMPLE PREPARATION, ANALYSES AND SECURITY

This section describes the sample preparation, analysis and security procedures for the project's diamond drilling programs, covering the drill holes in the databases used for the 2023 MRE.

The issuer's geology team provided the information discussed below. The QPs reviewed the quality assurance / quality control (QA/QC) procedures and the results of the drilling programs.

## 11.1 Core Handling, Sampling and Security

Little information is available on the historical sample preparation procedures. Since 2004, the methods used by Richmont, Adventure Gold, and Probe Gold for core handling, sampling, and security have changed little over time.

The drill core is boxed and sealed at the drill rigs and delivered to the logging facility, where a technician takes over the core handling.

Drill core is logged and sampled by qualified geologists or by a geologist-in-training under the supervision of a qualified geologist. A geologist marks the samples by placing a unique ID tag at the end of each core sample interval. Core sample lengths vary from 0.2 to 2.0 m with an average of around 1 m, and samples respect lithological contacts and/or changes in the appearance of mineralization or alteration (type and/or strength).

The technician saws each marked sample in half. One half of the core is placed in a plastic bag along with a detached portion of the unique bar-coded sample tag, and the other half of the core is returned to the core box with the remaining tag portion stapled in place. For future reference, the core boxes are stockpiled or stored in outdoor core racks. Individually bagged samples are placed in security-sealed rice bags along with the list of samples for delivery to the assay laboratory. QA/QC samples are added to the sample batch at the core shack according to the geologist's instructions. Samples remained under the supervision of Richmont or Probe Gold personnel until transferred to the laboratory. The laboratory employs barcoding and scanning technologies that provide a complete chain of custody records for every sample.

### 11.1.1 Monique Area

The history of the Monique area can be divided into three main periods:

- 1971 to 1991 – Drilling mainly performed by Louvem, Moricor and SOQUEM. A total of 29,554 samples were collected from 276 DDH, representing 24% of the total database.
- 2004 to 2013 – Drilling performed by Richmont. A total of 8,387 samples were collected from 126 DDH, representing 7% of the total database.
- 2018 to 2022 – Drilling performed by Probe Gold. A total of 86,238 samples were collected from 629 DDH, representing 69% of the total database.

Between 2004 and 2013, logging was completed at the Beaufor mine site and, since 2018, at Probe Gold's core shack in Val-d'Or.

The 2004 and 2005 drilling programs were stored at the Francoeur mine site, holes drilled between 2010 and 2013 were stored at the Beaufor mine site, and since 2018, the core has been stored at the Monique mine site or Probe Gold's core shack.

#### 11.1.2 Courvan Area

The history of the Courvan area can be divided into three main periods:

- 1940s – Drilling performed by Cournor Mining Corp. A total of 8,154 samples were collected from 138 DDH, representing 11% of the total database.
- 1963 to 1992 – Drilling was mainly performed by Courvan Mining, SOQUEM, Louvem, Cambior and Exploration Monicor. A total of 8,707 samples were collected from 161 DDH, representing 11% of the total database.
- 2004 to 2015 – Drilling performed by Richmont. A total of 889 samples were collected from 10 DDH, representing 1% of the total database.
- 2018 to 2022 – Drilling performed by Probe Gold. A total of 59,313 samples were collected from 340 DDH, representing 77% of the total database.

Between 2004 and 2015, logging was completed at the Beaufor mine site and, since 2018, at Probe Gold's core shack in Val-d'Or.

The 2004 and 2006 drilling programs were stored at the Francoeur mine site, holes drilled between 2010 and 2013 were stored at the Beaufor mine site, and since 2018, the core has been stored at the Monique mine site or Probe Gold's core shack.

#### 11.1.3 Pascalis Area

The history of the Pascalis area can be divided into six main periods:

- 1936 to 1979 – Drilling performed by multiple companies. A total of 550 samples were collected from 80 DDH, representing 0.2% of the total database.
- 1981 to 1986 – Drilling performed mainly by SOQUEM. A total of 9932 samples were collected from 274 DDH, representing 4.2% of the total database.
- 1987 to 1993 – Drilling performed mainly by Cambior Inc. A total of 32,118 samples were collected from 835 DDH, representing 13.7% of the total database.
- 1995 to 2007 – Drilling performed mainly by Exploration Malartic-Sud Inc. and Donald Trudel. A total of 1,636 samples were collected from 42 DDH, representing 0.7% of the total database.

- 2009 to 2014 – Drilling performed by Adventure Gold. A total of 18,408 samples were collected from 89 DDH, representing 7.9% of the total database.
- 2016 to 2022 – Drilling performed by Probe Gold. A total of 171,636 samples were collected from 826 DDH, representing 73.3% of the total database.

Since 2016 logging has been completed at Probe Gold's actual core shack in Val-d'Or.

The 2004 and 2006 drilling programs were stored at the Francoeur mine site. Holes drilled between 2010 and 2013 were stored at the Beaufor mine site, and since 2018, the core has been stored at the Monique mine site or Probe Gold's core shack.

## 11.2 Laboratory Accreditation and Certification

The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) form the specialized system for worldwide standardization. ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories sets out the criteria for laboratories wishing to demonstrate that they are technically competent, operating an effective quality system, and can generate technically valid calibration and test results. The standard forms the basis for the accreditation of laboratory competence by accreditation bodies. ISO 9001 applies to management support, procedures, internal audits and corrective actions. It provides a framework for existing quality functions and procedures.

ALS Ltd (ALS), AGAT Laboratories Ltd (AGAT), and all divisions of Activation Laboratories Ltd (Actlabs and Techni-lab) are accredited ISO/IEC 17025 by the Standards Council of Canada.

Laboratoire d'Analyse Bourlamaque Ltée (Laboratoire Bourlamaque), Chimitec Ltée (Chimitec) and Laboratoire Expert Inc. (Laboratoire Expert) are not accredited. Samples tested at those laboratories or from an unknown laboratory represent 25% of the total samples for the Monique area, 10% of the total samples for the Courvan area and 18.8% of the total samples for the Pascalis area.

The laboratories are independent of the issuer and have no interests in the project.

## 11.3 Laboratory Preparation and Assays

The samples have been shipped to various independent commercial assay laboratories over time. Tables 11-1, 11-2 and 11-3 detail the assay distribution by year and laboratory for the Monique, Corvan, and Pascalis areas, respectively.

**Table 11-1: Assay Distribution by Year and Laboratory (Monique Area)**

| Year | Owner | Laboratory | Number Sample | Analyze Type | Detection Limit | Database Percentage |
|---|---|---|---|---|---|---|
| 1971 | Abitibi Metals Mines | Laboratoire Bourlamaque | 13 | FA-AA | 0.17 g/t Au | 23.8% |
| 1983 | Louvem | | 430 | | | |
| 1984 | | | 5,150 | | | |
| 1985 | | | 1,307 | | | |
| 1987 | Exploration Monicor | Chimitec | 6,576 | FA-AA; FA-MS | 0.03g/t; 0.01g/t | |
| 1988 | | | 5,437 | | | |
| 1989 | Exploration Monicor; Louvem; Soquem | Chimitec; Laboratoire Bourlamaque | 6,872 | | | |
| 1990 | Exploration Monicor; Louvem; Soquem | Chimitec | 3,447 | | | |
| 1991 | Exploration Monicor; Monterval | Unknown | 322 | Unknown | Unknown | |
| 2004 | Richmont Mines | ALS | 853 | FA-AA; Au-GRAV | 0.005 g/t; 0.05 g/t | 6.8% |
| 2005 | | | 196 | | | |
| 2010 | | | 196 | | | |
| 2011 | | | 5,107 | | | |
| | | Laboratoire Expert | 445 | | 0.005 g/t; 0.03 g/t | |
| 2012 | | Actlabs | 39 | | | |
| | | Laboratoire Expert | 1,003 | | | |
| 2013 | | ALS | 548 | | 0.005 g/t;0.05 g/t | |
| 2018 | Probe Gold | Actlabs | 3,274 | | 0.005 g/t; 0.03 g/t | 69.4% |
| 2019 | | Actlabs | 3,945 | FA-AA; Au-GRAV; FA-MS | 0.005 g/t; 0.02 g/t; 0.003 g/t; | |
| 2020 | | Actlabs | 10,798 | | | |
| | | Techni-lab | 1,181 | FA-AA; Au-GRAV | 0.005 g/t; 0.03 g/t | |
| | | AGAT | 167 | FA-AA; Au-GRAV; FA-MS | 0.02 g/t; 0.003 g/t; 0.001 g/t; | |
| 2021 | | Actlabs | 8,690 | | 0.005 g/t; 0.02 g/t; 0.003 g/t; | |
| | | AGAT | 16,181 | | 0.02 g/t; 0.003 g/t; 0.001 g/t; | |
| 2022 | | Techni-lab | 6,892 | FA-AA; Au-GRAV; | 0.005 g/t; 0.03 g/t | |
| | | Actlabs | 35,110 | | 0.005 g/t; 0.02 g/t | |

**Table 11-2: Assay Distribution by Year and Laboratory (Courvan Area)**

| Year | Owner | Laboratory | Number Sample | Analyze Type | Detection Limit | Database Percentage |
|---|---|---|---|---|---|---|
| Historical | Various owners | - | 6,305 | - | - | 10% |
| 2018 | Probe | ALS | 21 | FA-AA; Au-GRAV; FA-MS | 0.003 | 90% |
| | | Techni-Lab | 163 | | 0.002 | |
| | | Actlabs | 17,743 | | | |
| 2019 | | | 8,367 | | | |
| 2020 | | | 8,983 | | | |
| 2020 | | AGAT | 1,744 | | 0.001 | |
| 2021 | | | 773 | | | |
| 2022 | | Actlabs | 18,046 | | 0.002 | |
| 2022 | | Techni-Lab | 1,798 | | | |

**Table 11-3: Assay Distribution by Year and Laboratory (Pascalis Area)**

| Year | Owner | Laboratory | Number Sample | Analyze Type | Detection Limit | Database Percentage |
|---|---|---|---|---|---|---|
| Historical | Various owners | - | 44,236 | - | - | 18.8% |
| 2009 | Adventure Gold | ALS Chemex | 59 | FA-AA; Au-GRAV; FA-MS | 0.005 g/t; 0.05 g/t | 7.9% |
| | | Techni-Lab | 2,384 | | 0.005 g/t; 0.03 g/t | |
| 2010 | | Techni-Lab | 321 | | 0.005 g/t; 0.03 g/t | |
| 2011 | | Techni-Lab | 1,731 | | 0.005 g/t; 0.03 g/t | |
| | | AGAT | 4,789 | | 0.02 g/t; 0.003 g/t; 0.001 g/t; | |
| 2012 | | AGAT | 7,251 | | | |
| 2014 | | Actlabs | 410 | | 0.002 | |
| 2014 | | AGAT | 1,463 | | 0.02 g/t; 0.003 g/t; 0.001 g/t; | |
| 2016 | Probe | Actlabs | 6,444 | FA-AA; Au-GRAV; FA-MS | 0.005 g/t; 0.02 g/t; 0.003 g/t; | 73.3% |
| 2017 | | Actlabs | 52,227 | | | |
| 2018 | | Actlabs | 55,914 | | | |
| | | ALS | 97 | | 0.005 g/t; 0.05 g/t | |
| 2019 | | Actlabs | 10,724 | | 0.005 g/t; 0.02 g/t; 0.003 g/t; | |
| 2020 | | Actlabs | 18,690 | | | |
| 2021 | | Actlabs | 1,634 | | | |
| 2022 | | Actlabs | 25,906 | | | |

### 11.3.1 Laboratoire d'Analyse Bourlamaque

Between 1971 and 1985, 6,900 samples from the Monique area were analyzed for gold at the Laboratoire Bourlamaque in Val-d'Or, Quebec. The procedures used were fire assay (FA) with atomic absorption (AA) spectroscopy, with a detection limit of 0.17 g/t Au.

### 11.3.2 Chimitec

Between 1987 and 1990, 22,332 samples from the Monique area were analyzed for gold at Chimitec in Quebec City, Quebec. The procedures used were FA-AA and metallic screen analysis (MS-FA). Described below is the methodology:

- Samples are dried and crushed to ¼ inch using a primary jaw crusher.
- A representative sub-sample of approximately 250 g is taken by successively splitting the crushed sample through a mechanical splitter.
- The split sample is pulverized to -150 mesh using a ring-type pulverizer.
- Gold is pre-concentrated into a doré bead by fire assay and extracted with an aqua regia acid mixture.
- Samples are analyzed for gold with AA (detection limit of 0.03 g/t).

Some samples, including those with visible gold, were submitted to a metallic screen procedure for more accuracy. For samples submitted for MS-FA analysis, the pulp is screened through a 150 µm screen. The >150 µm material is retained and analyzed in its entirety by FA with gravimetric finish and reported as the Au(+) fraction. The <150 µm material is homogenized and analyzed by the FA-AA method. The FA-AA results are reported as the Au(-) fraction result. The gold values for both the Au(+) and Au(-) fractions are reported together with the weight of each fraction as well as the calculated total gold content of the sample (detection limit of 0.01 g/t).

### 11.3.3 ALS

Between 2004 and 2018, a total of 6,900 samples from the Monique area, 21 samples from the Courvan area, and 156 samples from the Pascalis area were analyzed for gold at ALS in Val-d'Or. The procedures used were FA-AA and FA by gravimetric finish (FA-GRAV). The methodology is described as follows:

- Samples are sorted, bar-coded and logged into the laboratory tracking program.
- Samples are dried and crushed to 70% passing a 2 mm screen.
- A 250 g split is pulverized to 85% passing a 75 µm screen.
- Samples are analyzed for gold by FA with AA finish on a 30 g charge aliquot pulp (Au-AA23, reporting range of 0.005 to 100 g/t).
- When assay results are higher than 3 g/t Au, samples are re-assayed by FA with a gravimetric finish method (FA-GRAV) on a 30 g charge aliquot (AuGRA21, reporting range of 0.05 to 1,000 g/t).

- Assay results are provided on Excel spreadsheets and the official certificate (sealed and signed) is provided in portable document format (PDF).

### 11.3.4 Laboratoire Expert

Between 2011 and 2012, 1,448 samples from the Monique area were analyzed for gold at Laboratoire Expert in Rouyn-Noranda, Quebec. The procedures used were FA-AA and FA-GRAV. The methodology is described as follows:

- Samples are sorted, bar-coded, and logged into the laboratory tracking program.
- Samples are dried and crushed to 90% passing a 2 mm screen.
- A 300 g split is pulverized to 90% passing a 75 µm screen.
- Samples are analyzed for gold by FA with AA finish on a 30 g charge aliquot pulp (detection limit of 0.005 g/t).
- When assay results are higher than 1 g/t Au, samples are re-assayed by FA-GRAV on a 30 g charge aliquot (detection limit of 0.03 g/t).
- Assay results are provided on Excel spreadsheets and the official certificate (sealed and signed) is provided as a PDF.

### 11.3.5 Actlabs and Techni-Lab

Between 2012 and 2022, 69,929 samples from the Monique area, 55,100 samples from the Courvan area, and 176,385 samples from the Pascalis area were analyzed for gold at the Actlabs laboratory in Ancaster, Ontario or Techni-Lab in St-Germaine-Boulé, Quebec. The procedures used were FA-AA, FA-GRAV and MS-FA. The methodology is described as follows:

- Samples are sorted, bar-coded, and logged into the laboratory tracking program.
- Samples are dried and crushed to 85% passing a 2 mm screen.
- A split is pulverized to 90% passing a 75 µm screen.
- Samples are analyzed for gold by FA with AA finish on a 50 g charge aliquot pulp (detection limit of 0.005 g/t).
- When assay results are higher than 3 g/t Au, samples are re-assayed by FA-GRAV on a 30 g charge aliquot (detection limit of 0.03 g/t).
- Assay results are provided on Excel spreadsheets and the official certificate (sealed and signed) is provided as a PDF.

Some samples, including those with visible gold, were submitted to a metallic screen procedure for more accuracy. For samples submitted to MS-FA, the pulp is screened through a 100 µm screen. The >100 µm material is retained and analyzed in its entirety by FA with gravimetric finish and reported as the Au(+) fraction. The <100 µm material is homogenized, and two 30 g subsamples are analyzed by the FA-AA method. The average of the two FA-AA results is reported as the Au(-) fraction result. The gold values for both the Au(+) and Au(-) fractions are reported together with the weight of each fraction as well as the calculated total gold content of the sample (detection limit of 0.003 g/t).

#### 11.3.6 AGAT

Between 2020 and 2021, 16,348 samples from the Monique area, 2,517 samples from the Courvan area and 13,503 samples from the Pascalis area were analyzed for gold at the AGAT laboratory in Mississauga, Ontario. The procedures used were FA-AA, FA-GRAV and MS-FA. The methodology is described as follows:

- Samples are sorted, bar-coded, and logged into the laboratory tracking program.
- Samples are dried and crushed to 75% passing a 2 mm screen.
- A 250 g split is pulverized to 85% passing a 75 µm screen.
- Samples are analyzed for gold by FA with AA finish on a 50 g charge aliquot pulp (detection limit of 0.002 g/t). The specific method was lead fusion fire assay with inductively coupled plasma optical emission spectroscopy (ICP-OES).
- When assay results are higher than 3 g/t Au, samples are re-assayed by FA-GRAV on a 50 g charge aliquot (detection limit of 0.5 g/t).
- Assay results are provided on Excel spreadsheets and the official certificate (sealed and signed) is provided as a PDF.

Some samples, including those with visible gold, were submitted to a metallic screen procedure for more accuracy. For samples submitted to MS-FA, the pulp is screened through a 100 µm screen. The >100 µm material is retained and analyzed in its entirety by FA with gravimetric finish and reported as the Au(+) fraction. The <100 µm material is homogenized, and two 30 g subsamples are analyzed by the FA-AA method. The average of the two FA-AA results is taken and reported as the Au(-) fraction result. The gold values for both the Au(+) and Au(-) fractions are reported together with the weight of each fraction as well as the calculated total gold content of the sample (detection limit of 0.001 g/t).

### 11.4 Quality Assurance and Quality Control

Little information is available on the historical procedures for QA/QC.

For the Monique and Courvan areas for the 2004 and 2005 drilling campaigns, Richmont's QA/QC program consisted of inserting 12 blanks and 9 standards in the sample stream of core samples. Since 2010, the Richmont and Probe Gold drill core QA/QC programs have included blanks and standards in the sample stream. About 10% of the samples are control samples in the sampling and assaying process. One standard and one blank sample of barren rock have been added to each group of 20 samples. In addition, Richmont and Probe Gold's QA/QC includes pulp and reject duplicate samples. Probe Gold also performed quarter-split and half-split duplicate samples.

For the Pascalis Area, since 2009, Adventure Gold and Probe Gold QA/QC programs consisted of inserting approximately one standard and one blank sample of barren rock to each group of 20 samples. In addition, since 2017, QA/QC programs included pulp and reject duplicate samples. Probe Gold also performed quarter-split duplicate (or field duplicate) on samples.

Geologists for Richmont, Adventure Gold, and Probe Gold have been responsible for the QA/QC and database compilation. Upon receiving the analytical results, the geologists extracted the results for blanks and standards to compare against the expected values. If QA/QC acceptability was achieved for the analytical batch, the data were entered into the project database; if not, the laboratory was contacted to review and address the issue, including retesting the batch as required.

### 11.4.1 Certified Reference Materials (Standards)

Accuracy has been monitored by inserting certified reference material into the sample stream.

The standards were manufactured by Ore Research & Exploration (OREAS) in Melbourne, Australia, and supplied by Analytical Solutions Ltd. in Toronto, Ontario, by CND Resource Laboratories Ltd. in Landrey, BC, Canada and by Rocklabs in Charlotte, NC, USA.

The definition of a QC failure is when the assay result for a standard falls outside three standard deviations (3SD). Gross outliers are excluded from the standard deviation calculation.

#### 11.4.1.1 Monique Area

For the 2004 and 2005 drilling campaigns, Richmont inserted nine standards into the sample stream of core samples.

Since 2010, accuracy has been monitored by inserting a certified reference material at a ratio of one for every 20 samples (1:20). A total of 97 standards were inserted by Richmont and 3,828 by Probe Gold.

Between 2010 and 2021, 26 different certified reference materials were used. Of the 3,934 certified reference materials inserted, 73 results were outside 3SD, and the issuer took action to explain the cause of the abnormal values (e.g., incorrect submissions to the laboratory or sequencing issues). When no satisfactory explanation could be found, a minimum of five adjacent samples of the failed sample sequence were re-run.

The overall success rate was 98% (Table 11-4). Outliers did not show a persistent analytical bias (either below or above the 3SD limit). The results exhibit slight bias in terms of accuracy, with an average of -0.5% for representative standards. The precision for most certified reference materials is around 4.2%. Both parameters meet standard industry criteria.

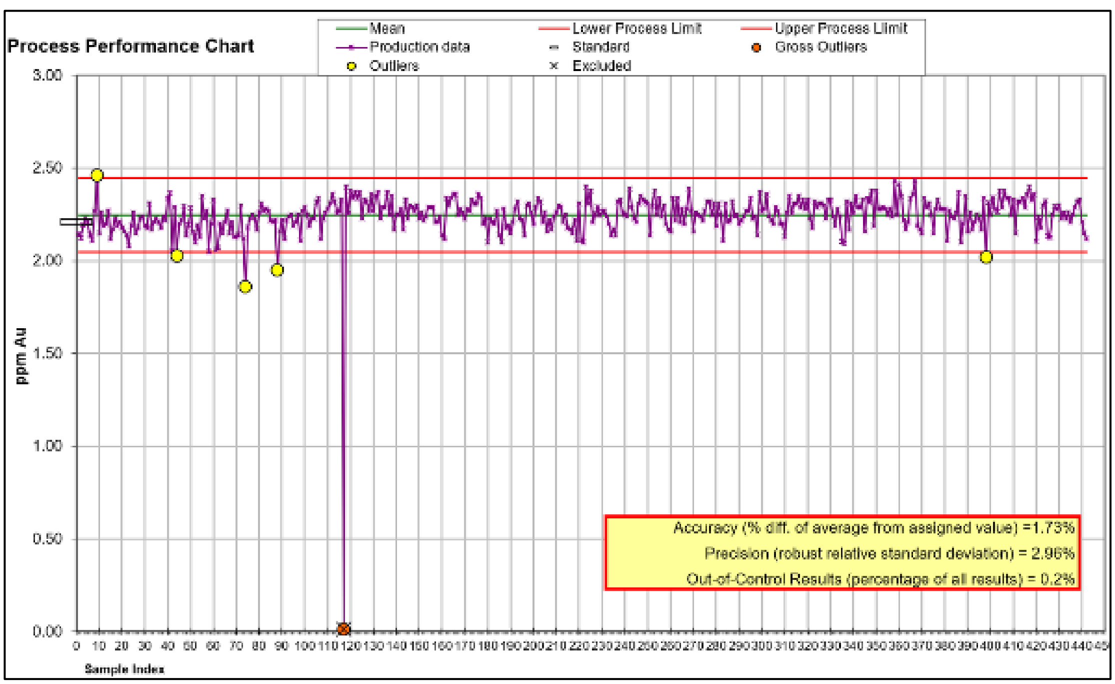
Figure 11-1 shows an example of a control chart for the standard OREAS 230 assayed by ALS. A similar control chart was prepared for each certified reference material to visualize the analytical concentration value over time.

**Table 11-4: Results of Standards Used between 2010 to 2022 in the Monique Area**

| Certified Reference Material | Value (g/t Au) | No. of Assays | Average (g/t Au) | Accuracy (%) | Precision (%) | Outliers | Gross Outliers | Percent Passing QC |
|---|---|---|---|---|---|---|---|---|
| SI54 | 1.78 | 14 | 1.74 | -2.5 | 7.3 | 1 | 0 | 93% |
| SL61 | 5.931 | 23 | 5.93 | -0.1 | 1.2 | 0 | 0 | 100% |
| SN60 | 8.595 | 24 | 8.58 | -0.2 | 0.8 | 0 | 0 | 100% |
| CND-GS-2S | 2.38 | 94 | 2.32 | -2.5 | 5.5 | 0 | 0 | 100% |
| CND-GS-2U | 2.12 | 233 | 2.11 | -0.4 | 3.8 | 7 | 0 | 97% |
| CND-GS-3P | 3.06 | 21 | 3.01 | -1.8 | 4.8 | 0 | 0 | 100% |
| CND-GS-3T | 3.05 | 192 | 3.01 | -1.5 | 5.3 | 5 | 0 | 97% |
| CND-GS-5R | 5.29 | 114 | 5.19 | -1.9 | 4.9 | 2 | 0 | 98% |
| CND-GS-5X | 5.04 | 55 | 5.11 | 1.5 | 4.3 | 1 | 1 | 96% |
| CND-GS-P7L | 0.709 | 114 | 0.71 | -0.3 | 4.7 | 1 | 0 | 99% |
| CND-GS-P7M | 0.725 | 32 | 0.72 | -0.4 | 6.8 | 0 | 0 | 100% |
| CND-GS-P8G | 0.818 | 916 | 0.81 | -0.9 | 5.3 | 7 | 0 | 99% |
| CND-GS-P8H | 0.83 | 180 | 0.83 | -0.5 | 5.3 | 6 | 0 | 97% |
| OREAS230 | 0.337 | 747 | 0.34 | -0.3 | 3.3 | 10 | 0 | 99% |
| OREAS231 | 0.542 | 222 | 0.54 | -0.3 | 3.6 | 5 | 0 | 98% |
| OREAS237 | 2.21 | 314 | 2.2 | -0.4 | 3 | 3 | 0 | 99% |
| OREAS239 | 3.55 | 578 | 3.56 | 0.5 | 3.7 | 21 | 2 | 96% |
| OREAS255b | 4.16 | 16 | 4.17 | 0.2 | 6.5 | 1 | 0 | 94% |

Note: Only standards with more than 10 occurrences are included.

**Figure 11-1: Control Chart for Standard OREAS 231**




Source: InnovExplo, 2023.

#### 11.4.1.2 Courvan Area

Since 2015, accuracy has been monitored by inserting a certified reference material at a ratio of one for every 20 samples (1:20). Six standards were inserted by Richmont and 2,544 by Probe Gold.

Between 2015 and 2022, 16 different certified reference materials were used. Of the 2,549 certified reference materials inserted, 42 results were outside 3SD, and the issuer took action to explain the cause of the abnormal values (e.g., incorrect submissions to the laboratory or sequencing issues). When no satisfactory explanation could be found, a minimum of five adjacent samples of the failed sample sequence were re-run.

The overall success rate was 98% (Table 11-5). Outliers did not show a persistent analytical bias (either below or above the 3SD limit). The results exhibit slight bias in terms of accuracy, with an average of -0.2% for representative standards. The precision for most certified reference materials is around 4.1%. Both parameters meet standard industry criteria.

**Table 11-5: Results of Standards Used between 2010 to 2022 on the Courvan Area**

| Certified Reference Material | Value (g/t Au) | No. of Assays | Average (g/t Au) | Accuracy (%) | Precision (%) | Outliers | Gross Outliers | Percent Passing QC |
|---|---|---|---|---|---|---|---|---|
| SL76 | 5.96 | 4 | 5.89 | -1.2 | 2.7 | 0 | 0 | 100% |
| SN60 | 8.59 | 1 | 8.50 | -1.1 | - | 0 | 0 | 100% |
| SP73 | 18.17 | 2 | 17.9 | -1.5 | 1.21 | 0 | 0 | 100% |
| CND-GS-2S | 2.38 | 311 | 2.35 | -1.2 | 5.0 | 2 | 0 | 99% |
| CND-GS-2U | 2.12 | 223 | 2.11 | -0.4 | 4.0 | 4 | 0 | 98% |
| CND-GS-3P | 3.06 | 89 | 3.00 | -1.8 | 4.2 | 4 | 0 | 96% |
| CND-GS-3T | 3.05 | 98 | 3.01 | -1.3 | 4.3 | 3 | 0 | 97% |
| CND-GS-5R | 5.29 | 94 | 5.25 | -0.8 | 4.6 | 1 | 1 | 98% |
| CND-GS-5X | 5.04 | 6 | 5.07 | 0.7 | 11.8 | 0 | 0 | 100% |
| CND-GS-P7L | 0.709 | 313 | 0.71 | -0.1 | 5.5 | 1 | 0 | 100% |
| CND-GS-P7M | 0.725 | 90 | 0.72 | -0.3 | 6.7 | 0 | 0 | 100% |
| CND-GS-P8G | 0.818 | 147 | 0.81 | -1.5 | 6.1 | 2 | 0 | 99% |
| OREAS 231 | 0.54 | 557 | 0.54 | 0.0 | 2.7 | 7 | 2 | 98% |
| OREAS 237 | 2.21 | 442 | 2.25 | 1.7 | 3.0 | 5 | 1 | 99% |
| OREAS 239 | 3.55 | 2 | 3.65 | 2.8 | 7.3 | 0 | 0 | 100% |
| OREAS 255b | 4.16 | 170 | 4.11 | -1.1 | 4.3 | 9 | 0 | 95% |

#### 11.4.1.3 Pascalis Area

Accuracy has been monitored by Probe Gold by inserting certified reference materials at a ratio of one for every 20 samples (1:20). A total of 6,582 standards were inserted by Probe Gold.

Between 2016 and 2022, 19 different certified reference materials were used in significant numbers (inserted more than 10 times and sent to the same laboratory). Of the 6,582 standards inserted sourced from those 19 different certified reference materials, 108 results were outside 3SD, and the issuer took action to explain the cause of the abnormal values (e.g., incorrect submissions to the laboratory or sequencing issues). When no satisfactory explanation could be found, a minimum of five adjacent samples of the failed sample sequence were re-run.

The overall success rate was 98% (Table 11-5). Outliers did not show a persistent analytical bias (either below or above the 3SD limit). The results exhibit slight bias in terms of accuracy, with an average of -0.5% for representative standards. The precision is around 4.7%. Both parameters meet standard industry criteria.

**Table 11-6: Results of Standards Used between 2016 to 2022 on the Pascalis Area**

| Certified Reference Material | Value (g/t Au) | Lab. Name | No. of Assays | Average (g/t Au) | Accuracy (%) | Precision (%) | Outliers | Gross Outliers | Percent Passing QC |
|---|---|---|---|---|---|---|---|---|---|
| CDN-GS-2P | 1.990 | Actlabs | 471 | 1.998 | 0.4 | 5.1 | 5 | 2 | 98.5% |
| CDN-GS-2S | 2.326 | Actlabs | 883 | 2.326 | -2.3 | 4.9 | 7 | 0 | 99.2% |
| CDN-GS-2U | 2.120 | Actlabs | 418 | 2.121 | 0.1 | 4.5 | 4 | 0 | 99.0% |
| CDN-GS-3K | 3.190 | Actlabs | 145 | 3.228 | 1.2 | 3.8 | 2 | 2 | 97.2% |
| CDN-GS-3P | 3.060 | Actlabs | 320 | 3.016 | -1.4 | 5.5 | 6 | 1 | 97.8% |
| CDN-GS-3T | 3.050 | Actlabs | 165 | 2.991 | -1.9 | 5.7 | 3 | 0 | 98.2% |
| CDN-GS-5R | 5.290 | Actlabs | 248 | 5.302 | 0.2 | 4 | 3 | 0 | 98.8% |
| CDN-GS-5X | 5.050 | Actlabs | 36 | 5.006 | -0.9 | 3.7 | 1 | 0 | 97.2% |
| CDN-GS-P7L | 0.709 | Actlabs | 1620 | 0.714 | 0.7 | 5.8 | 14 | 3 | 99.0% |
| CDN-GS-P7L | 0.709 | ALS | 31 | 0.707 | -0.2 | 5.5 | 0 | 1 | 96.8% |
| CDN-GS-P7M | 0.721 | Actlabs | 108 | 0.721 | -0.6 | 6.4 | 3 | 0 | 97.2% |
| CDN-GS-P8G | 0.818 | Actlabs | 339 | 0.804 | -1.7 | 6 | 3 | 0 | 99.1% |
| OREAS 230 | 0.337 | Actlabs | 48 | 0.340 | 0.8 | 2.9 | 0 | 0 | 100.0% |
| OREAS 231 | 0.542 | Actlabs | 597 | 0.536 | -1.1 | 3.2 | 13 | 3 | 97.3% |
| OREAS 237 | 2.210 | Actlabs | 541 | 2.192 | -0.8 | 3.1 | 11 | 3 | 97.4% |
| OREAS 239 | 3.550 | Actlabs | 33 | 3.607 | 1.6 | 4.5 | 1 | 1 | 93.9% |
| OREAS 255b | 4.160 | Actlabs | 163 | 4.180 | 0.5 | 4.2 | 8 | 0 | 95.1% |
| SG84 | 1.026 | Actlabs | 190 | 1.011 | -1.5 | 2.8 | 2 | 2 | 97.9% |
| SJ80 | 2.656 | Actlabs | 197 | 2.610 | -1.7 | 2.8 | 2 | 1 | 98.5% |
| SN60 | 8.595 | Actlabs | 29 | 8.500 | -1.1 | 2.2 | 1 | 0 | 96.6% |

### 11.4.2 Blank Samples

Contamination is monitored by the routine insertion of a barren sample (blank) which goes through the same sample preparation and analytical procedures as the core samples.

The blanks were derived from barren crushed marble.

A general guideline for success during a contamination QC program is a rate of 90% of blank assay results not exceeding the acceptance limit of five times the detection limit. The detection limit was 0.002 (AGAT) to 0.005 g/t Au (ALS, Actlabs, Laboratoire Expert) for the regular FA-AA analytical method and 0.001 (AGAT) to 0.003 g/t Au (ALS, Actlabs/Techni-Lab, Laboratoire Expert) for the MS-FA method. The acceptance limit was set at 0.025 g/t Au to homogenize the study.

#### 11.4.2.1 Monique Area

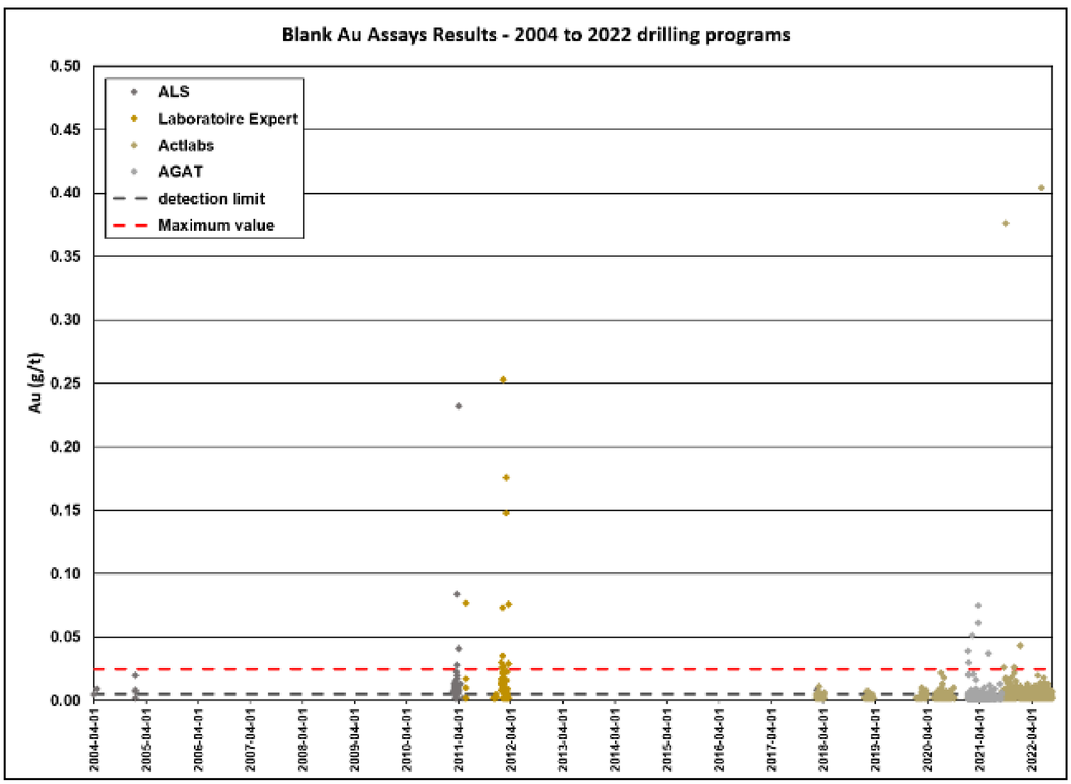
For the 2004 and 2005 drilling campaigns, Richmont inserted 12 blanks in the sample stream of core samples. Since 2010, contamination has been monitored by inserting blanks at a ratio of one for every 20 samples (1:20). Richmont inserted 116 blanks and Probe Gold inserted 2,191.

For drilling programs performed between 2004 and 2022, 28 samples (1.2%) returned grades higher than five times the detection limit (Table 11-7 and Figure 11-2).

**Table 11-7: Results of Blanks Used between 2004 and 2022 in the Monique Area**

| Laboratory | Quantity Inserted | Quantity Failed | Percent Passing QC |
|---|---|---|---|
| ALS | 40 | 4 | 90% |
| Laboratoire Expert | 90 | 13 | 86% |
| Actlabs / Techni-Lab | 1,838 | 5 | 99.7% |
| AGAT | 349 | 6 | 98% |

**Figure 11-2: Time Series Plot for Blank Samples**




Source: InnovExplo, 2023.

#### 11.4.2.2 Courvan Area

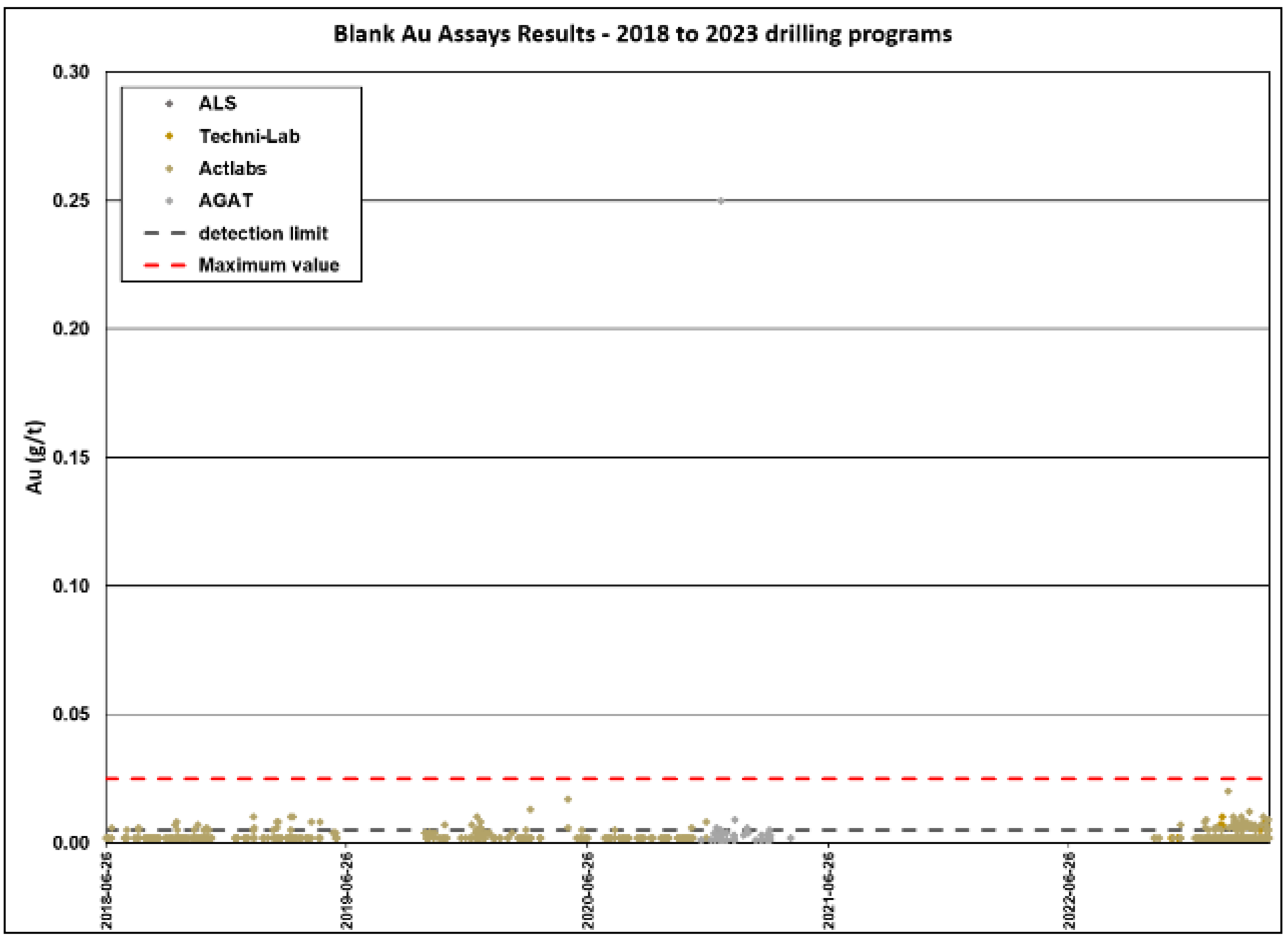
Since 2015, contamination has been monitored by inserting blanks at a ratio of one for every 20 samples (1:20). Richmont inserted 7 blanks and Probe Gold inserted 1,440.

For drilling programs performed between 2015 and 2022, one sample returned grades higher than five times the detection limit (Table 11-8 and Figure 11-3).

**Table 11-8: Results of Blanks Used between 2018 and 2022 in the Courvan Area**

| Laboratory | Quantity Inserted | Quantity Failed | Percent Passing QC |
|---|---|---|---|
| ALS | 9 | 0 | 100% |
| Actlabs / Techni-Lab | 1,362 | 0 | 100% |
| AGAT | 69 | 1 | 99.9% |

**Figure 11-3: Time Series Plot for Blank Samples**




Source: InnovExplo, 2023.

#### 11.4.2.3 Pascalis Area

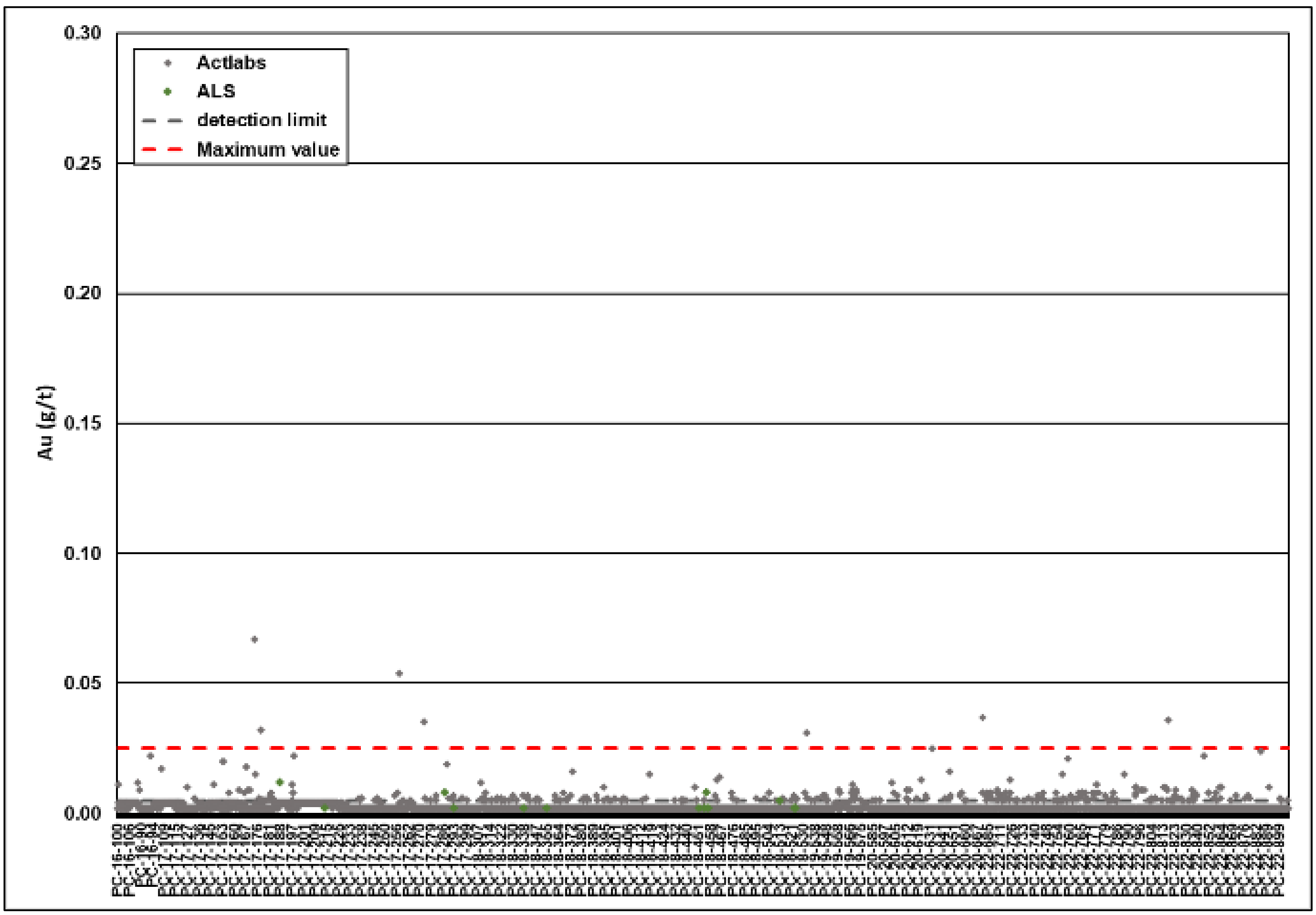
Contamination has been monitored by inserting blanks at a ratio of one for every 20 samples (1:20). Probe Gold, since 2016, has inserted 3,533 blanks.

For drilling programs performed between 2016 and 2022, nine samples returned grades higher than five times the detection limit (Table 11-9 and Figure 11-4).

**Table 11-9: Results of Blanks Used between 2016 and 2022 in the Pascalis Area**

| Laboratory | Quantity Inserted | Quantity Failed | Percent Passing QC |
|---|---|---|---|
| ALS | 13 | 0 | 100.0% |
| Actlabs | 3,520 | 9 | 99.7% |

**Figure 11-4: Time Series Plot for Blank Samples (Pascalis Area)**




Source: InnovExplo, 2023.

#### 11.4.3 Pulp Duplicates

A further check comprised a pulp duplicate program.

##### 11.4.3.1 Monique Area

Between 2010 and 2013, Richmont's QA/QC included 348 pulp duplicate samples. Since 2018, a pulp duplicate of a regular sample has been systematically taken approximately every 100 samples.

The pulp duplicates were mainly analyzed at the same laboratory as the original samples except for some samples that were sent to SGS Canada Inc. (SGS) in Cochrane, Ontario, for secondary laboratory check assays. Table 11-10 details the pulp duplicate distribution and results over time. Scatterplots of the original analyses and pulp duplicates are shown in Figure 11-5 and Figure 11-6.

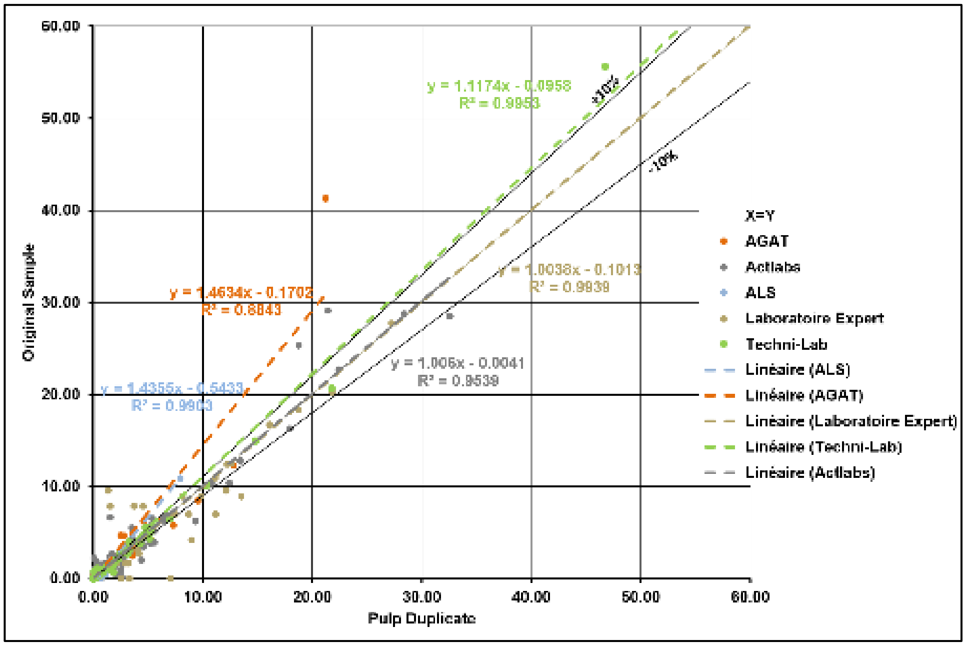
The results from Laboratoire Expert, Techni-Lab, and Actlabs show good reproducibility of analyses with a coefficient of determination ($R^2$) between 0.9 to 0.99 and good accuracy as monitored by the linear regression line (between the 10% tolerance limit).

AGAT original assays show a positive bias compared to the internal pulp duplicates analysis and the SGS results. The plot shows good precision with $R^2$ of 0.88 for internal pulp duplicates and 0.9 for pulp duplicates sent to SGS but a low accuracy monitored by the linear regression line (outside the 10% tolerance limit). Assays performed at AGAT represent 13% of the total analysis.

**Table 11-10: Details of Pulp Duplicates used between 2011 and 2022 in the Monique Area**

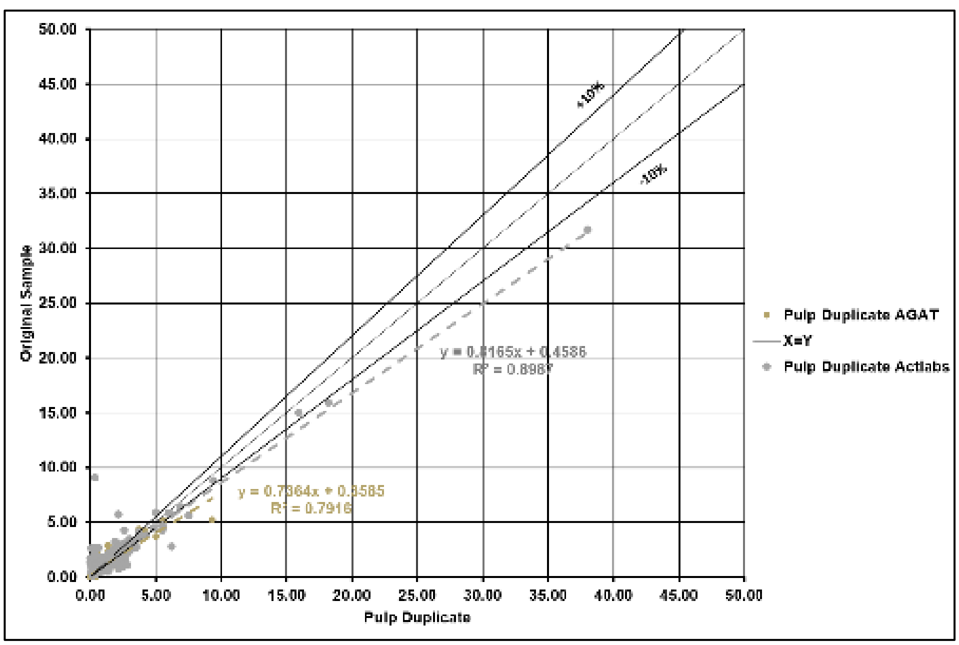
<table>
<tr><th>Year</th><th>Number of Samples</th><th>Original Laboratory</th><th>Duplicate Laboratory</th><th>Linear Regression</th><th>Coefficient of Determination ($R^2$)</th></tr>
<tr><td>2011</td><td>5</td><td>ALS</td><td>ALS</td><td>Dataset too low</td><td>Dataset too low</td></tr>
<tr><td>2011</td><td>31</td><td rowspan="2">Laboratoire Expert</td><td rowspan="2">Laboratoire Expert</td><td rowspan="2">y = 1.01x - 0.10</td><td rowspan="2">0.99</td></tr>
<tr><td>2012</td><td>113</td></tr>
<tr><td>2022</td><td>172</td><td>Techni-Lab</td><td>Techni-Lab</td><td>y = 1.12x - 0.09</td><td>0.99</td></tr>
<tr><td>2012</td><td>1</td><td rowspan="6">Actlabs</td><td rowspan="6">Actlabs</td><td rowspan="6">y = 1.01x - 0.01</td><td rowspan="6">0.95</td></tr>
<tr><td>2018</td><td>35</td></tr>
<tr><td>2019</td><td>41</td></tr>
<tr><td>2020</td><td>125</td></tr>
<tr><td>2021</td><td>129</td></tr>
<tr><td>2022</td><td>649</td></tr>
<tr><td>2020</td><td>3</td><td rowspan="2">AGAT</td><td rowspan="2">AGAT</td><td rowspan="2">y = 1.46x - 0.17</td><td rowspan="2">0.88</td></tr>
<tr><td>2021</td><td>170</td></tr>
<tr><td>2021</td><td>254</td><td>AGAT</td><td>SGS</td><td>y = 0.74x - 0.36</td><td>0.79</td></tr>
<tr><td>2019</td><td>5</td><td rowspan="2">Actlabs</td><td rowspan="2">SGS</td><td rowspan="2">y = 0.82x - 0.46</td><td rowspan="2">0.90</td></tr>
<tr><td>2020</td><td>106</td></tr>
</table>

**Figure 11-5: Linear Graph Comparing Original and Pulp Duplicate Assays Analyzed at the Same Laboratory between 2011 and 2022**




Source: InnovExplo, 2023.

**Figure 11-6: Linear Graph Comparing Original and Pulp Duplicate Assays Analyzed at Different Laboratories between 2011 and 2022**




Source: InnovExplo, 2023.

#### 11.4.3.2 Courvan Area

Since 2018, a pulp duplicate of a regular sample has been systematically taken approximately every 100 samples.

The pulp duplicates were mainly analyzed at the same laboratory as the original samples, except for some samples that were sent to SGS in Cochrane, Ontario, for secondary laboratory check assays. Table 11-11 details the pulp duplicate distribution and results over time. Scatterplots of the original analyses and pulp duplicates are shown in Figure 11-7 and Figure 11-8.

Pulps duplicates performed at the same laboratory show good reproducibility of analyses with a coefficient of determination ($R^2$) between 0.94 to 0.99 and average accuracy as monitored by the linear regression line (close to the 10% tolerance limit).

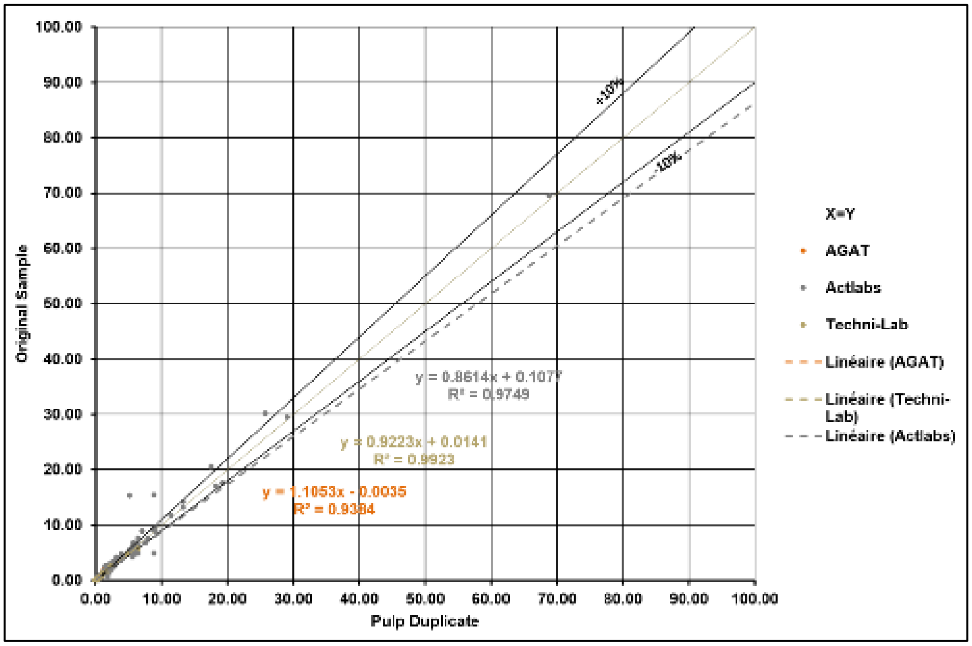
The Actlabs pulp duplicates that were sent to SGS show good reproducibility of analyses with a coefficient of determination ($R^2$) of 0.98 and average accuracy as monitored by the linear regression line (close to the 10% tolerance limit).

AGAT pulps duplicates sent at SGS show low reproducibility of analyses with a coefficient of determination ($R^2$) of 0.80 and average accuracy as monitored by the linear regression line (close to the 10% tolerance limit).

**Table 11-11: Details of Pulp Duplicates used between 2018 and 2022 in the Courvan Area**

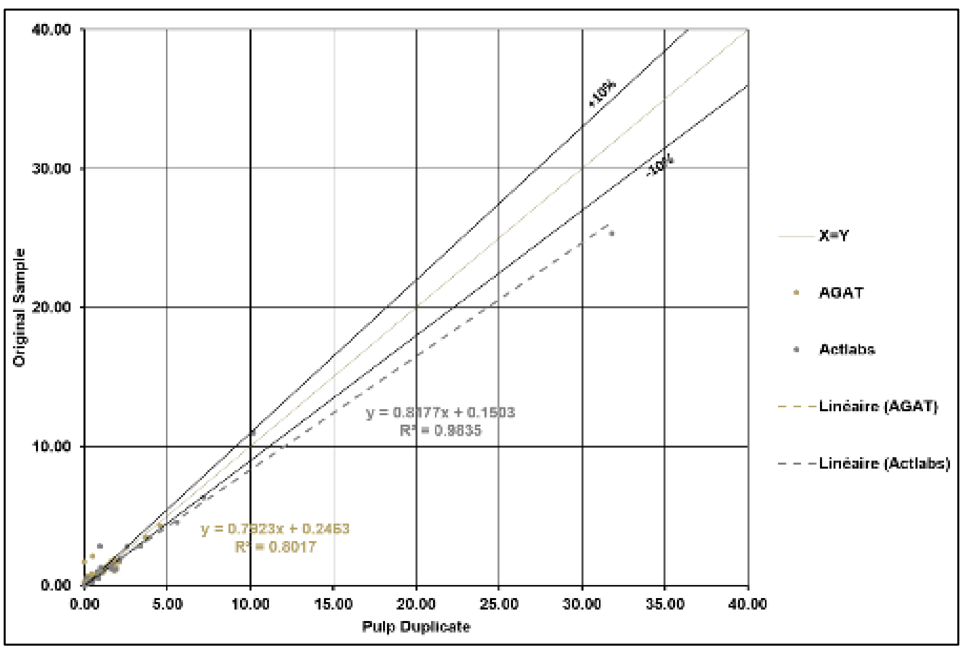
| Year | Number of Samples | Original Laboratory | Duplicate Laboratory | Linear Regression | Coefficient of Determination ($R^2$) |
|---|---|---|---|---|---|
| 2018 | 3 | Techni-Lab | Techni-Lab | y = 0.92x - 0.01 | 0.99 |
| 2022 | 44 | | | | |
| 2018 | 190 | Actlabs | Actlabs | y = 0.86x - 0.11 | 0.97 |
| 2019 | 89 | | | | |
| 2020 | 106 | | | | |
| 2021 | 129 | | | | |
| 2022 | 441 | | | | |
| 2020 | 21 | AGAT | AGAT | y = 1.11x - 0.00 | 0.94 |
| 2021 | 10 | | | | |
| 2020 | 35 | AGAT | SGS | y = 0.79x - 0.25 | 0.80 |
| 2021 | 12 | | | | |
| 2019 | 5 | Actlabs | SGS | y = 0.82x - 0.15 | 0.98 |
| 2020 | 40 | | | | |

**Figure 11-7: Linear Graph Comparing Original and Pulp Duplicate Assays Analyzed at the Same Laboratory between 2018 and 2022**




Source: InnovExplo, 2023.

**Figure 11-8: Linear Graph Comparing Original and Pulp Duplicate Assays Analyzed at Different Laboratories between 2019 and 2021**




Source: InnovExplo, 2023.

### 11.4.3.3 Pascalis Area

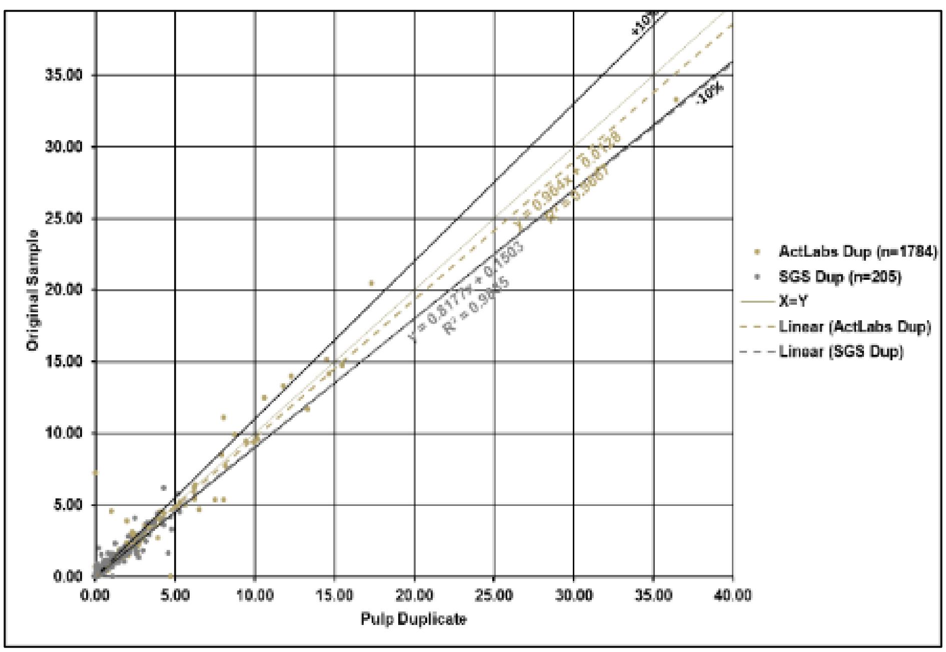
Since 2017, a pulp duplicate of a regular sample has been systematically taken approximately every 100 samples.

The pulp duplicates were mainly analyzed at the same laboratory as the original samples, except for some samples that were sent to SGS in Cochrane, Ontario, for secondary laboratory check assays. Table 11-12 details the pulp duplicate distribution and results over time. Scatterplots of the original analyses and pulp duplicates are shown in Figure 11-9.

**Table 11-12: Details of Pulp Duplicates used between 2017 and 2022 in the Pascalis Area**

| Year | Number of Samples | Original Laboratory | Duplicate Laboratory | Linear Regression | Coefficient of Determination ($R^2$) |
|---|---|---|---|---|---|
| 2017 | 267 | Actlabs | Actlabs | y = 0.96x - 0.01 | 0.97 |
| 2018 | 591 | | | | |
| 2019 | 114 | | | | |
| 2020 | 225 | | | | |
| 2021 | 18 | | | | |
| 2022 | 569 | | | | |
| 2018 | 1 | Actlabs | ALS | Dataset too low | Dataset too low |
| 2017 | 2 | Actlabs | SGS | y = 0.22x - 0.02 | 0.98 |
| 2018 | 8 | | | | |
| 2019 | 8 | | | | |
| 2020 | 187 | | | | |

**Figure 11-9: Linear Graph Comparing Original and Pulp Duplicate Assays during the Drilling Programs between 2017 and 2022**




Source: InnovExplo, 2023.

Pulps duplicates performed at the same laboratory show good reproducibility of analyses with a coefficient of determination ($R^2$) of 0.97 and average accuracy as monitored by the linear regression line (inside 10% tolerance limit).

Actlabs pulps duplicates sent at SGS show good reproducibility of analyses with a coefficient of determination ($R^2$) of 0.98 and average accuracy as monitored by the linear regression line (on the lower 10% tolerance limit).

### 11.4.4 Field Duplicates

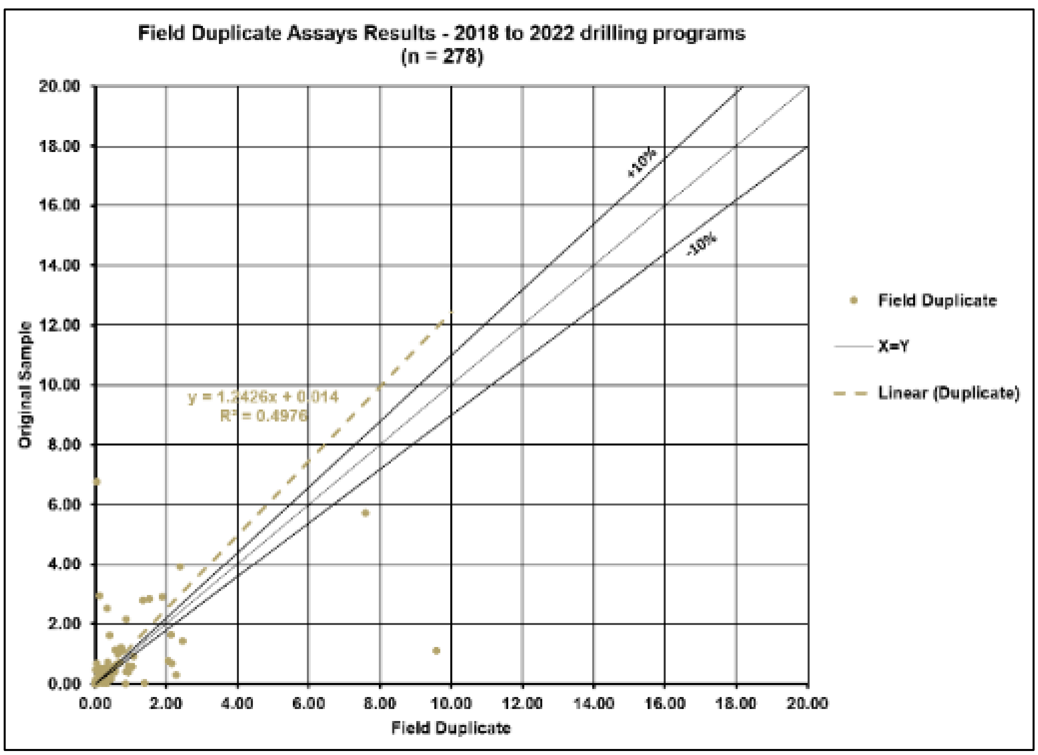
Since 2018, drilling programs have included quarter-core and half-core duplicate samples to assess the "nugget effect" or heterogeneity of gold mineralization within individual intervals of sampled drill core.

#### 11.4.4.1 Monique Area

The issuer inserted 278 field duplicates into the sample stream.

The original and field duplicate assays are plotted on the graph in Figure 11-10. The plot shows a moderate precision with $R^2$=0.49 but also moderate accuracy monitored by the linear regression line (above the 10% tolerance limit). This moderate repeatability shows that gold distribution in the core is heterogenous and can be explained by the nugget effect, particularly for high-grade results.

**Figure 11-10: Linear Graph Comparing Original and Field Duplicate Assays Analyzed between 2018 and 2022 for the Monique Area**



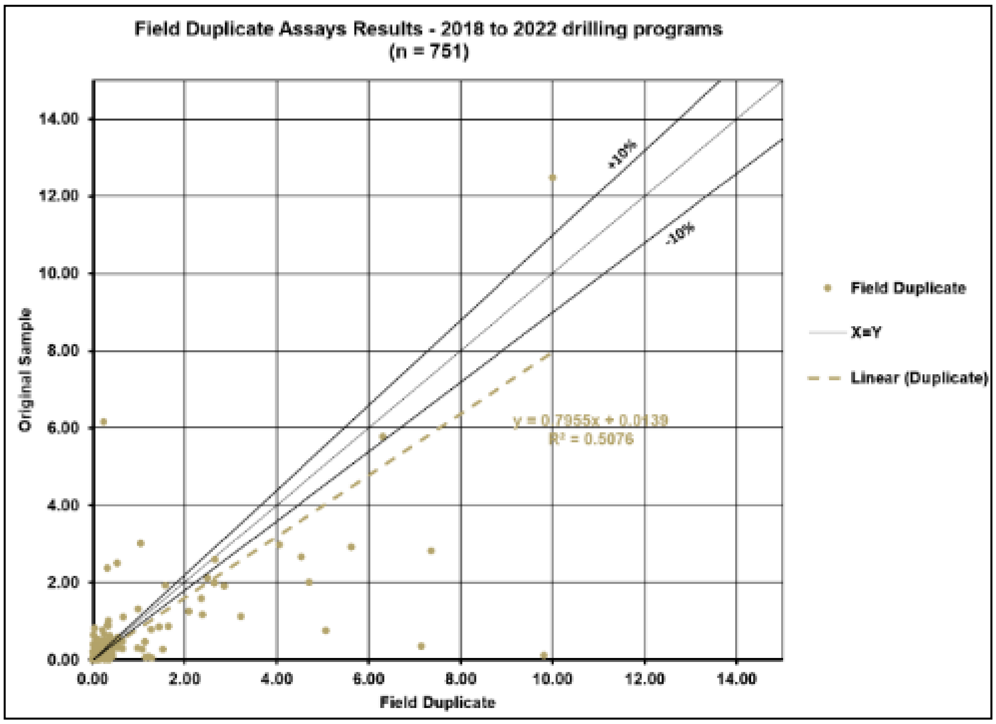

Source: InnovExplo, 2023.

#### 11.4.4.2 Courvan Area

The issuer inserted 751 field duplicates into the sample stream.

The original and field duplicate assays are plotted on the graph in Figure 11-11. The plot shows a moderate precision with $R^2$=0.51 but also moderate accuracy monitored by the linear regression line (above the 10% tolerance limit). This moderate repeatability shows that gold distribution in the core is heterogenous and can be explained by the nugget effect, particularly for high-grade results.

**Figure 11-11: Linear Graph Comparing original and Field Duplicate Assays Analyzed between 2018 and 2022 for the Courvan Area**



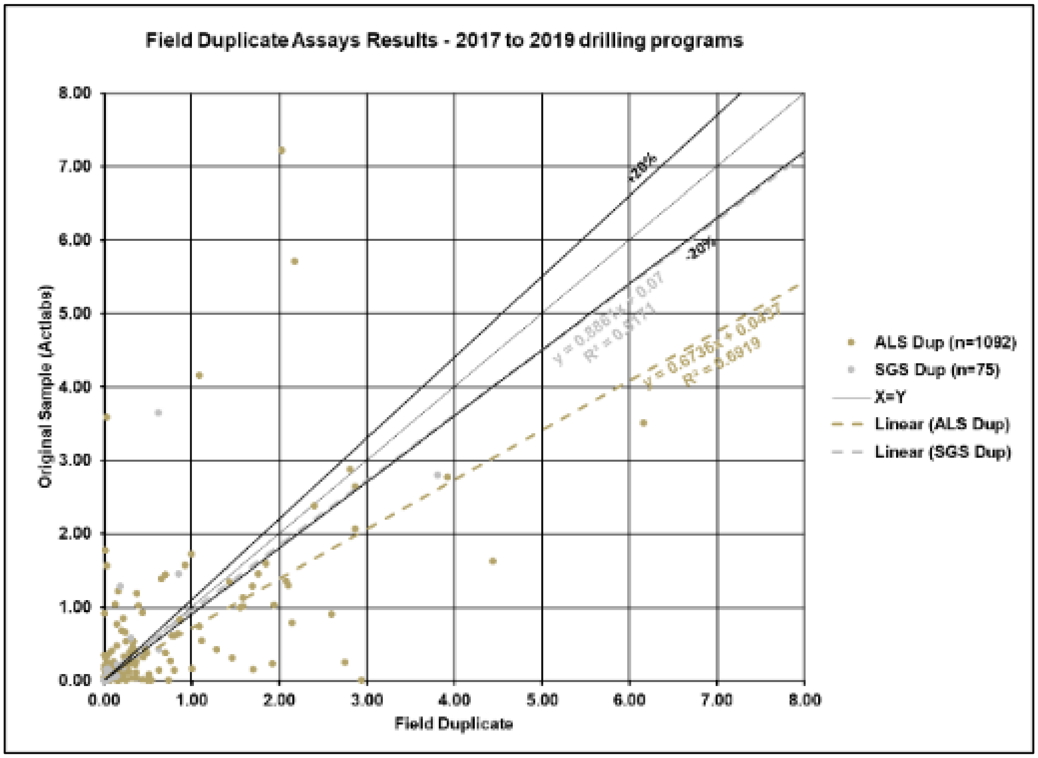

Source: InnovExplo, 2023.

#### 11.4.4.3 Pascalis Area

The issuer inserted 751 field duplicates into the sample stream from 2017 to 2019. These duplicates were sent to umpire laboratories only (SGS and ALS).

The original and field duplicate assays are plotted on the graph in Figure 11-12. For the duplicate sent to the SGS laboratory, the plot shows a moderate precision with $R^2$=0.51 but also moderate accuracy monitored by the linear regression line (above the 20% tolerance limit). For the duplicate sent to the ALS laboratory, the plot shows a moderate precision with $R^2$=0.69 but shows a negative bias with a linear regression line below the "- 20%" tolerance limit (Au grade values are generally higher in ALS assay results). This moderate repeatability shows the heterogeneous nature of gold; this type of deposit has a significant nugget effect, particularly for high-grade results (above 2 g/t Au).

**Figure 11-12: Linear Graph Comparing Original and Field Duplicate Assays during the Drilling Programs between 2017 and 2019**




Source: InnovExplo, 2023.

## 11.5 Conclusion

The authors are of the opinion that the sample preparation, security, analysis, and QA/QC protocols performed by the issuer follow generally accepted industry standards and that the data is valid and of sufficient quality for a mineral resource estimation.

# 12 DATA VERIFICATION

This section discusses data verification for the diamond drill hole databases provided by the issuer for the 2023 MRE. The close-out date is October 25, 2022 for the Monique database, May 19, 2023 for the Courvan database, and March 8, 2023 for the Pascalis database. The 2023 drill holes are not included in the MRE 2023. The authors do not believe that the omission of these holes will materially affect the MRE 2023, and the decision to leave them out is in accordance with the current geological models.

Data verification included visits to the project and an independent review of the data for selected drill holes (e.g., surveyor certificates, assay certificates, QA/QC program and results, downhole surveys, lithologies, alteration, and structures).

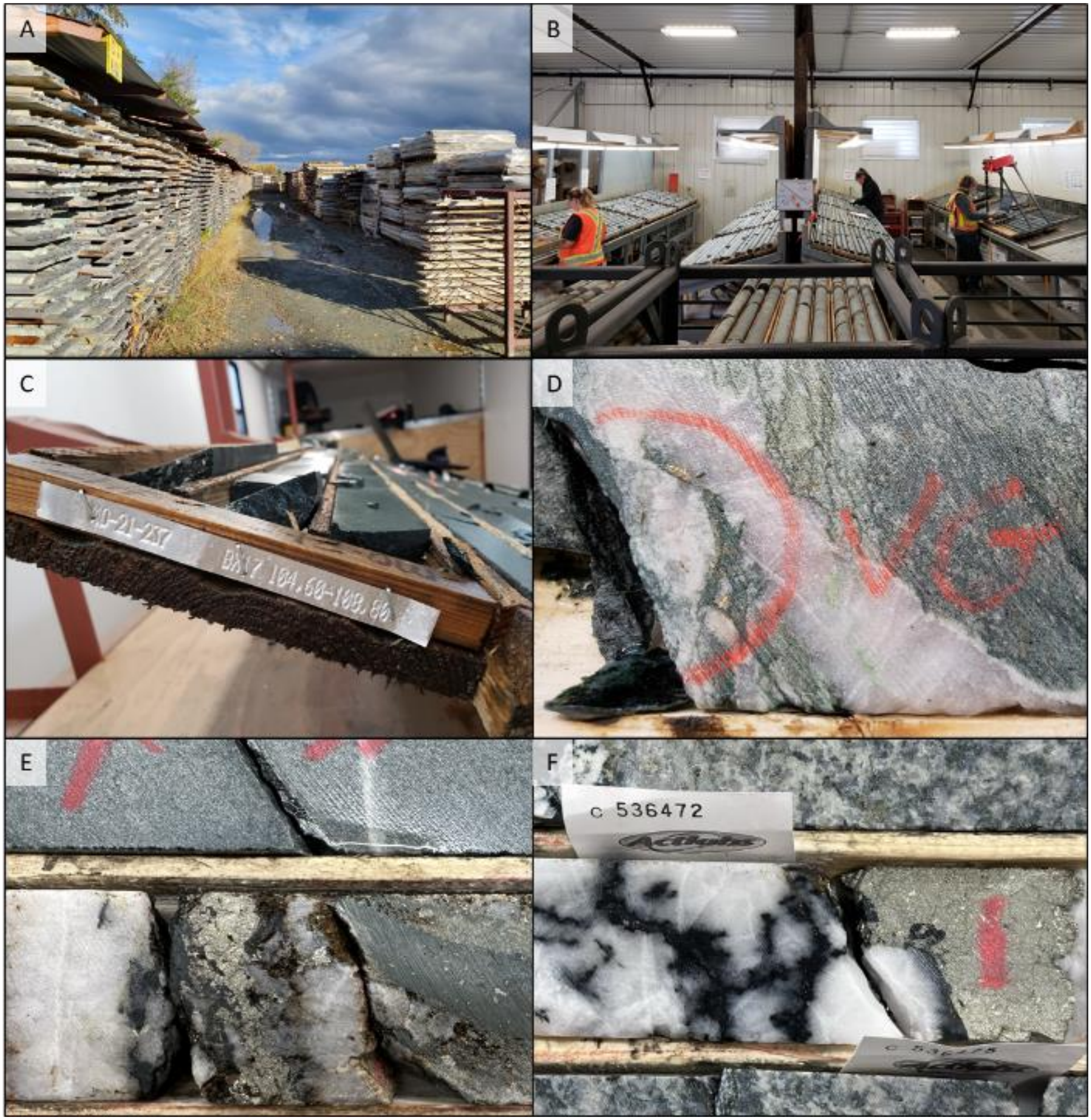
## 12.1 Historical Work

Some of the historical information used in this report was taken from reports produced before of NI 43-101 was implemented. In some cases, very little information is available about the sample preparation, analysis, and security procedures. The author assumes that exploration activities conducted by previous companies followed prevailing industry standards.

## 12.2 Core Review

The core boxes are stored in core racks or cross-stacked piles. The QPs found the boxes in good order and properly labelled with the sample tags. The wooden blocks at the beginning and end of each drill run were still in place, matching the indicated footage on each box. The authors validated the sample numbers and confirmed the presence of mineralization in the reference half-core samples (Figure 12-1).

**Figure 12-1: Photographs Taken during the Drill Core Reviews**




Notes: A = Core racks. B = Logging facility. C = Sample tag stapled on a core box. D = Mineralization from hole MO-22-402. E = Mineralization from hole PC-22-802. F = Mineralization from hole CO-22-245. Source: InnovExplo, 2023.

## 12.3 Database

The databases were compiled and imported in GeoticLog format. After initially inheriting them from the previous owners, Probe Gold reviewed all the coordinates, assay results, and geological data. Other information (Prolog, Excel) is available in paper logs and summarized in the GeoticLog database. Drilling campaigns performed by Probe Gold since 2016 were integrated into the GeoticLog database.

The Monique database contains 1,044 diamond drill holes (251,551 m). The database includes 415 historical holes (90,283 m) drilled before 2018 and 629 holes (161,268 m) between 2018 and 2022.

The Courvan database contains 846 diamond drill holes (175,641 m). The database includes 481 historical holes (81,775 m) drilled before 2018 and 365 holes (93,866 m) between 2018 and 2022. Bordure and Senore diamond drill holes are included in the Courvan database.

The Pascalis database contains 2018 diamond drill holes (415,606 m). 1192 historical holes (153,746 m) drilled before 2016 and 826 holes (261,860 m) drilled between 2016 and 2022. Highway diamond drill holes are included in the Pascalis database.

### 12.3.1 Drill Hole Locations

Collar position coordinates and azimuths are presented in the database using the UTM system (NAD 83, Zone 18).

The spatial location of most of the historical data is usually referenced to the Cambior grid system, in which the heading used is geographic true north. This grid system was established by SOQUEM in 1981 for exploration and used afterward during the mining operations and was the main reference grid for all underground data and most surface data collected historically. The local grid references were converted into UTM coordinates (NAD83, zone 18).

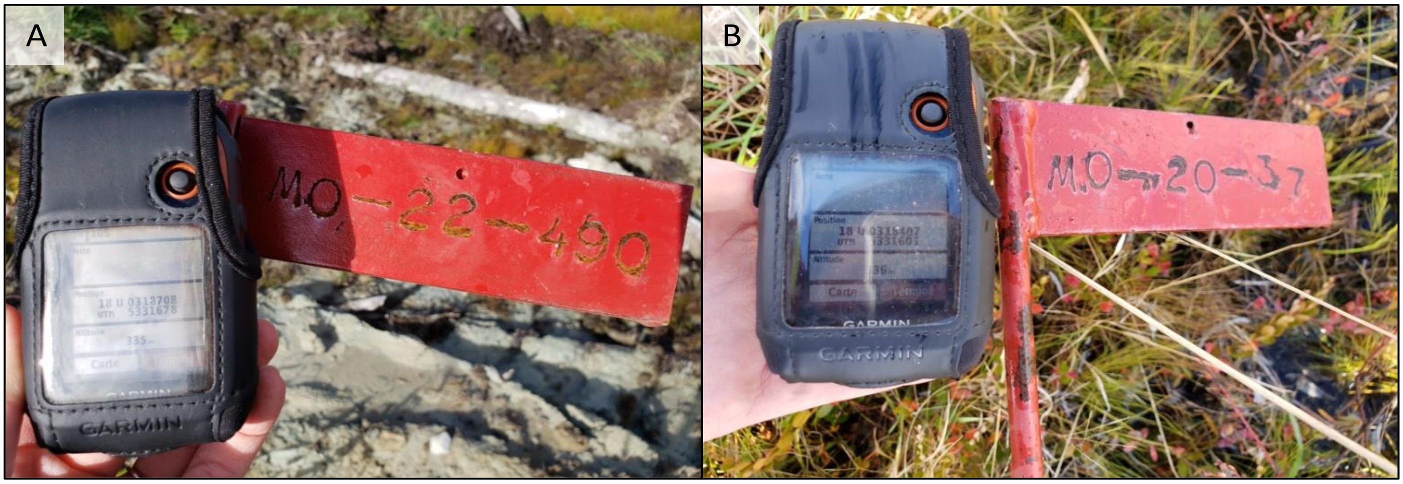
Procedures for surveying diamond drill hole collars from the surface have varied considerably across programs. The information from most programs is relatively complete and is shown on the front page of the drill logs. The collar locations for holes drilled from 1937 to 1986 were originally determined from measurements with a chain on a cut grid. After 1986, the collars were surveyed by a technical team of Cambior staff. Since 2010, J.L. Corriveau and Associates Inc. has used a high-precision GPS unit for all holes.

Most of the casings were left in place with an identification tag.

The coordinates of 23 surface holes were confirmed by the author using a handheld GPS (Figure 12-2 and Table 12-1), then compared to the database. All results had acceptable precision.

The collar locations in the databases are considered adequate and reliable.

**Figure 12-2: Examples of On-Site Verification**




Notes: A = MO-22-490 collar. B = MO-20-37 collar. Source: InnovExplo, 2023.

**Table 12-1: Original Collar Survey Data Compared to InnovExplo's Checks**

| Area | Hole ID | Original Coordinates | | Checked Coordinates | | Difference (m) | |
|---|---|---|---|---|---|---|---|
| | | Easting | Northing | Easting | Northing | Easting | Northing |
| Monique Gold Trend | MO-18-12 | 318,429.4 | 5,331,639.3 | 318,430 | 5,331,639 | -0.6 | 0.3 |
| | MO-20-37 | 318,406.5 | 5,331,600.1 | 318,407 | 5,331,601 | -0.5 | -0.9 |
| | MO-20-78 | 318,436.1 | 5,331,618.8 | 318,437 | 5,331,619 | -1.0 | -0.2 |
| | MO-21-164 | 318,789.7 | 5,331,685.0 | 318,790 | 5,331,684 | -0.3 | 1.0 |
| | MO-22-426 | 318,411.0 | 5,331,629.2 | 318,411 | 5,331,628 | 0.0 | 1.2 |
| | MO-22-469 | 318,742.3 | 5,331,710.1 | 318,744 | 5,331,710 | -1.7 | 0.1 |
| | MO-22-474 | 318,734.5 | 5,331,688.3 | 318,735 | 5,331,686 | -0.5 | 2.3 |
| | MO-22-490 | 318,707.2 | 5,331,679.2 | 318,708 | 5,331,678 | -0.8 | 1.2 |
| | MO-22-517 | 318,845.8 | 5,331,698.9 | 318,847 | 5,331,699 | -1.2 | -0.1 |
| Courvan Gold Trend | CO-18-021 | 310,552 | 5,334,198 | 310,552 | 5,334,198 | -0.4 | 0.0 |
| | CO-19-107 | 310,487 | 5,333,698 | 310,487 | 5,333,699 | -0.4 | 1.2 |
| | CO-19-108 | 310,484 | 5,333,650 | 310,483 | 5,333,650 | -0.8 | 0.4 |
| | CO-20-156 | 310,576 | 5,334,238 | 310,576 | 5,334,237 | -0.2 | -0.8 |
| | CO-22-189 | 310,440 | 5,333,737 | 310,441 | 5,333,738 | 0.5 | 1.1 |
| | CO-22-190 | 310,504 | 5,333,731 | 310,505 | 5,333,732 | 1.2 | 0.9 |
| | CO-22-216 | 310,486 | 5,333,757 | 310,486 | 5,333,759 | -0.1 | 2.1 |
| Pascalis Gold Trend | PC-18-525 | 312,799 | 5,335,550 | 312,801 | 5,335,550 | 1.5 | 0.2 |
| | PC-18-529 | 312,818 | 5,335,548 | 312,823 | 5,335,546 | 4.9 | -2.1 |
| | PC-20-653 | 312,751 | 5,335,626 | 312,749 | 5,335,625 | -1.8 | -1.4 |
| | PC-20-671 | 312,902 | 5,335,599 | 312,902 | 5,335,599 | 0.5 | 0.1 |
| | PC-20-672 | 312,852 | 5,335,623 | 312,850 | 5,335,623 | -1.6 | 0.3 |
| | PC-22-833 | 312,849 | 5,335,543 | 312,851 | 5,335,541 | 1.6 | -2.0 |
| | PC-22-841 | 312,887 | 5,335,584 | 312,887 | 5,335,583 | -0.1 | -1.0 |

### 12.3.2 Downhole Survey

Downhole surveys were conducted on most of the holes. For the most recent drill holes (from 2016), the deviation was measured using a multi-shot instrument such as a Flexit SmartTool or Reflex EZ-Shot, with readings taken every 30 m down the hole during the drilling. After completing the hole, the driller would pull the rod out and survey the hole every 3 m with the multi-shot instrument. Several methods were used in the drilling programs before 2016, such as EZ-Gyro, Acid test and Tropari.

The survey information was verified for 5% of each database. Any discrepancies were corrected and incorporated into the current resource database.

### 12.3.3 Assays

The authors were given access to the assay certificates for all drilling programs since 2018 (2016 for Pascalis). The certificates were obtained directly from the laboratory. The verified holes represent 5% of the holes used in the 2023 MRE database. The holes were selected based on their representativeness in terms of the drilling program they were part of and their geographical position with respect to the interpreted mineralized zones.

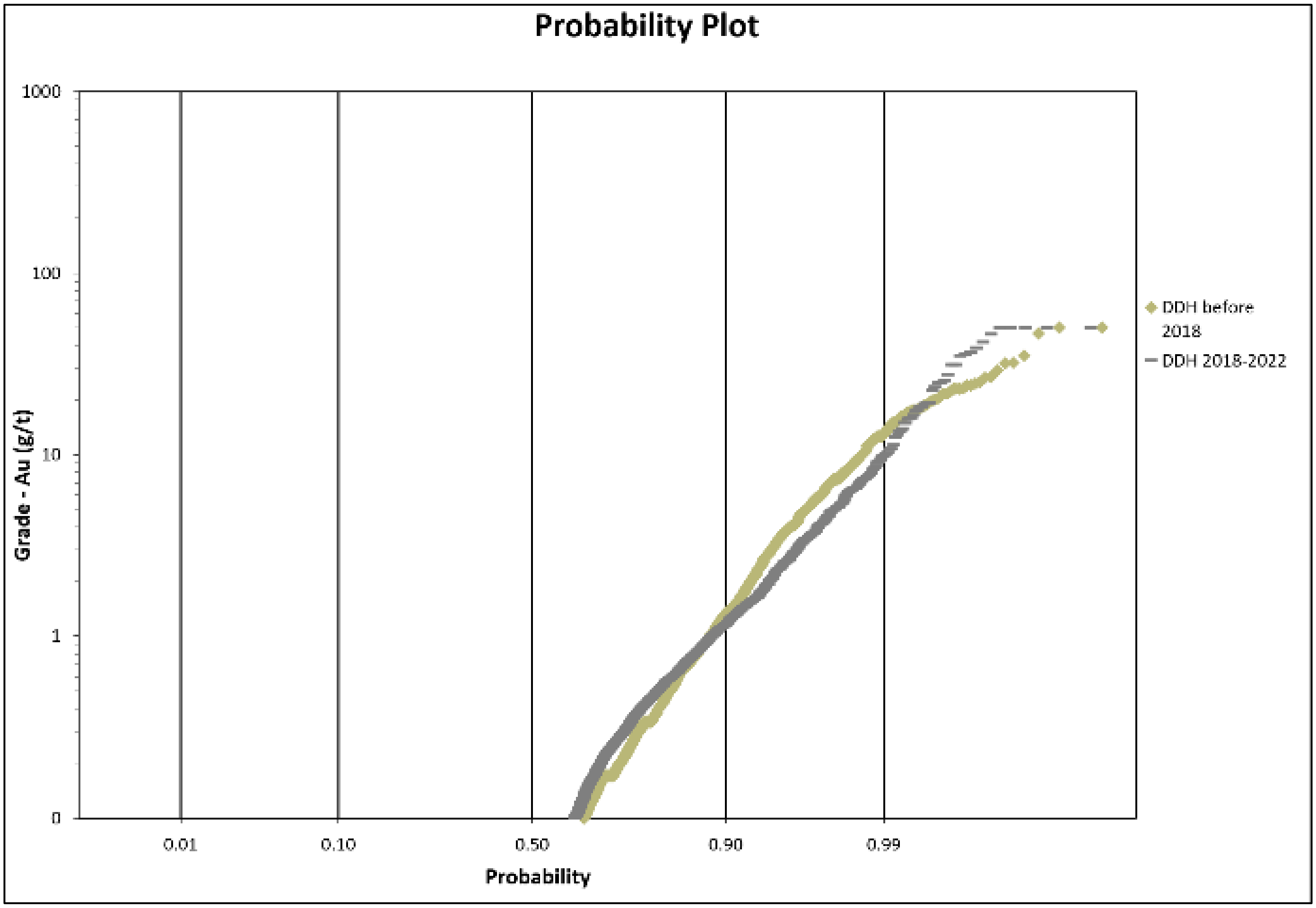
Minor errors of the type normally encountered in a project database were identified and corrected.

For the historical holes (prior to Probe Gold being the project operator), only paper logbooks, or logs as PDF, were available for validation by the author. The authors compared the historical assays to recent assays to verify and validate the quality of the historical data for these holes.

The comparison was performed on 1-metre composited assays to mitigate the variation of sample length through the years. Cumulative probability plots show a good correlation between recent and historical values between 0 g/t Au and 20 g/t Au. Above 20 g/t Au, except for the Pascalis gold trend, the cumulative probability plots show a greater proportion of higher grades in the recent assays compared to historical assays (Figure 12-3). These discrepancies could be explained by the lower precision for high-grade values in historical analysis techniques. The differences, however, are not considered material.

For the Pascalis gold trend, there is a greater proportion of higher grades in the historical assays compared to the recent assays. This discrepancy is explained by the high proportion in the database of samples taken in holes drilled at or close to the former L.C. Béliveau mine.

**Figure 12-3: Cumulative Probability Plot for Gold in Recent and Historical Assays, Courvan Area**




Source: InnovExplo, 2023.

## 12.4 Resampling of Diamond Drill Holes

During the site visits, the QPs selected 22 half-split core intervals. The QPs bagged the samples and transported them to ALS for analysis. One standard was inserted in the sequence.

The resampling results confirmed the ranges of grades in the mineralized intervals. The results show that low-grade samples yielded grades that are consistent with the original results and more erratic results for higher-grade samples (although still considered high), reflecting a nugget effect commonly related to this type of deposit.

The QPs believe the field-duplicate results from the independent resampling program are reliable and valid for this type of gold project.

Table 12-2 shows the resampling results for the 22 samples.

**Table 12-2: Results of the Independent Resampling**

| Area | Hole ID | Original (Probe) | | Field Duplicate (InnovExplo) | |
|---|---|---|---|---|---|
| | | Sample Number | Au (g/t) | Sample Number | Au (g/t) |
| Monique Gold Trend | MO-22-402 | B1167813 | 0.49 | K504289 | 0.86 |
| | | B1167814 | 5.85 | K504290 | 5.05 |
| | | B1167815 | 14 | K504291 | 6.41 |
| | | B1167816 | 1.63 | K504292 | 0.84 |
| | | B1167817 | 0.6 | K504293 | 0.62 |
| | MO-20-44 | M18151 | 1.39 | K504294 | 2.15 |
| | | M18152 | 3.12 | K504295 | 7.13 |
| | | M18153 | 0.06 | K504296 | 0.08 |
| | | M18154 | 0.94 | K504297 | 0.92 |
| | | M18155 | 0.24 | K504298 | 0.37 |
| Pascalis Gold Trend | PC-22-835 | C354570 | 2.00 | W035483 | 1.29 |
| | | C354572 | 2.27 | W035484 | 1.46 |
| | | C354573 | 3.46 | W035485 | 4.46 |
| | | C354574 | 0.37 | W035486 | 0.25 |
| | | C354575 | 0.07 | W035487 | 0.06 |
| | | C354576 | 0.54 | W035488 | 0.75 |
| | | C354577 | 0.78 | W035489 | 0.63 |
| | | C354578 | 50.40 | W035490 | 5.09 |
| Courvan Gold Trend | CO-22-245 | C536414 | 2.81 | W035492 | 0.40 |
| | | C536415 | 1.09 | W035493 | 9.83 |
| | | C536416 | 0.64 | W035494 | 0.87 |
| | | C536417 | 2.27 | W035495 | 0.55 |
| **Average (*)** | | | **4.32** | | **2.28** |
| **Minimum (*)** | | | **0.06** | | **0.06** |
| **Maximum (*)** | | | **50.40** | | **9.83** |
| **Correlation Coefficient (*)** | | | | | **0.36** |

## 12.5 Metallurgy

The QP regularly reviewed the metallurgical results that may impact mineral resource estimation and/or metallurgical recovery model. In the opinion of the QP, the data and assumptions used to estimate the metallurgical recovery model for the mineral resource estimates are sufficiently reliable for those purposes.

## 12.6 Conclusion

The QPs believe their data verification has demonstrated the validity of the data and the project protocols. The QPs consider the databases valid and of sufficient quality to be used for mineral resource estimation.

# 13 MINERAL PROCESSING AND METALLURGICAL TESTING

## 13.1 Introduction

Three metallurgical testwork programs on drill core samples from the different mineralized zones in the Novador property have been conducted between 2017 and 2023. The purpose of these programs was to quantify metallurgical performance under different processing options to support the design of the optimal processing flowsheet for the Novador property. Table 13-1 shows a summary of these testwork programs. All material tested exhibited free milling gold recoveries amenable to gravity concentration and cyanide leaching of the gravity tails.

**Table 13-1: Summary of Metallurgical Testwork**

| Year | Laboratory/Location | Testwork Performed |
|---|---|---|
| 2023 | Base Metallurgical Laboratories (BaseMet) in Kamloops, BC | Mineralogy, comminution, E-GRG, flotation, leaching, leach variability, oxygen uptake, cyanide destruction, solid-liquid separation |
| 2020-2021 | Corem in Quebec, QC | Mineralogy, comminution, gravity, leach, flotation |
| 2017-2019 | Tomra test centre in Koblenz, Germany | Mineralized material sorting |

In the opinion of the QP, the test samples from the various test programs described below are considered representative of the various types and styles of mineralization found in the deposit and support the assumptions made regarding the recovery model for this technical report.

## 13.2 Historical Metallurgical Data

### 13.2.1 Historical Metallurgical Testing

Metallurgical tests conducted in 1991 on mineralized material from Monique at the Centre de Recherches Minérales in Quebec City (Quebec) showed that the material responds well to cyanidation, and recoveries of 96.6% could be achieved on mineralized material with a head grade of 5.2 g/t Au after 24 hours for material ground to 75% minus 200 mesh. Additional cyanidation tests performed in 2011 at the URSTM in Rouyn-Noranda (Quebec) showed a good correlation between grind size and gold recovery, the latter of which varied from 95.2% to 97.8% with low reagent consumption.

### 13.2.2 Historical Operational Data

Historical operations on Novador properties exhibited amenability to cyanidation gold recovery rates above 95% Au following cyanidations during commercial operation. These are summarized in Table 13-2.

**Table 13-2: Historical Operations Gold Recovery Summary**

| Operation | Years Active | Process Summary | Gold Recovery Summary |
|---|---|---|---|
| Monique Open Pit Mine (Material Treated at Richmont's Camflo Mill) | 2013 - 2016 | Merrill-Crowe-type mill with circuits for crushing, grinding, cyanidation, and precipitation using zinc powder | 95.9% Au recovery from a 2.47 g/t Au head grade |
| L.C. Béliveau Mine | 1989 - 1993 | Crushing, grinding, gravity and cyanidation of gravity tails | 93.1% Au recovery during operation, subsequent metallurgical testwork on a simplified flowsheet (gravity and leaching of gravity tails) averaged<br>97.9% Au recovery, with an associated cyanide consumption of approximately 1.0 kg/t NaCN |
| Bussiere Mine | 1932 - 1943 | Amalgamation until 1935, cyanidation after 1937 | Initial 75% Au recovery, increasing to 98% after introduction of cyanidation |

## 13.3 2017-2019 Particle Sorting Testwork

Particle sorting is a preconcentration technique that uses sensor-based methods to scan, classify and concentrate the run-of-mine material. Particle sorting offers the potential to reject waste and low-grade material from the mill feed, thus enriching the mill feed head grades. This can be used to lower the quantity of material to be milled, reducing overall processing cost and/or upgrade material below economic cut-off grades.

To evaluate the amenability and benefit of sensor-based sorting to the Novador mineralized material, two sorting tests were conducted between 2017 and 2019. The initial first inspection test conducted in 2017 on the New Béliveau samples provided encouraging results, so further tests on the New Béliveau samples were conducted in a 12 t industrial-scale performance test in 2018. The purpose of this test was to obtain a representative higher-grade mill feed sample targeting 2 g/t Au to 3 g/t Au and containing volcanic and dyke mineralization, including a mix of high-grade (HG), low-grade (LG), very-low grade (VLG), and waste rocks. It was assumed that sorter performance on samples from other deposits would be similar, so the analysis was extended to other deposits. The tests were completed at Tomra's facility in Germany using x-ray transmission and laser scanners. The feed samples were screened into two sizes: 12 to 25 mm and 25 to 75 mm. Material below 12 mm was screened out as it is not suitable for sorting in the machine.

The results showed an overall gold recovery of 94% to 99% when sorting 100% of the ROM material. However, the testwork evaluation concluded that sorting all run-of-mine material added marginal value at a very high risk. A small decrease in sorter recovery (~2% to 4%) would make the economics negative. Due to the highly variable nature of gold deposits and the presence of free gold at the project, the risk of recovery loss is significant.

To reduce the recovery loss risk, Ausenco recommended the application of "near-mineralized material" sorting (material mined at or just below the cut-off grade), defined as 0.25 to 0.8 g/t Au, in the 2021 PEA flowsheet. Sorting of only the near cut-off grade material would result in feeding higher grade material to the mill and reduce the size of the downstream process while minimizing the value at risk due to sorting inefficiencies. Particle sorting was deemed to not be beneficial for the updated PEA processing design based on the quantity and grades of material available to be processed in the updated resource.

## 13.4 2020-2021 Corem Testwork

Eight composite samples were subject to physical property characterization, mineralogy, gravity amenability, gravity recoverable gold, leach cyanidation and flotation tests at Corem in Quebec City, (Quebec) from July 2020 to January 2021. The results were used to inform the 2021 PEA Process design and have been considered for the updated 2023 PEA processing design where applicable.

### 13.4.1 Sample Details

Eight composites were created for the 2021 testwork program, either from drill core intervals or from the products of the 2017-2019 mineralized material sorting testwork program. Composites were created from drill core intervals for each Béliveau, Courvan, Monique, Highway and North Zone (a total of five composites). Three additional composites were created from mineralized material sorting products from 2017-2019 testing comprised of material from Béliveau. The samples were composited to represent a high-grade mineralized material sorting concentrate sample, a low-grade concentrate, and a blended composite to represent the mineralized material sorting feed (OSC ROM).

### 13.4.2 Comminution

Three samples underwent comminution tests in 2020: the Béliveau-dyke, Béliveau-volcanic, and mineralized material sorting principal concentrate (OSC Principal) composites. The OSC Principal sample only had enough material for bond rod mill work index (RWi) testing and bond ball mill work index (BWi) testing. Testing for the other samples included crusher work index (CWi), Bond abrasion index (Ai) and SMC testing (Axb). Table 13-3 provides a summary of the design values used in the 2021 PEA based on this testwork. As two or three samples were used for each test, the average values were used for CWi, RWi, BWi, and Ai. In the case of Axb, the lowest value (i.e., the hardest sample) was used as a conservative estimate given the limited number of sample results available.

**Table 13-3: Corem Comminution Test Results**

| Description | CWi (kWh/t) | RWi (kWh/t) | BWi (kWh/t) | Ai (g) | Axb |
|---|---|---|---|---|---|
| 2021 PEA Design Value | 18.5 | 12.8 | 11.2 | 0.131 | 29.3 |

#### 13.4.2.1 Gravity Recovery

Samples were subject to gravity amenability tests (GAT) as well as gravity recoverable gold (GRG) tests. The GAT testwork demonstrated high gold recoveries, suggesting that the mineralized material contained gold amenable to gravity recovery. The GRG tests recovered 55.2% to 77.5% of the gold from the Highway, Monique, Courvan, and two OSC composites. Gravity recovery of 50% was assumed in the 2021 PEA processing design, assuming a 0.05% gravity concentrator weight recovery.

#### 13.4.2.2 Cyanidation and Grind Size Optimization

The tailings resulting from the GRG tests underwent cyanidation testing to determine optimal grind size, leach residence times, and reagent usage. Gold recoveries ranged from 83.9% (Highway composite) to 96.2% (OSC Principal composite). The testwork interpretation concluded the optimal conditions to be a leach residence time of 48 hours at a grind size of 80% passing ($K_{80}$) of 75 µm. These values were used in the 2021 PEA process design.

#### 13.4.2.3 Flotation

The composite blended to represent the mineralized material sorting feed (OSC run-of-mine) underwent rougher and scavenger flotation testwork to determine its amenability to sulphide flotation. The testwork demonstrated amenability to flotation, with 0.02% and 0.03% sulphur grades presenting in the tailings streams. Flotation was not considered for the 2021 PEA process flowsheet as conventional gravity and cyanidation provided favourable recoveries.

## 13.5 2023 BaseMet Testwork Program

The 2023 testwork program was performed by BaseMet in Kamloops, BC and was used to inform the 2023 updated PEA process design. This program included additional testwork not conducted in the Corem program such as cyanide detoxification and solids liquid separation. The mineralized material selected for this testwork program was guided by the 2021 PEA mine plan, focusing on deposits that represented the major proportion of gold. As a result, the New Béliveau and Monique deposits were the major focus of this metallurgical program.

The 2023 testwork program included the following tests:

- head assaying
- mineralogy
- comminution
- gravity concentration
- flotation
- cyanidation
- oxygen uptake
- cyanide destruction
- solid-liquid separation.

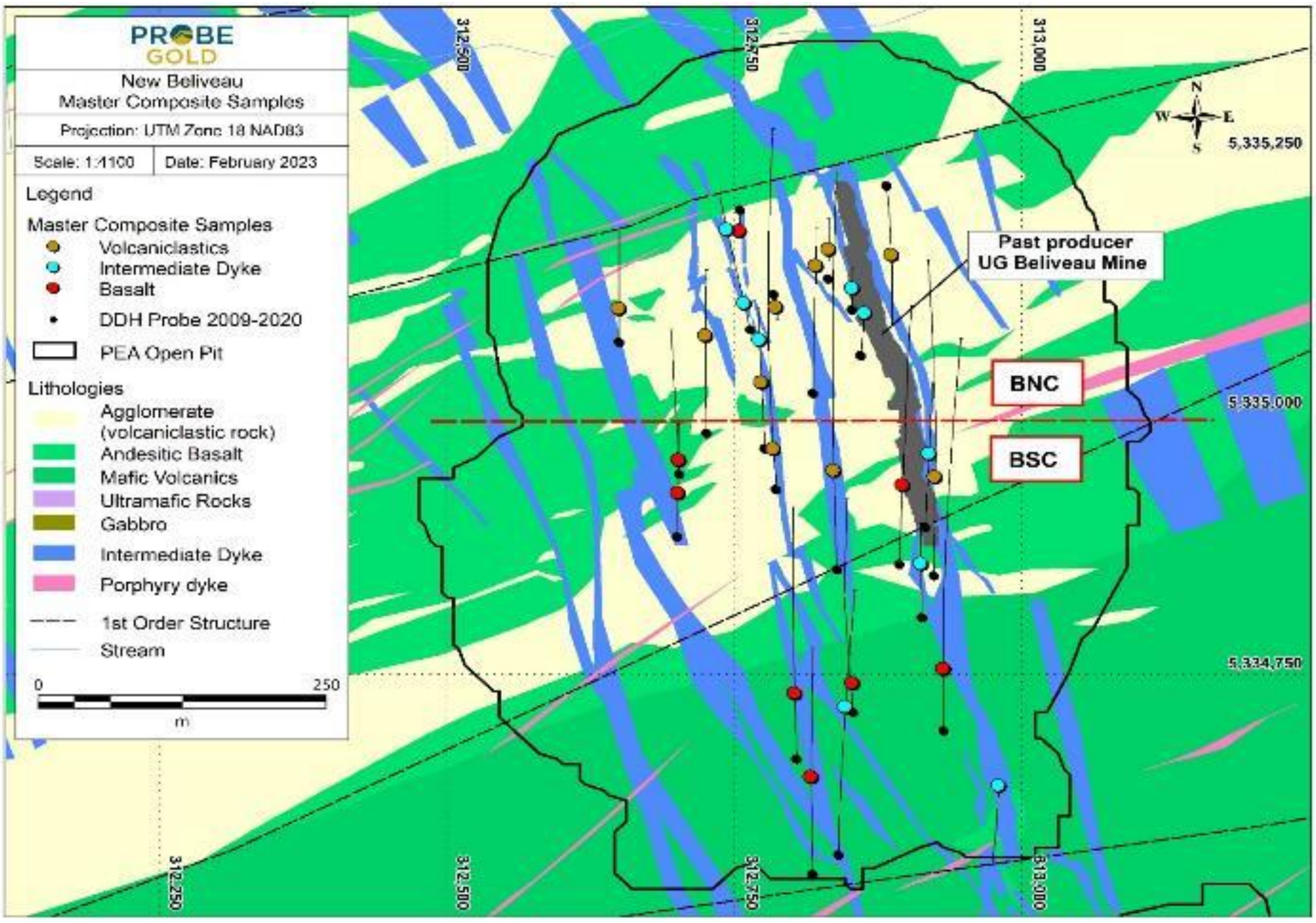
### 13.5.1 Sample Selection

Twelve comminution composites (5 from New Béliveau, 7 from Monique), nineteen BWi composites (8 from New Béliveau and 11 from Monique), four master composites (2 from New Béliveau and 2 from Monique), 22 variability composites (8 from New Béliveau, 12 from Monique, 1 from North, and 1 from Courvan Southwest and Creek), and one blend composite were submitted for various tests. The blend composite is a blended sample comprised of 14% BSC, 26% BNC, 30% MNC, and 30% MSC. Table 13-4 describes each composite ID. Figure 13-1 and Figure 13-2 show the composite sample origin locations.

**Table 13-4: Sample IDs and Descriptions**

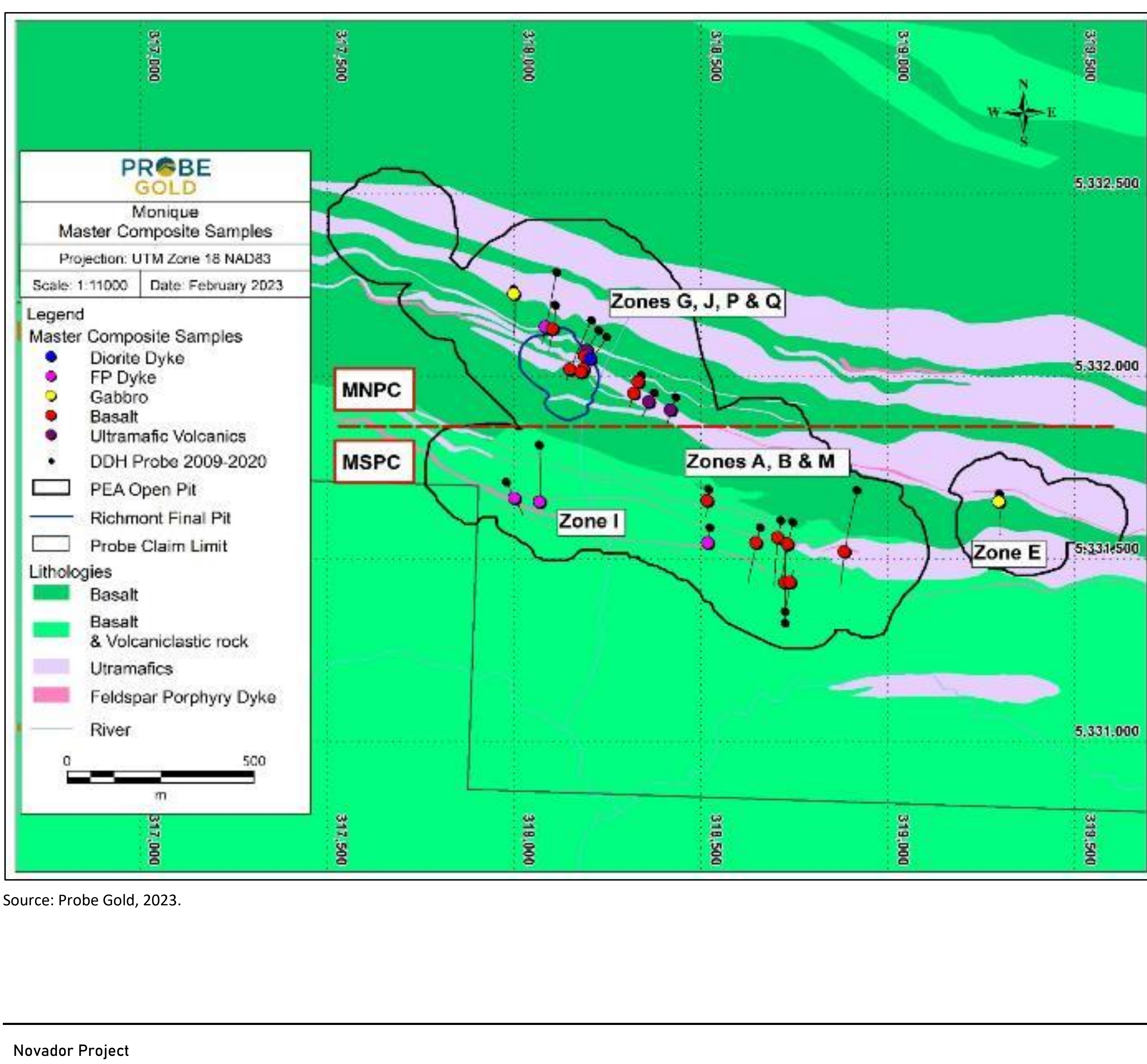
| Deposit | Sample ID | Description |
|---|---|---|
| New Béliveau | BCOM1 | Béliveau (Volcanic) Comminution Sample 1 |
| | BCOM2 | Béliveau (Volcanic) Comminution Sample 2 |
| | BCOM3 | Béliveau (Volcanic) Comminution Sample 3 |
| | BCOM4 | Béliveau (Dyke) Comminution Sample 4 |
| | BCOM5 | Béliveau (Dyke) Comminution Sample 5 |
| | BP1 | Béliveau Pit (Volcanic BWI) Variability Sample 1 |
| | BP2 | Béliveau Pit (Volcanic BWI) Variability Sample 2 |
| | BP3 | Béliveau Pit (Volcanic BWI) Variability Sample 3 |
| | BP4 | Béliveau Pit (Volcanic BWI) Variability Sample 4 |
| | BP5 | Béliveau Pit (Volcanic BWI) Variability Sample 5 |
| | BP6 | Béliveau Pit (Dyke BWI) Variability Sample 6 |
| | BP7 | Béliveau Pit (Dyke BWI) Variability Sample 7 |
| | BP8 | Béliveau Pit (Dyke BWI) Variability Sample 8 |
| | BNC | Béliveau Pit Composite (North End) |
| | BSC | Béliveau Pit Composite (South End) |
| | BDVHG | Béliveau Dyke Very High Grade |
| | BDHG | Béliveau Dyke High Grade |
| | BDMG | Béliveau Dyke Medium Grade |
| | BDLG | Béliveau Dyke Low Grade |
| | BVVHG | Béliveau Volcanic Very High Grade |
| | BVHG | Béliveau Volcanic High Grade |
| | BVMG | Béliveau Volcanic Medium Grade |
| | BVLG | Béliveau Volcanic Low Grade |
| Monique | MCOM1 | Monique (Basalt) Comminution Sample 1 |
| | MCOM2 | Monique (Basalt) Comminution Sample 2 |
| | MCOM3 | Monique (Basalt) Comminution Sample 3 |
| | MCOM4 | Monique (Basalt) Comminution Sample 4 |
| | MCOM5 | Monique (Feldspar Porphyry) Comminution Sample 5 |
| | MCOM6 | Monique (Ultramafic Volcanic) Comminution Sample 6 |
| | MCOM7 | Monique (Diorite) Comminution Sample 7 |
| | MP1 | Monique South (Basalt) Pit BWI Variability Sample 1 |
| | MP2 | Monique South (Basalt) Pit BWI Variability Sample 2 |
| | MP3 | Monique South (Basalt) Pit BWI Variability Sample 3 |
| | MP4 | Monique South (Feldspar Porphyry) Pit BWI Variability Sample 4 |
| | MP5 | Monique South (Feldspar Porphyry) Pit BWI Variability Sample 5 |
| | MP6 | Monique North Pit (Basalt) BWI Variability Sample 6 |
| | MP7 | Monique North Pit (Basalt) BWI Variability Sample 7 |
| | MP8 | Monique North Pit (Basalt) BWI Variability Sample 8 |
| | MP9 | Monique North Pit (Diorite) BWI Variability Sample 9 |
| | MP10 | Monique North Pit (Diorite) BWI Variability Sample 10 |
| | MP11 | Monique North Pit (Ultramafic Volcanic) BWI Variability Sample 11 |
| | MNPC | Monique North Pit Composite |
| | MSPC | Monique South Pit Composite |
| | MNPVHG | Monique North Pit Very High Grade |
| | MNPHG | Monique North Pit High Grade |
| | MNPMG | Monique North Pit Medium Grade |
| | MNPLG | Monique North Pit Low Grade |
| | MSPVHG | Monique Basalt South Pit Very High Grade |
| | MSPHG | Monique Basalt South Pit High Grade |
| | MSPMG | Monique Basalt South Pit Medium Grade |
| | MSPLG | Monique Basalt South Pit Low Grade |
| | MFP | Monique Felsic Porphyry |
| | MUV | Monique Ultramafic Volcanic |
| | MDI | Monique Diorite |
| | MGA | Monique Gabbro |
| North | NC | North Deposit Composite Sample |
| Courvan | CC | Courvan Deposit Composite Sample |
| Monique and Béliveau | Blend Composite | Blend Composite of BSC, BNC, MSC, MNC |

**Figure 13-1: New Béliveau Master Composite Sample Locations**




Source: Probe Gold, 2023

**Figure 13-2: Monique Master Sample Locations**




Source: Probe Gold, 2023.

### 13.5.2 Head Analysis

#### 13.5.2.1 Screened Metallics

Screened metallics gold assays were conducted at BaseMet on 26 samples to evaluate the occurrence of coarse free gold. The four main composites Aliquots of 500 g from each composite were pulverized and then screened at 106 µm with the oversize and undersize fractions assayed separately. The head grade was calculated from the weighted assays from the two fractions. The results are shown in Table 13-5. Within the coarse fraction, the samples contained coarse gold above the mass in the oversize fraction, which is indicative of free gold in the samples that could be amenable to gravity concentration. The samples demonstrate a high percentage of coarse gold in the oversize fraction, with an average of 23.6% of the gold reporting to 4.79% of the mass recovered in the oversize fraction.

**Table 13-5: Screened Metallics Head Grades and Gold Distribution**

| Sample | Calculated Head Grade (g/t Au) | Distribution in +106 µm Fraction | |
|---|---|---|---|
| | | Au (%) | Mass (%) |
| BNC | 4.28 | 65.9 | 5.43 |
| BSC | 0.85 | 19.2 | 3.51 |
| MNPC | 1.21 | 14.5 | 5.29 |
| MSPC | 1.51 | 22.4 | 5.76 |
| BD LG | 2.05 | 35.5 | 5.48 |
| BD MG | 3.43 | 11.6 | 5.56 |
| BD HG | 1.68 | 40.3 | 5.99 |
| BD VHG | 3.76 | 30.8 | 5.48 |
| BV LG | 4.59 | 71.4 | 2.40 |
| BV MG | 0.87 | 23.8 | 5.79 |
| BV HG | 2.65 | 19.8 | 5.97 |
| BV VHG | 6.93 | 19.3 | 4.89 |
| MNP LG | 0.62 | 19.1 | 4.45 |
| MNP MG | 1.56 | 12.0 | 5.66 |
| MNP HG | 1.10 | 5.83 | 0.75 |
| MNP VHG | 2.12 | 23.1 | 4.25 |
| MSP LG | 0.14 | 6.69 | 4.78 |
| MSP MG | 1.01 | 6.47 | 4.57 |
| MSP HG | 0.77 | 15.2 | 5.89 |
| MSP VHG | 2.87 | 27.4 | 3.28 |
| MFP | 1.30 | 5.42 | 5.71 |
| MGA | 0.58 | 14.0 | 5.67 |
| MUV | 0.68 | 22.5 | 3.04 |
| MDI | 1.43 | 16.5 | 4.08 |
| NC | 1.08 | 42.8 | 5.25 |
| CC | 1.51 | 21.2 | 5.49 |
| **Average** | **1.95** | **23.6** | **4.79** |

#### 13.5.2.2 Head Assays

The master composites, the variability composites, the BWi composites, and the blend composite were submitted to characterize the sample with chemical assays of gold, silver, sulphur (sulphide and sulphate), and mercury. Some of the samples also underwent inductively coupled plasma spectroscopy (ICP) scanning for 55 elements. The sample head assays are shown in Table 13-6 and the ICP scan results are summarized in Table 13-7.

Gold assayed from 0.14 to 6.52 g/t Au for metallurgical testing composites and from 0.05 to 26.5 g/t Au for BWI composites. The samples tested presented low silver grades, ranging from below 0.1 g/t to 0.9 g/t.

**Table 13-6: Sample Head Assays**

| Sample | Au (g/t) | Ag (g/t) | S (%) | $SO_4$ (%) | $S^{2-}$ (%) | Hg (ppm) |
|---|---|---|---|---|---|---|
| BNC | 1.04 | < 0.1 | 1.04 | 0.01 | 1.03 | < 5 |
| BSC | 0.39 | 0.1 | 0.45 | 0.01 | 0.43 | < 5 |
| MNPC | 0.86 | 0.5 | 0.80 | 0.01 | 0.79 | < 5 |
| MSPC | 0.67 | 0.3 | 0.85 | 0.01 | 0.84 | < 5 |
| BD LG | 0.92 | < 0.1 | 1.44 | 0.02 | 1.42 | < 5 |
| BD MG | 2.66 | 0.1 | 0.79 | 0.01 | 0.78 | < 5 |
| BD HG | 4.26 | 0.4 | 1.25 | 0.01 | 1.24 | < 5 |
| BD VHG | 3.17 | 0.1 | 2.21 | <0.01 | 2.21 | < 5 |
| BV LG | 0.74 | 0.1 | 0.68 | <0.01 | 0.68 | < 5 |
| BV MG | 0.70 | 0.1 | 0.63 | 0.01 | 0.62 | < 5 |
| BV HG | 2.17 | 0.1 | 0.68 | 0.01 | 0.66 | < 5 |
| BV VHG | 6.52 | 0.9 | 0.88 | 0.01 | 0.86 | < 5 |
| MNP LG | 0.36 | < 0.1 | 0.24 | 0.01 | 0.23 | < 5 |
| MNP MG | 0.94 | 0.2 | 0.70 | 0.01 | 0.69 | < 5 |
| MNP HG | 1.22 | < 0.1 | 0.37 | 0.01 | 0.35 | < 5 |
| MNP VHG | 3.34 | 0.1 | 1.23 | 0.02 | 1.21 | < 5 |
| MSP LG | 0.14 | < 0.1 | 0.42 | 0.01 | 0.41 | < 5 |
| MSP MG | 0.60 | 0.1 | 0.53 | 0.03 | 0.50 | < 5 |
| MSP HG | 0.23 | < 0.1 | 0.51 | <0.01 | 0.50 | < 5 |
| MSP VHG | 3.42 | 0.7 | 1.57 | 0.01 | 1.56 | < 5 |
| MFP | 1.20 | 0.3 | 1.23 | 0.01 | 1.22 | < 5 |
| MGA | 0.30 | 0.2 | 0.71 | <0.01 | 0.71 | < 5 |
| MUV | 0.19 | < 0.1 | 0.32 | 0.01 | 0.31 | < 5 |
| MDI | 3.47 | 0.4 | 1.03 | <0.01 | 1.03 | < 5 |
| NC | 0.86 | < 0.1 | 0.64 | 0.01 | 0.63 | < 5 |
| CC | 0.94 | < 0.1 | 0.56 | 0.01 | 0.55 | < 5 |
| BP 1 | 0.21 | < 0.1 | 1.04 | 0.08 | 0.96 | < 5 |
| BP 2 | 0.85 | < 0.1 | 0.51 | 0.01 | 0.50 | < 5 |
| BP 3 | 0.12 | 0.3 | 0.58 | <0.01 | 0.58 | < 5 |
| BP 4 | 10.1 | 0.1 | 0.42 | <0.01 | 0.42 | < 5 |
| BP 5 | 4.17 | 0.3 | 0.56 | 0.02 | 0.54 | < 5 |
| BP 6 | 0.57 | 0.4 | 1.95 | 0.02 | 1.93 | < 5 |
| BP 7 | 0.05 | 0.2 | 0.24 | <0.01 | 0.24 | < 5 |

| Sample | Au (g/t) | Ag (g/t) | S (%) | $SO_4$ (%) | $S^{2-}$ (%) | Hg (ppm) |
|---|---|---|---|---|---|---|
| BP 8 | 26.5 | 0.2 | 1.04 | 0.01 | 1.03 | < 5 |
| MP 1 | 0.37 | 0.5 | 0.81 | <0.01 | 0.81 | < 5 |
| MP 2 | 0.46 | 0.5 | 1.33 | 0.01 | 1.32 | < 5 |
| MP 3 | 1.00 | < 0.1 | 0.57 | <0.01 | 0.57 | < 5 |
| MP 4 | 0.64 | 0.1 | 0.82 | <0.01 | 0.82 | < 5 |
| MP 5 | 0.45 | 0.2 | 0.81 | 0.01 | 0.80 | < 5 |
| MP 6 | 1.38 | < 0.1 | 0.87 | 0.01 | 0.87 | < 5 |
| MP 7 | 0.36 | < 0.1 | 0.31 | <0.01 | 0.31 | < 5 |
| MP 8 | 0.50 | < 0.1 | 0.77 | <0.01 | 0.77 | < 5 |
| MP 9 | 2.01 | < 0.1 | 0.87 | 0.01 | 0.86 | < 5 |
| MP 10 | 0.93 | < 0.1 | 1.15 | 0.01 | 1.14 | < 5 |
| MP 11 | 0.68 | < 0.1 | 0.20 | <0.01 | 0.20 | < 5 |
| Blend Comp | 1.93 | - | 0.84 | - | - | - |

**Table 13-7: ICP Test Results**

| Sample | Ag (g/t) | Cu (ppm) | Fe (%) | Zn (ppm) | Pb (ppm) | Ni (ppm) | As (ppm) | Hg (ppm) | S (%) |
|---|---|---|---|---|---|---|---|---|---|
| MDI | 0.5 | 88 | 4.83 | 44 | 5 | 137 | 2 | < 1 | 0.99 |
| NC | < 0.2 | 20 | 3.95 | 38 | 2 | 66 | 4 | < 1 | 0.89 |
| CC | 0.2 | 274 | 2.23 | 15 | 2 | 6 | 1 | < 1 | 0.57 |
| BP 1 | < 0.2 | 31 | 2.40 | 13 | < 2 | 33 | 5 | < 1 | 0.93 |
| BP 2 | < 0.2 | 104 | 2.75 | 29 | < 2 | 26 | 5 | < 1 | 0.60 |
| BP 3 | < 0.2 | 42 | 4.20 | 30 | < 2 | 27 | 4 | < 1 | 0.64 |
| BP 4 | 0.9 | 72 | 4.41 | 61 | 2 | 157 | 9 | < 1 | 0.47 |
| BP 5 | 0.2 | 53 | 3.75 | 28 | < 2 | 27 | 3 | < 1 | 0.56 |
| BP 6 | < 0.2 | 60 | 3.02 | 17 | < 2 | 10 | 4 | < 1 | 2.06 |
| BP 7 | < 0.2 | 30 | 3.36 | 33 | 2 | 25 | 2 | < 1 | 0.30 |
| BP 8 | 0.5 | 40 | 3.16 | 20 | 2 | 10 | 2 | < 1 | 1.08 |
| MP 1 | 0.3 | 28 | 3.78 | 27 | 3 | 56 | 2 | < 1 | 0.93 |
| MP 2 | 0.4 | 95 | 6.54 | 55 | 3 | 34 | 2 | < 1 | 1.54 |
| MP 3 | < 0.2 | 55 | 5.78 | 47 | 2 | 57 | 8 | < 1 | 0.61 |
| MP 4 | 0.3 | 23 | 1.98 | 45 | 2 | 15 | 2 | < 1 | 0.69 |
| MP 5 | 0.4 | 21 | 1.96 | 33 | 2 | 16 | 2 | < 1 | 0.90 |
| MP 6 | 0.4 | 119 | 7.40 | 69 | 4 | 159 | 5 | < 1 | 0.93 |
| MP 7 | 0.2 | 70 | 6.62 | 56 | 2 | 77 | 1 | < 1 | 0.24 |
| MP 8 | 0.2 | 87 | 6.08 | 49 | 2 | 68 | 5 | < 1 | 0.86 |
| MP 9 | 0.3 | 23 | 4.41 | 40 | 4 | 139 | 2 | < 1 | 0.94 |
| MP 10 | 0.3 | 87 | 6.85 | 53 | 3 | 137 | 3 | < 1 | 1.12 |
| MP 11 | 0.2 | 51 | 4.83 | 32 | 3 | 238 | 1 | < 1 | 0.19 |

### 13.5.3 Mineralogy Studies

Mineralogical characterization of core samples was completed at BaseMet using quantitative evaluation of minerals by scanning electron microscopy (QEMSCAN). The mineralogy program was completed to understand the distribution of key minerals across the deposit and to support the definition of geometallurgical domains. The four master composite samples—Béliveau North (BNC), Béliveau South (BSC), Monique North (MNPC), and Monique South (MSPC)—were subject to mineralogy to determine mineral abundance and sulphide deportment. The composition of minerals for the four master composites is shown in Table 13-8, and the sulphides distribution is presented in Table 13-9.

**Table 13-8: Novador Composite Samples Mineral by Mass Percentage**

| Mineral Abundance (wt%) | BNC | BSC | MNPC | MSPC |
|---|---|---|---|---|
| Chalcopyrite | 0.04 | 0.04 | 0.03 | 0.03 |
| Pyrite | 1.56 | 1.04 | 1.52 | 1.67 |
| Other Sulphides | 0.02 | 0.00 | 0.01 | 0.01 |
| Quartz | 29.0 | 28.1 | 23.4 | 22.7 |
| Plagioclase | 15.0 | 6.80 | 21.5 | 31.8 |
| K-Feldspar | 0.13 | 0.11 | 0.38 | 0.12 |
| Biotite | 0.16 | 0.10 | 1.68 | 0.13 |
| Sericite/Muscovite | 7.86 | 4.72 | 3.98 | 7.20 |
| Chlorite | 15.1 | 18.7 | 17.5 | 13.2 |
| Talc | 0.03 | 0.05 | 2.57 | 0.04 |
| Tourmaline | 15.3 | 17.4 | 1.79 | 2.43 |
| Clays | 0.35 | 0.37 | 0.39 | 0.40 |
| Other Silicates | 0.43 | 0.54 | 0.61 | 0.48 |
| Oxides | 1.00 | 0.94 | 0.85 | 1.00 |
| Calcite | 6.34 | 4.22 | 0.26 | 0.86 |
| Ferroan Dolomite | 7.12 | 16.2 | 19.3 | 15.8 |
| Other Carbonates | 0.27 | 0.47 | 3.82 | 1.89 |
| Apatite | 0.30 | 0.27 | 0.35 | 0.20 |
| Other | 0.02 | 0.02 | 0.03 | 0.01 |
| **Total** | **100** | **100** | **100** | **100** |

Most of the sulphide occurs in pyrite, and as there is no arsenopyrite present, arsenic removal in effluent treatment is likely not required. Quartz, chlorite are the two most common non-sulphide gangue minerals present in all four composites. Plagioclase is seen in high concentrations in both Monique composites and the Béliveau North composite, whereas tourmaline is seen in higher concentrations in the two Béliveau composites.

**Table 13-9: Composite Sample Sulphur Mineral Distribution**

| Mineral | % Sulphur Distribution | | | |
|---|---|---|---|---|
| | BNC | BSC | MNPC | MSPC |
| Chalcopyrite | 1.54 | 2.34 | 1.13 | 1.02 |
| Pyrite | 97.9 | 97.2 | 98.3 | 98.6 |
| Other Sulphides | 0.41 | 0.25 | 0.41 | 0.22 |
| Other | 0.20 | 0.21 | 0.17 | 0.11 |
| Total | 100 | 100 | 100 | 100 |

#### 13.5.3.1 Assay Reconciliation

The four master composites underwent assay reconciliation using QEMSCAN and X-Ray fluorescence (XRF) whole rock analysis. The assays are provided in Table 13-10. Both assaying techniques demonstrated similar results.

**Table 13-10: QEMSCAN and Chemical Assays of Composite Samples**

| Element | Assay Method | BNC | BSC | MNPC | MSPC |
|---|---|---|---|---|---|
| Al | QEMSCAN | 7.68 | 7.25 | 5.17 | 6.64 |
| | Chemical | 7.90 | 7.81 | 5.16 | 6.72 |
| Ca | QEMSCAN | 4.53 | 5.60 | 4.97 | 4.55 |
| | Chemical | 5.34 | 5.86 | 4.99 | 4.78 |
| Fe | QEMSCAN | 5.04 | 5.97 | 7.65 | 5.45 |
| | Chemical | 4.70 | 5.49 | 6.73 | 5.85 |
| K | QEMSCAN | 0.80 | 0.49 | 0.59 | 0.73 |
| | Chemical | 0.64 | 0.46 | 0.59 | 0.71 |
| Mg | QEMSCAN | 2.56 | 3.76 | 4.38 | 2.94 |
| | Chemical | 2.39 | 3.53 | 4.79 | 2.82 |
| Na | QEMSCAN | 1.56 | 0.93 | 1.82 | 2.68 |
| | Chemical | 1.92 | 1.43 | 1.95 | 2.91 |
| P | QEMSCAN | 0.05 | 0.05 | 0.07 | 0.04 |
| | Chemical | 0.05 | 0.04 | 0.05 | 0.03 |
| S | QEMSCAN | 0.85 | 0.57 | 0.83 | 0.90 |
| | Chemical | 1.04 | 0.45 | 0.80 | 0.85 |
| Si | QEMSCAN | 25.0 | 22.2 | 22.7 | 24.7 |
| | Chemical | 24.3 | 22.0 | 22.5 | 23.7 |
| Ti | QEMSCAN | 0.44 | 0.39 | 0.36 | 0.32 |
| | Chemical | 0.43 | 0.35 | 0.34 | 0.31 |

#### 13.5.3.2 Deleterious Elements

Metallurgical testing has not identified any deleterious elements present in significant quantities that would impair the quality of the doré bullion that would be produced. Mercury is present in small concentrations, below detectable limits of the chemical assay, and less than 1.0 g/t in ICP testing. Arsenic is present in low levels, ranging from 1 ppm to 9 ppm. It is not anticipated from the testwork completed that mercury abatement equipment would be required in the elution circuit or gold room. The samples presented low levels of typical deleterious elements.

### 13.5.4 Comminution Circuit Characterization Testwork

Comminution testwork was completed to understand the variability in competency, hardness, and abrasion of Novador material. The proposed comminution circuit utilizes a SAG mill for primary grinding and a ball mill for further size reduction. The key metrics from this testwork that were used for the plant design bases were the Axb parameters from JK drop weight (JK DWT) and SMC tests, as well as the Bond work indices. The test program was completed at BaseMet.

As part of the comminution test program, the following set of tests were completed: JK DWT, SMC test, Bond low-energy impact (CWi) test, Bond rod mill work index (RWi) test, Bond ball mill work index (BWi) test and the Bond abrasion (Ai) test. Thirty-six composites were apart of the comminution testwork program. One sample underwent a full suite of tests (Ai, SMC, CWi, RWi and BWi tests), 11 samples were subject to all tests barring BWi, and 24 samples underwent BWi tests only.

The three samples from the 2021 PEA were also used to inform the PEA Update design basis to include all the available grindability data. The results are summarized in Table 13-11.

**Table 13-11: Grindability Testwork Results**

| Statistic | Relative Density | SMC Axb | CWi (kWh/t) | RWi (kWh/t) | BWi @ 150 um (kWh/t) | Ai (g) |
|---|---|---|---|---|---|---|
| # of Data Points | 12 | 14 | 14 | 15 | 28 | 14 |
| Average | 2.81 | 38.3 | 14.1 | 14.5 | 12.1 | **0.141** |
| Min. | 2.72 | 29.3 | 9.92 | 12.4 | 9.79 | 0.073 |
| 10th Percentile | 2.75 | 31.9 | 11.6 | 12.7 | 10.3 | 0.073 |
| 25th Percentile | 2.78 | **34.4** | 12.1 | 13.3 | 11.0 | 0.081 |
| Median | 2.81 | 36.2 | 13.4 | 14.5 | 11.7 | 0.130 |
| 75th Percentile | 2.84 | 39.4 | **16.3** | **15.3** | **13.1** | 0.176 |
| 90th Percentile | 2.86 | 46.8 | 16.8 | 16.3 | 14.4 | 0.231 |
| Max. | 2.90 | 59.3 | 20.0 | 16.7 | 16.0 | 0.284 |

The BWi results are characterized as medium soft (75th percentile) while the abrasion index results are characterized as slightly abrasive. The Axb results indicate a moderately competent material. The 25th percentile of the Axb and the 75th percentile BWi values are to be used in the comminution circuit design.

### 13.5.5 Extended Gravity Recoverable Gold Tests

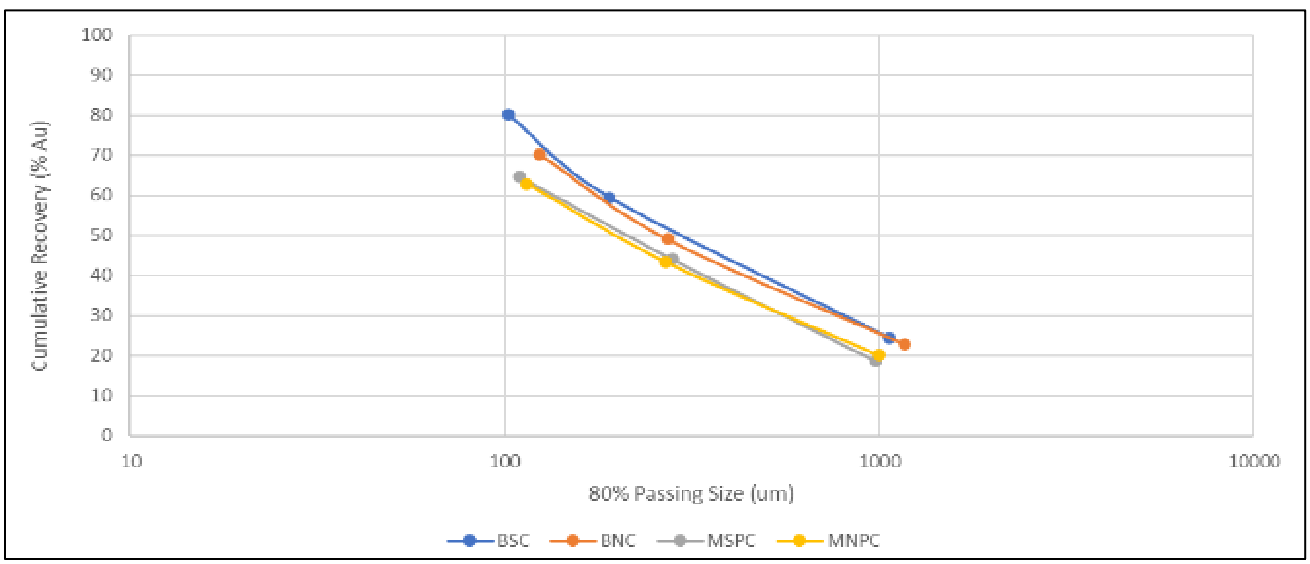
Extended gravity recoverable gold (E-GRG) tests were completed on the four main composite samples by BaseMet. The three-stage test passes sample initially crushed to 100% passing 1.7 mm and then passes through a Knelson concentrator. This is repeated twice, with the concentrator tailings ground to target values of 80% passing ($K_{80}$) = 235 µm and 110 µm in each stage. The test results showed high levels of GRG, which is indicative of plant-scale gravity gold amenability. The E-GRG test results are summarized in Table 13-12.

All composite samples demonstrate high extended gravity gold recovery, ranging between 63% and 80%. These results do not predict actual gravity gold recovery, but rather demonstrate that samples are amenable to gravity concentration in the grinding circuit to remove coarse free gold prior to downstream processing.

**Table 13-12: E-GRG Test Results Summary**

| Sample | Product | Feed Size | Mass | Assay | Gold Distribution |
|---|---|---|---|---|---|
| BSC | Stage 1 Concentrate | 1,063 | 0.45 | 94.4 | 24.5 |
| | Stage 2 Concentrate | 191 | 0.49 | 122 | 35.0 |
| | Stage 3 Concentrate | 102 | 0.47 | 75.8 | 20.8 |
| | Tailing | - | 98.6 | 0.34 | 19.7 |
| | **Combined Concentrate** | **-** | **1.41** | **98.0** | **80.3** |
| | Feed (Calc.) | - | - | 1.72 | |
| BNC | Stage 1 Concentrate | 1,172 | 0.43 | 139 | 22.7 |
| | Stage 2 Concentrate | 272 | 0.46 | 149 | 26.3 |
| | Stage 3 Concentrate | 124 | 0.50 | 110 | 21.1 |
| | Tailing | - | 98.6 | 0.80 | 29.9 |
| | **Combined Concentrate** | **-** | **1.40** | **132** | **70.1** |
| | Feed (Calc.) | - | - | 2.63 | - |
| MNPC | Stage 1 Concentrate | 1,000 | 0.44 | 71.2 | 20.1 |
| | Stage 2 Concentrate | 270 | 0.49 | 74.0 | 23.2 |
| | Stage 3 Concentrate | 114 | 0.55 | 55.0 | 19.6 |
| | Tailing | - | 98.5 | 0.58 | 37.1 |
| | **Combined Concentrate** | **-** | **1.48** | **66.1** | **62.9** |
| | Feed (Calc.) | - | - | 1.55 | - |
| MSPC | Stage 1 Concentrate | 981 | 0.44 | 69.9 | 18.6 |
| | Stage 2 Concentrate | 280 | 0.49 | 86.8 | 25.5 |
| | Stage 3 Concentrate | 110 | 0.57 | 60.8 | 20.5 |
| | Tailing | - | 98.5 | 0.60 | 35.3 |
| | **Combined Concentrate** | **-** | **1.50** | **72.0** | **64.7** |
| | Feed (Calc.) | - | - | 1.67 | - |

**Figure 13-3: Cumulative E-GRG Recovery as a Function of Grind Size**




Source: BaseMet, 2023.

### 13.5.6 Flotation Testwork

Each of the composites were subject to a rougher test to investigate their amenability to flotation following gravity concentration. All samples underwent conditioning for 11.5 to 13 minutes with the addition of 40 g/t of copper sulphate, followed by 13 minutes of rougher flotation with the addition of 60 g/t potassium amyl xanthate (PAX) collector and 91 g/t methyl isobutyl carbinol (MIBC) frother. The flotation testwork for each composite is summarized in Table 13-13. The grades and recoveries of the combined concentrates do not include gravity recovery.

Flotation was not selected as part of the Novador flowsheet, as conventional gravity and cyanidation provided optimal recoveries.

**Table 13-13: Summary of Flotation Concentrate**

| Composite | Overall Performance – Combined Concentrates | | | | |
|---|---|---|---|---|---|
| | Mass Pull to Concentrate (% wt) | Grade | | Recovery | |
| | | Au (g/t) | S (%) | Au (%) | S (%) |
| BSC | 7.68 | 5.63 | 5.41 | 45.5 | 93.1 |
| BNC | 7.14 | 15.1 | 12.8 | 50.0 | 95.0 |
| MSPC | 6.53 | 12.3 | 16.5 | 48.7 | 95.9 |
| MNPC | 12.5 | 5.58 | 3.84 | 52.5 | 86.9 |

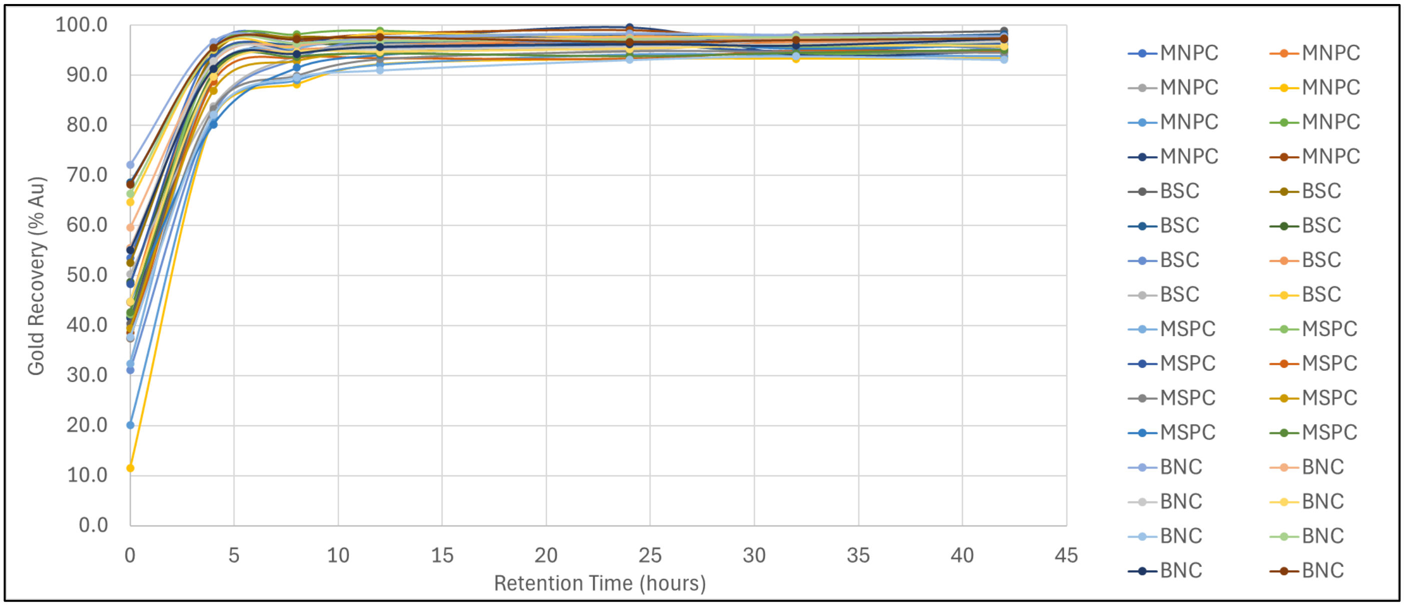
### 13.5.7 Leach Development Testwork

Preliminary gravity separation followed by leach tests were performed on the four master composites to evaluate the effect of grind size, cyanide dosage, retention time, and pre-aeration on leach gold recovery. For each composite, grind sizes ranges between 80% passing 60 µm and 150 µm, samples were taken at the 4$^{th}$, 8$^{th}$, 12$^{th}$, 24$^{th}$, 32$^{nd}$, and 48$^{th}$ hour of leaching, one sample underwent six hours of pre-oxidation, and two samples underwent leaching at lower cyanide concentrations. A summary of the leach development testwork can be found in Table 13-14 and the corresponding kinetic curves are shown in Figure 13-4. Interpretation of the testwork concluded the optimal conditions for the process design to be a grind size ($K_{80}$) of 70 µm with a 24-hour leaching time. The testwork is described in more detail in the upcoming subsections.

**Table 13-14: Summary of Leaching Development Tests**

| Test ID | Sample ID | Grind Size ($K_{80}$) | Leach Time | NaCN Concentration | Reagent Addition (kg/t) | | Reagent Consumption (kg/t) | | Au Grade | | Recovery (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Head (calc) | Residue | Grav. | Leach | Total |
| | | µm | h | g/L | NaCN | CaO | NaCN | CaO | g/t | g/t | Au | 42/48 | Au |
| CN05 | MNPC | 65 | 48 | 1.00 | 1.87 | 0.66 | 0.44 | 0.66 | 1.53 | 0.04 | 53.5 | 43.9 | 97.4 |
| CN06 | MNPC | 81 | 48 | 1.00 | 1.78 | 0.54 | 0.38 | 0.54 | 1.62 | 0.03 | 44.6 | 53.6 | 98.1 |
| CN07 | MNPC | 90 | 48 | 1.00 | 1.78 | 0.69 | 0.34 | 0.69 | 1.89 | 0.04 | 39.8 | 58.1 | 97.9 |
| CN17 | MNPC | 110 | 48 | 1.00 | 1.76 | 0.94 | 0.30 | 0.94 | 1.51 | 0.10 | 11.5 | 81.9 | 93.4 |
| CN18 | MNPC | 150 | 48 | 1.00 | 1.73 | 0.86 | 0.26 | 0.86 | 1.37 | 0.09 | 20.1 | 73.7 | 93.8 |
| CN25 | MNPC | 70 | 42 | 1.00 | 1.72 | 1.28 | 0.26 | 1.28 | 1.01 | 0.05 | 41.6 | 53.4 | 95.0 |
| CN29 | MNPC | 70 | 42 | 0.50 | 0.95 | 0.94 | 0.30 | 0.94 | 0.97 | 0.05 | 41.6 | 53.3 | 94.8 |
| CN33 | MNPC | 70 | 42 | 0.75 | 1.55 | 0.84 | 0.45 | 0.84 | 1.59 | 0.04 | 38.6 | 58.9 | 97.5 |
| CN08 | BSC | 66 | 48 | 1.00 | 1.82 | 0.63 | 0.42 | 0.63 | 1.31 | 0.02 | 40.4 | 58.4 | 98.9 |
| CN09 | BSC | 83 | 48 | 1.00 | 1.77 | 0.55 | 0.37 | 0.55 | 1.51 | 0.03 | 52.5 | 45.5 | 98.0 |
| CN10 | BSC | 92 | 48 | 1.00 | 1.77 | 0.58 | 0.33 | 0.58 | 2.60 | 0.05 | 68.5 | 29.7 | 98.3 |
| CN19 | BSC | 110 | 48 | 1.00 | 1.76 | 0.80 | 0.30 | 0.80 | 1.64 | 0.06 | 48.7 | 48.0 | 96.7 |
| CN20 | BSC | 150 | 48 | 1.00 | 1.66 | 0.71 | 0.23 | 0.71 | 1.02 | 0.05 | 31.1 | 64.1 | 95.1 |
| CN26 | BSC | 70 | 42 | 1.00 | 1.71 | 1.09 | 0.25 | 1.09 | 0.88 | 0.03 | 55.5 | 41.6 | 97.2 |
| CN30 | BSC | 70 | 42 | 0.50 | 0.87 | 0.84 | 0.15 | 0.84 | 0.94 | 0.04 | 50.2 | 46.0 | 96.3 |
| CN34 | BSC | 70 | 42 | 0.75 | 1.38 | 0.91 | 0.30 | 0.91 | 1.23 | 0.04 | 64.7 | 32.5 | 97.2 |
| CN11 | MSPC | 60 | 48 | 1.00 | 2.11 | 0.80 | 0.68 | 0.80 | 1.11 | 0.03 | 32.4 | 64.9 | 97.3 |
| CN12 | MSPC | 78 | 48 | 1.00 | 1.95 | 0.54 | 0.57 | 0.54 | 1.48 | 0.06 | 42.2 | 54.1 | 96.3 |
| CN13 | MSPC | 84 | 48 | 1.00 | 1.88 | 0.57 | 0.45 | 0.57 | 1.66 | 0.06 | 48.3 | 48.1 | 96.4 |
| CN21 | MSPC | 110 | 48 | 1.00 | 1.71 | 0.76 | 0.30 | 0.76 | 1.82 | 0.10 | 37.4 | 57.4 | 94.8 |
| CN22 | MSPC | 150 | 48 | 1.00 | 1.73 | 0.74 | 0.32 | 0.74 | 1.74 | 0.10 | 37.5 | 57.1 | 94.6 |
| CN27 | MSPC | 70 | 42 | 1.00 | 1.72 | 1.02 | 0.32 | 1.02 | 1.42 | 0.06 | 39.4 | 56.4 | 95.8 |
| CN31 | MSPC | 70 | 42 | 0.50 | 0.86 | 0.93 | 0.18 | 0.93 | 1.52 | 0.06 | 44.8 | 51.2 | 96.1 |
| CN35 | MSPC | 70 | 42 | 0.75 | 1.49 | 0.76 | 0.39 | 0.76 | 1.22 | 0.06 | 42.7 | 52.4 | 95.1 |
| CN14 | BNC | 71 | 48 | 1.00 | 1.93 | 0.67 | 0.49 | 0.67 | 2.65 | 0.06 | 72.1 | 25.6 | 97.7 |
| CN15 | BNC | 93 | 48 | 1.00 | 1.81 | 0.57 | 0.43 | 0.57 | 2.63 | 0.07 | 59.5 | 37.8 | 97.3 |
| CN16 | BNC | 97 | 48 | 1.00 | 1.82 | 0.54 | 0.44 | 0.54 | 2.28 | 0.08 | 55.3 | 41.4 | 96.7 |
| CN23 | BNC | 110 | 48 | 1.00 | 1.84 | 0.72 | 0.40 | 0.72 | 2.04 | 0.09 | 44.8 | 51.0 | 95.8 |
| CN24 | BNC | 150 | 48 | 1.00 | 1.69 | 0.69 | 0.28 | 0.69 | 2.17 | 0.15 | 37.7 | 55.4 | 93.1 |
| CN28 | BNC | 70 | 42 | 1.00 | 1.71 | 1.03 | 0.21 | 1.03 | 2.22 | 0.06 | 66.3 | 31.0 | 97.3 |
| CN32 | BNC | 70 | 42 | 0.50 | 0.90 | 0.62 | 0.19 | 0.62 | 1.81 | 0.05 | 55.0 | 42.2 | 97.2 |
| CN36 | BNC | 70 | 42 | 0.75 | 1.40 | 0.60 | 0.30 | 0.60 | 2.30 | 0.06 | 68.2 | 29.2 | 97.4 |

**Figure 13-4: Leach Development Kinetic Curves**




Source: BaseMet, 2023.

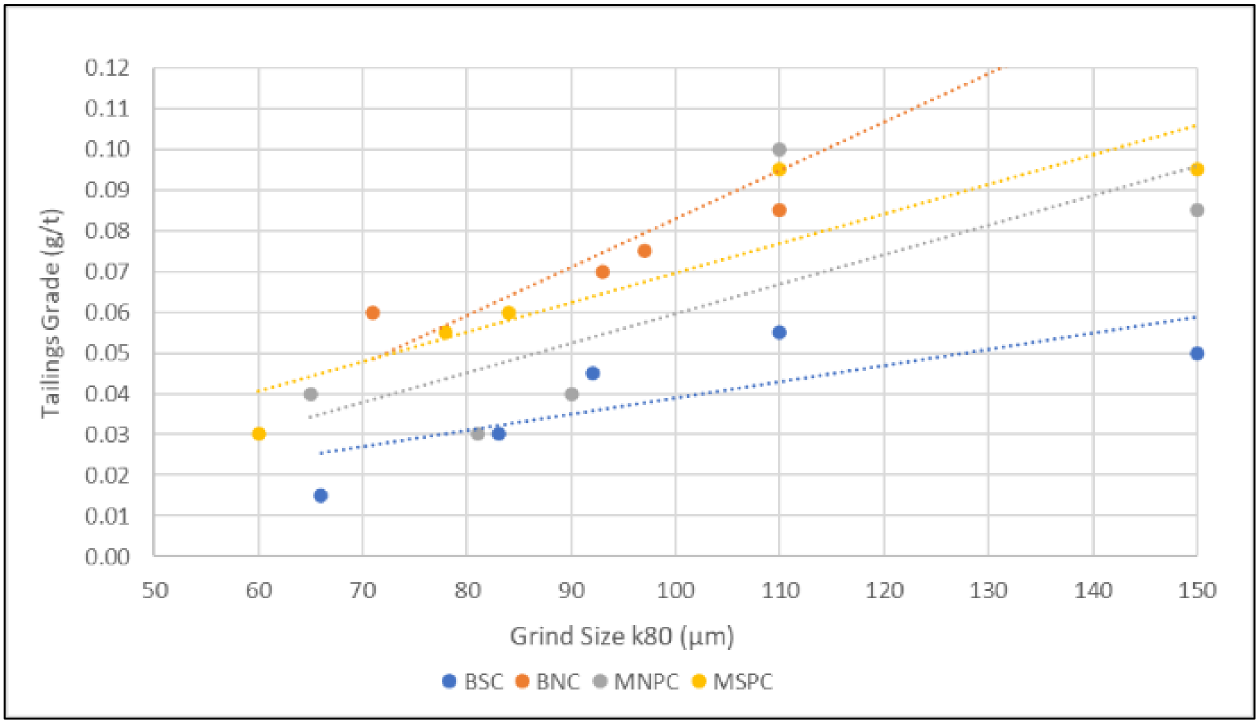
#### 13.5.7.1 Effect of Grind Size

Cyanidation tests were performed over a range of $K_{80}$ grind sizes from 60 to 150 µm for the four master composites. Tails grades were logged at the various grind sizes at 48-hour leach retention time to determine the optimal grind size for recovery. The tailings grades are plotted with respect to grind size in Figure 13-5. As expected, a finer grind generally leads to a lower tails grade for all four composites. The tails grades of the BNC composite are most sensitive to grind size. After analysis, the optimum grind size was interpreted to be $K_{80}$ 70 µm. All further optimization and variability testing was conducted at this grind size.

#### 13.5.7.2 Retention Time

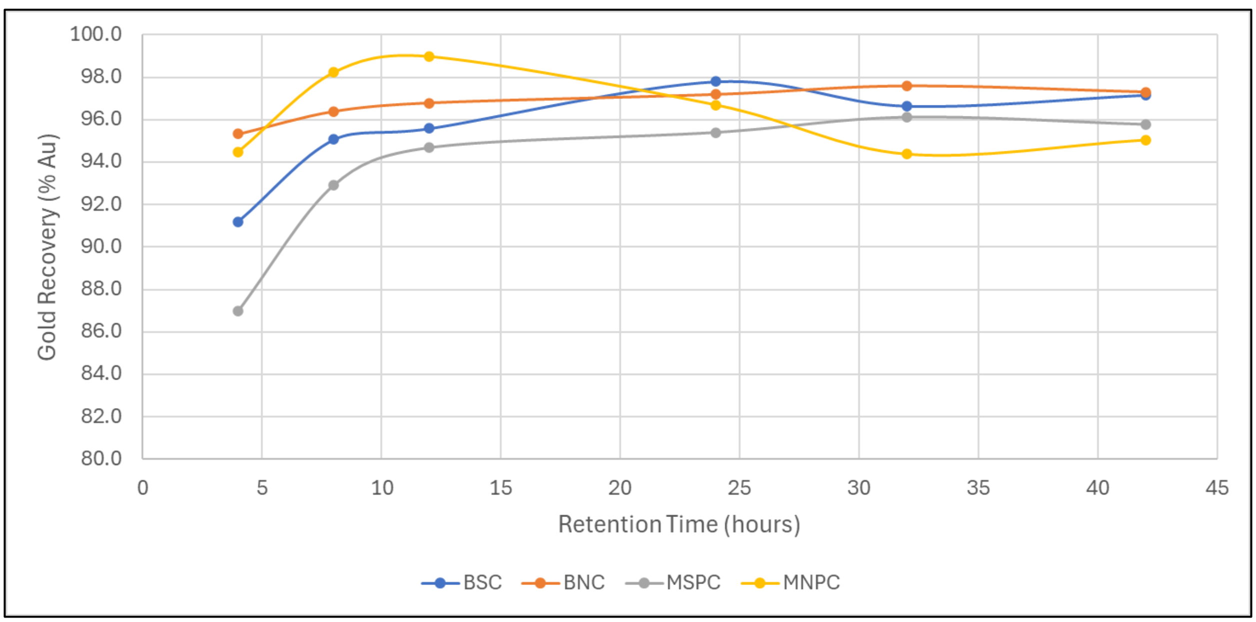
Leach development tests were performed on the gravity tailings of the master composites at a $K_{80}$ of 70 µm, 42-hour retention time and a cyanide concentration of 1.0 g/L. Kinetic readings were taken at intervals of 4, 8, 12, 24, 32 and 42 hours. The results are shown in Figure 13-6. There was no significant recovery benefit observed beyond a 24-hour leach retention time. However, a 42-hour retention was used for all further development and variability testwork to confirm the optimal retention time under the tested conditions.

**Figure 13-5: Effect of Grind Size on Tailings Grade per Composite**




Source: BaseMet, 2023.

**Figure 13-6: Leach Development Leach Kinetics at 70 µm and 1.00 g/L NaCN**

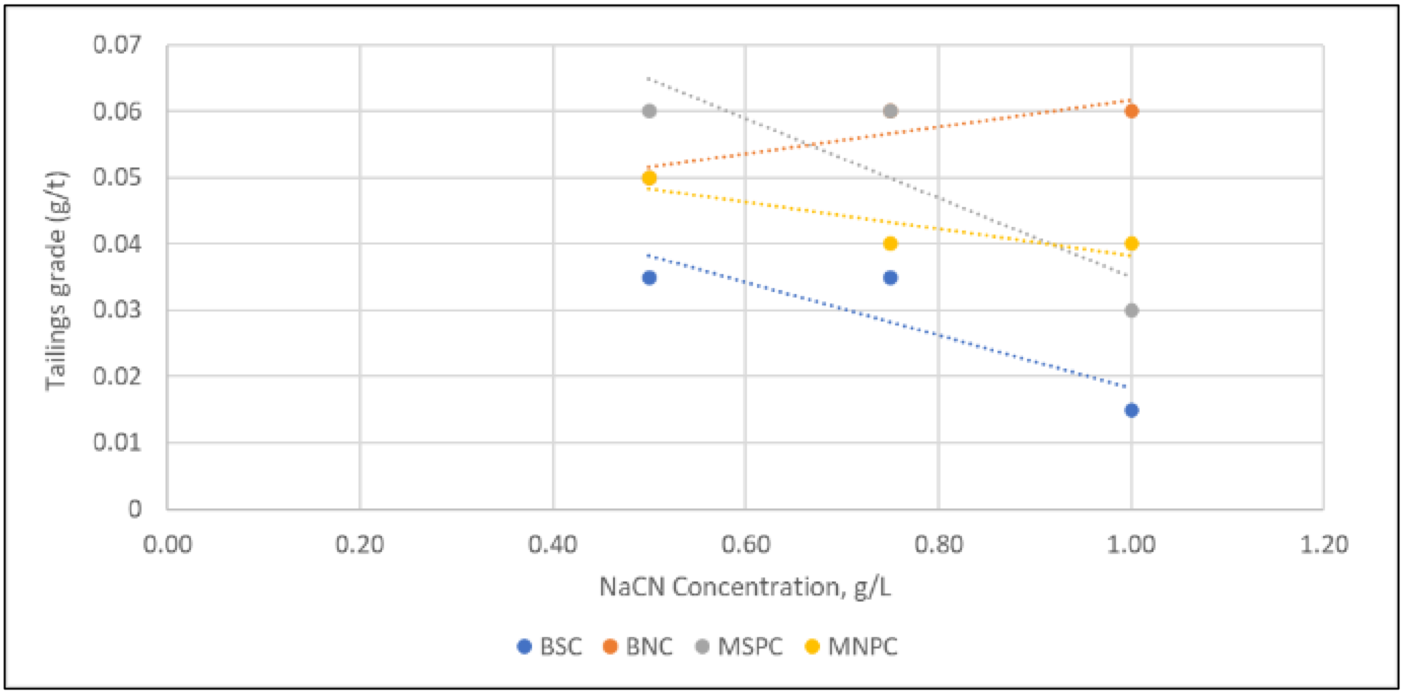



Source: BaseMet, 2023.

#### 13.5.7.3 Effect of Cyanide Dosage

Leach tests were performed at various cyanide concentrations to determine the effect of cyanide dosage on gold recovery. Figure 13-7 outlines the effect of cyanide concentration on tailings grade for tests performed on gravity tailings at a 42-hour retention time and grind size $K_{80}$ of 70 µm. Cyanide concentrations were maintained at 0.50 g/L, 0.75 g/L, and 1.00 g/L NaCN during the test. The BSC, MSPC, and MNPC samples demonstrate a minimal decrease in tailings grade with an increase in cyanide concentration. The BNC sample shows an unexpected slight increase in tailings grade (from 0.05 g/t to 0.06 g/t) with an increase in cyanide dosage. There is an overall minimal recovery benefit yielded by the increase in cyanide concentration, suggesting the cyanide dosage could be further optimized. A lower dosage of 0.20 g/L was selected for the variability testing.

**Figure 13-7: Effect of Cyanide Dosage on Tailings Grade per Composite**

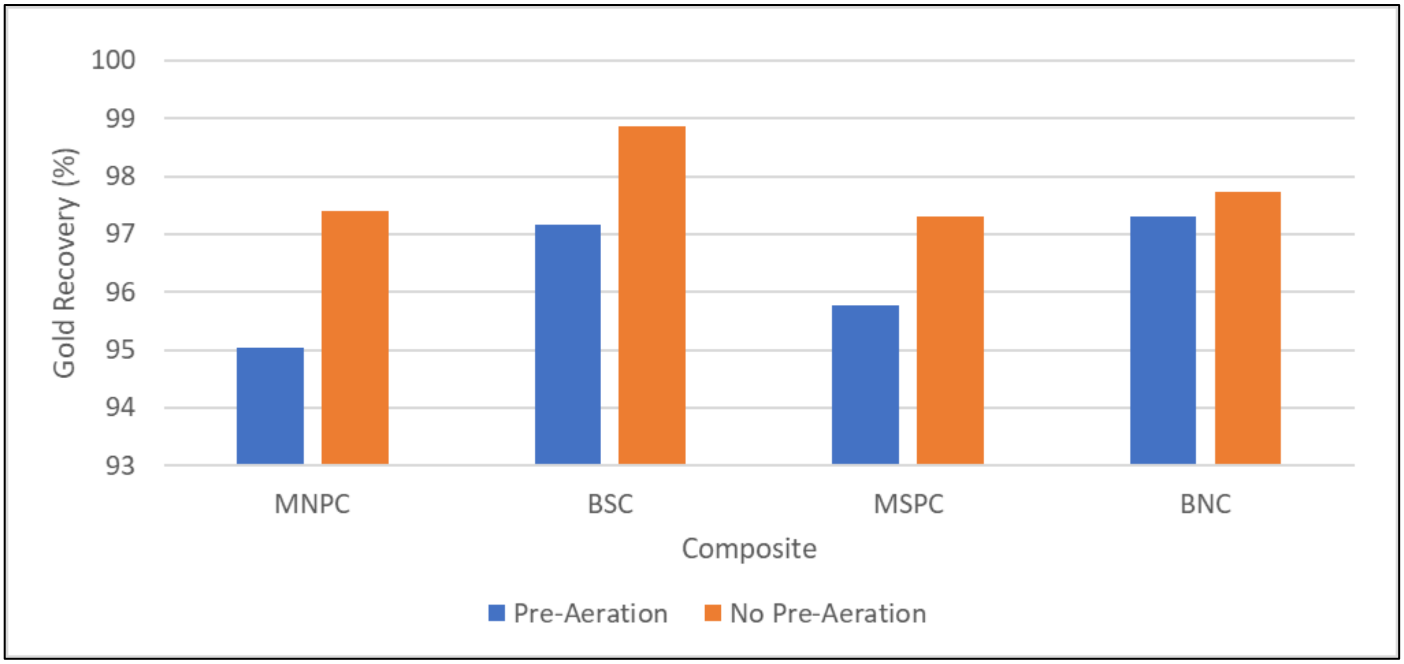



Source: BaseMet, 2023.

#### 13.5.7.4 Effect of Pre-Aeration

Samples underwent leach testwork at a grind size of 70 µm and a cyanide concentration of 1.00 g/L with and without pre-aeration. Pre-aeration was performed for 6 hours prior to a gravity-leach test, and its gold recovery comparison to tests without pre-aeration is shown in Figure 13-8. On average, the composites demonstrate a 1.5% increase in recovery without the addition of pre-aeration. Pre-aeration was therefore not included in the Novador Project flowsheet.

**Figure 13-8: Effect of Pre-Aeration on Gold Recovery per Composite**




Source: BaseMet, 2023.

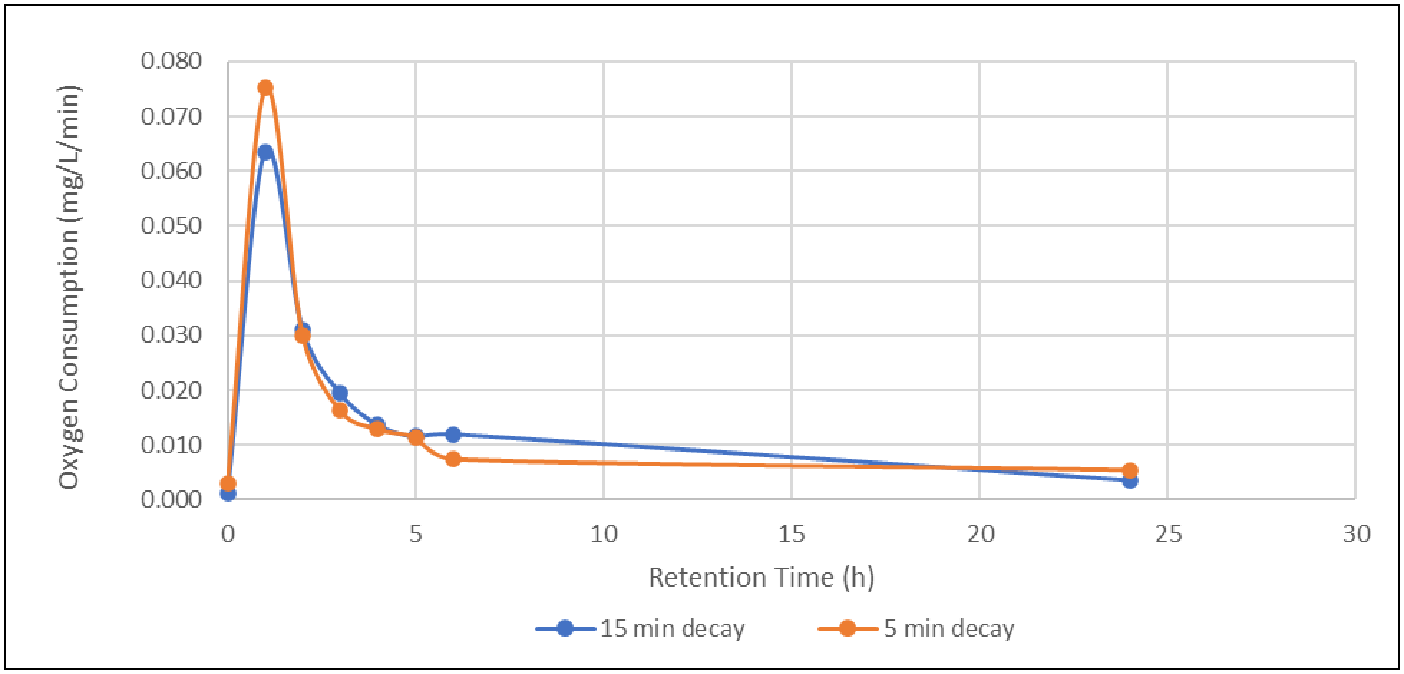
#### 13.5.7.5 Oxygen Uptake Testing

Oxygen uptake testing was completed on a 1 kg sample at the $K_{80}$ grind size of 70 µm from the blend composite sample by BaseMet. The following conditions were maintained during testwork:

- Slurry pulp density = 40% w/w solids
- NaCN concentration = 1.0 g/L and maintained to 0.5 g/L
- Slurry pH = 11
- Dissolved oxygen target = 10 mg/L.

The intention of the testwork was to determine oxygen demand in leaching. The testwork indicated moderate oxygen demand. The test results also provide oxygen consumption data for selecting the required oxygen plant capacity or liquid oxygen supply. The resulting oxygen consumption rates based on 5- and 15-minute intervals are shown in Figure 13-9.

**Figure 13-9: Oxygen Uptake Testwork Results**




Source: BaseMet, 2023.

These results demonstrate that the blend composite requires moderate oxygen consumption. Oxygen sparging was selected for the design of the leach circuit.

#### 13.5.7.6 Variability Testwork

Leach variability testing of 22 variability samples (plus one repeat) was conducted at the following conditions:

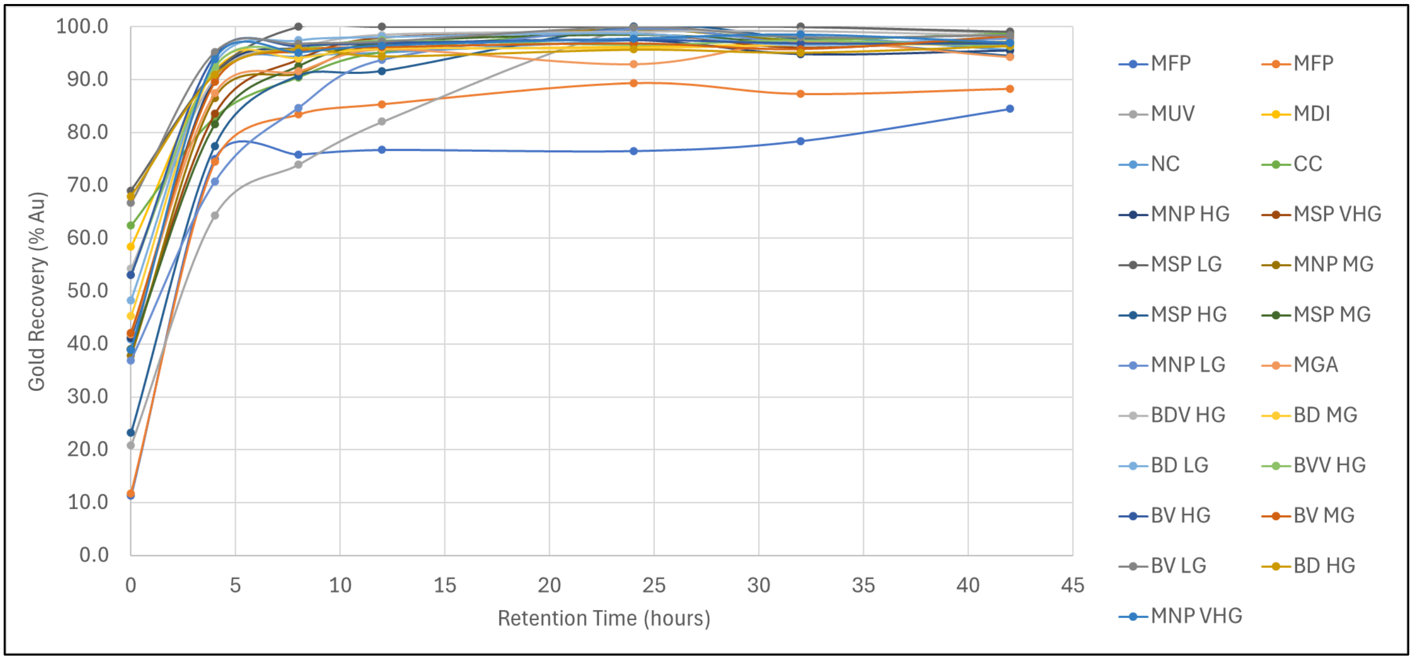
- Slurry pulp density = 40% w/w solids
- Slurry pH = 11 (maintained)
- NaCN concentration = 0.2 g/L (maintained)
- Retention time = 42 hours (samples taken at 4, 8, 12, 24, 32, and 42 hours)
- Grind size (80% passing) = 70 µm
- Dissolved oxygen = 20 mg/L with oxygen sparged.

The variability results are summarized in Table 13-15 and the leach curve kinetics are displayed in Figure 13-10.

**Table 13-15: Summary of Leach Variability Tests**

| Test ID | Sample ID | Grind Size ($P_{80}$) | Leach Time | Reagent Addition (kg/t) | | Reagent Consumption (kg/t) | | Au Grade | | Recovery (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Head (calc) | Residue | Grav. | Leach | Total |
| | | µm | h | NaCN | CaO | NaCN | CaO | g/t | g/t | Au | 42 | Au |
| CN37 | MFP | 70 | 42 | 0.81 | 0.80 | 0.10 | 0.80 | 1.45 | 0.23 | 11.3 | 73.2 | 84.5 |
| CN65 | MFP (repeat) | 70 | 42 | 0.97 | 0.70 | 0.22 | 0.70 | 1.49 | 0.18 | 11.8 | 76.5 | 88.3 |
| CN38 | MUV | 70 | 42 | 0.85 | 1.15 | 0.19 | 1.15 | 1.82 | 0.02 | 20.8 | 78.1 | 98.9 |
| CN39 | MDI | 70 | 42 | 0.92 | 0.84 | 0.24 | 0.84 | 1.95 | 0.06 | 58.4 | 38.7 | 97.2 |
| CN40 | NC | 70 | 42 | 0.89 | 0.84 | 0.18 | 0.84 | 0.91 | 0.04 | 40.9 | 54.7 | 95.6 |
| CN41 | CC | 70 | 42 | 1.04 | 0.59 | 0.32 | 0.59 | 2.06 | 0.03 | 62.5 | 36.3 | 98.8 |
| CN42 | MNP HG | 70 | 42 | 0.89 | 1.02 | 0.17 | 1.02 | 0.89 | 0.04 | 41.2 | 54.3 | 95.5 |
| CN43 | MSP VHG | 70 | 42 | 1.06 | 0.69 | 0.34 | 0.69 | 2.71 | 0.06 | 39.0 | 59.0 | 98.0 |
| CN44 | MSP LG | 70 | 42 | 0.87 | 0.67 | 0.19 | 0.67 | 0.54 | 0.01 | 69.0 | 30.0 | 99.1 |
| CN45 | MNP MG | 70 | 42 | 0.94 | 0.71 | 0.20 | 0.71 | 1.55 | 0.05 | 37.8 | 59.3 | 97.1 |
| CN46 | MSP HG | 70 | 42 | 0.94 | 1.38 | 0.22 | 1.38 | 0.36 | 0.02 | 23.2 | 71.3 | 94.5 |
| CN47 | MSP MG | 70 | 42 | 0.91 | 0.64 | 0.19 | 0.64 | 2.02 | 0.06 | 39.1 | 57.9 | 97.0 |
| CN48 | MNP LG | 70 | 42 | 0.87 | 0.72 | 0.16 | 0.72 | 0.89 | 0.02 | 36.9 | 60.8 | 97.8 |
| CN49 | MGA | 70 | 42 | 0.97 | 0.96 | 0.23 | 0.96 | 0.44 | 0.03 | 41.9 | 52.4 | 94.3 |
| CN50 | BDV HG | 70 | 42 | 0.88 | 0.62 | 0.19 | 0.62 | 3.22 | 0.06 | 54.3 | 44.0 | 98.3 |
| CN51 | BD MG | 70 | 42 | 0.92 | 0.80 | 0.23 | 0.80 | 2.72 | 0.09 | 45.3 | 51.4 | 96.7 |
| CN52 | BD LG | 70 | 42 | 0.92 | 0.71 | 0.21 | 0.71 | 1.63 | 0.03 | 48.3 | 49.9 | 98.2 |
| CN53 | BVV HG | 70 | 42 | 0.90 | 0.73 | 0.19 | 0.73 | 5.50 | 0.20 | 53.1 | 43.2 | 96.4 |
| CN54 | BV HG | 70 | 42 | 0.96 | 1.00 | 0.25 | 1.00 | 2.55 | 0.08 | 53.0 | 43.8 | 96.9 |
| CN55 | BV MG | 70 | 42 | 0.93 | 0.58 | 0.18 | 0.58 | 0.86 | 0.02 | 42.1 | 56.1 | 98.3 |
| CN56 | BV LG | 70 | 42 | 0.92 | 0.97 | 0.20 | 0.97 | 1.27 | 0.02 | 66.7 | 31.7 | 98.4 |
| CN57 | BD HG | 70 | 42 | 1.02 | 0.46 | 0.27 | 0.46 | 1.67 | 0.06 | 68.0 | 28.4 | 96.4 |
| CN58 | MNP VHG | 70 | 42 | 0.99 | 0.80 | 0.30 | 0.80 | 2.66 | 0.08 | 39.0 | 58.0 | 97.0 |

**Figure 13-10: Variability Leach Testwork Kinetic Curves**




Source: BaseMet, 2023.

Overall gold recoveries ranged from 84.5% to 99.1% with residue grades ranging from 0.01 to 0.23 g/t Au. The average gold recovery is 96.2% and the average residue grade is 0.06 g/t Au. As shown in Figure 13-10, most of the samples completed leaching at 24 hours. Confirming the optimal retention for the process design to be 24 hours.

### 13.5.8 Grind Size Optimization

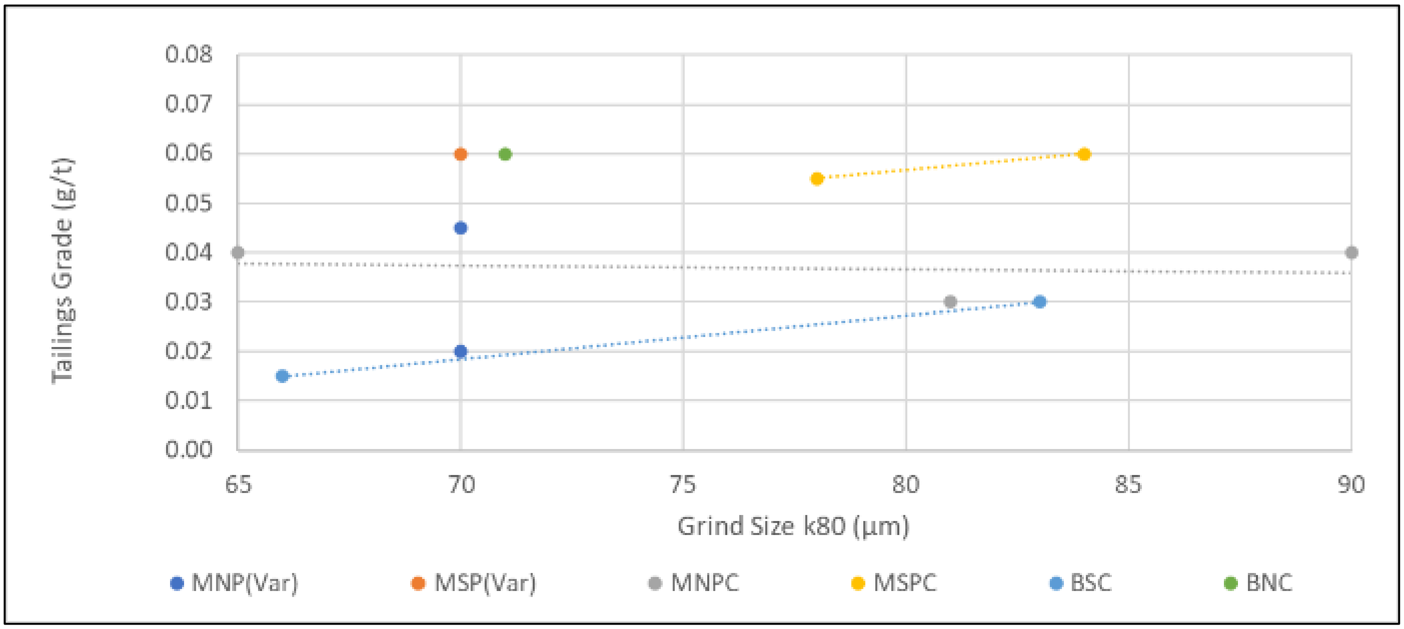
An analysis was performed on the leach development and leach variability samples to optimize the grind size for the Novador Project economics. As previously demonstrated in Section 13.5.7.1 and Figure 13-5, an increase in grind size would ultimately lead to an increase in tailings grade. Thus, the optimum grind size for recovery was selected at $K_{80}$ of 70 µm. The grind size influences the milling capital and operating costs, which decrease as the grind size increases. The recovery benefit of decreasing the grind size must therefore be offset against the incremental milling cost.

Considering the grind size development and variability testwork data between 65 µm and 90 µm as shown on Figure 13-11, it can be observed that:

- The largest increase in tailings grade is demonstrated by the BSC sample, increasing from 0.015 g/t at 67 µm to 0.03 g/t at 83 µm.
- The MNPC and MSPC samples demonstrate no relationship between tailings grade and grind across the observed range.

It can therefore be concluded that there is a potential to coarsen the grind size to a $K_{80}$ of up to 90 µm with minimal impact to recovery for the Monique deposit. The process design has assumed a coarsening of the grind size to a $K_{80}$ of 90 µm to enable a milling rate expansion in Year 6 of operation with no additional milling capacity and minimal recovery impact. Testwork at coarser grind sizes ($K_{80}$ of 80, 90 and 100 µm) will be recommended to improve available data density and test the hypothesis for the other mineralized zones in the Novador property.

**Figure 13-11: Effect of Grind Size on Tailings Grade Between 65 µm and 90 µm**




Source: BaseMet, 2023.

### 13.5.9 Cyanide Detoxification Testing

The leach tails from the bulk leach test performed on the blend composite were used in cyanide detoxification testwork. The results of the cyanide destruction tests are presented in Table 13-16. All tests were conducted at a pulp density of 40% w/w solids. Oxygen was added to maintain a target dissolved concentration of 8.0 mg/L.

The target $CN_{WAD}$ concentration of < 1 mg/L was only achieved by tests using a 60-minute retention time. Tests CND-C4 and CND-C5 achieved the target at a retention time of 60 minutes, $SO_2$:$CN_{WAD}$ ratio of 5:1 and a copper addition rate of 50 mg/L $Cu^{2+}$.

**Table 13-16: Summary of Cyanide Detoxification Testwork**

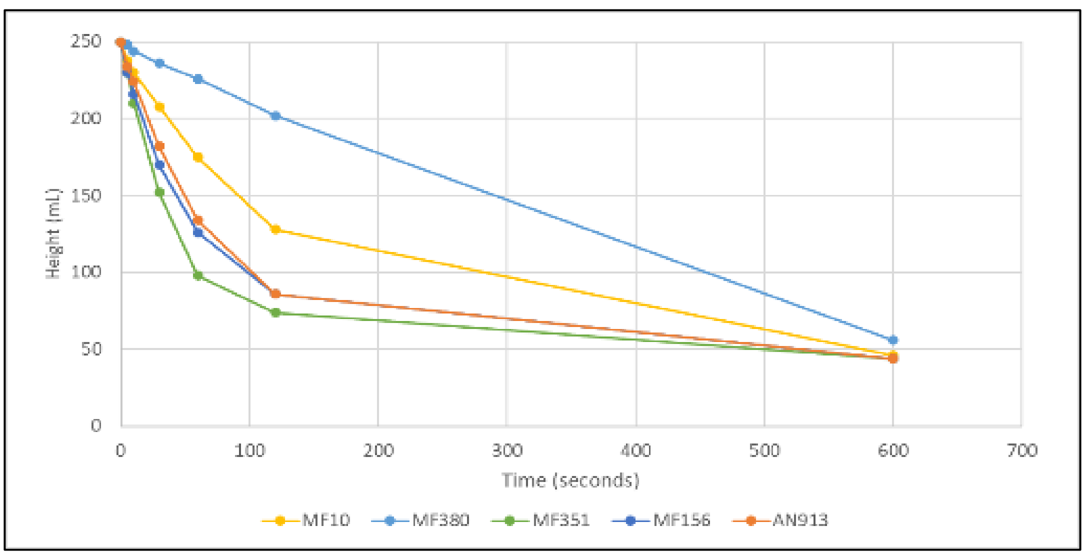
| Test | Objective | Retention Time | Reactor Chemistry (Solution) | | | | | Reagent Addition (g/g $CN_{WAD}$) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | pH | $CN_t$ mg/L | $CN_{WAD}$ mg/L | Cu mg/L | Fe mg/L | $SO_2$ Equiv. | Lime | Cu mg/L |
| Feed | - | - | - | 230 | 220 | 3.09 | 3.7 | - | - | - |
| CND-C1 | < 1 ppm $CN_{WAD}$ | 60 | 8.2 | 7.2 | 0.1 | 0.29 | 2.53 | 5.0 | 8.3 | 25 |
| CND-C1R | < 1 ppm $CN_{WAD}$ | 60 | 8.2 | 1.3 | 1.3 | 0.14 | 0.01 | 5.0 | 6.7 | 25 |
| CND-C2 | < 1 ppm $CN_{WAD}$ | 30 | 8.0 | 1.5 | 1.5 | 0.47 | 0.01 | 5.0 | 4.8 | 25 |
| CND-C3 | < 1 ppm $CN_{WAD}$ | 45 | 8.0 | 3.3 | 2.1 | 2.27 | 1.31 | 5.0 | 8.0 | 25 |
| CND-C3R | < 1 ppm $CN_{WAD}$ | 45 | 8.0 | 1.4 | 1.4 | 0.18 | 0.01 | 5.0 | 6.7 | 25 |
| CND-C4 | < 1 ppm $CN_{WAD}$ | 60 | 8.1 | 0.9 | 0.9 | 0.20 | 0.01 | 5.0 | 7.5 | 50 |
| CND-C5 | < 1 ppm $CN_{WAD}$ | 60 | 8.1 | 0.4 | 0.4 | 0.04 | 0.01 | 5.0 | 3.3 | 50 |

### 13.5.10 Dewatering Testwork

#### 13.5.10.1 Flocculant Scoping

Flocculant scoping was performed on the blend composite. The bulk leach tails from cyanide destruction were fed to dewatering tests where five flocculant reagents were investigated, including Magnafloc (MF) 10, 351, 380, and 156, and FloPam AN913. The flocculant scoping study results are shown in Figure 13-12. All flocculants were dosed at a rate of 10 g/t at a concentration of 0.1 g/L. The tests were performed at a feed density of 15% w/w solids at a constant volume of 250 mL. The tests demonstrate that MF351, AN913, and MF156 provide the quickest settling times.

**Figure 13-12: Flocculant Scoping Study Results**




Source: BaseMet, 2023.

#### 13.5.10.2 Static Settling Tests

Static settling tests were conducted on the blend composite gravity tails and detox tails samples using the MF351 flocculant. The feed was diluted to a density of 15% w/w solids, and flocculant was dosed to a 2 L cylinder at rates varying between 10 g/t and 40 g/t. Final densities ranged between 62.7% w/w solids to 65.9% w/w solids, as shown in Table 13-17.

**Table 13-17: Static Settling Test Conditions and Result Summary**

| Test | Sample | Grind | Flocculant | | pH | Density (wt% Solids) | | Free Settling Velocity |
|---|---|---|---|---|---|---|---|---|
| | | µm | Type | g/t | | Initial | Final | m/h |
| S3 | Gravity Tail Master Composite | 70 | MF351 | 10 | 8 | 14.5 | 65.8 | 3.8 |
| S1 | | | | 20 | | 14.5 | 65.3 | 5.4 |
| S2 | | | | 40 | | 14.5 | 65.9 | 6.2 |
| S4 | Detox Product Master Composite | 70 | MF351 | 20 | 8 | 14.0 | 62.9 | 6.8 |
| S5 | | | | 30 | | 13.9 | 62.7 | 6.7 |
| S6 | | | | 10 | | 13.9 | 65.4 | 6.9 |

#### 13.5.10.3 Dynamic Settling Tests

Dynamic thickening tests were conducted based on the results from the static settling tests. The tests were performed using a feed density of 15 wt% solids, achieving final underflow densities of 58% w/w to 62% w/w solids. Flocculant dosage ranged between 10 g/t and 40 g/t. Results of the dynamic thickening testing are shown in Table 13-18.

**Table 13-18: Dynamic Setting Test Conditions and Result Summary**

| Test | Sample | Grind | Flocculant | | pH | Density wt% Solids) | | Rise Rate | Loading Rate | Turbidity |
|---|---|---|---|---|---|---|---|---|---|---|
| | | µm | Type | g/t | | Initial | Final | m/h | t/m²/h | mg/L |
| D1-A | Gravity Tail Master Composite | 70 | MF351 | 20 | 8.1 | 15 | 62.4 | 3.1 | 0.5 | 18 |
| D1-B | | | | 20 | | 15 | 58.3 | 4.3 | 0.7 | 22 |
| D1-C | | | | 20 | | 15 | 64.3 | 1.8 | 0.3 | 15 |
| D1-D | | | | 10 | | 15 | 57.7 | 3.0 | 0.5 | 63 |
| D1-E | | | | 30 | | 15 | 61.1 | 3.1 | 0.5 | 9 |
| D2-A | Detox Product Master Composite | 70 | MF351 | 20 | 8.1 | 15 | 62.1 | 3.1 | 0.5 | 62 |
| D2-B | | | | 20 | | 15 | 60.5 | 4.3 | 0.7 | 45 |
| D2-C | | | | 20 | | 15 | 62.8 | 1.8 | 0.3 | 32 |
| D2-D | | | | 10 | | 15 | 62.2 | 3.0 | 0.5 | 141 |
| D2-E | | | | 30 | | 15 | 61.2 | 3.1 | 0.5 | 19 |

In Phase 1 of the PEA design, the tailings thickener is designed to achieve a 65% w/w solids underflow with a flocculant addition rate of 20 g/t of cyanide destruction discharge, and a loading rate of 0.3 t/m$^2$/h. The pre-leach thickener, added in Phase 2 of the PEA design, is designed to achieve an underflow density of 55% w/w solids with a flocculant addition rate of 20 g/t leach feed and a loading rate of 0.7 t/m$^2$/h.

#### 13.5.10.4 Rheology

Rheology tests were performed to determine whether the deformation potential of the settled tailings from the previous test under the influence of imposed stress. Results are summarized in Table 13-19.

**Table 13-19: Rheology Testing Results Summary**

| Test | Sample | Density (% w/w Solids) | Yield Stress (Pa) |
|---|---|---|---|
| V1-A | Gravity Tail Master Composite | 62.4 | 36 |
| V1-B | | 58.3 | 16 |
| V1-C | | 64.3 | 72 |
| V1-D | | 57.7 | 16 |
| V1-E | | 61.1 | 75 |
| V2-A | Detox Product Master Composite | 62.1 | 57 |
| V2-B | | 60.5 | 49 |
| V2-C | | 62.8 | 63 |
| V2-D | | 62.2 | 33 |
| V2-E | | 61.2 | 71 |

#### 13.5.10.5 Pressure Filtration

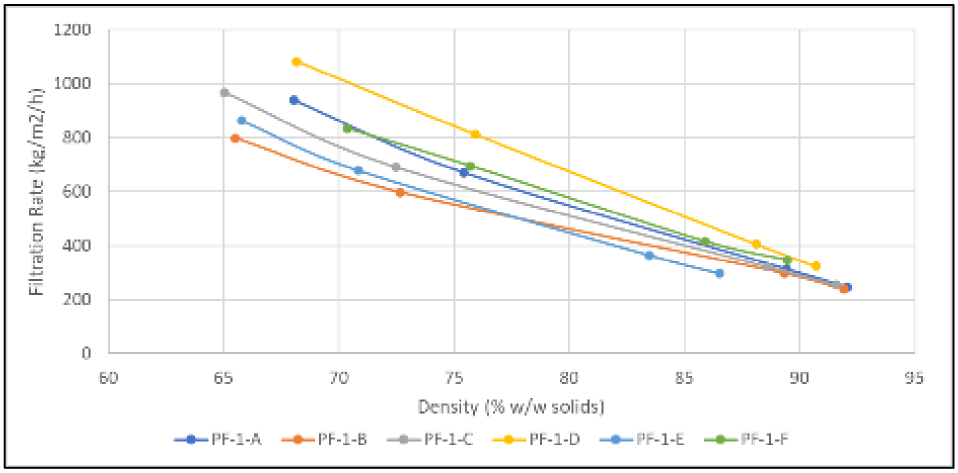
The thickened cyanide destruction tailings were subject to pressure filtration testwork using the Micronics plate-and-frame filtration unit. The filter press has a chamber diameter of 150 mm, with varying chamber widths to adjust the cake thickness. The filtration unit is filled with slurry by a diaphragm pump, the chamber is pressed for 20 to 30 seconds at a pressure of 200 psi, and compressed air is blown through the chamber for either 1 or 3 minutes.

The cyanide destruction tailings fed the pressure filtration tests at a feed density ranging between 65% w/w and 71% w/w solids. All the tests demonstrated the mineralized material was favourable filtration, achieving densities between 86.5% w/w and 92.1% w/w solids after 3 minutes of blow time. The results of the pressure filtration tests are summarized in Table 13-20 and depicted in Figure 13-13.

**Table 13-20: Pressure Filtration Test Result Summary**

| Test | Chamber Thickness (mm) | Feed | | Density (% w/w Solids) | | | | Filtration Rate (kg/m²/h) | | | | Total Time (Seconds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Density (% w/w Solids) | Pressure (psi) | Formed | Pressed | Blow 1 Minute | Blow 3 Minutes | Formed | Pressed | Blow 1 Minute | Blow 3 Minutes | |
| PF-1-A | 25 | 51.8 | 60 | 68.1 | 75.4 | 89.4 | 92.1 | 940 | 671 | 313 | 247 | 285 |
| PF-1-B | 25 | 50.9 | 75 | 65.5 | 72.7 | 89.3 | 91.9 | 799 | 599 | 299 | 240 | 300 |
| PF-1-C | 25 | 50.7 | 90 | 65.0 | 72.5 | 88.6 | 91.6 | 969 | 692 | 323 | 255 | 285 |
| PF-1-D | 35 | 48.7 | 75 | 68.2 | 75.9 | 88.1 | 90.7 | 1,084 | 813 | 406 | 325 | 300 |
| PF-1-E | 35 | 45.5 | 90 | 65.8 | 70.9 | 83.5 | 86.5 | 864 | 679 | 366 | 297 | 320 |
| PF-1-F | 35 | 51.0 | 90 | 70.4 | 75.7 | 85.9 | 89.5 | 835 | 696 | 418 | 348 | 360 |

**Figure 13-13: Pressure Filtration Rate as a Function of Tailings Density**

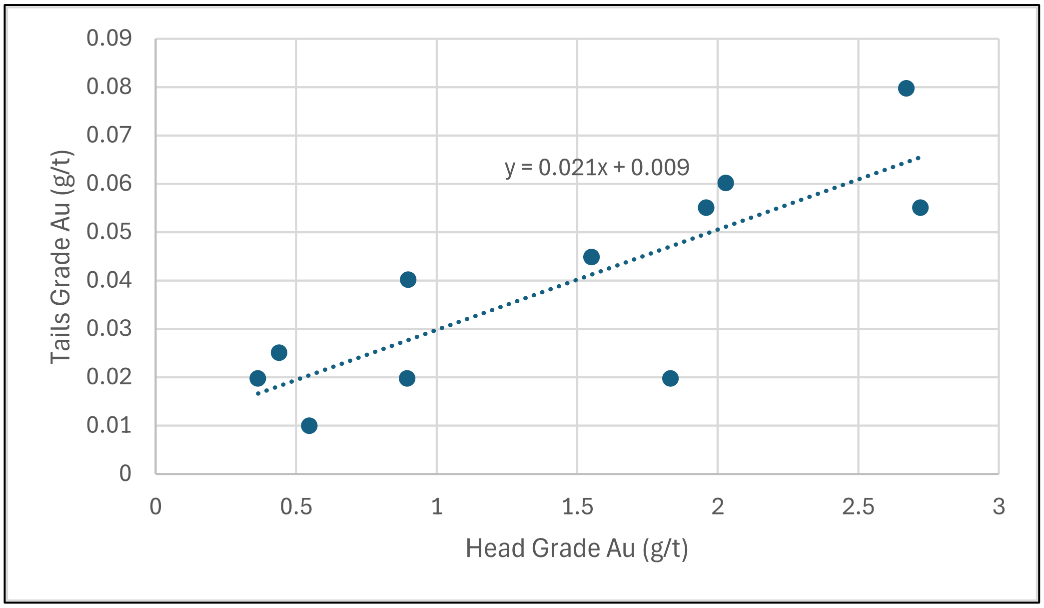



Source: BaseMet, 2023.

## 13.6 Recovery Estimates

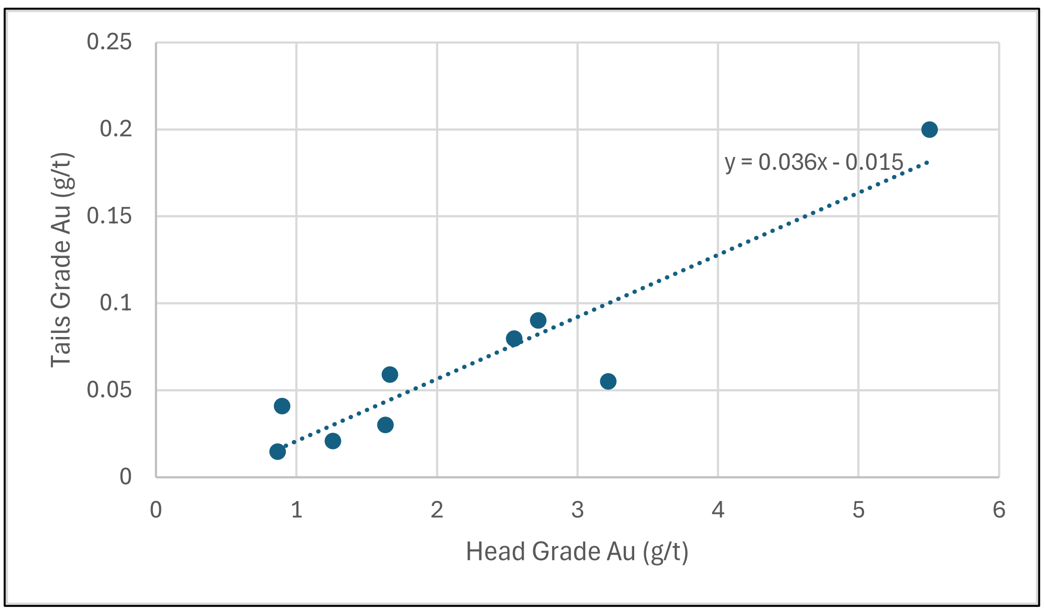
The proposed flowsheet selected from the testwork includes standard gravity concentration and cyanidation to produce doré. There is no evidence from the metallurgical test results of any deleterious elements that would impair recovery or result in low quality doré. The expected recovery for the Novador deposits was estimated from on a regression of the gold head grade vs. leach tailings grade from the variability testing as presented on Figure 13-14 and Figure 13-15. This recovery function predicts overall gold recovery to solution, which is observed to be greater than 95% in most cases.

**Figure 13-14: Leach Tailings Grade vs. Gold Head Grade for Monique and Courvan**




Source: Ausenco, 2023.

**Figure 13-15: Leach Tailings Grade vs. Gold Head Grade for Pascalis and Highway**




Source: Ausenco, 2023.

# 14 MINERAL RESOURCE ESTIMATES

The updated mineral resource estimate for the project ("2023 MRE") was prepared by Marina Iund (P.Geo.), Vincent Nadeau-Benoit (P.Geo), Martin Perron (P.Eng.) and Simon Boudreau (P.Eng.), using all available information.

The 2023 drill holes are not included in the MRE 2023. The authors do not believe that the omission of these holes will materially affect the MRE 2023, and the decision to leave them out is in accordance with the current geological models.

The mineral resources herein are not mineral reserves as they do not have demonstrated economic viability.

Table 14-1 details the deposits of the Novador Project and the distribution of responsibilities among the QPs.

**Table 14-1: Deposits of the Novador Project and QP Responsibilities**

<table>
<tr><th>Area</th><th colspan="2">Deposit</th><th>MRE Effective Date</th><th>Responsible QP</th></tr>
<tr><td>Monique Gold Trend</td><td colspan="2">Monique</td><td>January 16, 2023</td><td rowspan="6">Marina Iund (P.Geo.), Martin Perron (P.Eng.) and Simon Boudreau (P.Eng.)</td></tr>
<tr><td rowspan="7">Courvan Gold Trend</td><td>Courvan SE</td><td rowspan="2">Courvan South</td><td rowspan="5">July 13, 2023</td></tr>
<tr><td>Courvan SW</td></tr>
<tr><td>Bussiere Mine</td><td rowspan="3">Courvan North</td></tr>
<tr><td>Bussiere</td></tr>
<tr><td>Creek</td></tr>
<tr><td colspan="2">Bordure</td><td rowspan="2">September 7, 2021</td><td rowspan="2">Martin Perron (P.Eng.)</td></tr>
<tr><td colspan="2">Senore</td></tr>
<tr><td rowspan="3">Pascalis Gold Trend</td><td colspan="2">New Béliveau</td><td rowspan="2">July 13, 2023</td><td rowspan="2">Vincent Nadeau-Benoit (P.Geo.), Martin Perron (P.Eng.) and Simon Boudreau (P.Eng.)</td></tr>
<tr><td colspan="2">North</td></tr>
<tr><td colspan="2">Highway</td><td>September 7, 2021</td><td>Martin Perron (P.Eng.)</td></tr>
</table>

For the Courvan South, Courvan North, New Béliveau and North deposits, the 2023 MRE represents an update of the previous mineral resource estimate ("2021 MRE") published in an NI 43-101 technical report and preliminary economic assessment by Raponi et al. (2021) ("2021 PEA").

For the Monique deposit, the MRE has not been modified since the last update was completed in January 2023 (Iund et al., 2023).

For the Highway, Bordure and Senore deposits, the 2021 MRE parameters and results were reviewed and validated by the QP. As no new information was available and the 2021 MRE was deemed valid, the 2021 MRE results are reported unchanged in the 2023 MRE.

## 14.1 Methodology

The models were prepared using LeapFrog 2023.1 ("LeapFrog"), LeapFrog Edge 2023.1 ("Edge") and GEOVIA Surpac 2021 ("Surpac"). LeapFrog was used to model the lithologies and mineralized zones. The estimation, which consisted of 3D block modelling and grade interpolation, was performed with Surpac for the Monique area and with Edge for the Courvan and Pascalis areas. Statistical studies, capping and variography were completed using Snowden Supervisor v.8.13 ("Supervisor") and Microsoft Excel.

The main steps in the methodology were as follows:

- compile and validate the database for the diamond drill holes used in the mineral resource estimate
- review and validation of the geological model and interpretation
- drill hole intercepts and composite generation for each mineralized zone
- basic statistics
- geostatistical analysis, including variography
- block modelling and grade interpolation
- block model validation
- establish resource classification criteria and clipping areas to classify the mineral resources
- assess the "reasonable prospects for eventual economic extraction" and select the appropriate cut-off grades
- generate a mineral resource statement.

Geological modelling for the validation of the Bordure, Highway, and Senore deposits was performed and validated in LeapFrog Geo. Interpolation was originally created in GENESIS™ software and was validated in LeapFrog Edge. Most of the technical information regarding these deposits is derived from Beauregard et al. (2019) and Raponi et al. (2021). For more detailed information, the reader should refer to the above references.

## 14.2 Drill Hole Databases

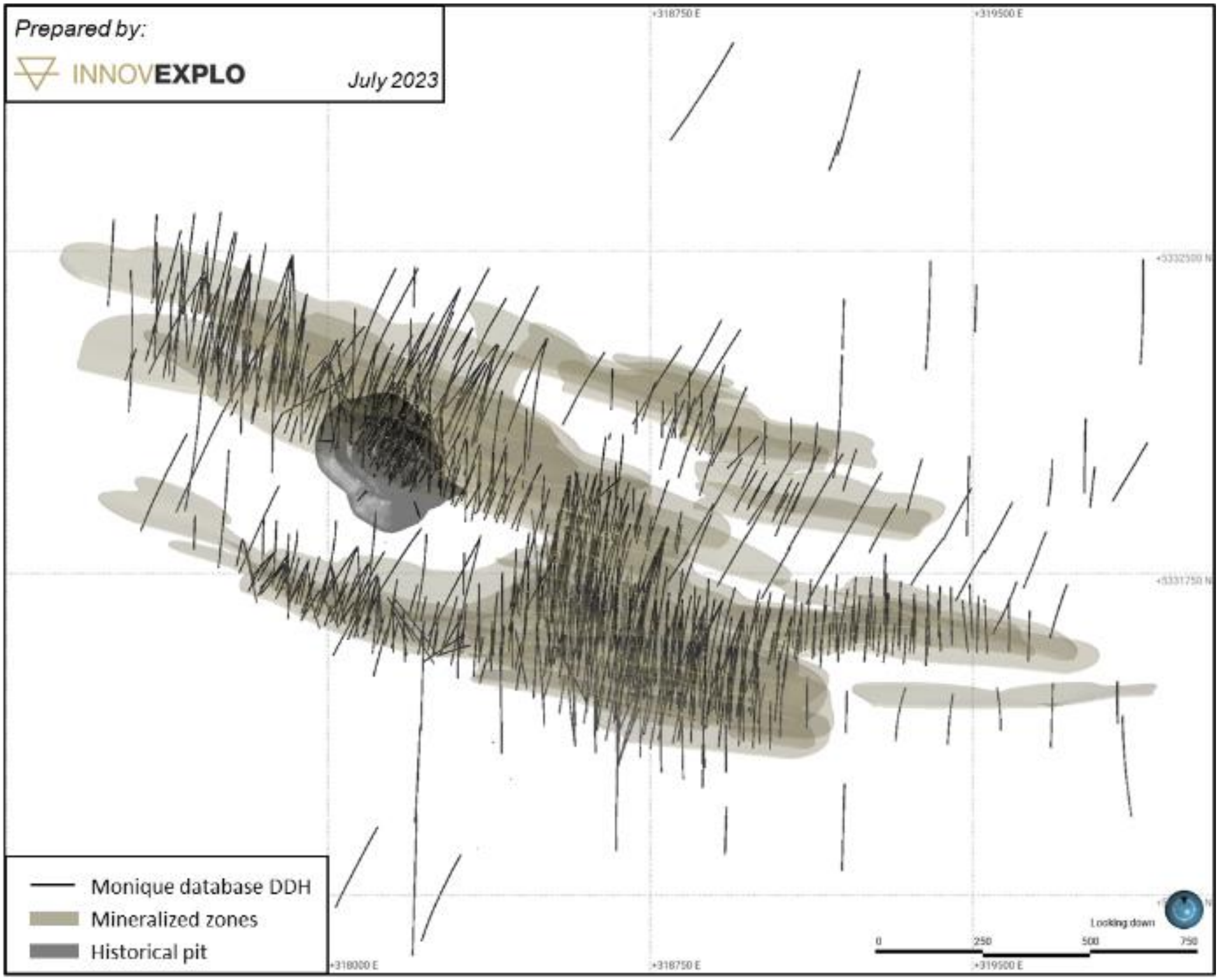
The drill hole databases contain assay results and lithological, alteration and structural descriptions taken from drill core logs. In addition to the tables of raw data, they also include several tables of calculated drill hole composites and wireframe solid intersections, which are required for statistical evaluation and resource block modelling.

### 14.2.1 Monique Area

A single diamond drill hole database covers the Monique area ("Monique database") (Figure 14-1). The close-out date is October 25, 2022.

The Monique database contains 1,044 DDH (251,551 m), corresponding to all the holes drilled in the resource area: 415 historical holes (90,283 m) drilled before 2018 and 629 holes (161,268 m) between 2018 and 2022.

**Figure 14-1: Surface Plan View of the Monique Database Drill Holes**



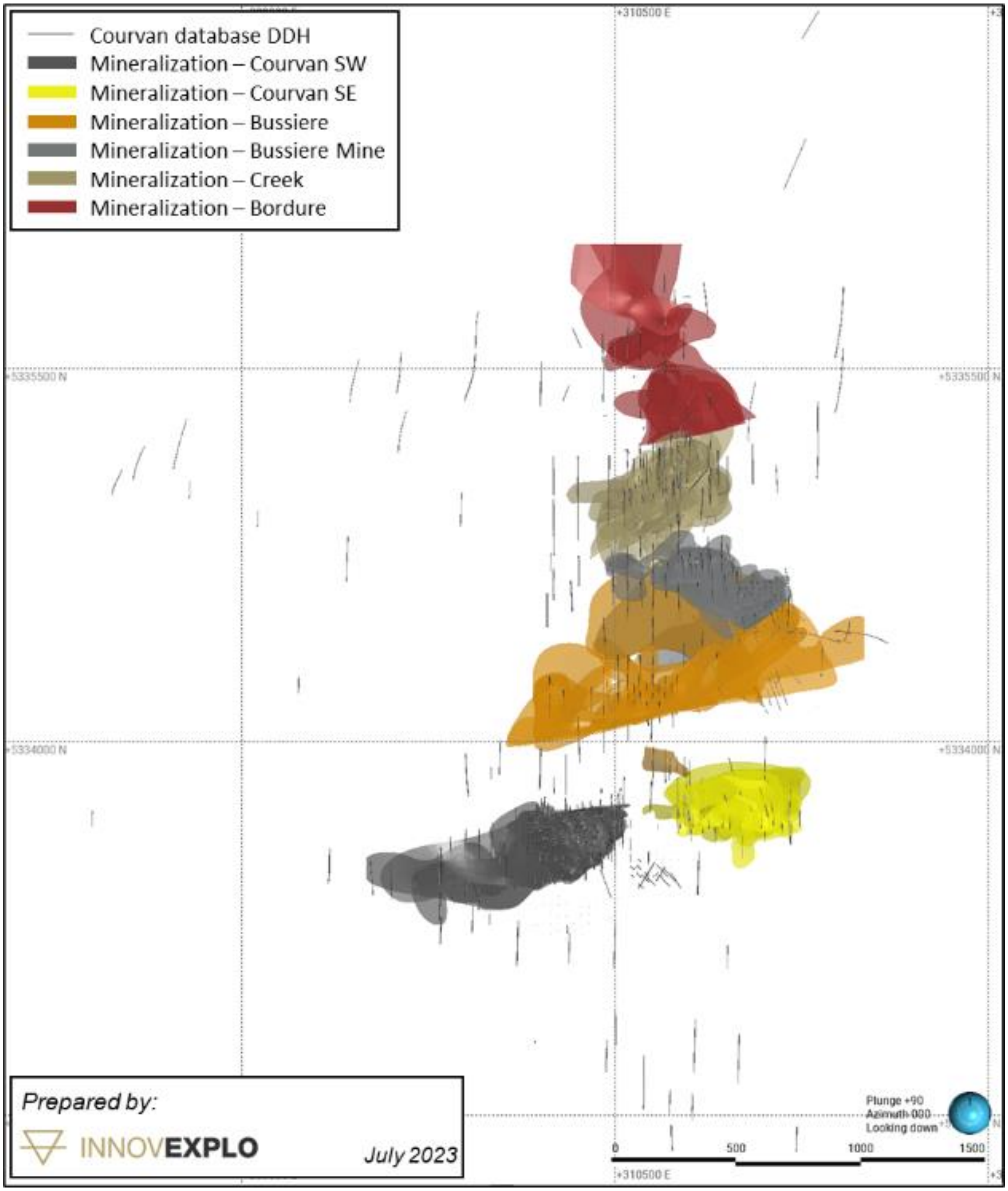

Source: InnovExplo, 2023.

### 14.2.2 Courvan Area

A single diamond drill hole database covers the Courvan area ("Courvan database"; Figure 14-2). The close-out date is May 19, 2023.

The Courvan database contains 846 DDH (175,641 m), corresponding to all the holes drilled in the resource area: 481 historical holes (81,775 m) drilled before 2018 and 365 holes (93,866 m) drilled between 2018 and 2022.

**Figure 14-2: Surface Plan View of the Courvan Database Drill Holes**



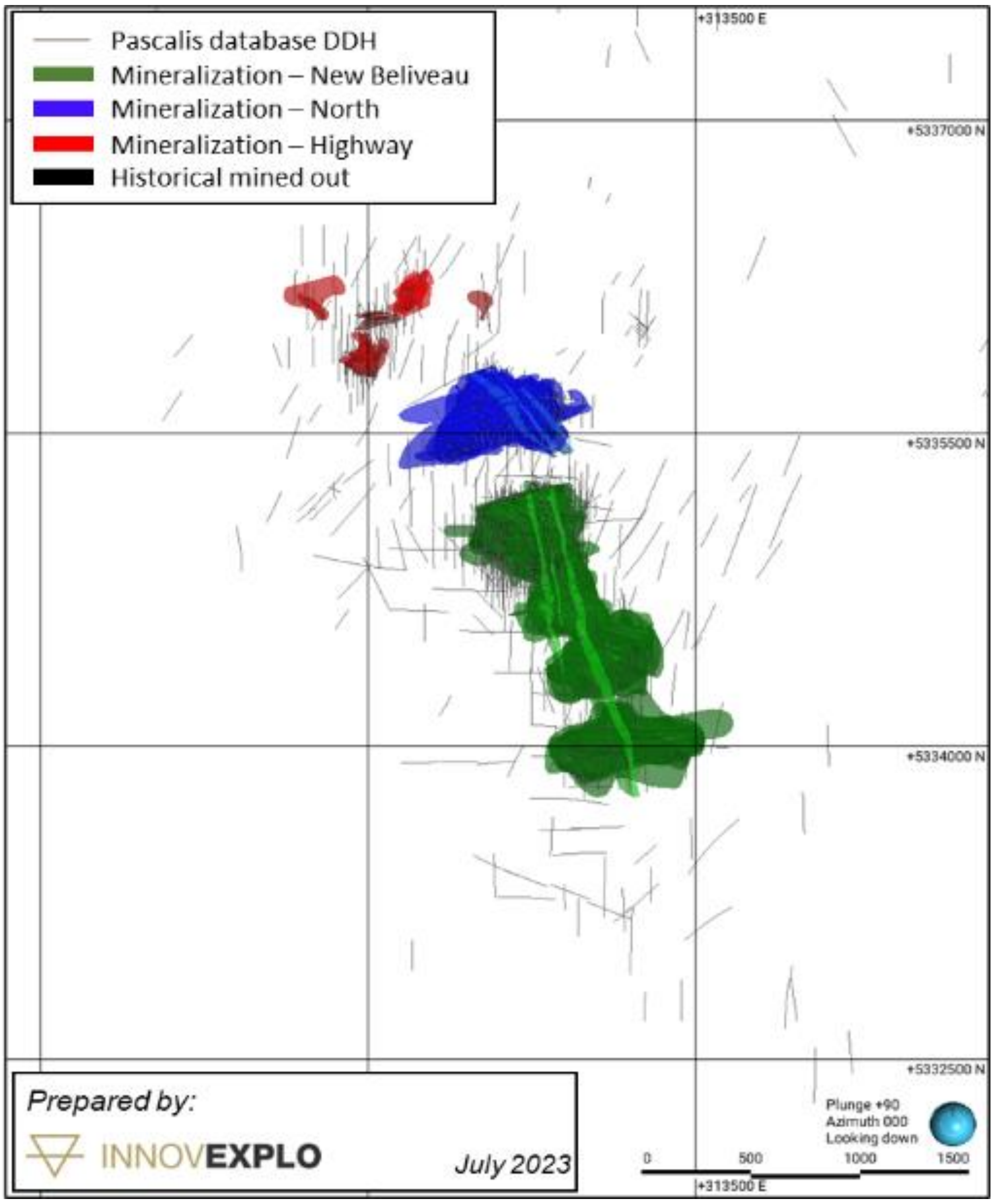

Source: InnovExplo, 2023.

### 14.2.3 Pascalis Area

A single diamond drill hole database covers the Pascalis Gold Trend area ("Pascalis database") (Figure 14-3). The close-out date is March 8, 2023.

The Pascalis database contains 2,018 DDH (415,606 m), corresponding to all the holes drilled in the resource area: 1,192 historical holes (153,746 m) drilled before 2018 and 826 holes (261,860 m) drilled between 2016 and 2022.

**Figure 14-3: Surface Plan View of the Pascalis Database Drill Holes**




Source: InnovExplo, 2023.

## 14.3 Geological Interpretation

The geological model developed by Probe Gold geologists was reviewed and validated by the QPs. All mineralized zones were interpreted directly in 3D in Leapfrog on a hole-by-hole basis. A dilution envelope was defined as the parts of the block model not included in any of the mineralized domain solids. The solid for the envelope contains isolated gold-bearing intersections for which continuity has not yet been demonstrated or interpreted.

Two surfaces were created to define the topography and the overburden/bedrock contact. The topographic surface was generated using Lidar data from 2020 (2 m resolution).

### 14.3.1 Monique Area

The Leapfrog model comprises 38 parallel mineralized zones. Some mineralized zones have been defined from surface to a depth of 600 m and vary in width from 1 m up to 100 m. Mineralized structures extend laterally up to 1,500 m.

Gold in the Monique deposit is mainly associated with three deformation zones that traverse the area with an orientation of 280° and a dip of 75° to 80° to the north. Gold mineralization is defined by a network of quartz-carbonate-albite±tourmaline veins and veinlets with disseminated pyrite in the altered wall rocks.

### 14.3.2 Courvan Area

Table 14-2 describes the characteristics of the mineralized zones in the Leapfrog models.

**Table 14-2: Details of the Mineralized Zones by Deposit, Corvan Area**

| Deposit | No. of Mineralized Zones | Max. Depth from Surface (m) | Max. Lateral Extent (Length x Width; m) | Zone Thickness (m) |
|---|---|---|---|---|
| Courvan SE | 10 | 300 | 550 x 250 | 1 to 17 |
| Courvan SW | 26 | 300 | 1,100 x 300 | 1 to 22 |
| Creek | 28 | 800 (mineralization starts 500 m below surface) | 450 x 250 | 1 to 32 |
| Bussiere Mine | 17 | 300 | 750 x 350 | 1 to 21 |
| Bussiere | 8 | 300 | 1,300 x 150 | 1.5 to 18.5 |

Gold mineralization is structurally controlled by several major shear zones and faults, striking 250° and dipping 75° to the north to subvertical, dividing the Courvan gold trend into structural blocks.

The mineralized zones consist of envelopes containing 5% to 30% centimetric to metric quartz-tourmaline-carbonates-pyrite ± chalcopyrite veins, mainly extensional, with a subhorizontal to moderate dip to the north or, the case of the Southeast deposit, to the south. The veins form en echelon networks. Typical mineralization is composed of 1% to 10% pyrite and rare chalcopyrite in veins and wall rocks altered to silica, sericite, carbonates ± K-feldspar-albite over a thickness of a few centimetres to few metres. High grades are often associated with coarse pyrite clusters and/or local native gold, similar to the Beaufor mine. High-grade zones are also locally associated with hydrothermal breccias of quartz-tourmaline-carbonates-pyrite.

### 14.3.3 Pascalis Area

Table 14-3 describes the characteristics of the mineralized zones in the Leapfrog models.

**Table 14-3: Detail of the Mineralized Zones by deposit, Pascalis Area**

| Deposit | No. of Mineralized Zones | No. of Dykes | Max. Depth from surface (m) | Max. Lateral Extent (Length x Width; m) | Zone Thickness(m) |
|---|---|---|---|---|---|
| North | 30 | 3 | 500 | 400 x 600 | 1 to 15 |
| New Béliveau | 69 | 3 | 600 | 1,600 x 600 | 1 to 20 |

Gold mineralization is structurally controlled by several major shear zones and faults, striking on average N250 to N290 or N70 to N110 and dipping 75° (up to subvertical), dividing the Pascalis gold trend into structural blocks.

The mineralized zones consist of envelopes containing 5% to 30% centimetric to metric quartz-tourmaline-carbonate-pyrite±chalcopyrite veins, mainly extensional but also locally shear type, dipping shallowly to moderately (10° to 60°) to the south. The veins form echelon networks. The concentration of those veins increases inside the diorite dykes. The major diorite dyke swarms were also modelled and used as estimation domains to capture the gold grades of veins that lie within the dyke preferential lithological units but outside the bulk mineralized zones. The alteration associated with the mineralization is composed of tourmaline-silica-carbonate assemblages in the dykes or silica-sericite-albite-carbonate assemblages in the volcanic rocks.

## 14.4 High-Grade Capping

Basic univariate statistics were performed on the raw assay datasets for each mineralized zone. The following criteria were used to decide if capping was warranted:

- The coefficient of variation of the assay population is above 3.0.
- The quantity of metal contained in the top 10% highest grade samples is above 40%, and/or the quantity of metal in the top 1% highest grade samples is higher than 20%.
- The probability plot of grade distribution shows abnormal breaks or scattered points outside the main distribution curve.
- The log-normal distribution of grades shows erratic grade bins or distanced values from the main population.

### 14.4.1 Monique Area

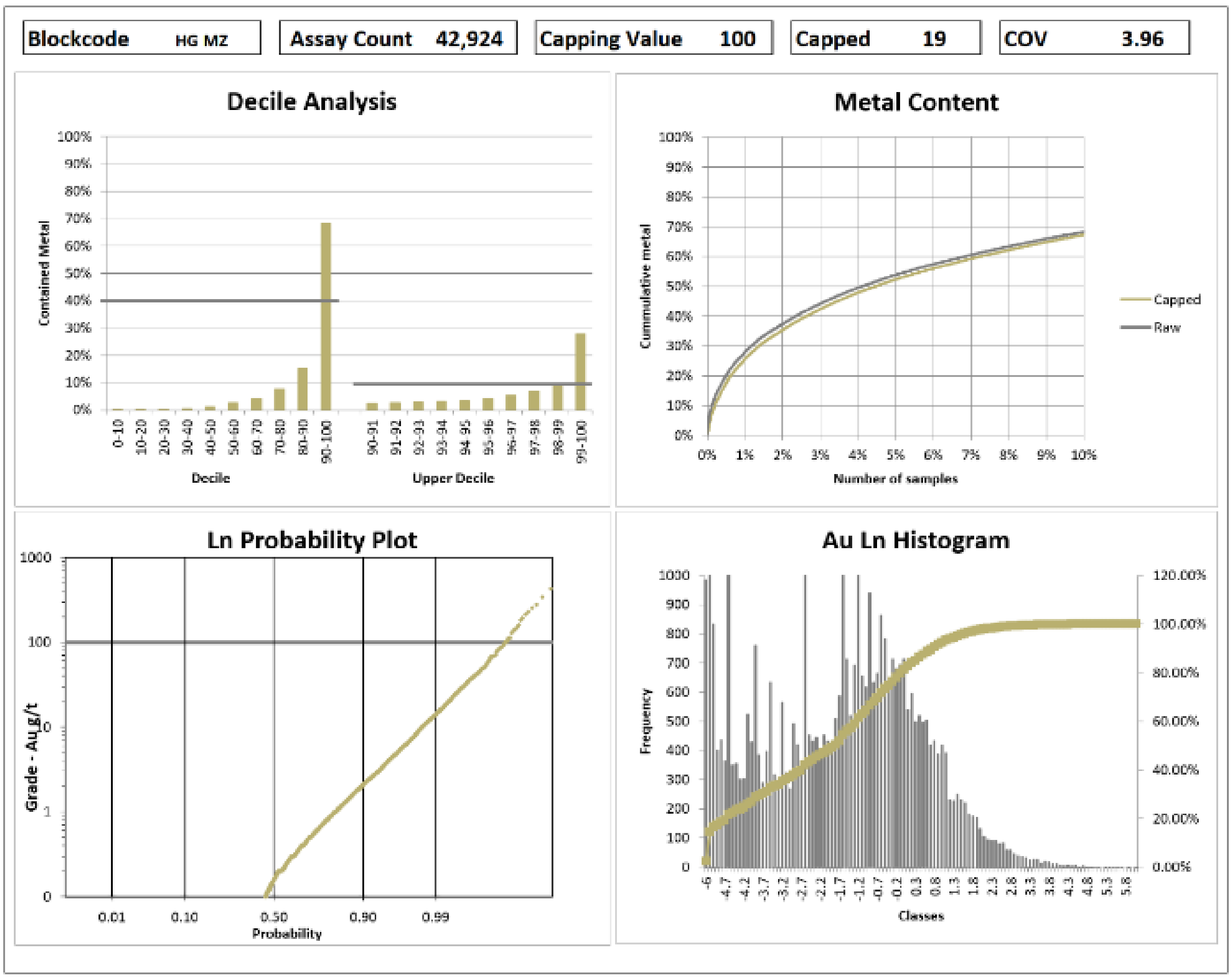
Only 19 of the 42,924 raw assays from the mineralized zones and 13 of the 80,351 raw assays from the dilution envelope were capped. Table 14-4 presents a summary of the statistical analysis.

The capping on raw assays consisted of a top cap of 100 g/t Au for the mineralized zones and a top cap of 20 g/t Au for the dilution envelope. Figure 14-4 shows graphs supporting the capping threshold decisions.

**Table 14-4: Summary Statistics for Raw Assays**

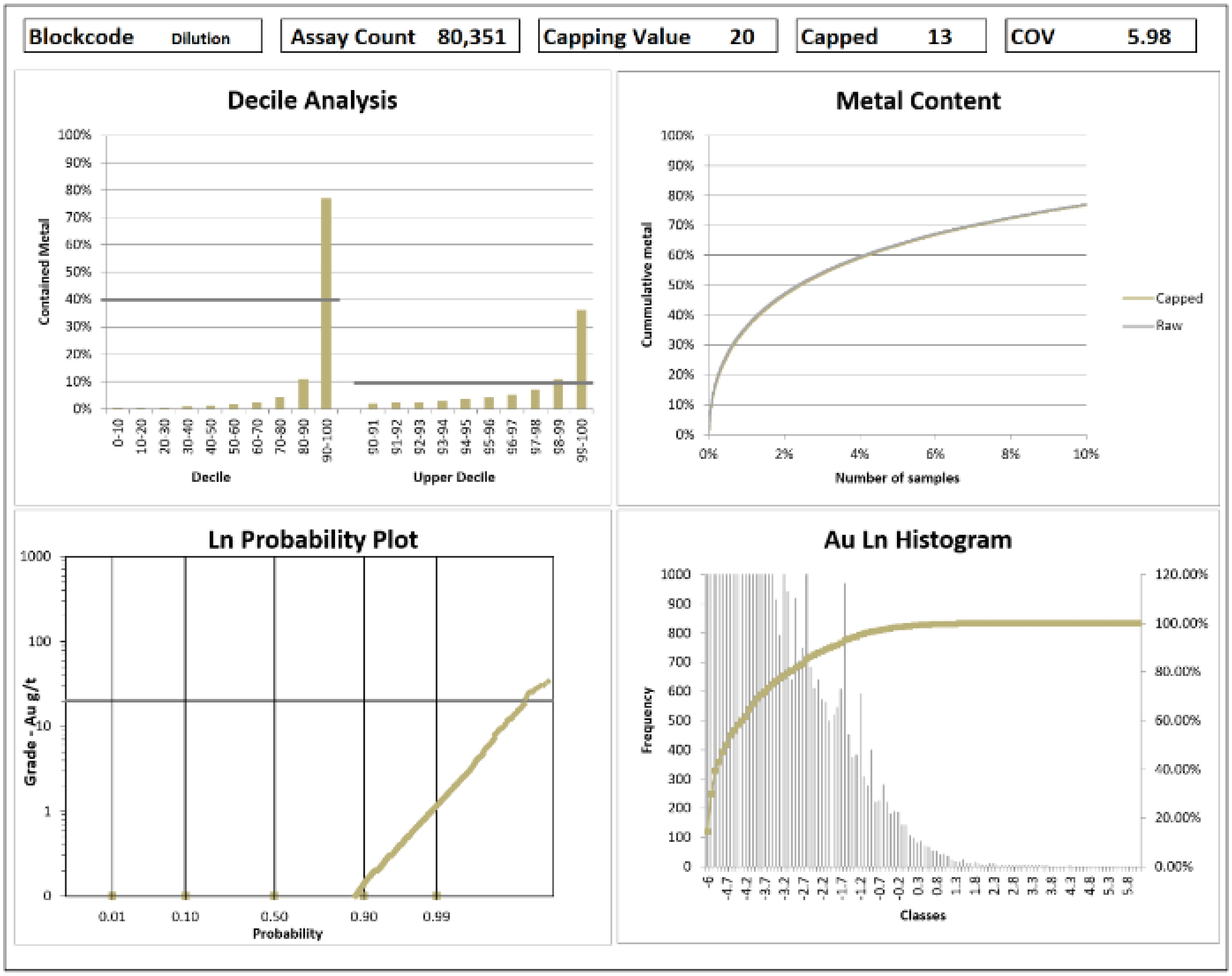
| Zone | No. of Samples | Max (Au g/t) | Uncut Mean (Au g/t) | Uncut COV | Capping (Au g/t) | No. Capped | Cut Mean (Au g/t) | Cut COV | Cut Metal Factor (%) |
|---|---|---|---|---|---|---|---|---|---|
| Mineralized Zones | 42,924 | 751.5 | 1.07 | 6.12 | 100 | 19 | 1.02 | 3.96 | 3.16 |
| Dilution Envelope | 80,351 | 68.5 | 0.08 | 7.25 | 20 | 13 | 0.08 | 5.98 | 1.23 |

**Figure 14-4: Graphs Supporting a Capping Value of 100 g/t Au for the Mineralized Zones**




Source: InnovExplo, 2023.

**Figure 14-5: Graphs Supporting a Capping Value of 100 g/t Au for the Dilution Envelope**




Source: InnovExplo, 2023.

### 14.4.2 Courvan Area

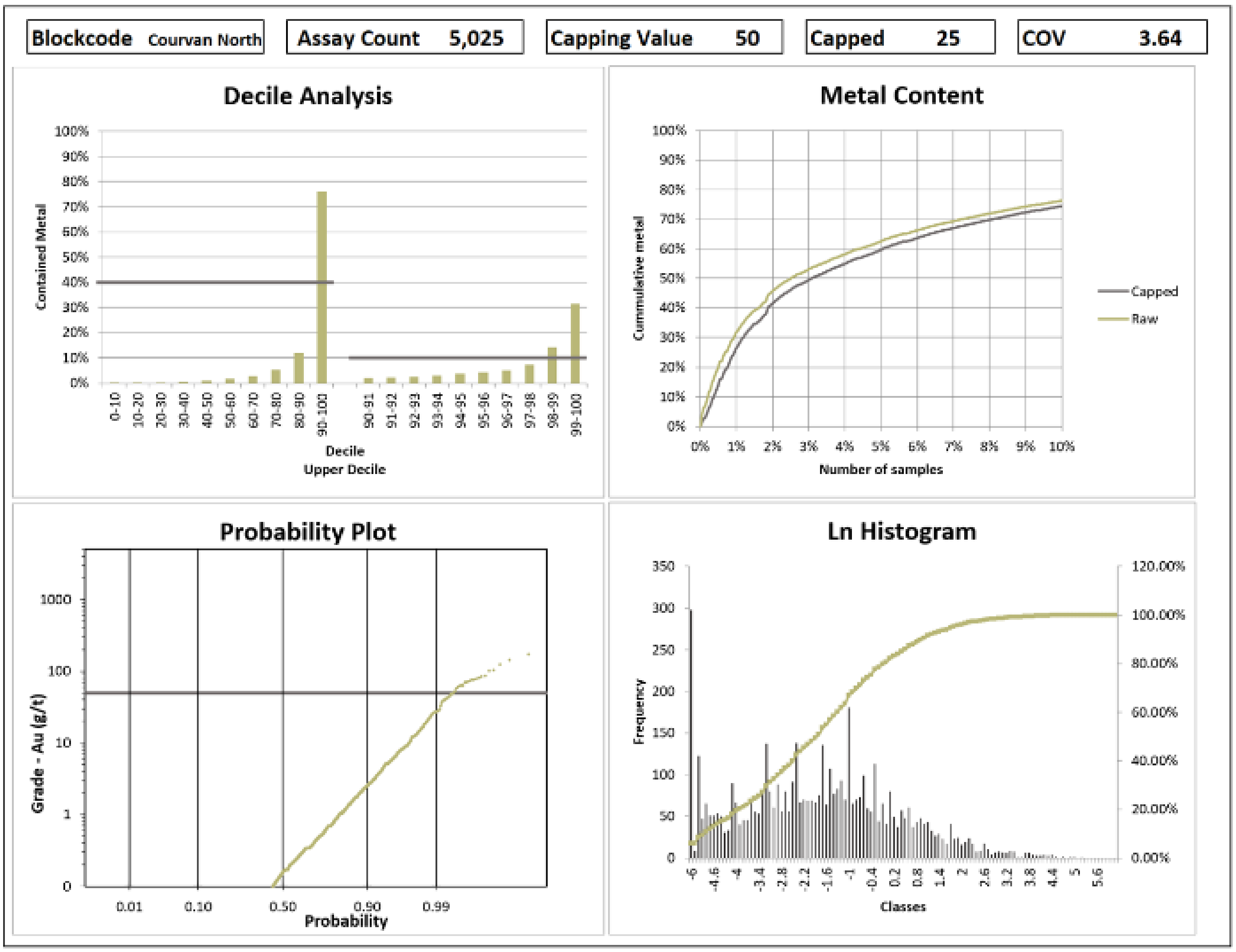
Seventy-four of the 14,452 raw assays were capped. Table 14-5 presents a summary of the statistical analysis.

The capping on raw assays consisted of a top cap of 50 g/t. Figure 14-6 and Figure 14-7 show graphs supporting the capping threshold decisions.

**Table 14-5: Summary Statistics for Raw Assays**

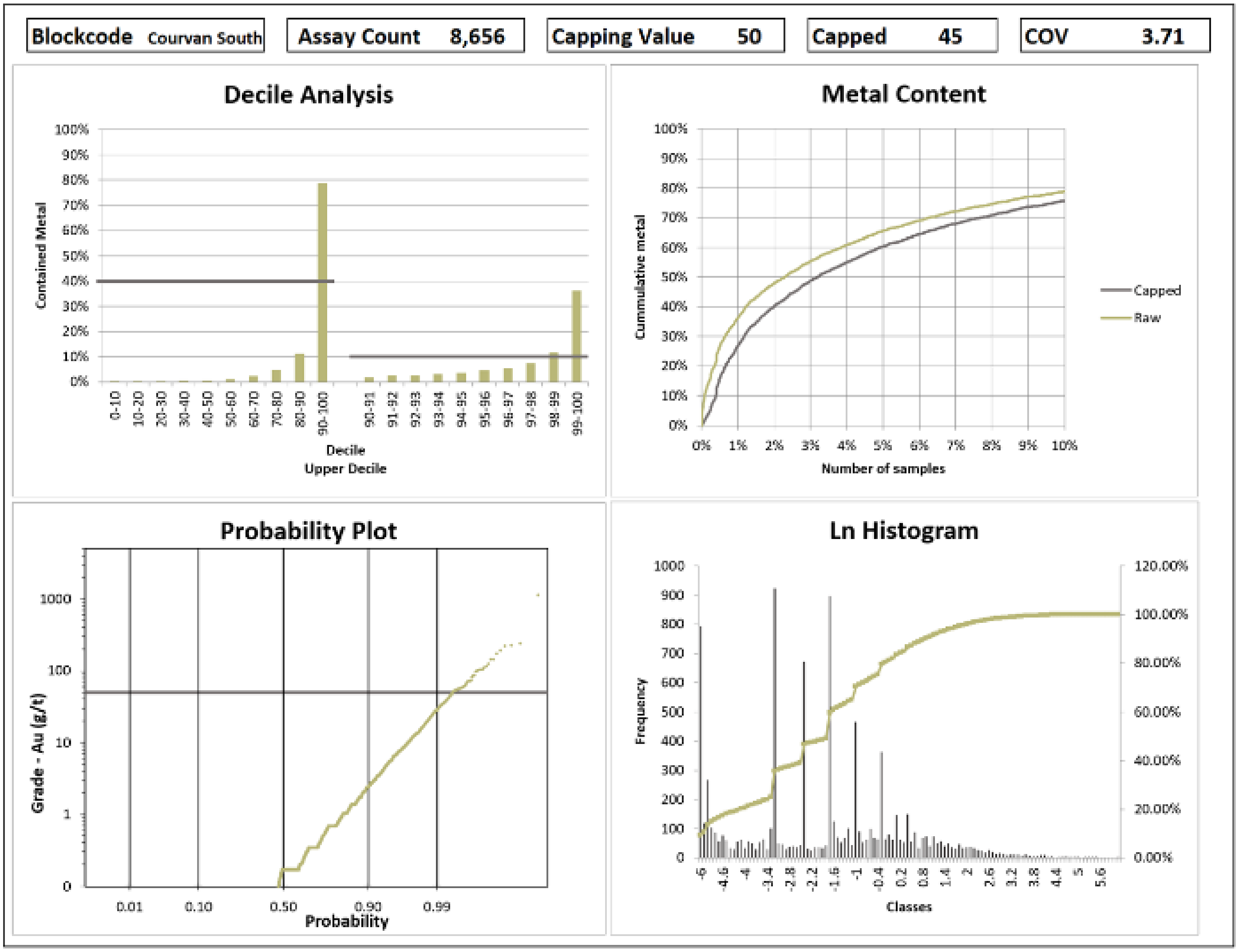
| Zone | No. of Samples | Max (Au g/t) | Uncut Mean (Au g/t) | Uncut COV | Capping (Au g/t) | No. Capped | Cut Mean (Au g/t) | Cut COV | Cut Metal Factor (%) |
|---|---|---|---|---|---|---|---|---|---|
| Courvan North (Bussiere; Creek; Bussiere Mine) | 5,025 | 171.45 | 1.53 | 4.53 | 50 | 25 | 1.39 | 3.64 | 7 |
| Courvan South (SE; SW) | 8,694 | 1,147.0 | 1.68 | 8.75 | 50 | 43 | 1.35 | 3.71 | 13 |

**Figure 14-6: Graphs Supporting a Capping Value of 50 g/t Au for the Mineralized Zones at Courvan North**




Source: InnovExplo, 2023.

**Figure 14-7: Graphs Supporting a Capping Value of 50 g/t Au for the Mineralized Zones at Courvan South**




Source: InnovExplo, 2023.

### 14.4.3 Pascalis Area

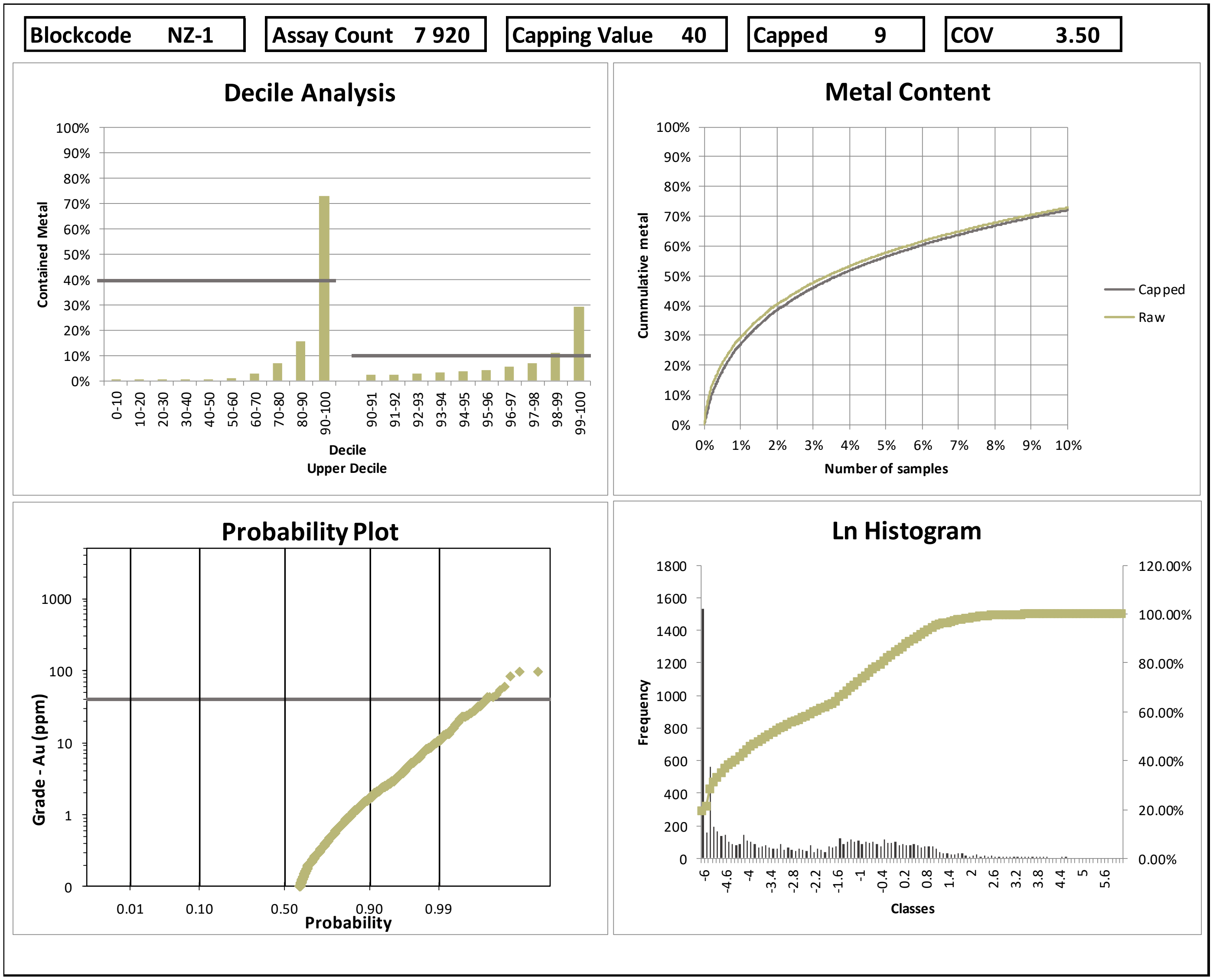
Three-hundred and seventy-four of the 179,979 raw assays were capped. Table 14-6 presents a summary of the statistical analysis.

Figure 14-8 shows NZ-1 (mineralized zones of North deposit) and Figure 14-9 shows NB-1 (mineralized zones in the northernmost part of the New Béliveau deposit) as examples of graphs supporting the capping threshold decisions.

**Table 14-6: Summary Statistics for Raw Assays (Pascalis)**

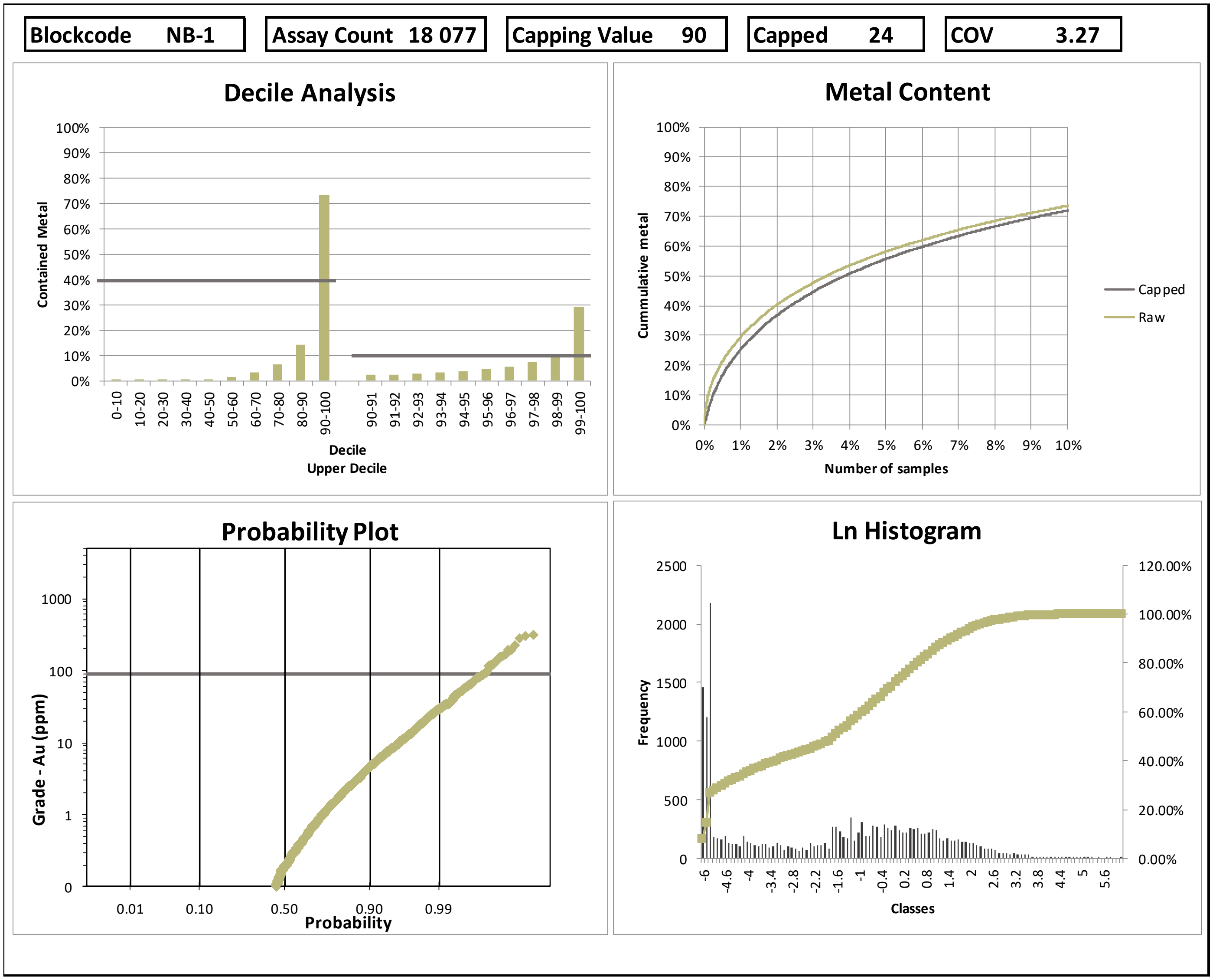
| Deposit | Grouped Mineralized Zone | No. of Sample | Max (Au g/t) | Uncut Mean (Au g/t) | Uncut COV | Capping (Au g/t) | No. Capped | Cut Mean (Au g/t) | Cut COV |
|---|---|---|---|---|---|---|---|---|---|
| North | NZ-1 | 7,920 | 96.82 | 0.65 | 4.28 | 40.00 | 9 | 0.63 | 3.50 |
| | ND_A | 5,886 | 38.28 | 0.11 | 7.20 | 10.00 | 10 | 0.10 | 5.83 |
| | ND_B | 1,244 | 4.19 | 0.05 | 4.83 | 10.00 | 0 | 0.05 | 4.83 |
| | ND_C | 712 | 1.71 | 0.03 | 4.16 | 10.00 | 0 | 0.03 | 4.16 |
| | North (Dilution) | 15,259 | 17.70 | 0.02 | 9.16 | 4.00 | 8 | 0.02 | 5.72 |
| New Béliveau | NB-1 | 18,077 | 1,121.54 | 1.86 | 5.42 | 90.00 | 24 | 1.76 | 3.27 |
| | NB-2 | 3,014 | 141.00 | 0.62 | 6.18 | 20.00 | 20 | 0.52 | 4.06 |
| | SB-1 | 3,405 | 174.76 | 0.52 | 6.92 | 20.00 | 9 | 0.44 | 3.49 |
| | SB-2 | 3,654 | 59.30 | 0.46 | 3.93 | 20.00 | 7 | 0.44 | 3.40 |
| | BE-SHR-1 | 308 | 64.83 | 0.55 | 6.03 | 10.00 | 1 | 0.43 | 3.28 |
| | BE-SHR-2 | 291 | 9.33 | 0.40 | 2.66 | 10.00 | 0 | 0.40 | 2.66 |
| | Main Dyke (Mine) | 25,450 | 567.70 | 1.99 | 4.32 | 55.00 | 114 | 1.82 | 3.10 |
| | Main Dyke (South) | 11,283 | 149.00 | 0.10 | 12.77 | 10.00 | 20 | 0.09 | 6.66 |
| | B Dyke | 10,211 | 41.84 | 0.14 | 7.48 | 10.00 | 37 | 0.12 | 5.65 |
| | WD Dyke | 1,372 | 20.00 | 0.09 | 8.69 | 10.00 | 4 | 0.08 | 7.36 |
| | New Béliveau (Dilution) | 71,893 | 159.00 | 0.05 | 16.99 | 5.00 | 111 | 0.04 | 6.49 |

**Figure 14-8: Graphs Supporting a Capping Value of 40 g/t Au for the Grouped Mineralized Zones "NZ-1" (all Mineralized Zones of the North Deposit) at Pascalis**




Source: InnovExplo, 2023.

**Figure 14-9: Graphs Supporting a Capping Value of 90 g/t Au for the Grouped Mineralized Zones "NB-1" (Northern Part of New Béliveau) at Pascalis**




Source: InnovExplo, 2023.

## 14.5 Compositing

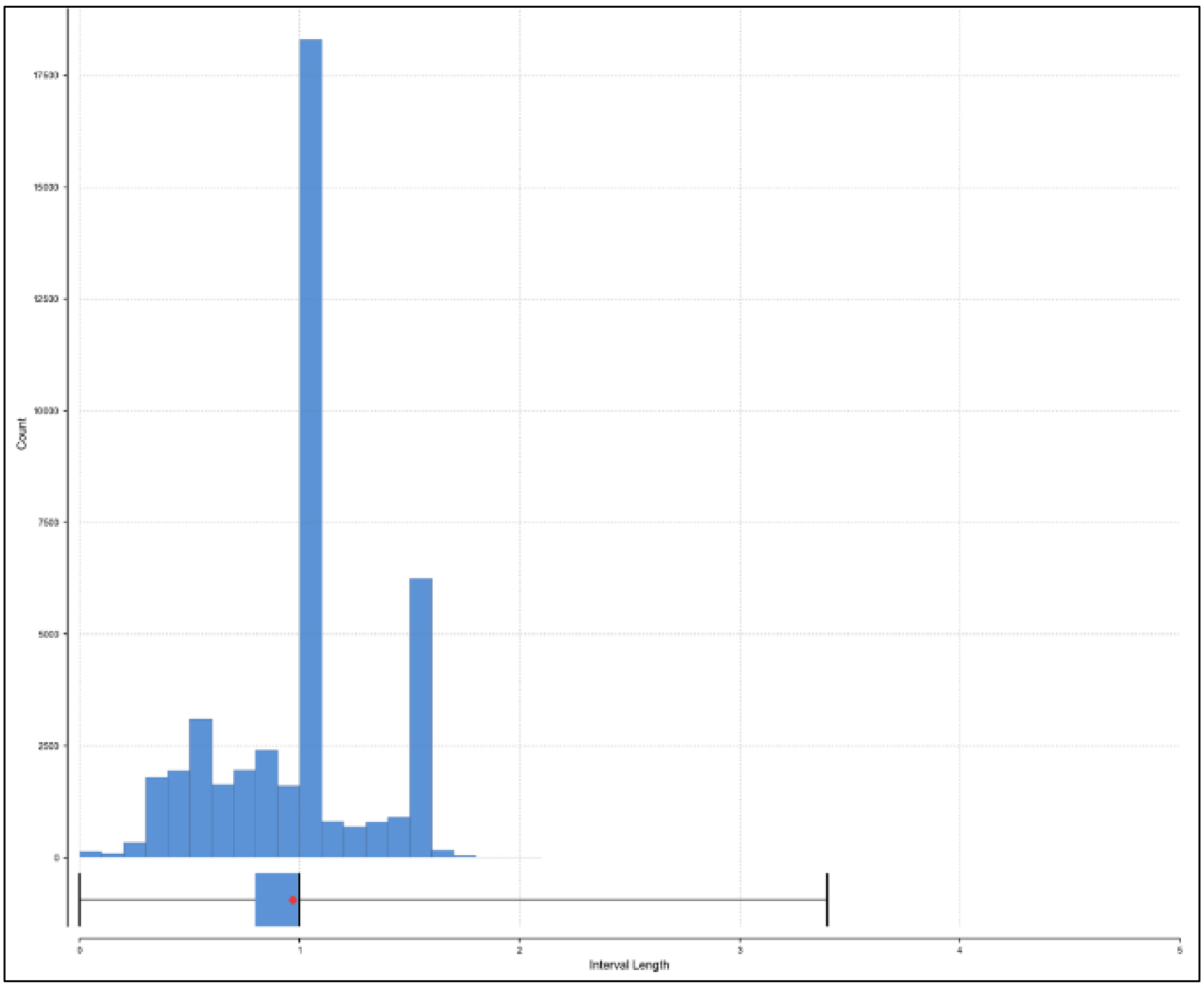
The gold assays of the DDH data were composited to equal lengths to minimize any bias introduced by variable sample lengths.

Codes were automatically attributed to DDH assay intervals intersecting the mineralized veins. Codes use the name of the corresponding 3D solid. The coded intercepts were used to analyze sample lengths and generate statistics for raw assays and composites. Table 14-7 summarizes the statistical analysis of the original (raw) assays, and Figure 14-10, Figure 14-11 and Figure 14-12 show the histograms of the sample length.

**Table 14-7: Summary Statistics for the DDH Cut Assays in the Mineralized Zones (or in the Diorite Dykes for Pascalis)**

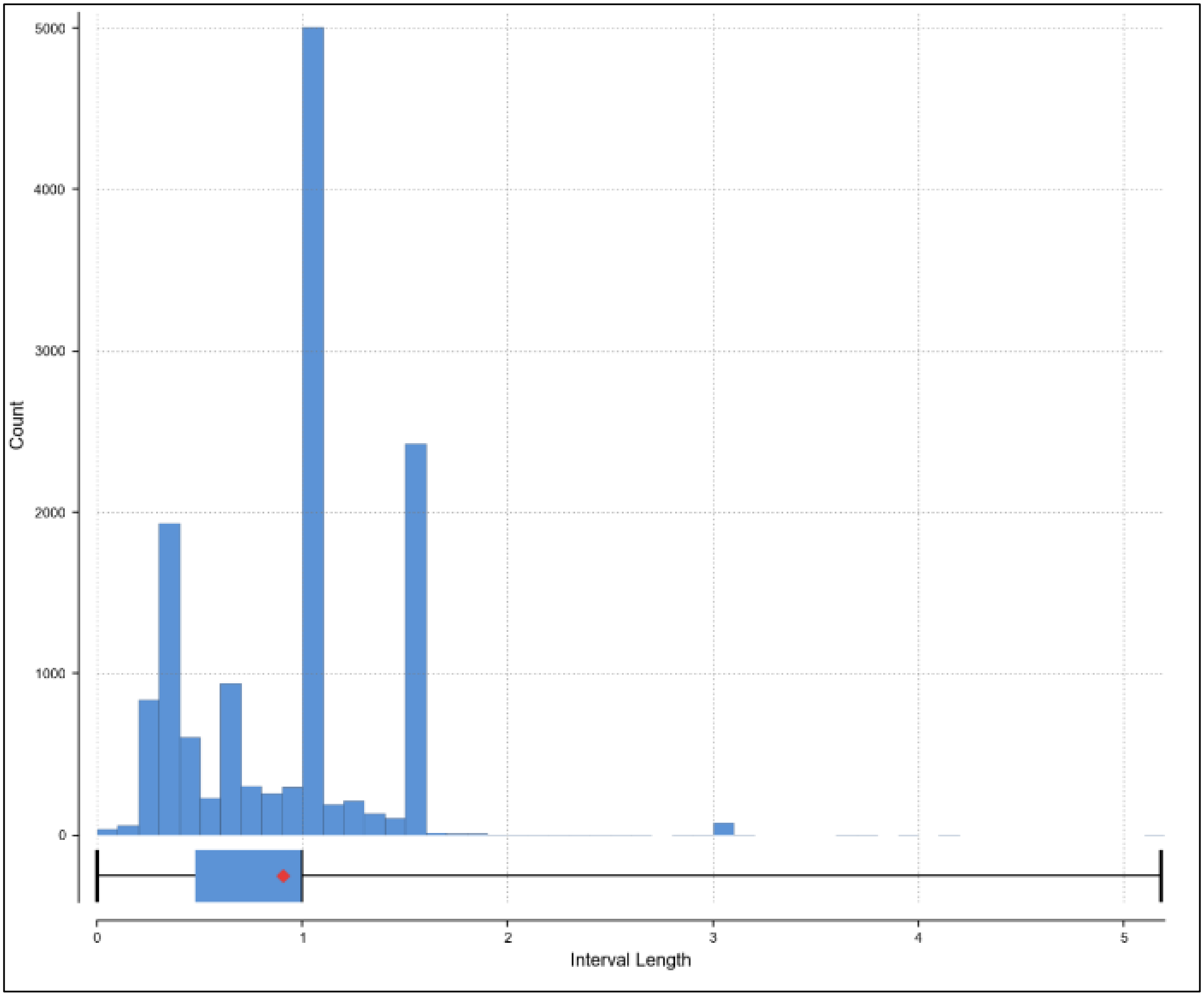
| Area | No. of Samples | Max Au Cut (g/t) | Mean Au Cut (g/t) | Standard Deviation Cut | COV Cut | Mean Sample Length (m) |
|---|---|---|---|---|---|---|
| Monique | 42,924 | 100 | 1.02 | 4.03 | 3.96 | 0.97 |
| Courvan North (Bussiere; Creek; Bussiere Mine) | 5,025 | 50 | 1.39 | 5.04 | 3.64 | 1.08 |
| Courvan South (SE; SW) | 8,694 | 50 | 1.35 | 5.01 | 3.71 | 0.8 |
| Pascalis | 92,827 | 90 | 0.94 | 4.02 | 4.30 | 1.07 |

**Figure 14-10: Histogram of Sample Lengths in Mineralized Zones in the Monique Area**



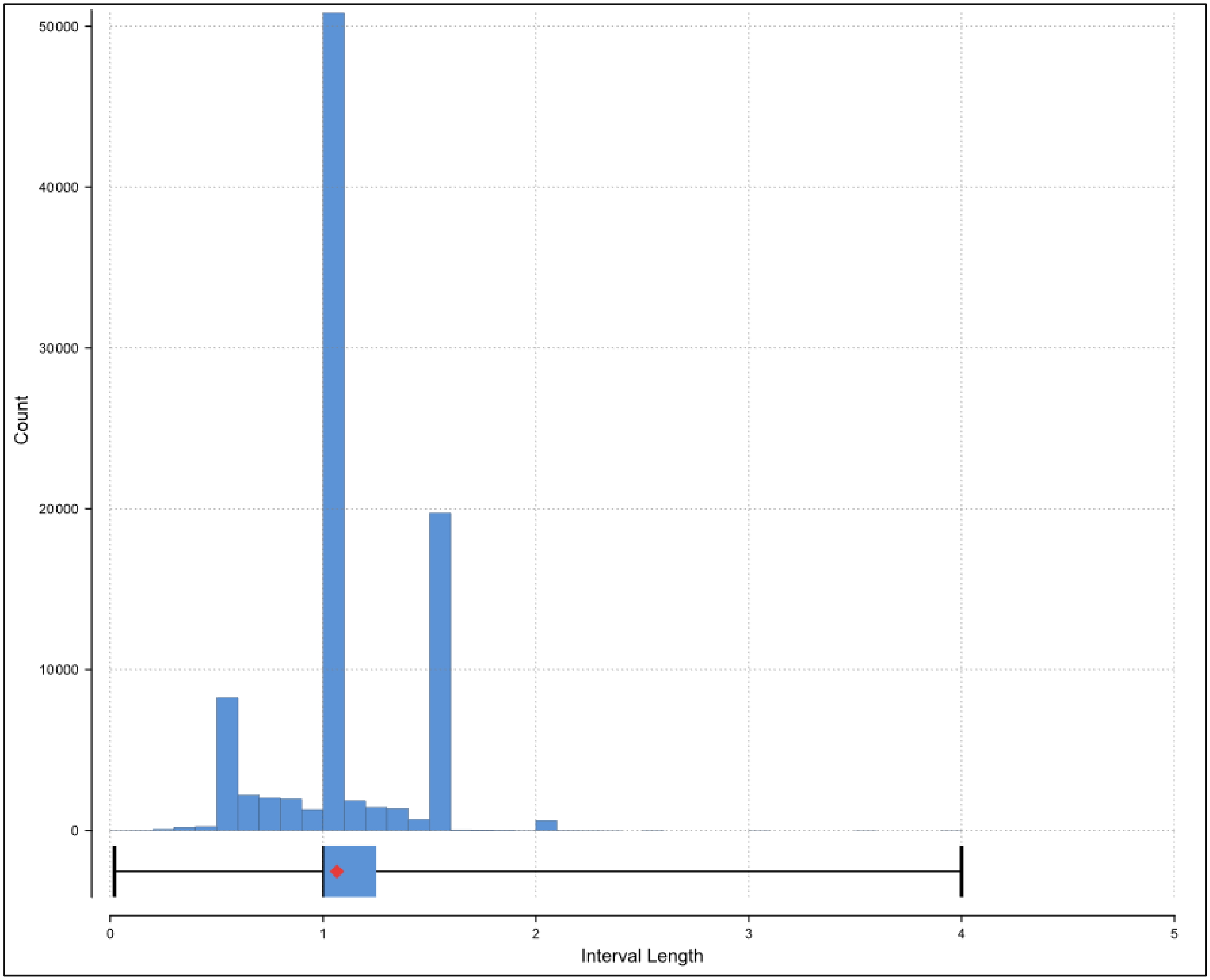

Source: InnovExplo, 2023.

**Figure 14-11: Histogram of Sample Lengths in Mineralized Zones in the Courvan Area**




Source: InnovExplo, 2023.

**Figure 14-12: Histogram of Sample Length in the Pascalis Area in Mineralized Zones or in the Diorite Dykes**




Source: InnovExplo, 2023.

Zone thickness, proposed block sizes, original sample lengths and intersect lengths were considered for the choice of the composite length, which was set at 1 m.

During the compositing process, a grade of 0.00 g/t Au was assigned to intentionally unsampled intervals.

Table 14-8 presents the summary statistics for the composites.

**Table 14-8: Summary Statistics for Composites in the Mineralized Zones (or in the Diorite Dykes for Pascalis)**

| Area | No. of Composites | Max Au Cut (g/t) | Mean Au Cut (g/t) | Standard Deviation | COV | Composite Length (m) |
|---|---|---|---|---|---|---|
| Monique | 48,098 | 100 | 0.68 | 2.47 | 3.65 | 1.0 |
| Courvan North (Bussiere; Creek; Bussiere Mine) | 7,850 | 50 | 0.80 | 3.19 | 3.99 | 1.0 |
| Courvan South (SE; SW) | 10,856 | 50 | 0.67 | 2.67 | 4.02 | 1.0 |
| Pascalis | 122,962 | 90 | 0.75 | 3.24 | 4.30 | 1.0 |

## 14.6 Density

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

### 14.6.1 Monique Area

Probe Gold performed a detailed analysis of the lithologies in the potential open pits. The Monique area was divided into two distinct geological domains, northern and southern, hosting the G-J-P and A-B-M-I mineralized zones, respectively. The company collected 100 samples from seven main lithologies (I1Z, I2J, I3A, QFP, T2, V3B and V4) across seven mineralized zones. Waste samples were collected across four lithologies (I1Z, I2J, V3B and V4) in the G-J-P potential pit and six lithologies (I1Z, I2J, I3A, QFP, T2 and V3B) in the A-B-M-I potential pit. Samples were collected across three lithologies (I2J, V3B and V4) in the G-J-P zones and three lithologies (I1Z, T2, and V3B) in the A-B-M-I zones.

Probe Gold combined the results with the 52 measurements made by Richmont in 2011 on the mineralized material and unmineralized material in V3B from the G zone. However, those measurements were not widely distributed. They were taken from only two holes (116_01 and 118_01) in continuous sections of 18 m and 27 m, respectively.

Table 14-9 presents a summary of the results. Probe Gold's statistical analysis performed on the specific gravity measurements showed no significant statistical differences between the following:

- zones for all rock types and lithologies
- rock types for all lithologies.

**Table 14-9: Specific Gravity by Lithology**

| Lithologies | Number of Measurements | Mean SG (g/cm³) | SD |
|---|---|---|---|
| I1Z/QFP | 11 | 2.807 | 0.036 |
| I2J/V4 | 22 | 2.941 | 0.038 |
| V3B/T2/I3A | 119 | 2.877 | 0.047 |

V3B is the main lithology for both mineralized and unmineralized material. It represents 60% of the unmineralized material and 75% of the mineralized material in the G-J-P potential pit and 80% of the unmineralized material and 75% of the mineralized material in the A-B-M-I potential pit. However, the averages for V3B seem to be pulled down by the overrepresentation of the Richmont samples in localized areas. When those samples are excluded, the average specific gravity for V3B/T2/I3A is 2.895 g/cm$^3$.

The second main lithology is V4, representing 30% of the unmineralized material and 20% of the mineralized material in the G-J-P potential pit.

The lowest density group (I1Z/QFP) only represents 2% of the unmineralized material in the G-J-P zones and 6% of the unmineralized material and 20% of the mineralized material in the A-B-M-I zones.

The QP used an average specific gravity of 2.88 g/cm$^3$. Overburden was assigned a bulk density of 2.00 g/cm$^3$.

### 14.6.2 Courvan Area

Probe Gold performed a detailed analysis of the lithologies in the potential open pits. The Courvan area was divided into three distinct geological domains, South, Bussiere and Creek. The company collected 107 samples from six main lithologies (I1C, I1F, I2J, I2R, I4I and V3B) for specific gravity measurements.

Table 14-10 presents a summary of the results.

The average specific gravity was assigned by lithologies based on those results. Overburden was assigned a bulk density of 2.00 g/cm$^3$. Mined-out voids in the former Bussiere mine were assigned a bulk density of 1.00 g/cm$^3$.

**Table 14-10: Specific Gravity by Lithology**

| Lithologies | Number of Measurements | Mean SG (g/cm$^3$) | SD |
|---|---|---|---|
| I1/I1C/I1F/I2J/I2R | 98 | 2.816 | 0.046 |
| I4I | 5 | 2.900 | 0.037 |
| V3B | 4 | 2.840 | 0.024 |

### 14.6.3 Pascalis Area

Probe Gold performed an analysis of the lithologies of the Pascalis area. The company collected 135 samples grouped into three lithologies (agglomerate sediments and basalts, diorite dykes associated with mineralization and diorite dykes not associated with mineralization) for specific gravity measurements using a pycnometer. They were taken from only six holes.

Table 14-11 presents a summary of the results.

An average specific gravity of 2.83 g/cm$^3$ was assigned to the bedrock based on those results. Overburden was assigned a bulk density of 2.00 g/cm$^3$. Historical underground infrastructures and mined outs at the former L.C. Béliveau mine were assigned a bulk density of 0.01 g/cm$^3$.

**Table 14-11: Specific Gravity by Lithology (Pascalis Area)**

| Lithologies | Number of Measurements | Mean SG (g/cm³) | SD |
|---|---|---|---|
| Agglomerate Sediments and Basalts | 107 | 2.842 | 0.065 |
| Diorite Dykes (Within Mineralization) | 13 | 2.772 | 0.042 |
| Diorite Dykes (Outside the Bulk of Mineralization | 15 | 2.824 | 0.041 |

## 14.7 Block Model

The models correspond to sub-block models in Surpac without rotation for the Monique area and to sub-block models in Leapfrog Edge without rotation for the Courvan and Pascalis areas. Mineralized zones, dykes, the overburden, and historical underground infrastructures were used as sub-blocking triggers.

Block dimensions reflect the sizes of mineralized zones and plausible mining methods.

Table 14-12 presents the properties of the block models.

**Table 14-12: Block Model Properties**

| Area | Properties | X (Columns) | Y (Columns) | Z (Columns) |
|---|---|---|---|---|
| Monique | Minimum Coordinates (m) | 317,050 | 5,331,000 | -500 |
| | Maximum Coordinates (m) | 320,002 | 5,332,752 | 448 |
| | User Block Size (m) | 6 | 6 | 6 |
| | Minimum Block Size (m) | 1.5 | 1.5 | 1.5 |
| | Rotation | 0° | | |
| Courvan South | Minimum Coordinates (m) | 309,500 | 5,332,800 | -100 |
| | Maximum Coordinates (m) | 311,500 | 5,334,400 | 400 |
| | User Block Size (m) | 4 | 4 | 4 |
| | Minimum Block Size (m) | 1 | 1 | 1 |
| | Rotation | 0° | | |
| Courvan North | Minimum Coordinates (m) | 309,800 | 5,333,800 | -550 |
| | Maximum Coordinates (m) | 311,700 | 5,336,500 | 350 |
| | User Block Size (m) | 4 | 4 | 4 |
| | Minimum Block Size (m) | 1 | 1 | 1 |
| | Rotation | | | 0° |
| Pascalis | Minimum Coordinates (m) | 311,500 | 5,333,500 | -750 |
| | Maximum Coordinates (m) | 313,952 | 5,336,020 | 350 |
| | User Block Size (m) | 4 | 4 | 4 |
| | Minimum Block Size (m) | 1 | 1 | 1 |
| | Rotation | 0° | | |

## 14.8 Variography and Search Ellipsoids

Three-dimensional directional variography was carried out in Snowden Supervisor on composites of capped assay data. The variography study was performed individually on mineralized zones containing at least 1,000 composites.

In combination with a strong geological understanding of the deposit, the main steps in the variography process were to:

- examine the strike, dip and dip plane of the mineralized domains to define the direction and plunge of the best continuity in the mineralization
- estimate the nugget effect (C0) based on the downhole variogram
- model the major, semi-major and minor axes of continuity.

The mineralized zones were grouped based on the results of the variography study, the zone orientations and their lithologies. The results for the most populated zones were then applied to all the zones in their respective group.

The search ellipsoid was based on the variography study. The interpolation strategy counts three cumulative passes. For the Monique area, the first and second passes correspond to x1 the variography ranges, and the third pass x2 the variography ranges. For the Courvan area, the first pass corresponds to x2/3 the variography ranges, the second x1 the variography ranges and the third pass x2 the variography ranges. For the Pascalis area, the first pass corresponds to x1/2 the variography ranges, the second x1 the variography ranges and the third pass x2 the variography ranges.

For the Courvan area, dynamic anisotropy was used to adjust the search ellipsoids to fit each domain's mean orientation (azimuth and dip) to reflect the variation in the orientation of the mineralized domains.

Tables 14-13 and 14-14 summarize the parameters of the ellipsoid used for interpolation. Figures 14-13 to 14-16 show the ellipsoids and the zone wireframes for each area.

**Table 14-13: Variogram Model Parameters**

| Area | Group | Grouped Mineralized Domain | Variogram Components | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Nugget Effect (C0) | Structure - Spherical | | | | | |
| | | | | Range | | | Orientation (Surpac) | | |
| | | | | X (m) | Y (m) | Z (m) | Z | X | Y |
| Monique | 1 | J, E2, E4, Q, G, P, K, S, T, WM1, WM2 | 0.4 | 80 | 40 | 20 | 89 | -68 | 63 |
| | 2 | A, A1, A2, A5, B, B1, E1, E3, WM3, WM4 | 0.15 | 90 | 80 | 20 | 190 | 75 | 0 |
| | 3 | I, I_FW, M, M_FW, M_FW_East, M_North, M_South | 0.4 | 70 | 50 | 20 | 76 | -57 | 62 |
| Courvan South | Dip North | SW002; SW016; SW017; SW018; SW019; SW020; SW021; SW022; SW024 | 0.1 | 65 | 50 | 10 | 170 | 30 | 0 |
| | Dip South | Other mineralized domains | 0.2 | 60 | 60 | 10 | 340 | 10 | 2 |

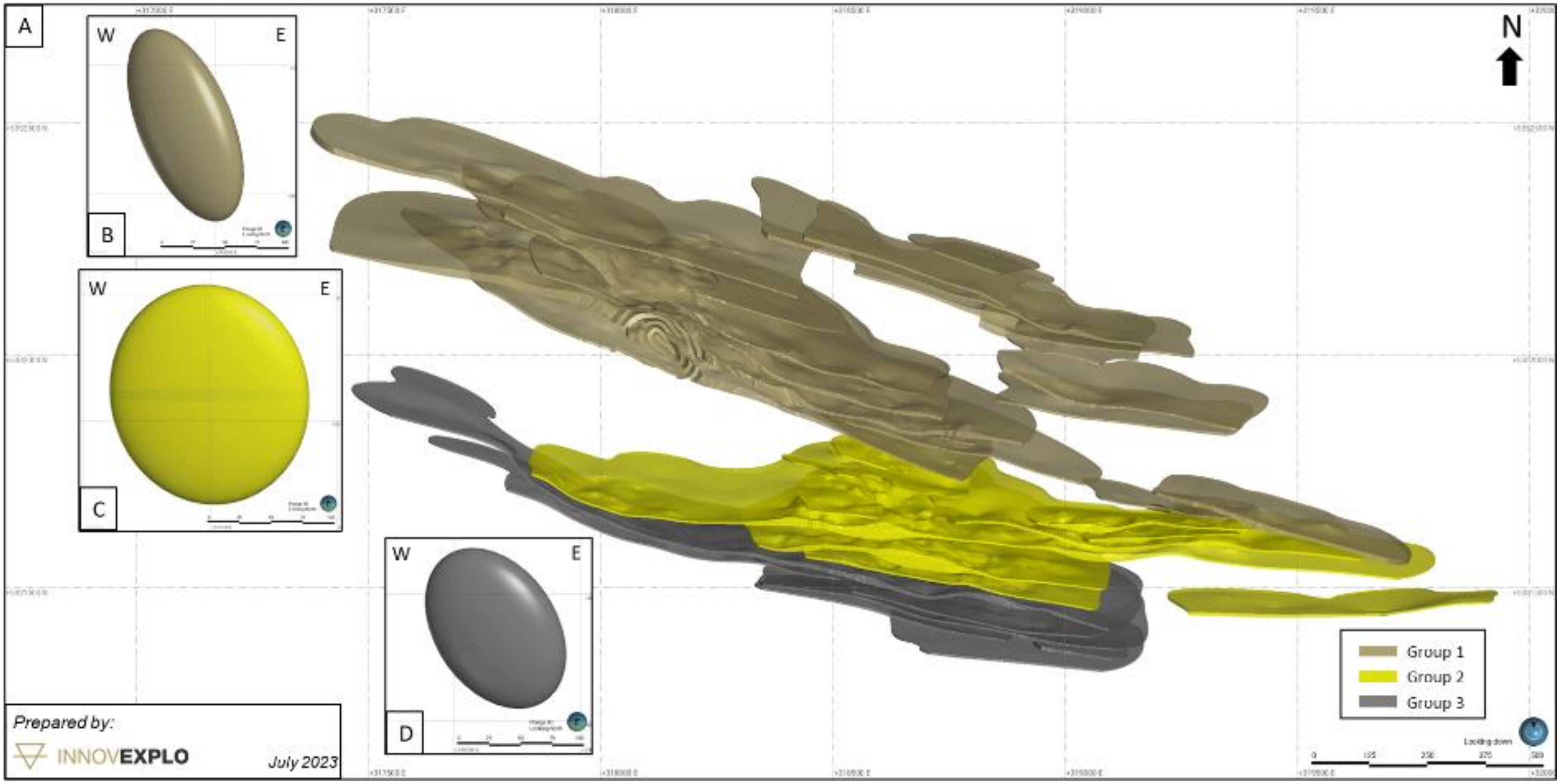
| Area | Group | Grouped Mineralized Domain | Variogram Components | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Nugget Effect (C0) | Structure - Spherical | | | | | |
| | | | | Range | | | Orientation (Surpac) | | |
| | | | | X (m) | Y (m) | Z (m) | Z | X | Y |
| Courvan North | 1 | Bussiere mine | 0.3 | 50 | 50 | 15 | 113 | 15 | 13 |
| | 2 | Creek; Bussiere | 0.3 | 75 | 75 | 15 | 104 | 26 | 24 |

**Table 14-14: Variogram Model Parameters (Pascalis Area)**

| Area | Group | Grouped Mineralized Domain | Variogram Components | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Nugget Effect (C0) | Structure - Spherical | | | | | |
| | | | | Range | | | Orientation (Edge) | | |
| | | | | X (m) | Y (m) | Z (m) | Z | X | Z |
| Pascalis | NZ-1 | NZ-P3, NZ-P2, NZ-P1, NZ-P, NZ-O, NZ-N1, NZ-N2, NZ-N, NZ-M, NZ-L, NZ-K, NZ-J, NZ-I, NZ-H, NZ-G, NZ-F, NZ-E, NZ-D, NZ-C, NZ-B, NZ-A1, NZ-A, N-17, N-15, N-15A, N-08, N-07, N-06, N-05, N-04 | 0.375 | 50 | 75 | 20 | 25 | 160 | 70 |
| | ND-A | ND-A | 0.247 | 50 | 35 | 20 | 25 | 135 | 94 |
| | ND-B | ND-B | 0.239 | 65 | 30 | 15 | 25 | 140 | 94 |
| | ND-C | ND-C | 0.229 | 75 | 35 | 30 | 30 | 140 | 86 |
| | North Dilution | North Dilution | 0.262 | 70 | 65 | 25 | 25 | 130 | 104 |
| | NB-1 | BE-12, BE-13, BE-14, BE-15, BE-16, BE-17, BE-35, BE-37, BE-45, BE-46, SZ-U, SZ-T, SZ-S, SZ-R, SZ-Q, SZ-P, SZ-O, SZ-N, SZ-M, SZ-M1, SZ-L, SZ-L1, SZ-K, SZ-J, SZ-I, SZ-H, SZ-G, SZ-F, SZ-E, SZ-D, SZ-C, SZ-B, SZ-A, NB-Z1, NB-Z, NB-Y, NB-X, NB-W, NB-V, NB-U, NB-T, NB-S, NB-R, NB-Q1, NB-Q, NB-P1, NB-P, NB-O, NB-N, NB-M, NB-L, NB-K, NB-J, NB-I, NB-H, NB-G, NB-F, NB-E, NB-D, NB-C, NB-B, NB-A4, NB-A3, NB-A2, NB-A1, NB-A | 0.366 | 60 | 45 | 20 | 31 | 185 | 70 |
| | NB-2, SB-1, SB-2 | BE-36, BE-12, BE-13, BE-14, BE-15, BE-16, BE-17, BE-35, BE-37, BE-45, BE-46, SZ-U, SZ-T, SZ-S, SZ-R, SZ-Q, SZ-P, SZ-O, SZ-N, SZ-M, SZ-M1, SZ-L, SZ-L1, SZ-K, SZ-J, SZ-I, SZ-H, SZ-G, SZ-F, SZ-E, SZ-D, SZ-C, SZ-B, SZ-A, NB-Z1, NB-Z, NB-Y, NB-X, NB-W, NB-V, NB-U, NB-T, NB-S, NB-R, NB-Q1, NB-Q | 0.282 | 65 | 55 | 20 | 26 | 180 | 80 |
| | BE-SHR | BE-32, BE-34 | 0.263 | 40 | 25 | 20 | 90 | 0 | 70 |
| | Bel-Main | Bel-Main Dyke | 0.204 | 55 | 30 | 25 | 26 | 165 | 92 |

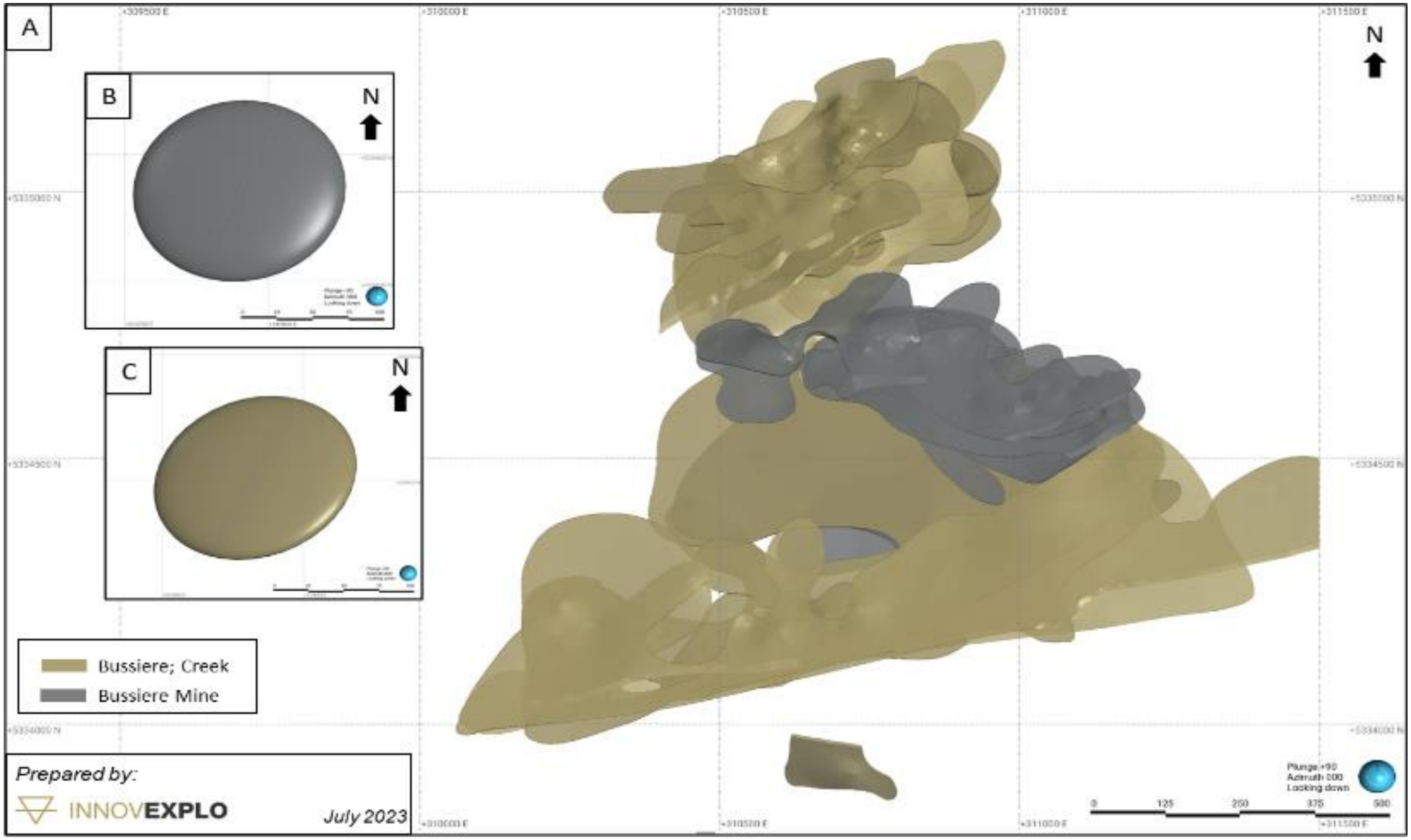
| Area | Group | Grouped Mineralized Domain | Variogram Components | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Nugget Effect (C0) | Structure - Spherical | | | | | |
| | | | | Range | | | Orientation (Edge) | | |
| | | | | X (m) | Y (m) | Z (m) | Z | X | Z |
| | Dyke | | | | | | | | |
| | Bel-WD Dyke | Bel-WD Dyke | 0.283 | 70 | 35 | 30 | 31 | 170 | 92 |
| | Bel-B Dyke | Bel-B Dyke | 0.242 | 75 | 40 | 30 | 31 | 165 | 96 |
| | Béliveau Dilution | Béliveau Dilution | 0.204 | 60 | 50 | 20 | 25 | 130 | 104 |

**Figure 14-13: Zone Wireframes and Search Ellipsoids, Monique Area**




Notes: A. Plan view, zone wireframes. B. Longitudinal view, looking north, search ellipsoid for group 1. C. Longitudinal view, looking north, search ellipsoid for group 2. D. Longitudinal view, looking north, search ellipsoid for group 3. Source: InnovExplo, 2023.

**Figure 14-14: Zone Wireframes and Search Ellipsoids, Courvan North Area**

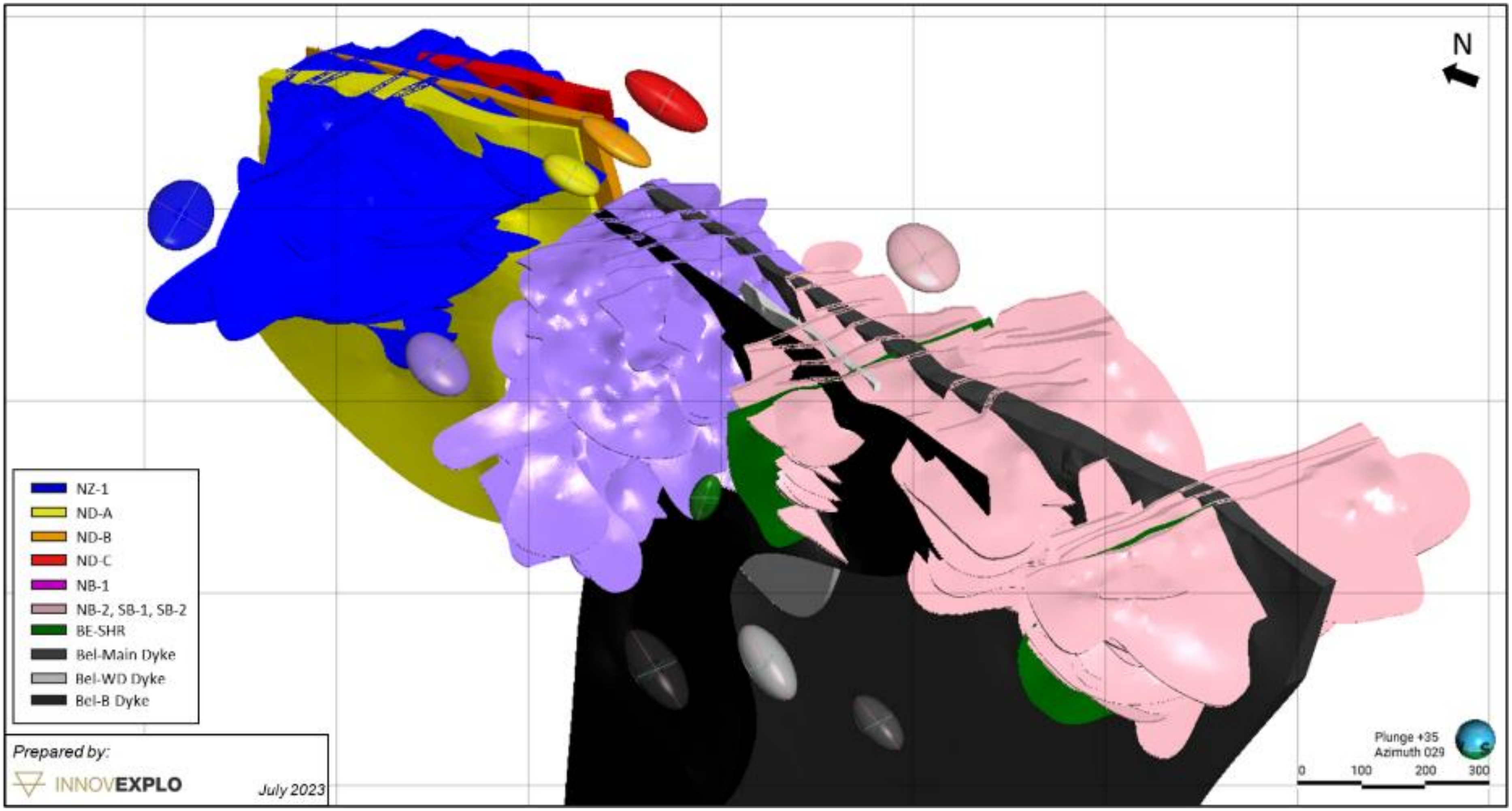



Notes: A. Plan view, zone wireframes. B. Plan view, search ellipsoid for Bussiere Mine mineralized domains. C. Plan view, search ellipsoid for Bussiere and Creek mineralized domains. Source: InnovExplo, 2023.

**Figure 14-15: Zone Wireframes and Search Ellipsoids, Courvan South Area**


Notes: A. 3D view, zone wireframes. B. Plan view, search ellipsoid for mineralized domains dipping south. C. Plan view, search ellipsoid for mineralized domains dipping north. Source: InnovExplo, 2023.

**Figure 14-16: Zone Wireframes and Search Ellipsoids (1.0x Variography), Pascalis Area**




Source: InnovExplo, 2023.

## 14.9 Grade Interpolation

### 14.9.1 Mineralized Domains

The variography study provided the parameters for interpolating the grade model using capped composites. The interpolation was run on point area workspaces extracted from the composite datasets (flagged by domain). A cumulative three-pass search was used for the resource estimate. The interpolation profiles were applied to each mineralized domain using hard boundaries to prevent block grades from being estimated using sample points with different block codes other than the block being estimated.

Several models were produced using the nearest neighbour (NN), inverse distance squared ($ID^2$) and ordinary kriging (OK) methods to choose the one that best honoured the raw assays and composite grade distribution. Models were compared visually (in section, plan and longitudinal), statistically and with swath plots. Considering the mineralization style and the morphology of the domains, the aim was to limit the smoothing effect to preserve local grade variations while avoiding smearing high-grade values.

$ID^2$ was selected for the final resource estimate. The strategy and parameters used for the grade estimation are summarized in Table 14-15.

**Table 14-15: Interpolation Strategy**

| Area | Pass | Search Ranges | Number of Composites | | |
|---|---|---|---|---|---|
| | | | Minimum | Maximum | Max per Drill Hole |
| Monique | 1 | 1.00x Variography | 5 | 12 | 2 |
| | 2 | 1.00x Variography | 3 | 12 | 2 |
| | 3 | 1.50x Variography | 2 | 12 | - |
| Courvan | 1 | 0.66x Variography | 4 | 12 | 3 |
| | 2 | 1.00x Variography | 4 | 12 | 3 |
| | 3 | 1.50x Variography | 3 | 12 | - |
| Pascalis | 1 | 0.50x Variography | 4 | 12 | 3 |
| | 2 | 1.00x Variography | 4 | 12 | 3 |
| | 3 | 1.50x Variography | 3 | 12 | 3 |

### 14.9.2 Dilution Envelope

Grades located between the mineralized domains were interpolated using the same parameters than the adjacent domains. To prevent the smearing of high grades in those unconstrained domains, for the Courvan area, only the first pass was interpolated at the Courvan area and, for the Monique area, only the first and second pass were interpolated.

For the Pascalis area, a three-pass approach, using the same parameters than the adjacent domains, was completed inside the dilution domains. To reduce the smearing of high grades, a restricted search approach was used. For the first pass, values were capped to the half of the capping value (4 g/t for the North deposit and 5 g/t for the New Béliveau deposit) if they were beyond 50.0% of the search ranges. For the second pass, values were capped to the half of the capping value if they were beyond 25.0% of the search ranges. Finally, for the third pass, values were capped to the half of the capping value if they were beyond 12.5% of the search ranges.

## 14.10 Block Model Validation

The block model was validated visually and statistically.

A visual comparison between block model grades, composite grades and gold assays was conducted on sections, plans and longitudinal views for both densely and sparsely drilled areas. No significant differences were observed during the comparison. It generally provided a good match in grade distribution without excessive smoothing in the block models. The visual validation confirmed that the block model honours the drill hole composite data (Figures 14-17 to 14-19 on the following pages).

As previously stated, several models were produced using NN, $ID^2$ and OK methods to check the local bias of every method. Table 14-16 presents the results of the statistical comparison.

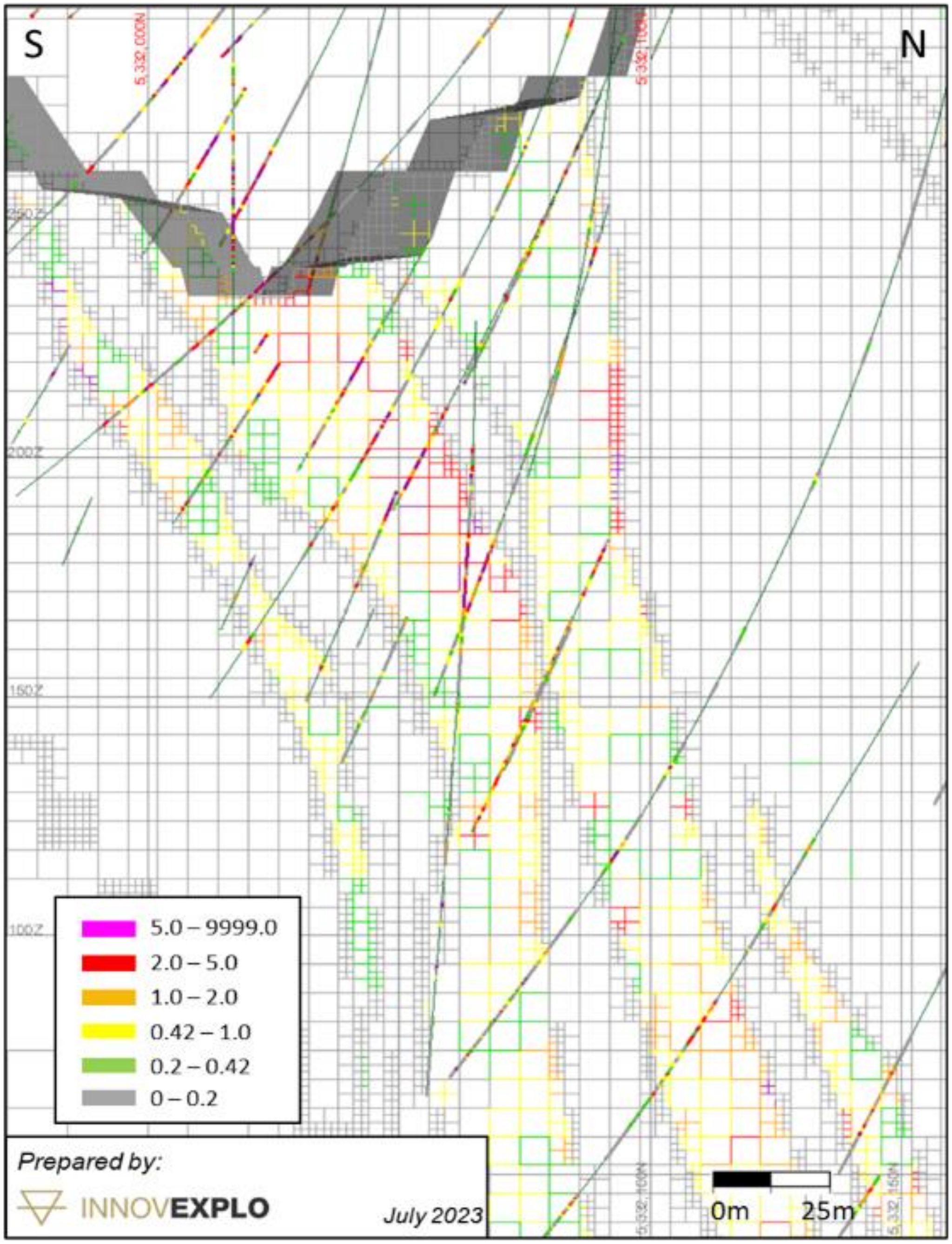
**Table 14-16: Statistical Comparison of Composite to Block Model for Different Interpolation Methods**

| Area | Deposit | Parameter | Composite (Declustered Mean) | Interpolation | | |
|---|---|---|---|---|---|---|
| | | | | $ID^2$ (Au g/t) | OK (Au g/t) | NN (Au g/t) |
| Monique | Monique | Mean (Au g/t) | 0.69 | 0.65 | 0.66 | 0.69 |
| | | COV | 3.66 | 1.76 | 1.76 | 3.89 |
| Courvan North | Bussiere mine | Mean (Au g/t) | 0.68 | 0.6 | 0.61 | 0.6 |
| | | COV | 4.22 | 2.1 | 1.88 | 4.09 |
| | Bussiere | Mean (Au g/t) | 0.47 | 0.49 | 0.49 | 0.46 |
| | | COV | 4.15 | 2.15 | 1.98 | 4.19 |
| | Creek | Mean (Au g/t) | 1.19 | 1.37 | 1.42 | 1.43 |
| | | COV | 3.38 | 1.71 | 1.55 | 3.26 |
| Courvan South | SE and SW | Mean (Au g/t) | 0.66 | 0.63 | 0.65 | 0.70 |
| | | COV | 4.05 | 2.01 | 2.07 | 3.99 |
| Pascalis | North | Mean (Au g/t) | 0.31 | 0.34 | 0.37 | 0.34 |
| | | COV | 4.43 | 2.26 | 1.93 | 4.23 |
| | New Béliveau | Mean (Au g/t) | 0.49 | 0.54 | 0.55 | 0.55 |
| | | COV | 5.20 | 2.52 | 2.23 | 4.92 |

Note: Blocks classified as measured, indicated and inferred mineral resources, dilution envelop blocks excluded.

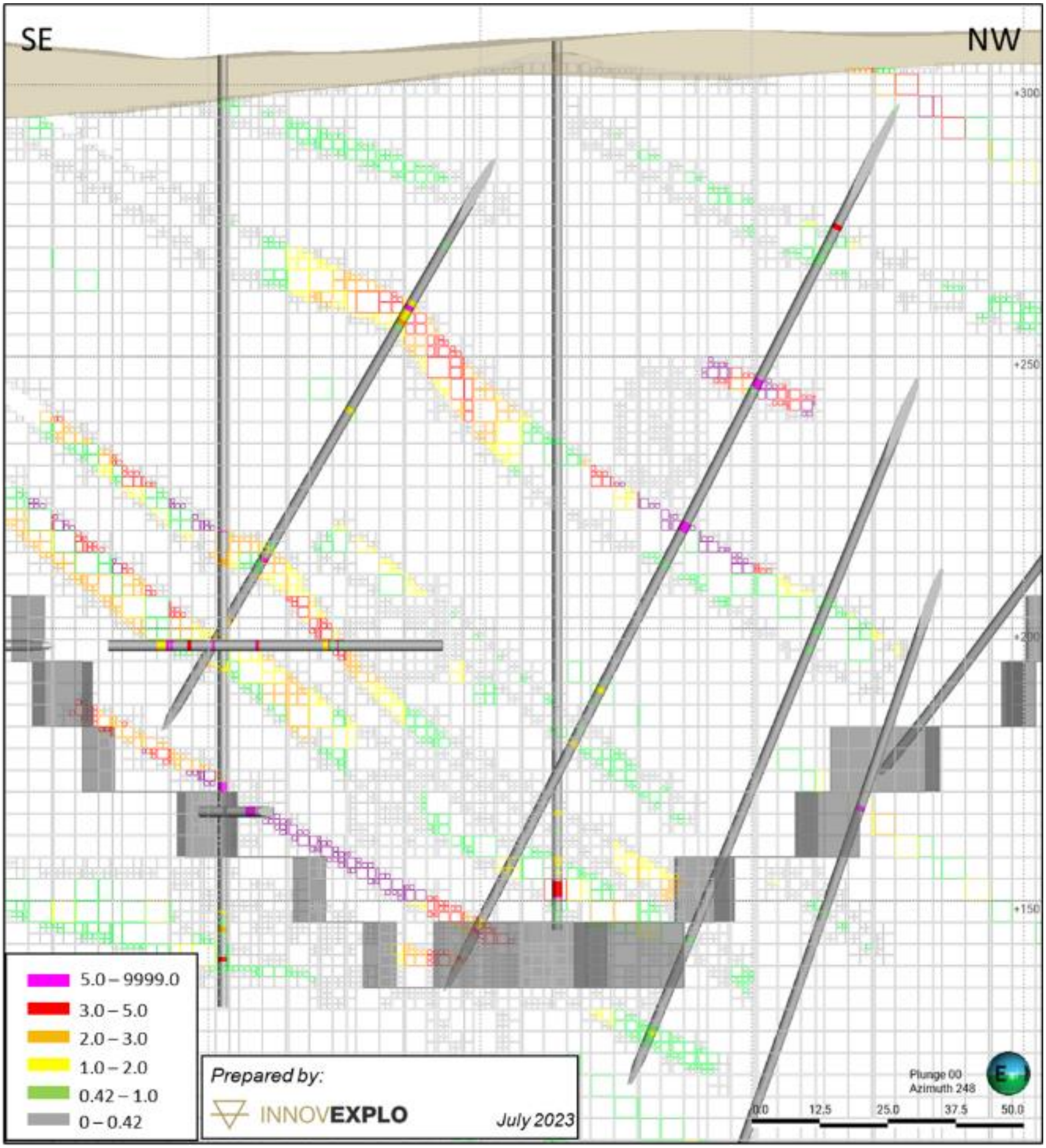
The trend and local variation of the estimated models were also compared to the composites in the three directions of the swath plots (north, east and elevation) for blocks estimated during the first and second passes. The swath plots show an acceptable amount of smoothing in the grade distribution for each method (Figure 14-20 for the Monique deposit and Figure 14-21 for the New Béliveau deposit as examples).

**Figure 14-17: Comparing Drill Hole Assays and Block Model Grade Values at the Monique Deposit (Section View; Looking West)**



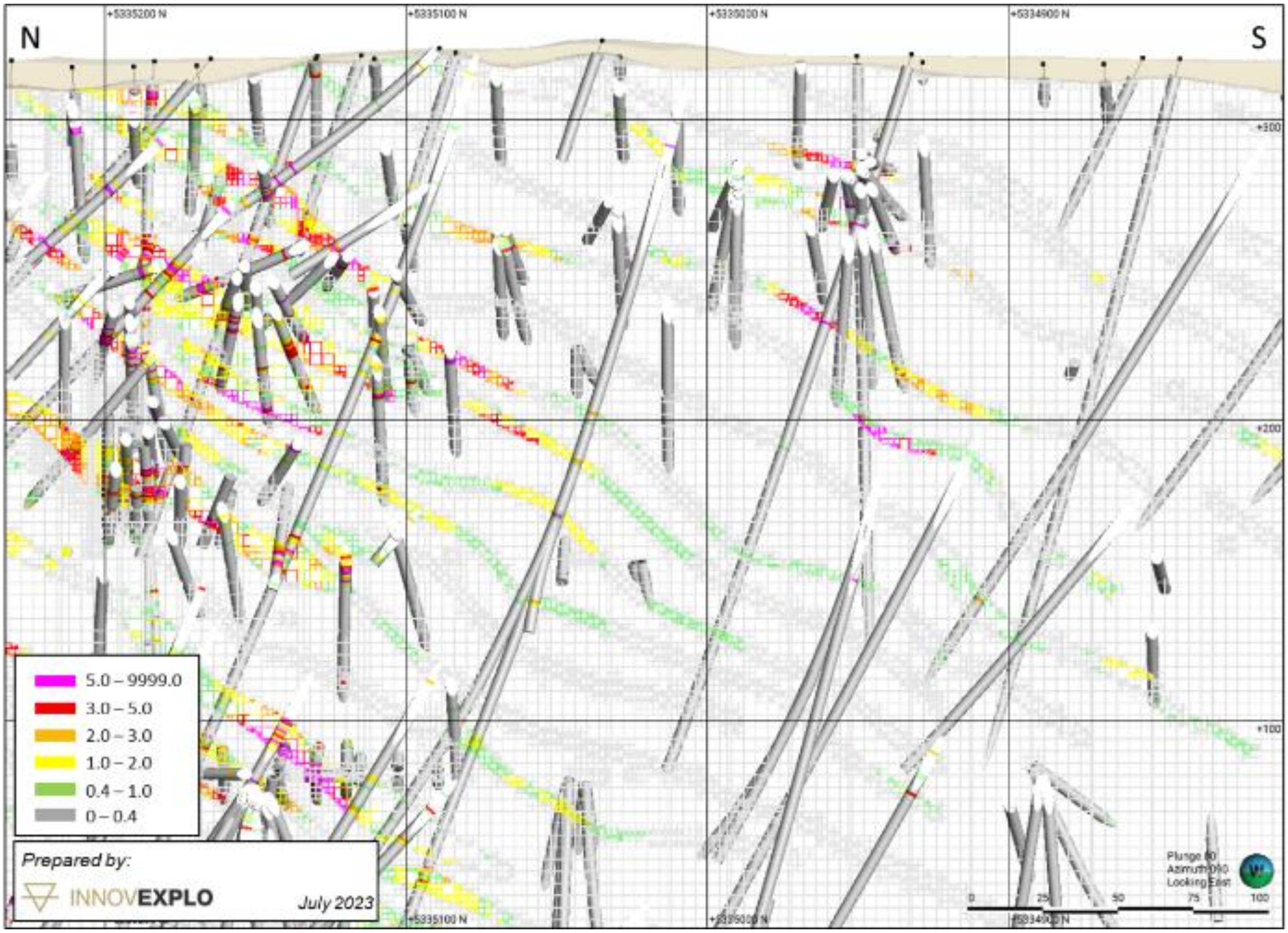

Source: InnovExplo, 2023.

**Figure 14-18: Comparing Drill Hole Assays and Block Model Grade Values at the Courvan North Deposit (Section View; Looking West)**



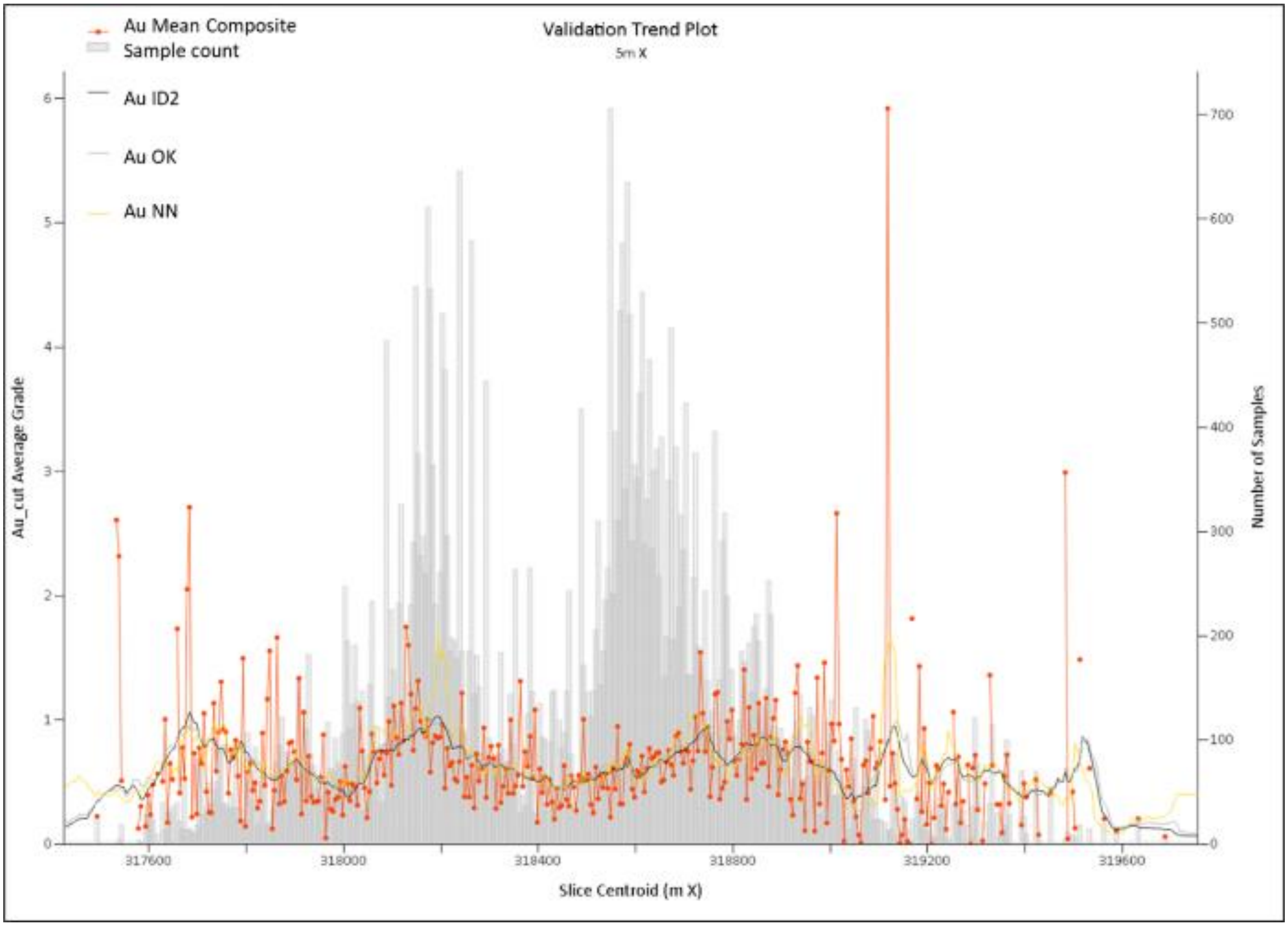

Source: InnovExplo, 2023.

**Figure 14-19: Example of the Validation on Section (±15 m Clipping) of the Interpolation Results, Comparing Drill Hole Assays and Block Model Grade Values at the Northern Part of New Béliveau Deposit (looking East)**



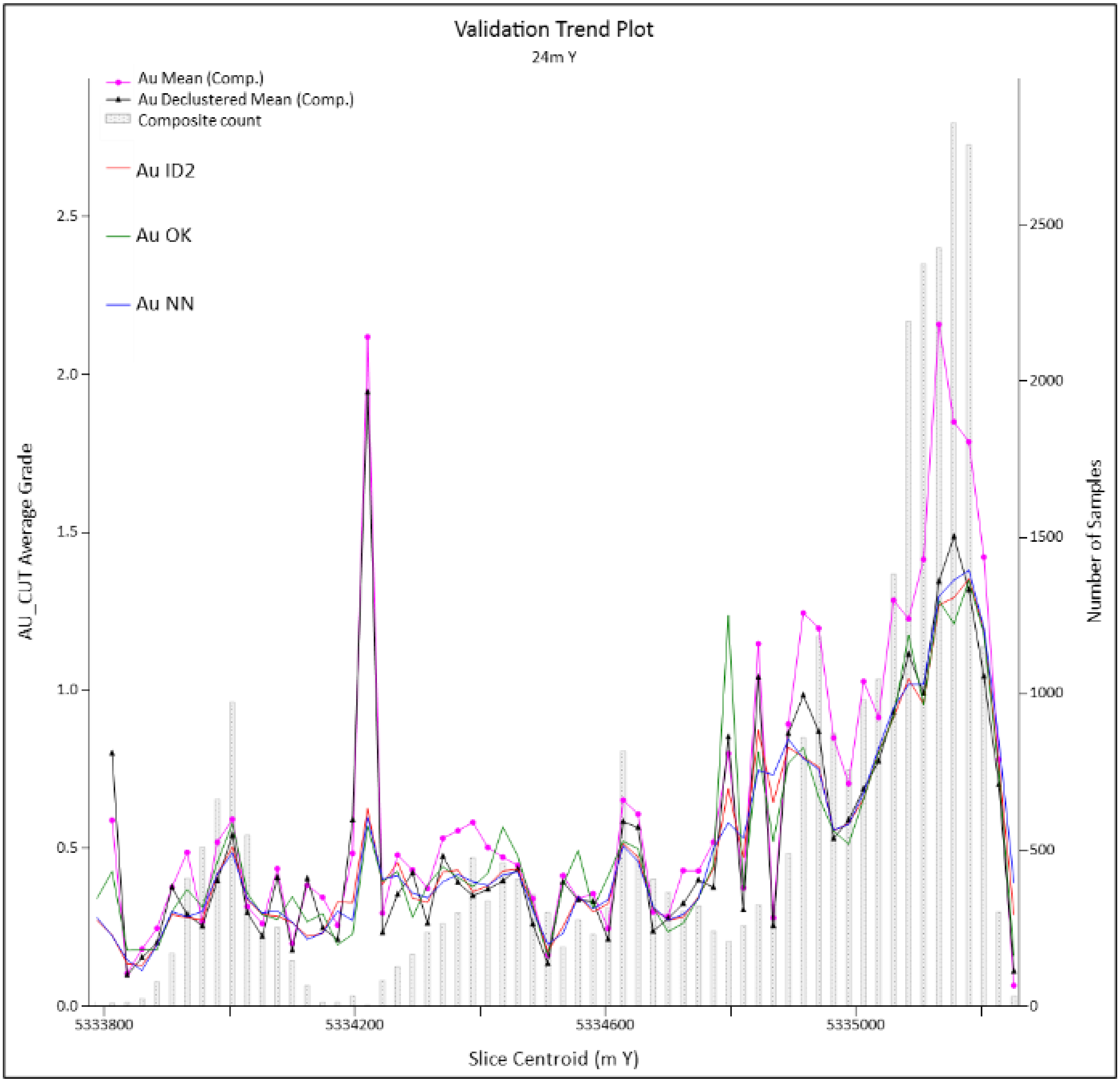

Source: InnovExplo, 2023.

**Figure 14-20: Swath Plot, Monique Area (looking North)**




Source: InnovExplo, 2023.

**Figure 14-21: Swath Plot with Slices on the Y Axis for the Pascalis Area (New Béliveau Deposit inside the Mineralized Zones Only)**




Source: InnovExplo, 2023.

#### 14.10.1 Reconciliation (Comparison with the Historical Production from the Former L.C. Béliveau Mine)

To account for the underground production from the former L.C. Béliveau mine, the issuer generated a voids model from historical plans and DXF files. The model was used to deplete the block model of historically mined material. The block centroids inside the voids model were not accounted for in the optimization and resource estimate statement.

Between 1989 and 1993, Cambior Inc. operated the L.C. Béliveau mine. Cambior published all mined quantities in an internal report (Cambior, 1996), including those in pre-production. Reconciliation between the current mineral estimation and the mined quantities is shown in Table 14-17.

**Table 14-17: Reconciliation with the Historically Mined Quantities from the L.C. Béliveau Mine between 1989 & 1993**

| Description | Current Model | Production History | Comparison |
|---|---|---|---|
| Tonnes (t) | 1,760,467 | 1,800,298 | 97.8% |
| Grade (g/t Au) | 3.29 | 3.17 | 103.8% |
| Ounces (oz Au) | 186,346 | 183,698 | 101.4% |

### 14.11 Validation of Bordure, Highway and Senore

The QP validated all three block models to verify interpolation and reporting accuracy. Validation includes a review of the modelling, capping, compositing, interpolation, and MRE statement. QP agrees with the estimation in all three deposits.

#### 14.11.1 Bordure and Highway Validation

The cut-off date for the database was May 8, 2021. At that time, it contained 3,005 drill hole collars, including extensions, wedges and abandoned holes, with a total meterage of 636,438.94 m and 319,729 assay intervals totalling 350,193.83 m.

Modelling by Probe Gold's geologists was based on the data and information present at the database cut-off date. They created solids using a minimum thickness of 2 m.

High-grade capping was conducted on raw assays and set at 28 g/t Au for Bordure and 30 g/t Au for Highway. Eleven samples were capped for Bordure, and 14 for Highway.

After capping, composites were created every metre inside geological solids, discarding any composites shorter than 0.5 m. A specific gravity of 2.82 t/m³ was used in both deposits.

Ellipsoids and search parameters used in both deposits align well with local variations. Block models were interpolated in GENESIS™ as percentile models. The block size was set at 2.5 m by 2.5 m by 2.5 m with no sub-blocking.

Surface optimization was conducted in GENESIS™ using parameters set in Table 14-19. Underground optimization was carried out using clipping boundaries to demarcate blocks above the cut-off grade, using all blocks within the boundaries as per CIM MRMR Best Practice Guidelines (2019).

#### 14.11.2 Senore Validation

The cut-off date for the database was July 25, 2019. At that date it contained 2,923 drill hole collars, 86,142 down-hole survey deviations, 296,090 assay intervals and 28,944 lithological intervals.

Modelling by Probe Gold's geologists was based on the data and information present at the date of the database cut-off. Solids were created using a minimum thickness of 3 m.

High-grade capping was conducted on raw assays and set at 100 g/t Au.

Composites were created after capping following the proposed mining method. Composites 3 m long were created for a mass model used for surface optimization, and composites of 1.5 m were created for a more refined model for underground optimization. In both cases, any composites shorter than 0.1 m were discarded. A specific gravity of 2.8 t/m³ was used in both deposits.

Ellipsoids and search parameters used in both deposits align well with local variations. Block models were interpolated in GENESIS™ as percentile models. The block size was set at 5 m x 5 m x 5 m for surface optimization, and a second one was set at 3 m x 3 m x 3 m for an underground optimization, both with no sub-blocking.

Surface optimization was conducted in GENESIS™ using parameters set in Table 14-19. Underground optimization was carried out using clipping boundaries to demarcate blocks above the cut-off grade, using all blocks within the boundaries as per CIM MRMR Best Practice Guidelines (2019).

### 14.12 Mineral Resource Classification

#### 14.12.1 Monique, Courvan and Pascalis

By default, all interpolated blocks were assigned to the "exploration potential" category when creating the grade block model. Subsequent reclassification to either measured, indicated, or inferred category followed the criteria below.

Inferred Category Criteria

- blocks showing geological and grade continuity;
- blocks interpolated by a minimum of two drill holes; and
- blocks in areas where drill spacing is no more than 50 m (Bussiere Mine), 65 m (Courvan South), 75 m (Creek, Bussiere, Pascalis) and 80 m (Monique).

Indicated Category Criteria

- blocks showing geological and grade continuity;
- blocks from well-defined mineralized zones (or diorite dykes; Pascalis) only;
- blocks interpolated by a minimum of three drill holes; and

- blocks in areas where drill spacing is no more than 35 m (Bussiere Mine), 45 m (Courvan South), 50 m (Creek, Bussiere, Pascalis) and 55 m (Monique).

Measured Category Criteria (Pascalis Only)

- blocks reaching the indicated category criteria; and
- blocks in areas within 20 m of former infrastructure and mined-out voids with documented production numbers.

Some blocks were locally upgraded to the inferred or indicated category, whereas others were locally downgraded to inferred or exploration potential to homogenize (smooth out) the resource volumes in each category and to avoid isolated blocks from being included in a category domain. The preliminary block classification was created using a series of outline rings (clipping boundaries) built on a longitudinal view.

That preliminary classification is performed only on the interpolated blocks inside mineralized domains, not in the dilution envelop. Based on that preliminary classification, Whittle pit shells and Deswik Stope Optimizer (DSO) were used to apply constraining volumes to any blocks in the potential open-pit and underground extraction scenario, respectively.

Blocks interpolated in the dilution envelop, falling in a whittle pit shell, are then classified as inferred resources if above the cut-off grade.

For blocks falling in DSO, a class attribute was determined for each DSO based on the dominant preliminary block class. The final classification was applied to each block based on the DSO class attribute.

#### 14.12.2 Bordure, Highway and Senore

For Bordure and Highway, the measured resources were classified using a minimum of three drill holes within 30 m of each other or less. For the indicated resources, a minimum of three drill holes within 60 m of each other or less were used. The inferred resources were classified using two passes. The first pass was set using two drill holes extended by a maximum of 120 m and 20 m thick with a minimum of three composites and a maximum of two composites from the same hole. The second pass was extended to a maximum of 170 m and 40 m thick using one drill hole with a minimum of two composites. For the wall material, the blocks were classified as inferred resources using a single pass and a minimum of two drill holes within 100 m of each other, within a maximum search ellipse of 50 m (X) and 50 m (Y) and 5 m (Z).

For Senore, all blocks were classified as inferred resources due to the historical nature of the diamond drill holes used in the MRE.

### 14.13 Reasonable Prospects of Eventual Economic Extraction Parameters

Reasonable cut-off grades for various parts of the deposit were established for each extraction scenario. The cost parameters from the 2021 PEA (Raponi et al., 2021) were used as a reference for the cut-off grade calculations. These unit costs were escalated for inflation using information from Statistics Canada. The cut-off grade must be evaluated regularly considering prevailing market conditions and other factors, such as gold price, exchange rate, mining method, related costs, etc. Under CIM Definition Standards, mineral resources should have 'reasonable prospects of eventual economic extraction' (RPEEE).

Whittle pit shells were used to constrain the 2023 MRE for its near-surface potential. Resource-level optimized pit shells, and the corresponding open-pit cut-off grades were used for the open pit resource statement. The remaining (out-pit) mineralized material was then flagged for its underground potential. DSO was used to apply constraining volumes to the blocks in the potential underground extraction scenario to meet the RPEEE standard for underground resources. The Whittle pit shells and DSO were created using only interpolated blocks constrained in mineralized domains. Dilution envelopes falling in those constraining volumes were then reported as mineral resources. In the absence of DSO (Bordure, Highway and Senore deposits), clipping boundaries on geological solids designed at a minimum mining width were used as constraining volumes.

A longitudinal view showing the optimized pit-shell and DSO stope designs of the classified mineral resources is provided in Figure 14-22 to visualize the relationship between the two. Mineral resources were compiled using a minimum cut-off grade as defined below.

### 14.13.1 Optimized Open Pit Cut-off Parameters

The MRE is locally pit-constrained. The pit-constrained resources are reported at a 0.42 g/t Au cut-off grade for the Monique deposit and 0.4 g/t Au for the other deposits, both of which are above the base case cut-off grade of 0.26 g/t Au, which was calculated using the parameters and assumptions presented in Table 14-18 and Table 14-19. Using the higher cut-offs of 0.4 and 0.42 g/t Au allows the issuer to potentially upgrade in-pit mineralized waste (0.20-0.42 g/t Au and 0.20-0.4 g/t Au) through an industrial sorter process.

**Table 14-18: Input Parameters used to Calculate the Cut-off Grade for the Open Pit Base Case (Monique, Courvan North, Courvan South, New Béliveau, and North Deposits)**

| Parameter | Unit | Value for Open Pit |
|---|---|---|
| Bedrock Slope Angle | ° | 43 to 54 |
| Gold Price | US$/oz | 1,700 |
| Exchange Rate | USD/CAD | 1.33 |
| Royalty(1) | C$/oz | 8.59 to 45.22 |
| Cost of Selling | C$/oz | 5.00 |
| Metallurgical Recovery | % | 95 |
| Mining Cost | C$/t | 2.97 |
| Mining Overburden Cost | C$/t | 2.70 |
| Processing Cost | C$/t | 17.82 |
| Base Case Cut-off Grade | g/t Au | 0.26 |

Note: 1. 0.38% royalty: Monique deposit; 2% royalty: other deposits.

**Table 14-19: Input Parameters used to Calculate the Cut-off Grade for the Open Pit Base Case (Bordure, Highway and Senore Deposits)**

| Parameter | Unit | Value for Open Pit |
|---|---|---|
| Bedrock Slope Angle | ° | 48 to 59 |
| Gold Price | US$/oz | 1,600 |

| Parameter | Unit | Value for Open Pit |
|---|---|---|
| Exchange Rate | USD/CAD | 1.33 |
| Royalty | C$/oz | 8.59 |
| Metallurgical Recovery | % | 95 |
| Mining Cost | C$/t | 3.00 to 3.50 |
| Mining Overburden Cost | C$/t | 2.50 |
| Processing Cost | C$/t | 17.50 |
| G&A Costs | C$/t | 4.00 |
| Transportation Cost | C$/t.km | 0.15 |
| Cut-off Grade | g/t Au | 0.40 |

### 14.13.2 Underground Cut-off Parameters

The considered underground extraction scenarios were long-hole stope mining and cut-and-fill stope mining, depending on the orientation of the mineralization. DSO stope design size parameters are presented in Table 14-20.

**Table 14-20: DSO Stope Design Size Parameters**

| Stope Mining Method | Minimum Mining Width (m) | Full Stope Shape (m) | Minimum Stope Sub-Shape (m) |
|---|---|---|---|
| Long-hole | 2 | 20 x 20 | 10 x 20 or 20 x 10 |
| Cut & fill | 3.5 | 4 x 20 | 4 x 10 |

The underground mineral resource estimate is reported at a 1.43 to 1.65 g/t Au cut-off grade for the long hole stope mining method and 1.71 to 2.05 g/t Au for the cut-and-fill stope method. The cut-off grade was calculated using the parameters and assumptions presented in Tables 14-21 and 14-22.

**Table 14-21: Input Parameters used to Calculate the Underground Cut-off grade (Monique, Courvan North, Courvan South, New Béliveau and North Deposits)**

| Parameter | Unit | Value for Long-Hole Stope Mining | Value for Cut & Fill Stope Mining |
|---|---|---|---|
| Gold Price | US$/oz | 1,700 | 1,700 |
| Exchange Rate | USD/CAD | 1.33 | 1.33 |
| Royalty (1) | C$/oz | 8.59 to 45.22 | 8.59 to 45.22 |
| Cost of Selling | C$/oz | 5.00 | 5.00 |
| Metallurgical Recovery | % | 95 | 95 |
| Mining Cost | C$/t moved | 81.00 | 97.5 |
| Processing Cost | C$/t treated | 17.82 | 17.82 |
| Base Case Cut-off Grade | g/t Au | 1.43 | 1.71 |

Note: 1. 0.38% royalty: Monique deposit; 2% royalty: other deposits.

**Table 14-22: Input Parameters used to Calculate the Underground Cut-off Grade (Bordure, Highway and Senore Deposits)**

| Parameter | Unit | Value for Long-Hole Stope Mining | Value for Cut & Fill Stope Mining |
|---|---|---|---|
| Gold Price | US$/oz | 1,600 | 1,600 |
| Exchange Rate | USD/CAD | 1.33 | 1.33 |
| Royalty (1) | C$/oz | 8.59 | 8.59 |
| Metallurgical Recovery | % | 95 | 95 |
| Mining Cost | C$/t moved | 82.00 | 110.00 |
| Processing Cost | C$/t | 17.50 | 17.50 |
| G&A Costs | C$/t | 4.00 | 4.00 |
| Transportation Cost | C$/t.km | 0.15 | 0.15 |
| Cut-off Grade | g/t Au | 1.65 | 2.05 |

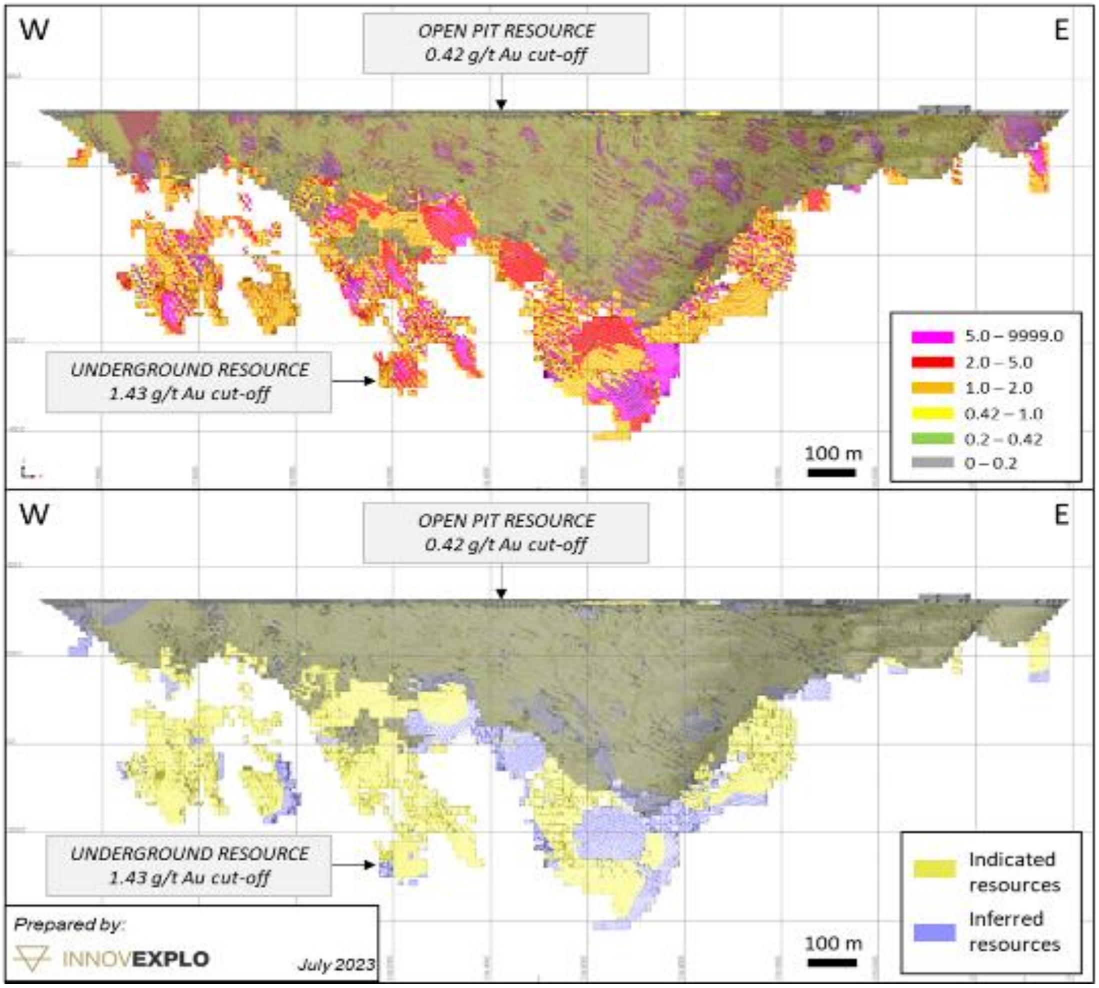
## 14.14 Mineral Resource Estimate

The QPs consider the 2023 MRE reliable and based on quality data, reasonable assumptions and parameters that follow CIM Definition Standards.

The QPs have classified the mineral resources in the 2023 MRE as Indicated and Inferred based on data density, search ellipse criteria, drill hole spacing and interpolation parameters. The QPs also believe the requirement of 'reasonable prospects for eventual economic extraction' has been met by having resources constrained by optimized pit-shell and DSO stope designs and by applying a cut-off grade based on reasonable inputs amenable to potential in-pit and underground extraction scenarios.

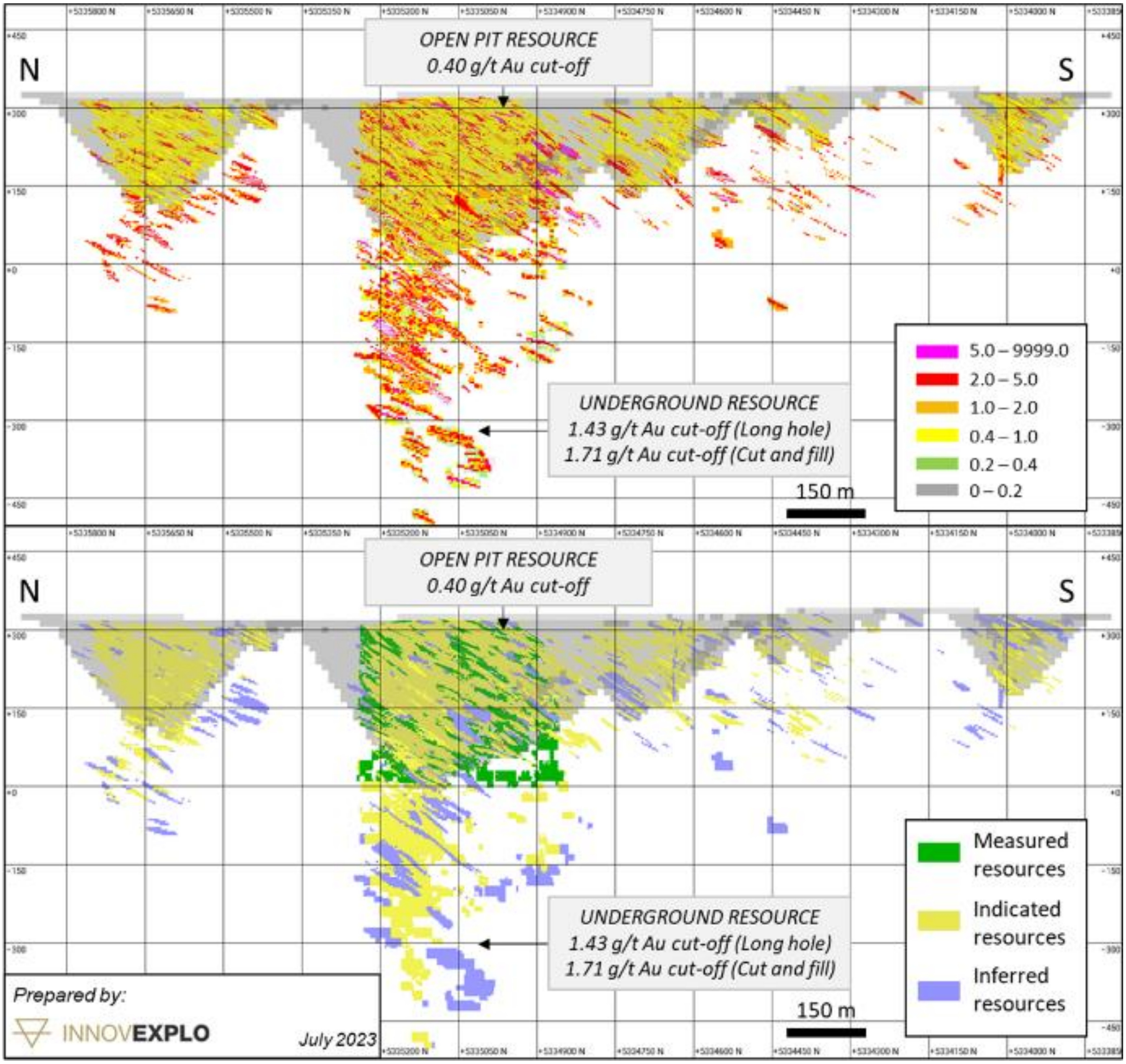
Figures 14-22 to 14-25 present the mineral resources constrained in-pit and the DSO stope designs above their respective cut-off grades.

**Figure 14-22: Longitudinal Views showing the Classified Mineral Resources and the Interpolated Grades Constrained in Optimized Pit Shells and DSO Stope Designs at the Monique Deposit**



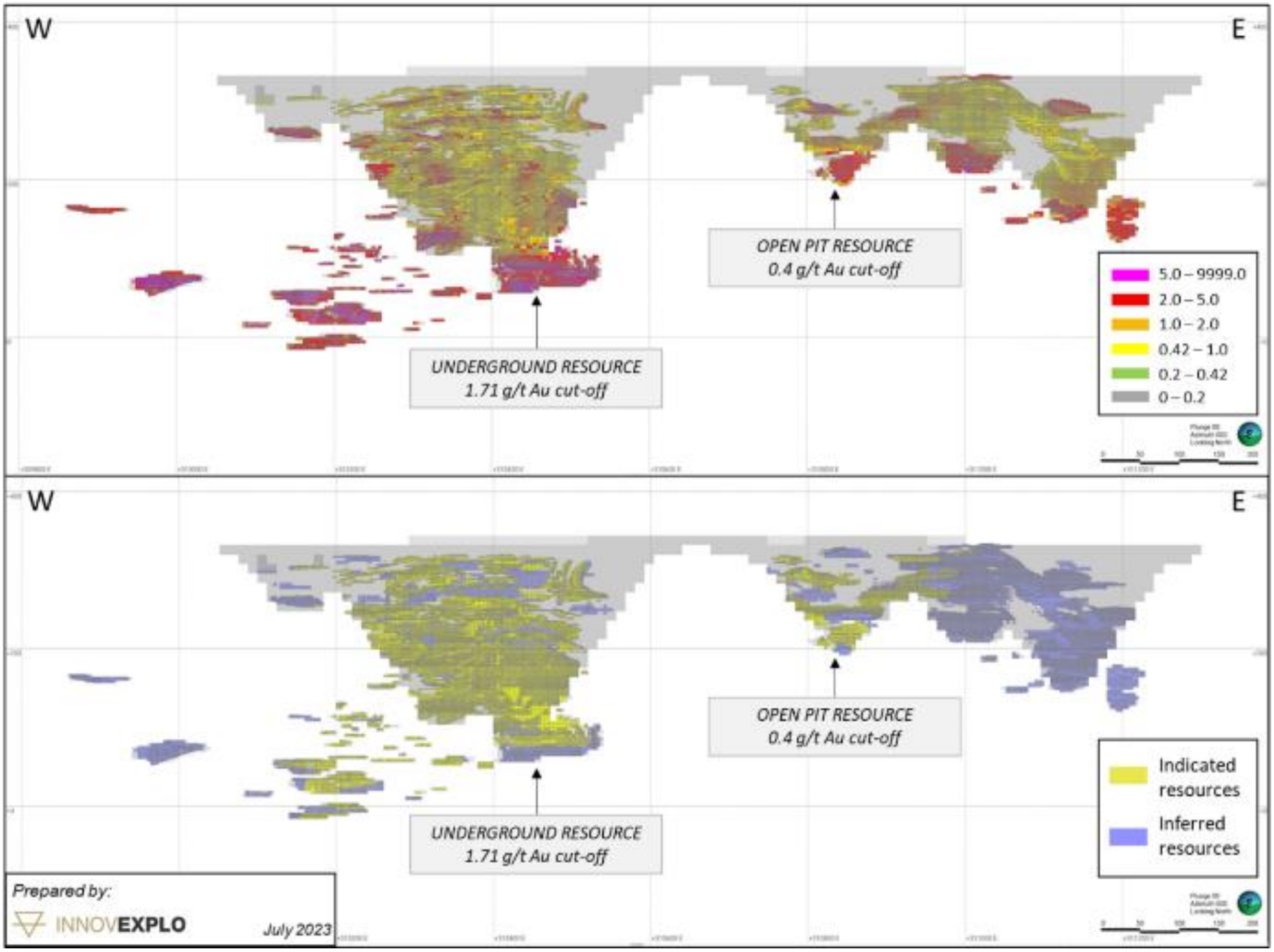

Source: InnovExplo, 2023.

**Figure 14-23: Longitudinal Views showing the Classified Mineral Resources and the Interpolated Grades Constrained in Optimized Pit Shells and DSO Stope Designs at the Deposits in the Pascalis Area**



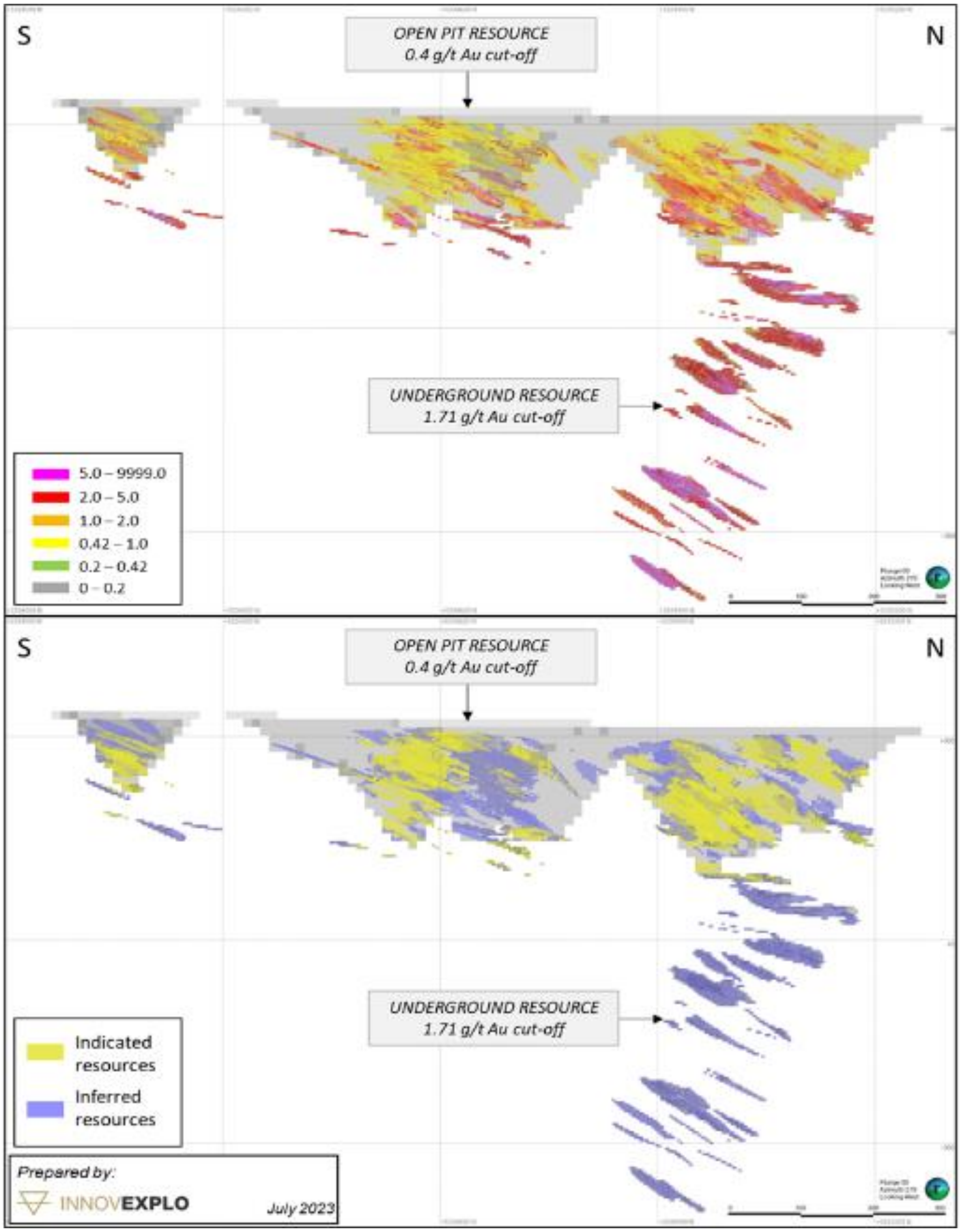

Source: InnovExplo, 2023.

**Figure 14-24: Longitudinal Views showing the Classified Mineral Resources and the interpolated Grades Constrained in Optimized Pit Shells and DSO Stope Designs at the Courvan South Deposit**




Source: InnovExplo, 2023.

**Figure 14-25: Longitudinal Views showing the Classified Mineral Resources and the Interpolated Grades Constrained in Optimized Pit Shells and DSO Stope Designs at the Courvan North Deposit**




Source: InnovExplo, 2023.

Table 14-23 and Table 14-24 display the results of the 2023 MRE combining potential open pit and underground mining scenarios at cut-off grades of 0.40 to 0.42 g/t Au (in-pit) and 1.43 to 2.05 g/t Au (underground).

**Table 14-23: Consolidated 2023 Mineral Resource Estimate for the Novador Project by Mining Method**

| Area/ Category | Pit-Constrained Mineral Resources | | | Underground Mineral Resources | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnes | Au (g/t) | Ounces | Tonnes | Au (g/t) | Ounces | Tonnes | Au (g/t) | Ounces |
| Measured | 3,356,300 | 2.34 | 252,100 | 126,400 | 1.87 | 7,600 | 3,482,800 | 2.32 | 259,700 |
| Indicated | 56,297,200 | 1.49 | 2,690,600 | 7,811,000 | 2.38 | 596,700 | 64,108,200 | 1.59 | 3,287,300 |
| Measured & Indicated | 59,653,600 | 1.53 | 2,942,700 | 7,937,400 | 2.37 | 604,300 | 67,591,000 | 1.63 | 3,547,000 |
| Inferred | 9,915,600 | 1.48 | 472,800 | 6,802,400 | 2.82 | 616,500 | 16,717,900 | 2.03 | 1,089,300 |

**Table 14-24: 2023 Mineral Resource Estimate for the Novador Project by Gold Trend and Mining Method**

| Area/ Category | Pit-Constrained Mineral Resources | | | Underground Mineral Resources | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnes | Au (g/t) | Ounces | Tonnes | Au (g/t) | Ounces | Tonnes | Au (g/t) | Ounces |
| **Pascalis Gold Trend (New Béliveau, North and Highway Deposits)** | | | | | | | | | |
| Measured | 3,326,700 | 2.35 | 250,800 | 126,400 | 1.87 | 7,600 | 3,453,200 | 2.33 | 258,400 |
| Indicated | 13,039,600 | 1.53 | 643,200 | 2,234,500 | 2.51 | 180,200 | 15,274,100 | 1.68 | 823,400 |
| Measured & Indicated | 16,366,300 | 1.70 | 894,000 | 2,361,000 | 2.47 | 187,900 | 18,727,300 | 1.80 | 1,081,900 |
| Inferred | 1,938,300 | 1.21 | 75,700 | 2,024,100 | 2.57 | 167,200 | 3,962,400 | 1.91 | 242,900 |
| **Monique Gold Trend (Monique Deposit)** | | | | | | | | | |
| Indicated | 36,914,400 | 1.42 | 1,685,300 | 4,929,300 | 2.23 | 353,600 | 41,843,700 | 1.52 | 2,038,900 |
| Inferred | 4,349,700 | 1.36 | 190,200 | 2,383,500 | 2.18 | 167,000 | 6,733,200 | 1.65 | 357,200 |
| **Courvan Gold Trend (Courvan SW, Courvan SE, Bussiere Mine, Bussiere, Creek, Senore and Bordure Deposits)** | | | | | | | | | |
| Measured | 29,600 | 1.36 | 1,300 | 0 | - | 0 | 29,600 | 1.36 | 1,300 |
| Indicated | 6,343,200 | 1.78 | 362,100 | 647,100 | 3.02 | 62,900 | 6,990,300 | 1.89 | 425,000 |
| Measured & Indicated | 6,372,800 | 1.77 | 363,400 | 647,100 | 3.02 | 62,900 | 7,020,000 | 1.89 | 426,300 |
| Inferred | 3,627,600 | 1.77 | 206,900 | 2,394,700 | 3.67 | 282,300 | 6,022,300 | 2.53 | 489,200 |
| **Totals** | | | | | | | | | |
| **Measured** | **3,356,300** | **2.34** | **252,100** | **126,400** | **1.87** | **7,600** | **3,482,800** | **2.32** | **259,700** |
| **Indicated** | **56,297,200** | **1.49** | **2,690,600** | **7,811,000** | **2.38** | **596,700** | **64,108,200** | **1.59** | **3,287,300** |
| **Measured & Indicated** | **59,653,600** | **1.53** | **2,942,700** | **7,937,400** | **2.37** | **604,300** | **67,591,000** | **1.63** | **3,547,000** |
| **Inferred** | **9,915,600** | **1.48** | **472,800** | **6,802,400** | **2.82** | **616,500** | **16,717,900** | **2.03** | **1,089,300** |

Notes: **1.** These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The mineral resource estimate follows current CIM Definition Standards (2014) and CIM MRMR Best Practice Guidelines (2019). **2.** The independent and qualified persons (QPs) for the mineral resource estimate, as defined by NI 43-101, are Marina Iund, P.Geo. (Monique, Courvan SW, Courvan SE, Bussiere Mine, Bussiere and Creek deposits), Vincent Nadeau-Benoit, P.Geo. (New Béliveau and North deposits), Martin Perron, P.Eng. (all deposits) and Simon Boudreau, P.Eng. (all deposits except Highway and Bordure), all from InnovExplo Inc. The effective date is July 13, 2023. **3.** For the Courvan SW, Courvan SE, Bussiere Mine, Bussiere, Creek, New Béliveau and North deposits, the 2023 MRE represents an update of the previous mineral resource estimate (the "2021 MRE") published by Raponi et al. (2021). The MRE for the Monique deposit has not been modified since the last update completed by InnovExplo in March 2023 (Iund et al., 2023). For the Highway, Bordure and Senore deposits, the 2021 MRE parameters and results were reviewed by the QP. As no new information was available and the 2021 MRE was deemed valid, the 2021 MRE results are reported unchanged.**4.** The results are presented undiluted and are considered to have reasonable prospects of economic viability. **5.** The mineral resource estimate is locally pit-constrained. The out-pit mineral resource met the standard of reasonable prospects for eventual economic extraction by applying constraining volumes to all blocks (potential underground long-hole extraction scenario) using DSO. **6.** Monique, Courvan SW, Courvan SE, Bussiere Mine, Bussiere, Creek, New Béliveau and North deposits: The pit-constrained mineral resource estimate is reported at a 0.42 g/t Au cut-off grade for the Monique deposit and 0.40 g/t Au for the other deposits, both values above the base case cut-off grade of 0.26 g/t Au, which was calculated using the following parameters: mining cost = C$2.97/t; mining overburden cost = C$2.70/t; processing cost = C$17.82/t; selling costs = C$5.00/t; royalty = C$8.59/oz to C$45.22/oz; gold price = US$1,700/oz; USD/CAD exchange rate = 1.33; bedrock slope angle of 43° to 54°; and mill recovery = 95%. The use of a higher cut-off should allow in-pit mineralized waste (0.20-0.40 g/t Au; 0.20-0.42 g/t Au) to be selected for potential upgrade through an industrial sorter process. The underground mineral resource estimate is reported at a cut-off grade of 1.43 to 1.71 g/t Au. The underground mineral resource estimate was based on two mining methods depending on the orientation of the mineralization. The cut-off grade was calculated using the following parameters: mining cost = C$81.00/t (long-hole) to C$97.50/t (cut & fill); processing cost = C$17.82/t; selling costs = C$5.00/t; royalty = C$8.59/oz to C$45.22/oz; gold price = US$1,700/oz; USD/CAD exchange rate = 1.33; and mill recovery = 95%. **7.** Bordure, Highway and Senore deposits: The pit-constrained mineral resource estimate is reported at a 0.40 g/t Au cut-off grade. The cut-off was calculated using the following parameters: gold price = US$1,600/oz; USD/CAD exchange rate = 1.33; mining cost = C$3.00/t or C$3.50/t; processing + G&A costs = C$21.50/t; transport cost = $0.15/t.km; bedrock slope angle of 48° to 59°; and mill recovery = 95%. The underground mineral resource estimate is reported at a cut-off grade of 1.65 to 2.05 g/t Au. The underground mineral resource estimate was based on two mining methods depending on the orientation of the mineralization: long-hole retreat at a mining cost of C$82/t and mechanized cut & fill at a mining cost of C$110/t and using the same ground unit cost as for the pit-constrained scenario. **8.** The cut-off grades should be re-evaluated considering future prevailing market conditions (metal prices, exchange rates, mining costs etc.). **9.** The number of metric tons (tonnes) was rounded to the nearest thousand, following the recommendations in NI 43-101. Any discrepancies in the totals are due to rounding effects. The metal contents are presented in troy ounces (tonnes x grade / 31.10348). **10.** The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues or any other relevant issue not reported in the technical report that could materially affect the mineral resource estimate.

Using a series of performance tests, the issuer has demonstrated that industrial sorting technology works well with the type of mineralization found on the project (see Section 13.1). By applying industrial sorting and very conservative gold recoveries to mineralized waste, additional mineral material can be extracted from the waste to add to the mineral resources. Table 14-25 presents the potential additional pit-constrained resource from industrial sorting.

**Table 14-25: Additional Pit-Constrained Resources from Industrial Sorting**

| Area | Resource Category | Tonnage (t) | Au | Ounces (oz) |
|---|---|---|---|---|
| Monique Gold Trend | Indicated | 16,427,578 | 0.32 | 166,900 |
| | Inferred | 6,305,600 | 0.28 | 56,500 |
| Courvan Gold Trend | Measured | 9,700 | 0.30 | 100 |
| | Indicated | 2,403,500 | 0.29 | 22,600 |
| | Measured & Indicated | 2,413,200 | 0.29 | 22,700 |
| | Inferred | 2,221,900 | 0.28 | 20,200 |
| Pascalis Gold Trend | Measured | 632,400 | 0.29 | 5,900 |
| | Indicated | 5,523,900 | 0.29 | 51,300 |
| | Measured & Indicated | 6,156,300 | 0.29 | 57,300 |
| | Inferred | 1,493,700 | 0.28 | 13,500 |

Notes: **1.** This additional pit-constrained mineral resource represents mineralized waste between cut-off grades of 0.20 g/t Au and 0.42 g/t Au for the Monique deposit and between 0.20 g/t Au and 0.4 g/t Au for the other deposits, exclusive of the pit-constrained mineral resource from Table 14-24. This lower cut-off was based on the following parameters: industrial sorting cost of C$1.73/t, gold recovery in the industrial sorting process at 82% with an overall gold recovery with gravity and leaching at 68%, and mass recovery in the industrial sorting process at 42%. The industrial sorting results on this material indicate that a product above 0.42 g/t Au (Monique) or 0.4 g/t Au (other deposits) could potentially be achieved. **2.** For more details on the industrial sorting technique and parameters, see the "Val-d'Or East Project, NI 43-101 Technical Report & Preliminary Economic Analysis" dated October 20, 2021 (Raponi et al., 2021), available on SEDAR (www.sedar.com) under Probe Gold's issuer profile.

Table 14-26 and Table 14-27 present the sensitivity of the 2023 MRE at different gold prices for each mining method. The reader is cautioned that the figures provided in this table should not be interpreted as a mineral resource statement. The reported quantities and grade estimates at different cut-off grades are presented for the sole purpose of demonstrating the sensitivity of the resource model to the reporting gold prices, with the preferred case in bold.

**Table 14-26: 2023 Mineral Resource Estimate, Novador Project: Gold Price Sensitivity for the Open Pit Portion**

| Deposit | Gold Price | Indicated Mineral Resource | | | Inferred Mineral Resource | | |
|---|---|---|---|---|---|---|---|
| | | Tonnage (t) | Au (g/t) | Ounces | Tonnage (t) | Au (g/t) | Ounces |
| Monique | 1360 | 31,189,500 | 1.29 | 1,292,100 | 2,679,700 | 0.93 | 80,400 |
| | 1530 | 42,717,300 | 1.23 | 1,695,400 | 5,761,800 | 0.93 | 172,900 |
| | **1700** | **48,245,100** | **1.17** | **1,811,100** | **7,838,500** | **0.90** | **226,900** |
| | 1870 | 55,150,700 | 1.12 | 1,992,300 | 10,989,100 | 0.82 | 291,300 |
| | 2040 | 63,947,200 | 1.08 | 2,212,400 | 16,552,500 | 0.77 | 408,100 |
| Courvan South (SW; SE) | 1360 | 2,816,241 | 1.40 | 126,400 | 589,817 | 1.40 | 26,600 |
| | 1530 | 3,239,502 | 1.32 | 137,600 | 1,674,186 | 1.22 | 65,800 |
| | **1700** | **3,471,421** | **1.26** | **140,800** | **1,859,978** | **1.14** | **68,200** |
| | 1870 | 3,891,002 | 1.23 | 153,900 | 2,057,595 | 1.08 | 71,700 |
| | 2040 | 4,183,415 | 1.20 | 161,100 | 2,269,748 | 1.02 | 74,700 |
| Courvan North (Bussiere Mine; Bussiere; Creek) | 1360 | 3,402,321 | 1.82 | 198,600 | 2,053,007 | 1.44 | 94,900 |
| | 1530 | 3,801,392 | 1.72 | 210,000 | 2,418,343 | 1.34 | 103,900 |
| | **1700** | **4,076,230** | **1.64** | **215,000** | **2,697,459** | **1.26** | **109,000** |
| | 1870 | 4,304,722 | 1.59 | 219,600 | 2,972,925 | 1.20 | 114,600 |
| | 2040 | 4,751,676 | 1.53 | 234,100 | 3,762,859 | 1.10 | 132,600 |
| New Béliveau; North | 1360 | 11,369,089 | 1.48 | 542,100 | 1,038,290 | 0.97 | 32,400 |
| | 1530 | 12,854,183 | 1.39 | 575,300 | 1,414,318 | 0.95 | 43,000 |
| | **1700** | **16,185,602** | **1.28** | **664,500** | **2,323,818** | **0.87** | **64,900** |
| | 1870 | 19,259,486 | 1.22 | 753,300 | 4,130,235 | 0.87 | 115,500 |
| | 2040 | 24,512,843 | 1.19 | 934,300 | 8,825,867 | 0.88 | 250,500 |

**Table 14-27: 2023 Mineral Resource Estimate, Novador Project: Gold Price Sensitivity for the Underground Portion**

| Deposit | Gold Price | Indicated Mineral Resource | | | Inferred Mineral Resource | | |
|---|---|---|---|---|---|---|---|
| | | Tonnage (t) | Au (g/t) | Ounces | Tonnage (t) | Au (g/t) | Ounces |
| Monique | 1360 | 4,155,273 | 2.87 | 383,300 | 2,109,738 | 2.71 | 183,800 |
| | 1530 | 4,035,281 | 2.44 | 317,000 | 2,230,851 | 2.40 | 172,400 |
| | **1700** | **4,929,287** | **2.23** | **353,600** | **2,383,494** | **2.18** | **167,000** |
| | 1870 | 5,097,212 | 2.04 | 335,100 | 2,462,272 | 2.02 | 160,000 |
| | 2040 | 4,692,147 | 1.92 | 289,900 | 2,324,059 | 1.85 | 138,500 |
| Courvan South (SW; SE) | 1360 | 265,488 | 3.46 | 29,600 | 322,644 | 4.05 | 42,000 |
| | 1530 | 295,505 | 3.22 | 30,600 | 277,756 | 3.33 | 30,000 |
| | **1700** | **332,918** | **3.01** | **32,300** | **324,574** | **3.11** | **32,400** |
| | 1870 | 330,769 | 2.71 | 28,800 | 371,841 | 2.92 | 34,900 |
| | 2040 | 326,014 | 2.46 | 25,800 | 434,105 | 2.75 | 38,400 |
| Courvan North (Bussiere Mine; Bussiere; Creek) | 1360 | 154,095 | 3.11 | 15,400 | 1,213,566 | 4.41 | 171,900 |
| | 1530 | 148,231 | 2.90 | 13,800 | 1,413,805 | 4.03 | 183,200 |
| | **1700** | **153,789** | **2.77** | **13,700** | **1,579,844** | **3.78** | **191,800** |
| | 1870 | 172,735 | 2.55 | 14,200 | 1,816,861 | 3.48 | 203,000 |
| | 2040 | 130,209 | 2.11 | 8,800 | 1,972,107 | 3.28 | 207,900 |
| New Béliveau; North | 1360 | 1,797,123 | 3.01 | 173,800 | 1,310,781 | 2.99 | 125,900 |
| | 1530 | 2,151,818 | 2.75 | 190,200 | 1,643,794 | 2.72 | 143,900 |
| | **1700** | **2,223,228** | **2.51** | **179,100** | **1,880,136** | **2.52** | **152,500** |
| | 1870 | 2,416,600 | 2.14 | 166,000 | 2,091,227 | 2.30 | 154,300 |
| | 2040 | 1,329,810 | 1.81 | 77,500 | 1,710,124 | 1.99 | 109,600 |

# 15 MINERAL RESERVE ESTIMATES

There are no current mineral reserves estimated for the project.

# 16 MINING METHODS

## 16.1 Overview Mine Design

Open pit and underground mine designs, mine production schedules, and mine capital and operating costs have been developed for the Monique, Courvan North, Courvan South, Pascalis and Highway deposits at a scoping level of engineering. The mineral resource estimate (dated July 2023) forms the basis of the mine planning. Open pit activities are designed for approximately 14 years of operation (one year of pre-production, followed by approximately 13 years of mill feed). Underground activities are designed to take place concurrently, starting in Year 4 of mill feed and ending in Year 13 of mill feed, while open pit mining is completed in Year 11, open pit stockpile reclaim will also end in Year 13. Conventional drill/blast/load/haul open pit mining methods are suitable for the project location and local site requirements. Underground mining areas are accessed from declines driven from surface portals and are mined using the longhole retreat (LHR) method for the Monique deposit and mechanized cut-and-fill (MCF) method for the Courvan and Pascalis deposits.

The subsets of mineral resources contained within the designed open pits and underground stopes are summarized in Table 16-1. Equivalent gold cut-off grades used for each deposit and mining method are also shown for reference. This subset of mineral resources forms the basis of the mine plans and production schedule. Note: The PEA is preliminary in nature and includes 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; there is no certainty that the results of the PEA will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

**Table 16-1: PEA Mine Plan Production Summary**

| Deposit | Mining Method | Mill Feed (Mt) | Mill Feed Au Grade (g/t) | Mill Feed Metal (koz) | Waste Rock (Mt) | Stripping Ratio (Waste tonnes:Mill Feed tonnes) | Calculated Cut-off Grade (g/t Au) |
|---|---|---|---|---|---|---|---|
| Monique | Open Pit | 42.4 | 0.94 | 1,278 | 298 | 7.0 | 0.21 |
| Pascalis | Open Pit | 14.2 | 1.24 | 564 | 102 | 7.2 | 0.21 |
| Courvan North | Open Pit | 6.4 | 1.07 | 222 | 57 | 8.8 | 0.21 |
| Courvan South | Open Pit | 4.5 | 0.89 | 129 | 46 | 10.1 | 0.21 |
| Highway | Open Pit | 0.4 | 0.95 | 11 | 2 | 4.6 | 0.29 |
| **Total Open Pit** | | **67.9** | **1.01** | **2,206** | **504** | **7.4** | **-** |
| Monique | Underground | 6.3 | 2.35 | 478 | - | - | 1.50 |
| Pascalis | Underground | 3.1 | 3.05 | 304 | - | - | 1.75 |
| Courvan | Underground | 3.0 | 3.80 | 364 | - | - | 1.75 |
| **Total Underground** | | **12.4** | **2.87** | **1,147** | **-** | **-** | **-** |
| **Total Open Pit and Underground** | | **80.3** | **1.30** | **3,353** | **504** | **-** | **-** |

Notes: **1.** Mill feed includes measured, indicated and inferred resources. **2.** The PEA mill feed estimates are a subset of the July 2023 mineral resource estimate and are based on the open pit and underground mine engineering and technical information developed at scoping level for the Monique, Pascalis, Courvan and Highway deposits. **3.** PEA mill feed estimates are mined tonnes and in-situ grade; the reference point is the primary crusher. **4.** Cut-off grade estimates are based on US$1,700/oz Au at a currency exchange rate of US$0.74 per C$1.00; 99.95% payable gold; C$3/oz refining and transportation; claim-based royalties ranging from 0% to 3% NSR or 0% to 1% GSR; recovery formulas are based on the location of the material source as follows: (1-(0.0179*AuHeadGrade+0.0121)/AuHeadGrade)-0.008 for Monique (except Felsic Porphyry), Courvan, North, 85.5% for Monique Felsic Porphyry, (1-(MAX(0.0381*AuHeadGrade-0.0237,0.01)/AuHeadGrade))-0.008 for Béliveau and (0.5+0.5*(0.9507-0.0874/AuHeadGrade/(1-0.5)))-0.008 for Highway; Processing and G&A costs of C$14/tonne. **5.** The open pit cut-off grade is NSR ≥ $14/t **6.** The underground cut-off grades are 1.50 g/t Au for Monique and 1.75 g/t Au for both Courvan and Pascalis. **7.** Estimates have been rounded and may result in summation differences.

Economic pit limits are determined using the Lerchs-Grossman algorithm. The ultimate pit limits are split up into phases or pushbacks to target higher economic margin material earlier in the mine life. Implementing the geotechnical recommendations and 25 m double-laned ramp width, phases and final pit limits are designed for all the deposits. Single-lane ramps are implemented at the pit bottoms (maximum of three benches). The ramp on the lowest bench is mined out using a retreat mining method. Open pit contents are based on whole block contents using the block sizes as supplied to MMTS (6 m for Monique, 5 m for Highway, and 4 m for Courvan and Pascalis).

Underground stope inventories are determined with Deswik underground mine planning software and by using the Deswik stope shape optimizer (DSO) algorithm targeting material above 1.50 g/t Au for LHR mining and 1.75 g/t Au for MCF mining. Stopes shapes are constrained by the geotechnical offset recommendations from the base of the designed open pit limits, to provide pillars between the underground workings and the open pits. Results from the DSO algorithm were reviewed with orphan blocks manually deleted from the inventory. Orphan blocks are deemed to be uneconomic because they're too small or too far away to support development from the main stope blocks.

After that, mining dilution of 0.50 m per contact is applied to LHR stope contents and dilution of 0.25 m per contact is added to the MCF stope contacts. For all stopes, regardless of mining method, an additional 3% dilution is added to allow for sloughing of backfill from previously filled stopes and from mucking the floor. Based upon industry experience, mining recovery of 90% is applied to the LHR underground material and 95% to the MCF material.

An annual mill feed rate of 5,657.5 kt is targeted with an expansion to 7,008 kt in Year 6 of production, and is the basis used for the mining schedule. Mill feed is comprised of measured, indicated and inferred resources.

Cut-off grade used in the open pit mine schedule is ≥$14.00/t NSR.

Stockpiling is utilized to maximize grades during the early years. A total of 80.3 Mt of open pit material is processed at an average deliverable gold grade of 1.30 g/t for a mine production of 12.5 years. Open pit material comprises 85% of the total mill feed; the remaining is from underground mining. Total waste mined is 504 Mt. The majority is placed in external waste rock storage facilities (WRSF). Waste rock is also planned for construction of haul roads between the pit exits and the primary crusher, underground portals, underground backfill requirements, and the explosives facility foundation material. Topsoil and overburden encountered at the top of pits will be placed in dedicated areas and kept salvageable for closure at the end of the mine life. All waste rock from the underground operations will be utilized for underground rock backfill as primarily cemented rockfill (CRF) but also uncemented rockfill (URF) where possible

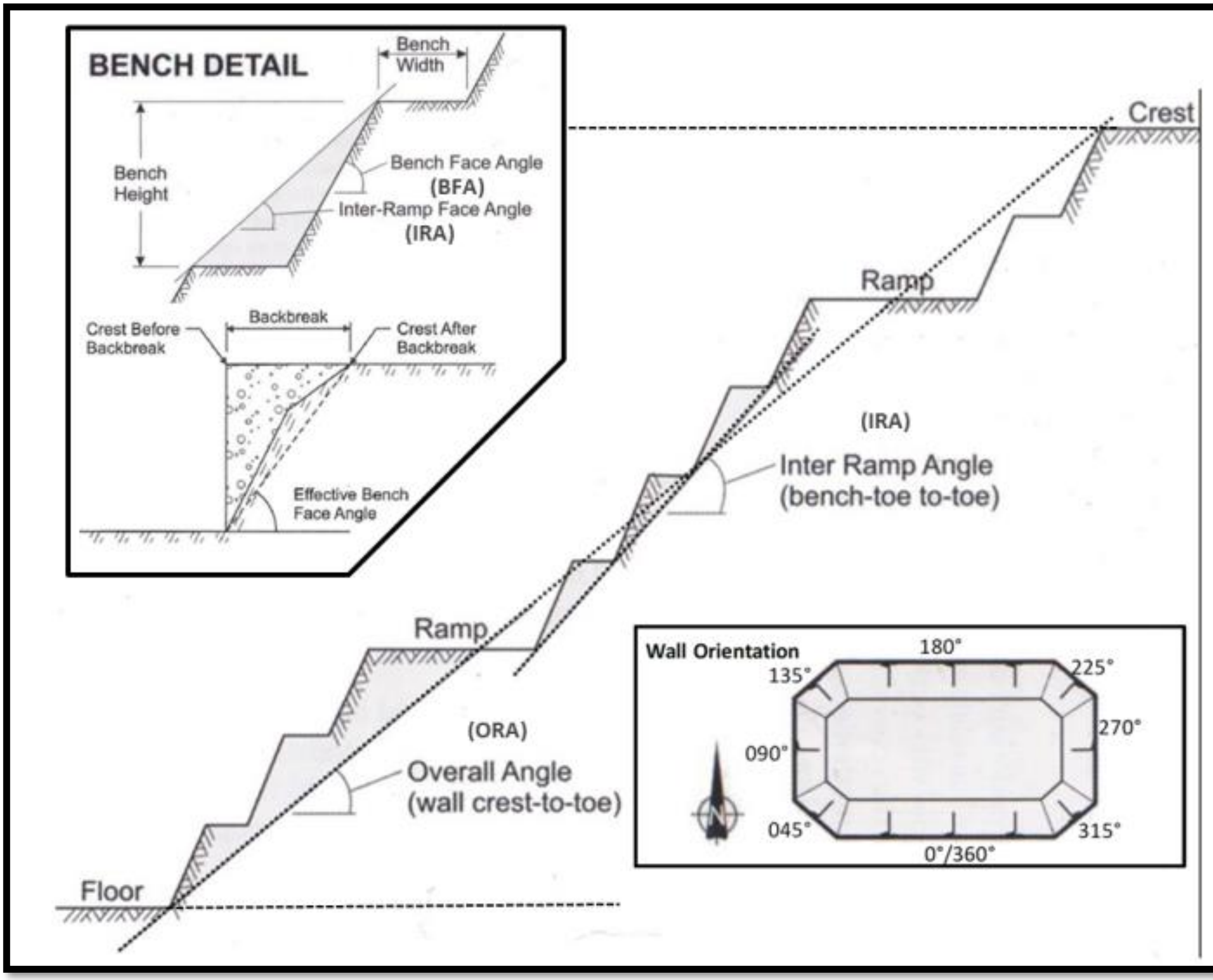
Open pit mine operations are planned as owner operated. The mining schedule assumes 355 operating days per year with two 12-hour shifts per day. An allowance of 10 days shutdown days is included to allow for adverse weather conditions and other operations downtimes.

Underground operations are based upon two 12-hour shifts per day with effective working time being 10 hours per day. Operations are planned to be carried out by the Owner.

## 16.2 Geotechnical Considerations

Pit slope design constraints have been assessed based on available geotechnical information. The pit geometry nomenclature used in this section is illustrated in Figure 16-1.

**Figure 16-1: Nomenclature Illustration of Open Pit Geometry**




Source: RockEng, 2023.

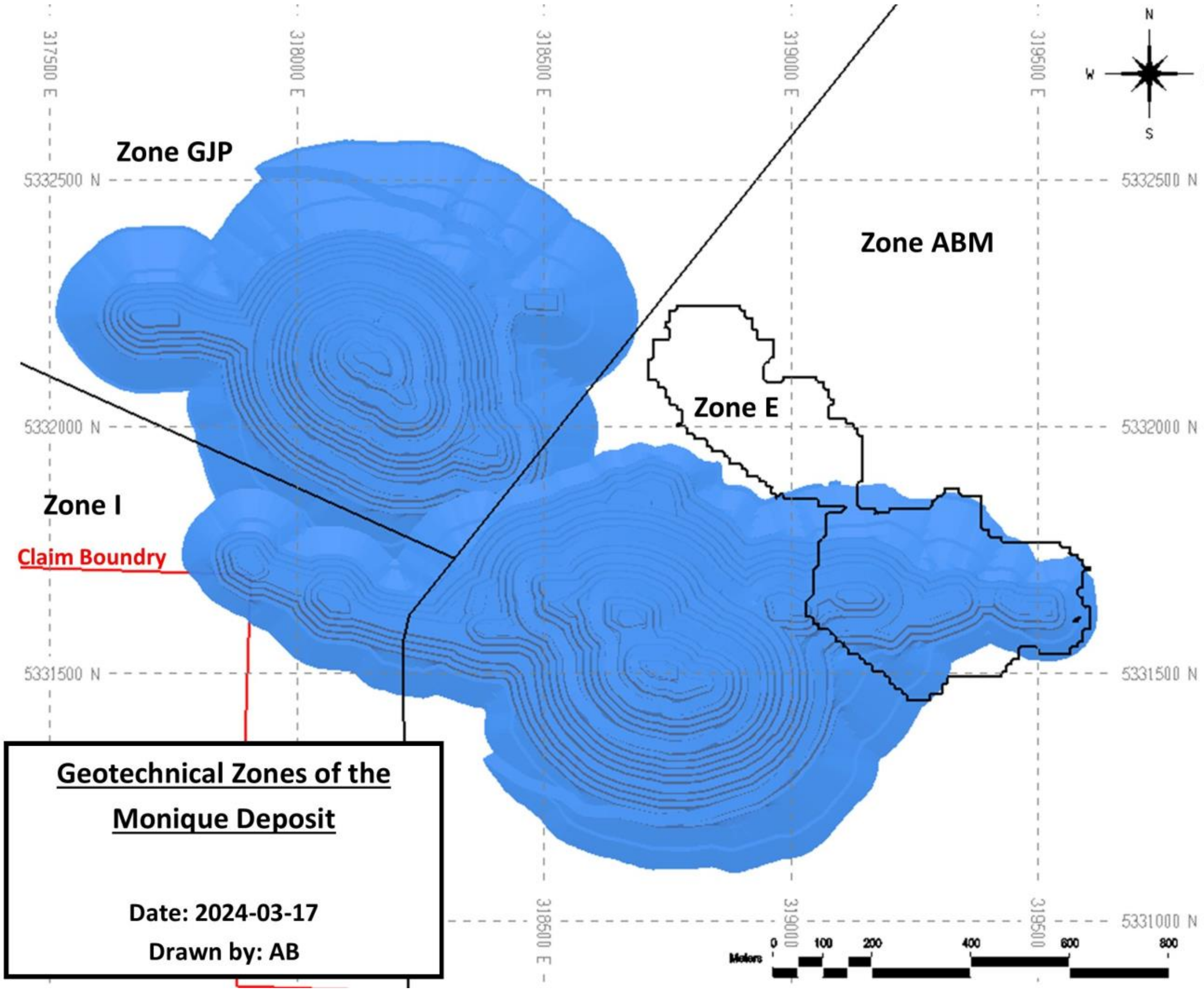
Pit slope angles applied (taken from the RockEng report of September 2023) are outlined in Table 16-2. Every 108 m vertically, 17 m geotechnical berms are required. Ramps with a width of 17 m or greater can also be utilized in place of a geotechnical berm. Geotechnical zones of the Monique deposit are shown in Figure 16-2.

**Table 16-2: Slope Parameters**

| Zone | Wall Orientation (°) | Bench Face Angle (°) | Bench Height (m) | Catch Berm (m) | Inter-Ramp Angle (°) |
|---|---|---|---|---|---|
| **Courvan** | | | | | |
| Courvan Southwest | 155°-195° | 70 | 24 | 15.1 | 45 |
| | 210°-230° | 80 | 24 | 11.3 | 57 |
| | All other orientations | 80 | 24 | 9.3 | 61 |
| Courvan Southeast | 110°-150° | 70 | 24 | 9.6 | 53 |
| | 150°-190° | 70 | 24 | 12.1 | 49 |
| | All other orientations | 70 | 24 | 9.3 | 53 |
| Courvan North | 310°-350° | 70 | 24 | 9.8 | 52 |
| | All orientations | 70 | 24 | 9.3 | 53 |
| **Pascalis** | | | | | |
| New Béliveau | All orientations | 80 | 24 | 9.3 | 61 |
| North Zone | 250°-290° | 80 | 24 | 13 | 54 |
| | 340°-015° | 80 | 24 | 13.4 | 54 |
| | 30°-80° | 80 | 24 | 12.1 | 56 |
| | All other orientations | 80 | 24 | 9.3 | 61 |
| Highway | 120°-160° | 70 | 20 | 11.6 | 47 |
| | All other orientations | 70 | 20 | 9.3 | 50 |
| **Monique (see Figure 16-2)** | | | | | |
| Monique – GJP Zone | All orientations | 80 | 24 | 9.3 | 61 |
| Monique – ABM Zone | All orientations | 80 | 24 | 10.5 | 58 |
| Monique – I Zone | All orientations | 80 | 24 | 9.3 | 61 |
| Monique – E Zone | All orientations | 80 | 24 | 9.3 | 61 |

Source: MMTS, 2024.

**Figure 16-2: Geotechnical Zones of the Monique Deposit**




Source: MMTS, 2024.

## 16.3 Hydrogeological Considerations

Anticipated water inflow rates by pit area are detailed in the hydrological study (Richelieu Hydrogéologie, 2023b. Probe Gold Inc. - Propriété Novador. Étude hydrogéologique. Novembre 2023. 66 pages). Predicted pit inflow rates are used to estimate the number of pumps required for dewatering and the associated costs.

## 16.4 Open Pit

### 16.4.1 Pit Optimization

Open pit mine designs, the mine production schedule, mining capital and operating costs are developed for the Novador deposits at a scoping level of engineering.

#### 16.4.1.1 Key Assumptions/Basis of Estimate

The following open pit mine planning design inputs are used:

- Topography is based on several LiDAR surveys of the various deposit areas.
- Modelled bedrock contact surfaces are used to estimate the overburden thicknesses and quantities within each deposit
- Resource block models are supplied as whole blocks with the following block dimensions (equal sizing in all three orientations): 4 m (Courvan and Pascalis), 5 m (Highway) and 6 m (Monique)
- The provided block models contain block-diluted gold grades, bulk densities, and block classifications
- Measured, Indicated and Inferred Resources are included in pit optimizations and mill feed tonnages
- Mill processing recoveries are based on the following formulas:
  - (1-(0.0179*AuHeadGrade+0.0121)/AuHeadGrade)-0.008 for Monique (except Felsic Porphyry), Courvan and North
  - 85.5% for Monique Felsic Porphyry
  - (1-(MAX(0.0381*AuHeadGrade-0.0237,0.01)/AuHeadGrade))-0.008 for Béliveau
  - (0.5+0.5*(0.9507-0.0874/AuHeadGrade/(1-0.5)))-0.008 for Highway
- Open pit overall slopes by pit area and wall orientation ranging from 43° to 57° have been applied to rock and a 17.5° slope in overburden above the rock
- Waste storage piles, stockpiles and haul roads are planned to minimize wetland, waterbody, and watercourse disturbances.
- WRSF and overburden facilities are designed with 3.6H:1V overall slope and assume a 30% swell factor.
  - WRSF and overburden facilities locations are selected with consideration to the underlying clay thickness. The average clay thickness below WRSF and overburden facilities is less than 4 m
- In-pit haul roads are designed with 25 m double-lane width. The overall road width includes allowance for safety berms and ditches.
  - The lowest 3 benches of ramp incorporate a single-lane width of 18.1 m

#### 16.4.1.2 Loss and Dilution

Block models are supplied as full blocks with the following block sizes: 4 m (Courvan and Pascalis), 5 m (Highway), and 6 m (Monique).

Gold mineralization occurs in smaller units than the 4 to 6 m block size, therefore the whole block grades are assumed to include some amount of internal dilution. This internal dilution is not quantified but is considered satisfactory for this level of study.

### 16.4.2 Pit Optimization

Economic pit limits are determined using the Lerch-Grossmann (LG) algorithm. The algorithm considers the block grades and tonnages and compares the expected costs to extract and process the block against the potential revenue from processing the block (if the block contains mineralization). Each block is assigned with a positive or negative net value. Pit wall angle inputs determine which upper blocks need to be mined to extract economic blocks that are lower in the deposit. The routine uses the input revenue, cost, and pit slope parameters to expand in an ever-increasing manner until the incremental tonnages of the next thin skin or pushback would generate negative economics. The total shape just prior to this 'negative pushback' is then used as the maximum economic pit limit for the selected input parameters.

Additional cases are included in the analysis to evaluate the sensitivities to mining and processing costs.

In this study, various pit shells are generated by varying the input gold. By increasing the economic parameters while keeping inputs for metallurgical recoveries and pits slopes constant, a series of nested pit shells are generated, where incremental pit shells produce marginal or negative economic returns. The economic margins from the expanded cases are evaluated on a relative basis to provide payback on capital and produce a return for the project. At some point further expansion does not provide significant added value. An ultimate economic pit limit can then be chosen that has suitable economic return for the deposit.

For each pit shell, an undiscounted cash flow (UCF) is generated based on the shell contents and the economic parameters listed in Table 16-3. The UCF for each case is used to reinforce the selected point at which increased pit expansion do not increase the project value (note that the economics are only applied for comparative purposes to assist in the selection of the optimum pit shell for further mine planning; they do not reflect the actual financial results of the mine plan). The selected ultimate economic pit limit is then used as the basis for mine scheduling.

**Table 16-3: Price and Operating Cost Inputs into LG Shell Runs**

| Item | Unit of Measure |
|---|---|
| Gold Price | US$1,700/oz |
| Foreign Exchange US$:C$ | 0.75:1 |
| Refining and Transportation | C$3.00/oz |
| Payable Gold | 99.95% |
| NSR Royalties | 0% to 3% (varies by claim) |

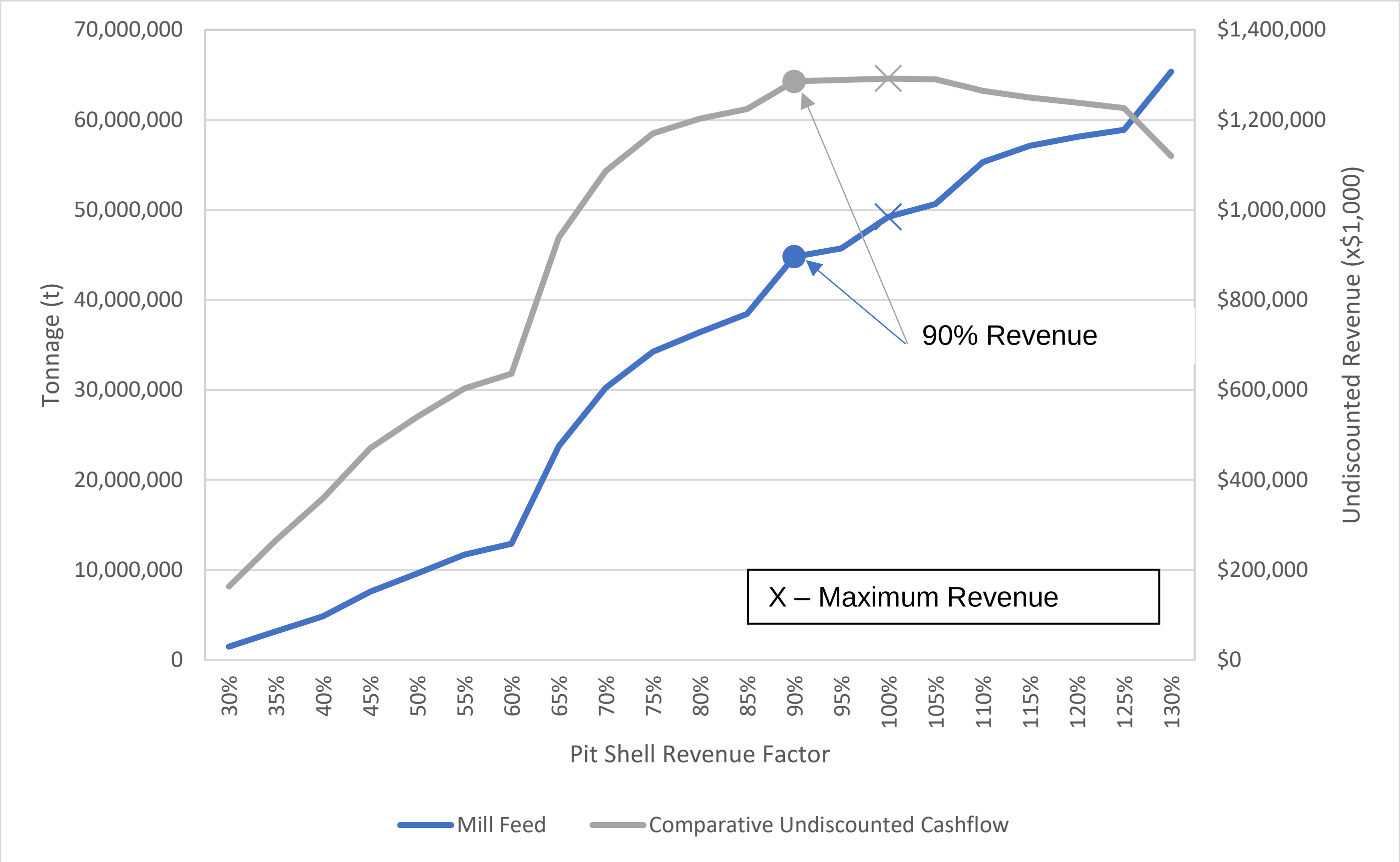
| Item | Unit of Measure |
|---|---|
| GSR Royalties | 0% to 1% (varies by claim) |
| Mining Cost | C$3.30/t mined |
| Process + G&A Cost | C$19.80/t mill feed |

Source: MMTS, 2024.

Figure 16-3 shows the contents of the generated LG pit shells for the Monique pit. An infliction point can be seen in the curve of cumulative tonnes and UCF by pit case. This point indicated the 90% pit shell case as the point at which larger pit shells are unlikely to produce significant increase to the project value. The maximum value pit shell, often referred to as the 100% case, is indicated on Figure 16-3 with "X"s.

Additional external waste storage constraints are also considered when selecting the pit limit for the Monique deposit. The impact of external storage constraints is minimized by incorporating backfilling in the North pit area. To maximize this backfilling opportunity, the 100% pit is suggested as a guide for the North pit area. In considering the backfill space available in the North pit area and the estimated waste from the South area, the 85% pit is suggested as a guide for the design of the South pit area. Most of the South pit waste is planned as backfill into the North pit area. Figure 16-3 highlights the 90% shell for reference. This shell is selected as reference initially. Following this initial selection, the WRSF limitation and backfilling capabilities required are reviewed to select the final limits. The combination of the 100% shell in the north and the 85% shell in the south is similar in overall quantity to the 90% shell.

**Figure 16-3: Monique LG Pit Shell Results by Case**




Source MMTS, 2024.

A similar Lerch-Grossman analysis is completed for Pascalis, Courvan North, Courvan South and Highway. In each area, a robust case is selected (typically 90% or lower). Figures 16-4 to 16-7 show the LG pit shell contents by case and the chosen shell for guides for mine planning design. The maximum economic value pit shell (using base case prices) is the 100% case and is indicated on each figure with an “X”.

A summary of the material inside the selected pit shells is shown in Table 16-4. The cut-off grade used to report potential mill feed is NSR ≥ $19.80/tonne

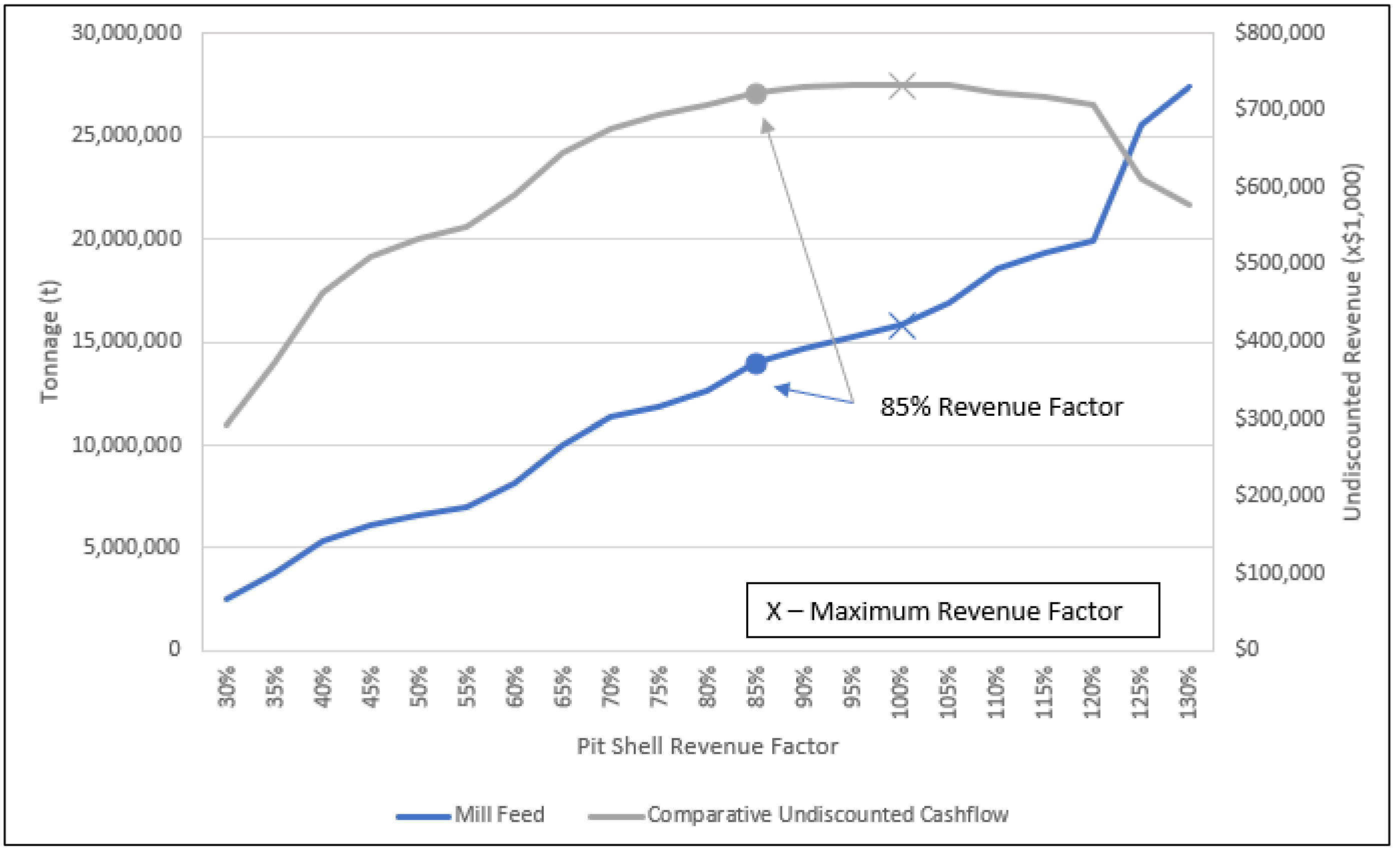
**Table 16-4: Summary of LG Selected Pit Shells**

| Area | Potential Mill Feed (kt) | Au (g/t) | NSR ($/t) | Waste (kt) | Contained Au (koz) | Strip Ratio (t:t) |
|---|---|---|---|---|---|---|
| Monique | 44,807 | 1.15 | 79.56 | 360,099 | 1,661 | 8.0 |
| Pascalis | 16,443 | 1.42 | 98.68 | 100,826 | 752 | 7.2 |
| Courvan North | 7,437 | 1.35 | 93.70 | 65,592 | 323 | 8.8 |
| Courvan South | 4,681 | 1.16 | 80.45 | 47,030 | 175 | 10.0 |

| Area | Potential Mill Feed (kt) | Au (g/t) | NSR ($/t) | Waste (kt) | Contained Au (koz) | Strip Ratio (t:t) |
|---|---|---|---|---|---|---|
| Highway | 575 | 1.12 | 71.70 | 3,502 | 21 | 6.1 |
| Total | 73,942 | 1.23 | 85.23 | 577,049 | 2,931 | 7.8 |

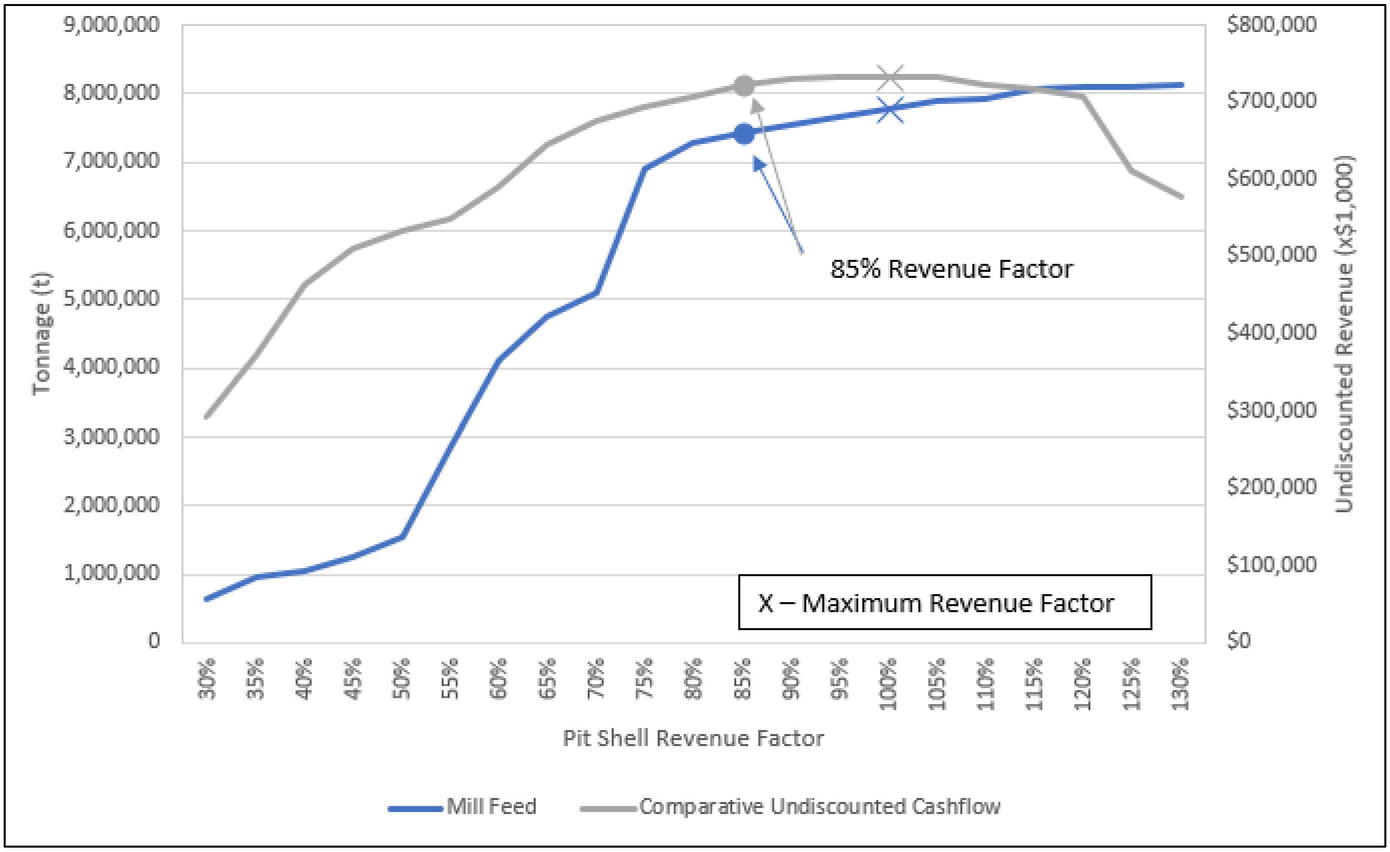
Source: MMTS, 2024.

**Figure 16-4: Pascalis LG Pit Shell Results by Case**



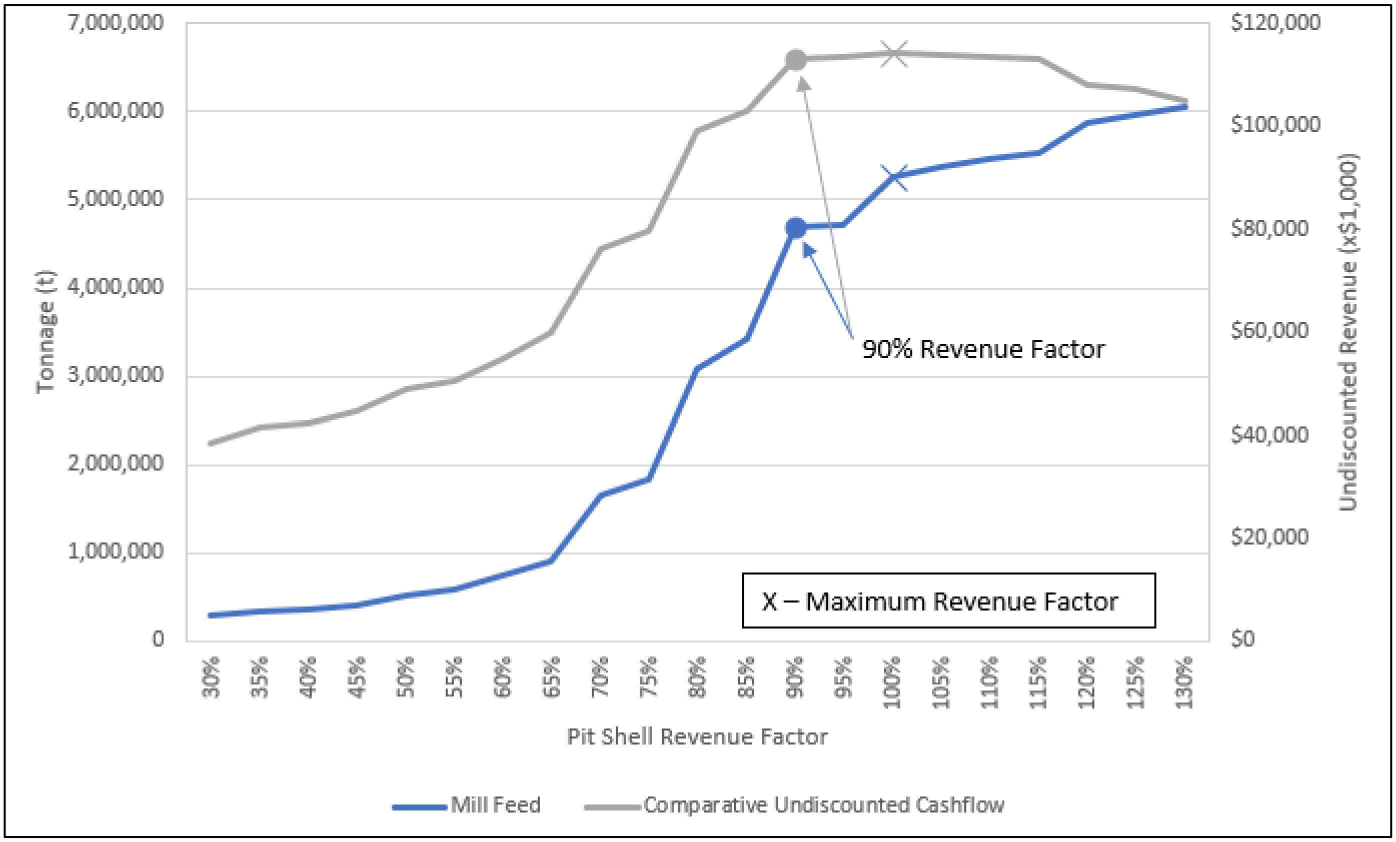

Source MMTS, 2024.

**Figure 16-5: Courvan North LG Pit Shell Results by Case**



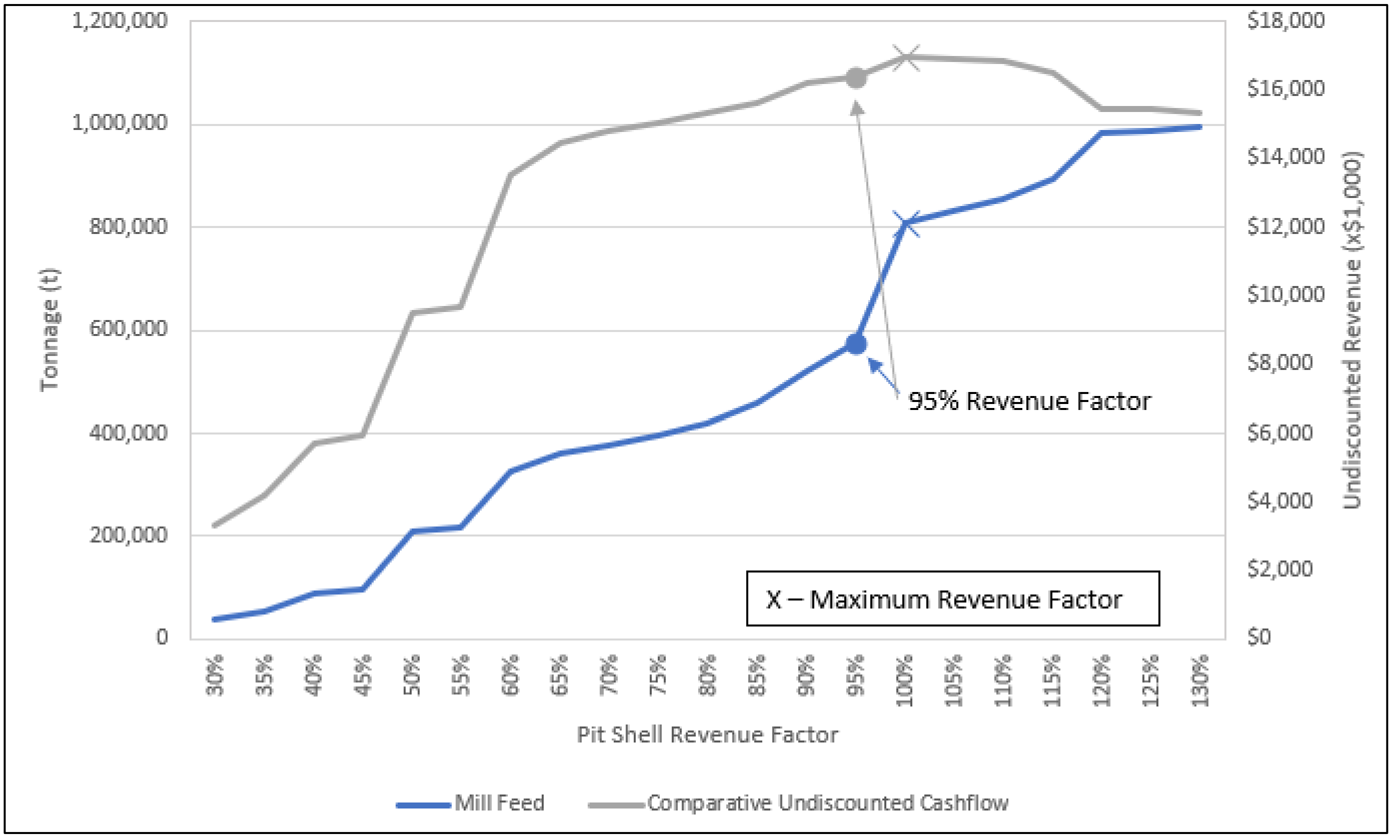

Source MMTS, 2024.

**Figure 16-6: Courvan South LG Pit Shell Results by Case**




Source MMTS, 2024.

**Figure 16-7: Highway LG Pit Shell Results by Case**




Source MMTS, 2024.

### 16.4.3 Pit Design

The selected pit shells and geotechnical parameters are implemented to create detailed pit and phase designs for all of Monique, Pascalis, Courvan North, Courvan South and Highway deposits.

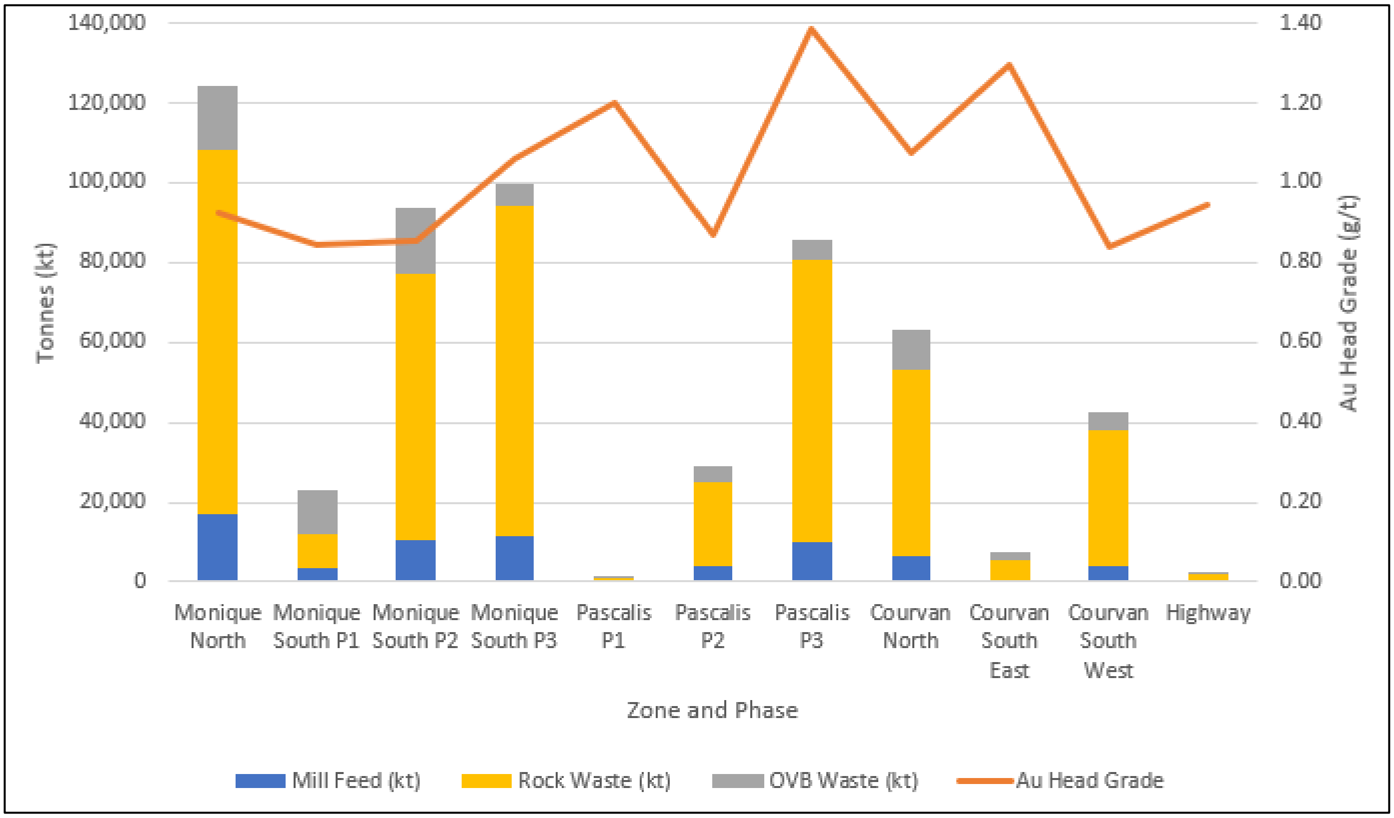
#### 16.4.3.1 In-Pit Haul Road Design

Mining operations utilize rigid body 135 t haul trucks. Pit limits and phases are designed with 25 m wide double-lane road widths that include allowances for berms and ditches. Haul road grades are limited to a maximum of 10%. The lowest three benches of haul roads in each pit incorporate single lane road widths of 18.1 m since bench volumes and traffic flow will be reduced in these portions of the pit.

#### 16.4.3.2 Results of Design

Pascalis, Monique, and Courvan South are split into smaller phases to allow extraction of higher-grade, lower strip ratio material. Courvan North and Highway are mined as single phases. A minimum pushback distance of 50 m is planned between each phase. Figure 16-8 graphically shows the contents for each designed pit phase.

**Figure 16-8: Pit Phase Contents**




Source: MMTS, 2024

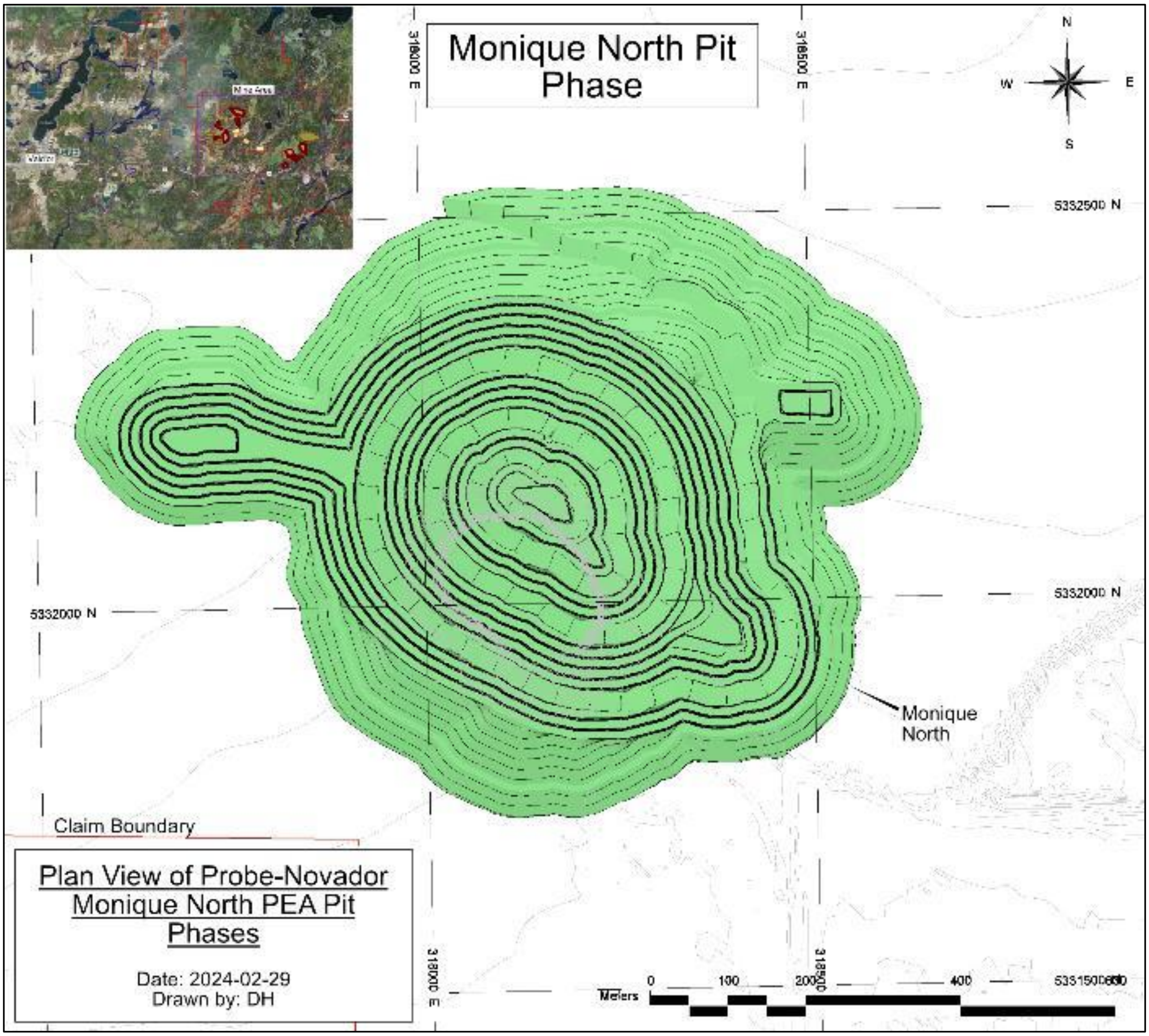
Monique is designed to optimally place waste rock material into and on top of mined out North pit area to limit wetland disturbance. The Monique North pit area (where there is a current historical open pit) will be mined first to the ultimate pit limit and then utilized for backfilling. The mining of Monique North is shown in Figure 16-9. Figures 16-10 to 16-12 show the mining progression of Monique South Phases 1 through 3. Most of the waste from these phases will be backfilled into the Monique North pit area.

Pascalis has a lower strip ratio and higher NSR values when compared to the other areas. This area will be mined early and the mined-out pit can be utilized for tailings placement. Figure 16-13 shows the Pascalis phases and final pit limit as well as the single phase for the highway.

Courvan South has two unique pit bottoms and will be mined in two phases. Figure 16-14 shows the final pit configuration for Courvan South. Courvan North is not considered for phasing and will be mined as single phases. Figure 16-15 shows the pit design for Courvan North.

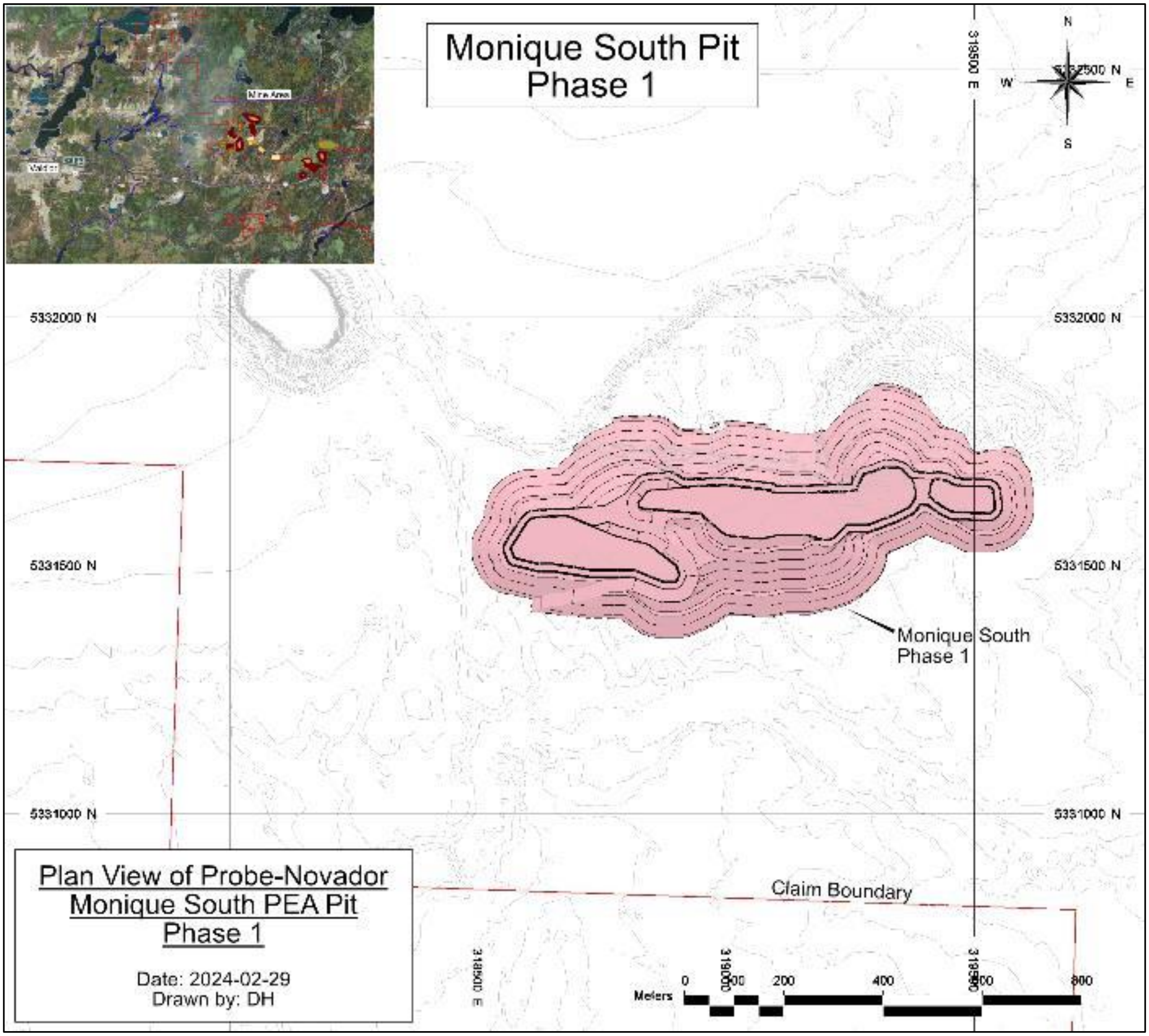
Figures 16-16 and 16-17 show the mine plan at the end of pre-production and the mine life, respectively.

**Figure 16-9: Monique North Pit Phases**



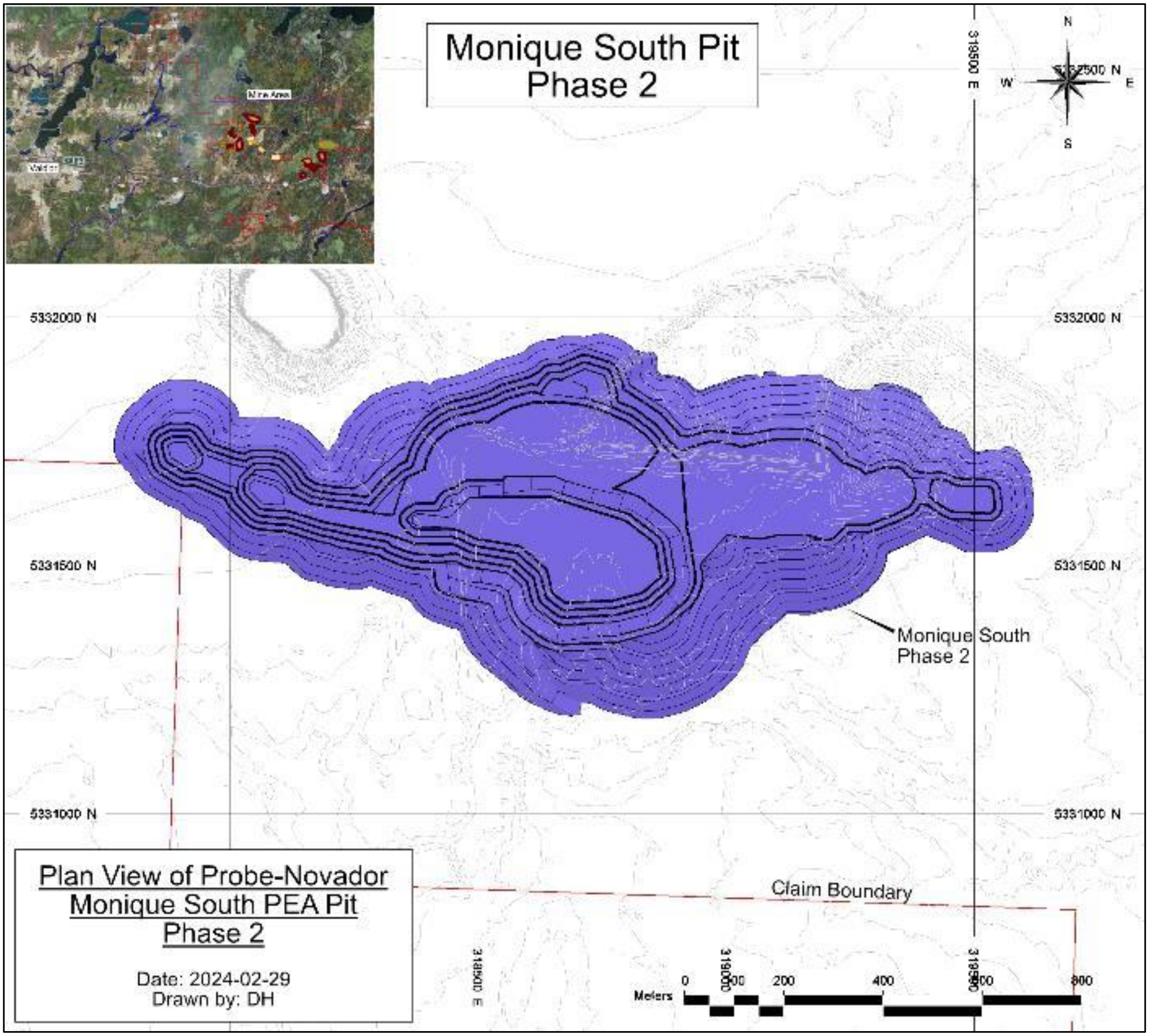

Source: MMTS, 2024.

**Figure 16-10: Monique South Pit – Phase 1**



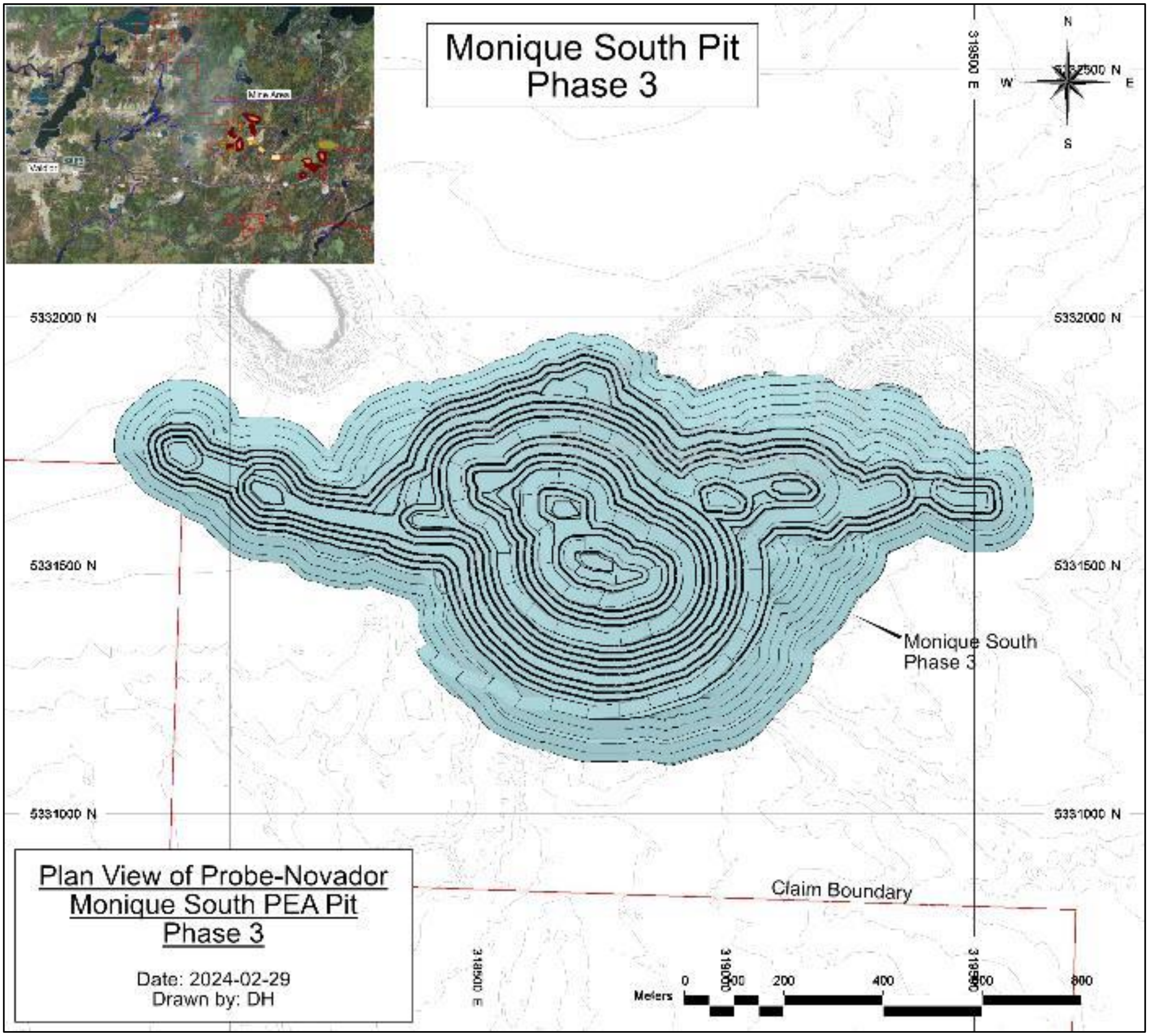

Source: MMTS, 2024.

**Figure 16-11: Monique South Pit – Phase 2**



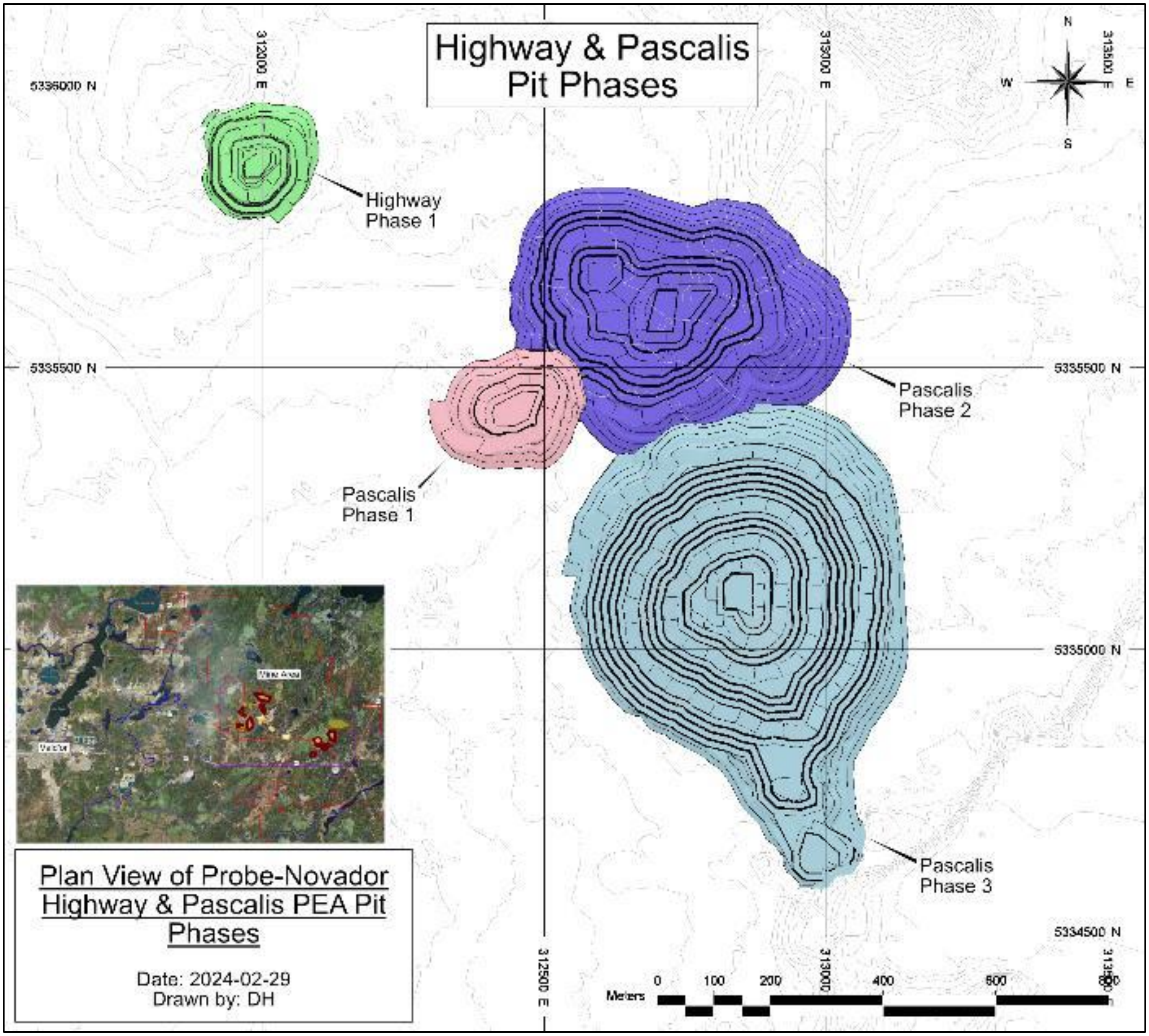

Source: MMTS, 2024.

**Figure 16-12: Monique South Pit – Phase 3**



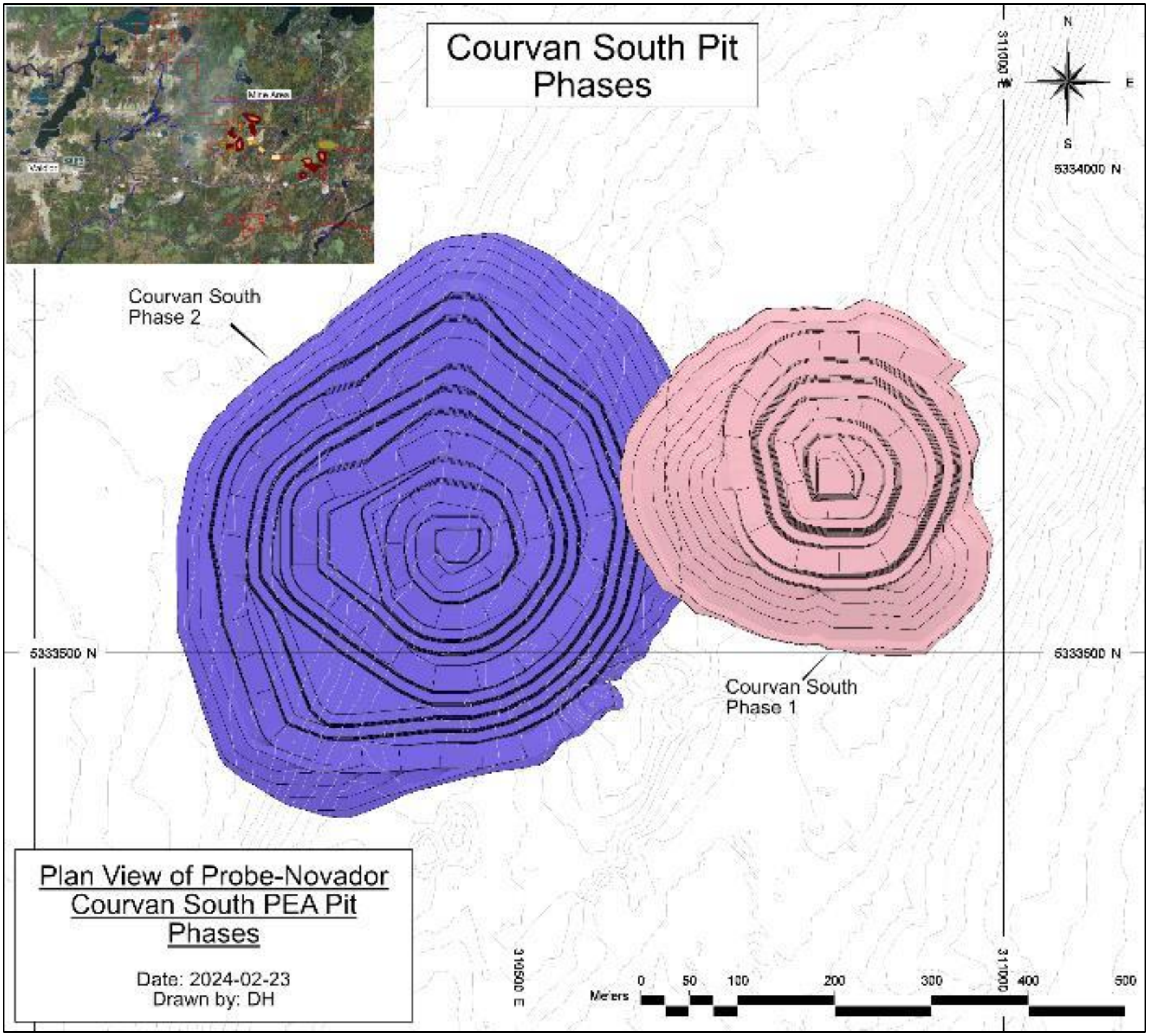

Source: MMTS, 2024.

**Figure 16-13: Highway & Pascalis Pit Phases**



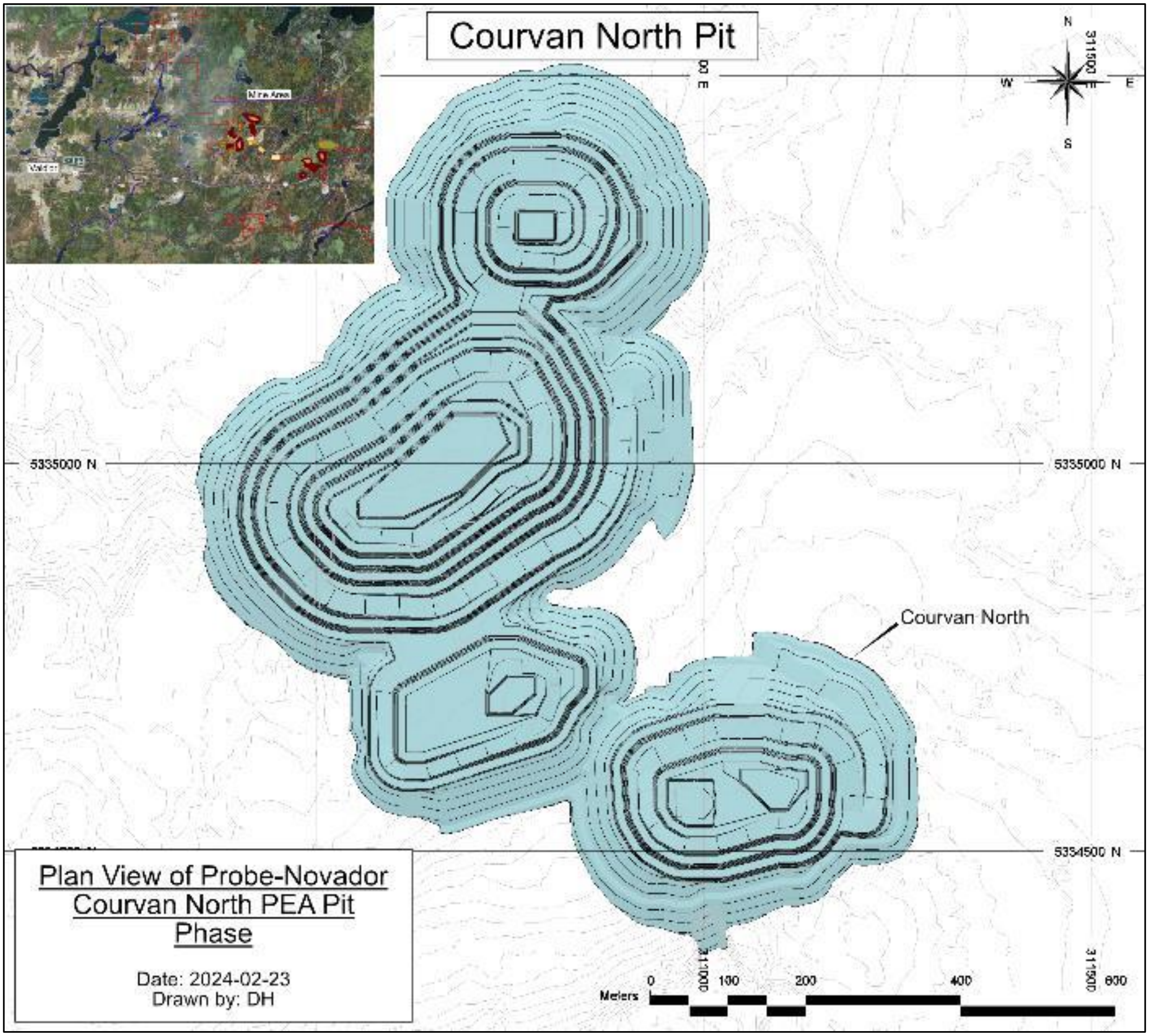

Source: MMTS, 2024.

**Figure 16-14: Courvan South Pit Phases**



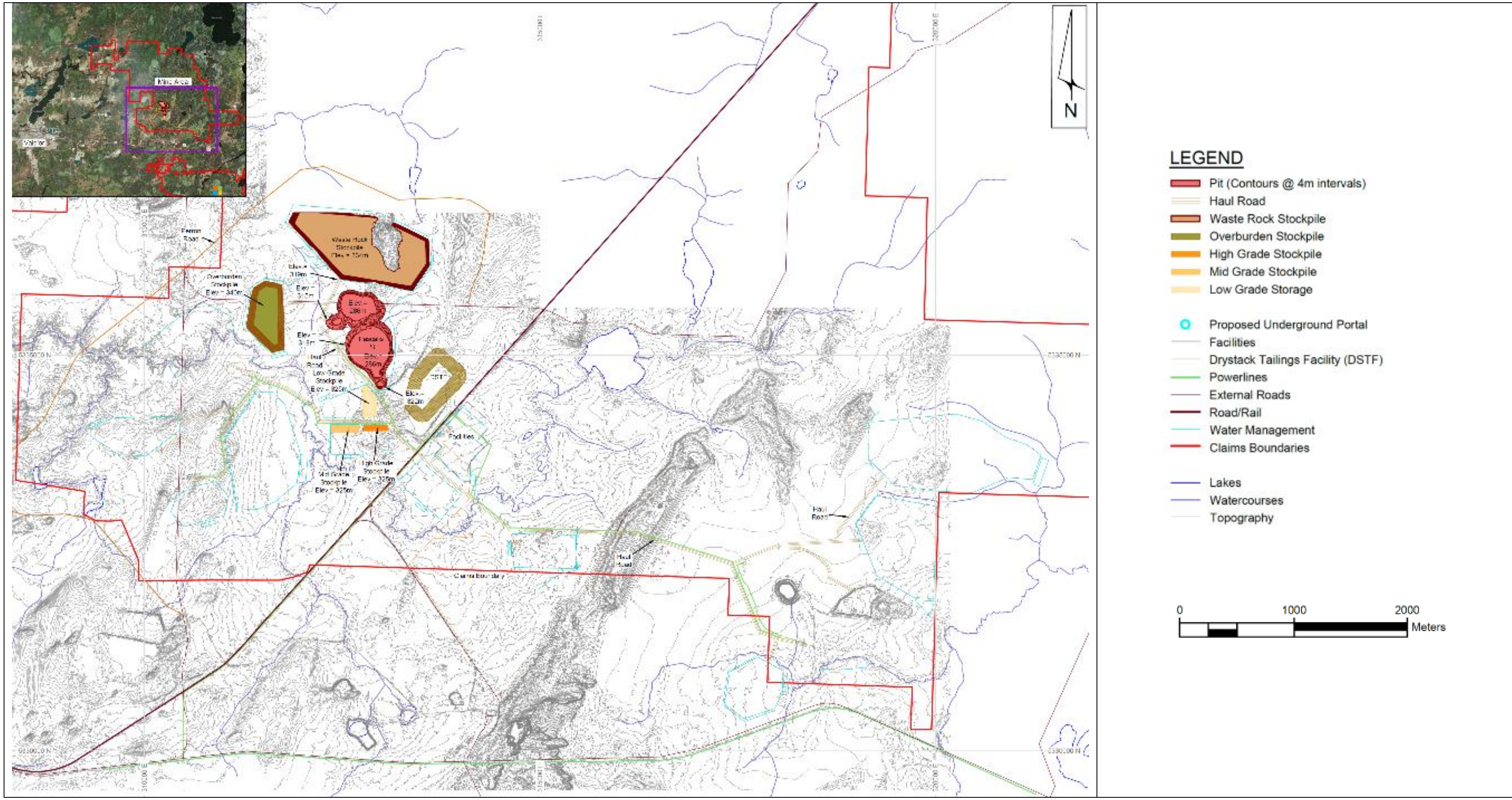

Source: MMTS, 2024.

**Figure 16-15: Courvan North Pit**



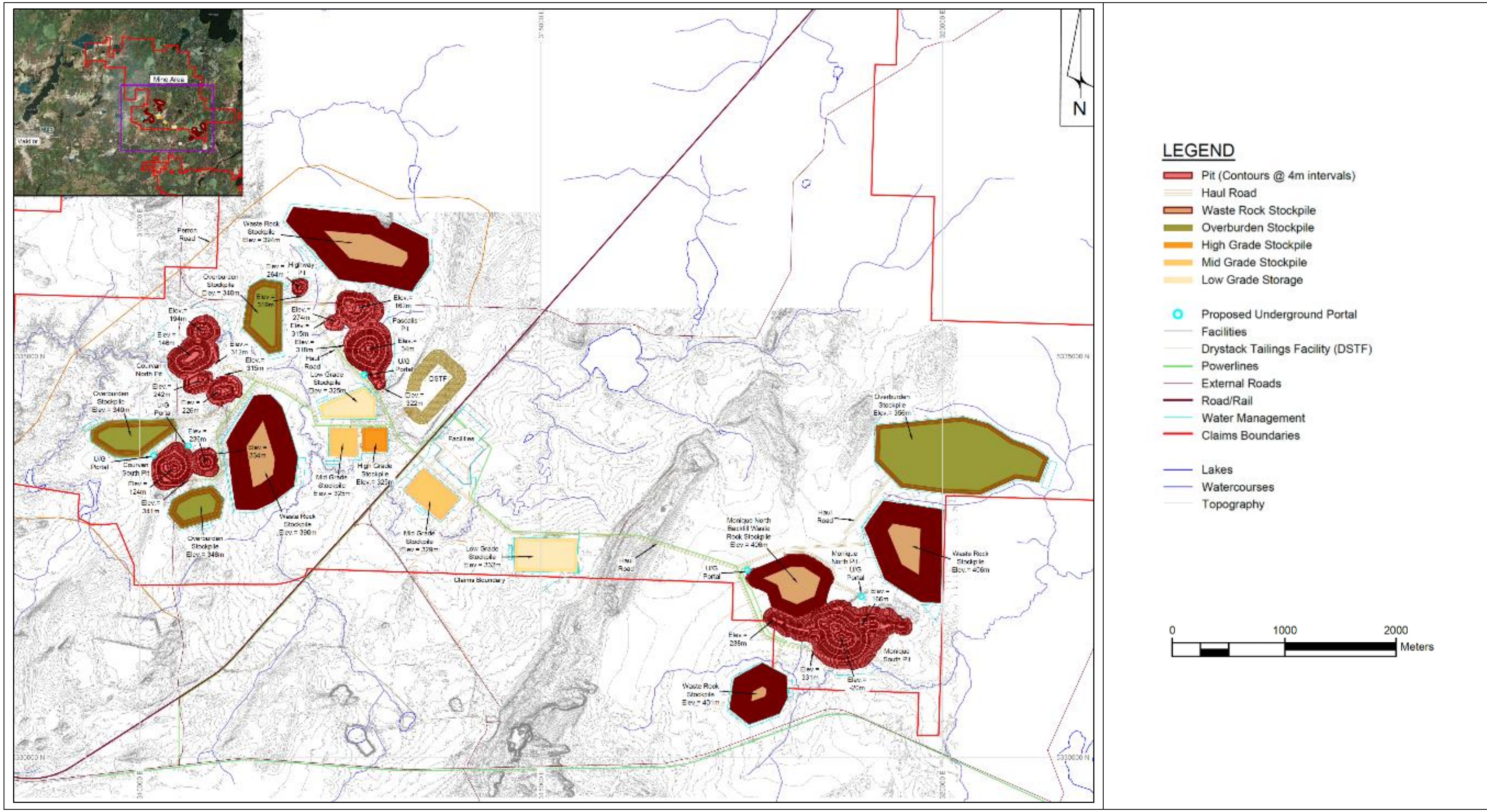

Source: MMTS, 2024.

**Figure 16-16: Mine Plan at the End of Pre-Production**




Source: MMTS, 2024.

**Figure 16-17: Mine Plan at the End of Mine Life**




Source: MMTS, 2024.

### 16.4.4 Ex-Pit Haul Roads

External mine haul roads are designed for haulage of mill feed and waste materials from the open pits to scheduled destinations. The mine haul roads are designed with the following key inputs:

- 30 m wide ex-pit haul roads. This road width incorporates a dual-lane running width (for 135t class trucks or smaller) and berms on both edges of the haul roads, as well as an allowance for ditches.
- 10% maximum grade

### 16.4.5 Mill Feed Stockpiles

Mill feed material mined from the pit will either be delivered to the crusher at the plant or long-term run-of-mine stockpiles. Courvan and Pascalis run-of-mine stockpiles are located between the pit exits and the plant. The Monique run-of-mine stockpiles are located along the road between Monique pit area and the plant. The stockpiles are placed to minimize disturbance to wetlands areas. Mill feed stockpiles are shown on the project layout drawing in Section 18.

### 16.4.6 Open Pit Electrical Supply

The drills and large open pit excavators are planned to be electrified. Each pit area will be supplied with sufficient electrical supply to meet the planned needs during mining operations. Section 18.1.3 further details the electrical supply at the project.

### 16.4.7 In Pit Dewatering

Anticipated water inflow rates into the pits are detailed in the hydrogeological study (Richelieu Hydrogéologie, 2023b. Probe Gold Inc. - Propriété Novador. Étude hydrogéologique. Novembre 2023. 66 pages). The predicted pit inflow rates are used to estimate the number of pumps required for dewatering. Pumps are included in the open pit equipment list and associated costs. The water inflow by major pit area is shown in Table 16-5. Allowances for dewatering from the other open pits is included in the mining costs.

**Table 16-5: Open Pit Water Inflow Rates**

| Area | Inflow Rate ($m^3/d$) |
|---|---|
| Pascalis Pit | 2,072 |
| Monique Pit | 3,554 |

### 16.4.8 Rock Storage Facilities (RSF)

Rock and overburden/topsoil storage facilities are planned at each site for waste material from the open pits.

The location of these facilities is planned to avoid existing waterbodies, water courses and wetlands as much as possible. Additionally, the anticipated depth of clay (determined by using auger holes) is considered. Facilities are placed in areas where the anticipated clay depth is less than 4 m, which allows the facilities to be built at an overall slope of 3.6H:1V, with a maximum height of 75 m. A swell factor of 30% is applied to all overburden and rock material.

Backfilling in Monique is utilized to minimize the external storage footprint. The mine schedule is guided to complete the North pit at Monique, before mining the South pit area. The mined out North pit can then be utilized for backfill. Material above the pit rim elevation is placed at an overall slope of 2H:1V

The waste rock storage facilities are shown on the project layout drawing in Section 18.

## 16.5 Underground

### 16.5.1 Summary

MMTS reviewed the geological block models available for the Monique, Courvan and Pascalis deposits to identify the most suitable underground mining method for the material within each zone. Given the information available on the project and the deposits, an Updated Preliminary Economic Assessment (UPEA) was carried out to evaluate the potential economic viability of these three deposits by generating for each, a mine design, a mine production plan and schedule, and a cost model.

The proposed mining method for the Monique deposit is longhole retreat (LHR) with mechanized longhole drilling, blasting and mucking equipment. Sublevels intervals are 25 m apart vertically. The proposed mining rate for Monique is 600,000 t/a or nominally 1,700 t/d based upon a 360 day per year schedule. The Monique mine will be accessed by two declines followed by a series of internal ramps and sublevels linking mining areas to each other on each sublevel.

The proposed mining method for Courvan and Pascalis deposits is mechanized cut and fill (MCF) with 2.5 m high cuts, using low-profile jumbos and mucking equipment. The stopes will be accessed by footwall waste drifts 25 m apart vertically. Crosscuts from the footwall drives provide access to a series of attack ramps which lead into the deposits. For the Courvan mine, two declines are currently proposed but MMTS feels that one can be eliminated through continued mine planning and optimization. The Pascalis mine is accessed with a single decline. The proposed mining rates for Courvan and Pascalis are both 300,000 t/a or nominally 850 t/d based upon a 360 day per year schedule.

Waste rock from underground mine development will be used for backfill at all three mines and supplemented with open pit waste as required. Most of the backfill will be cemented rock fill (CRF) but where possible, uncemented rock fill (UCR) will be used.

Mill feed from the mines will be transported to the processing facilities on surface to rehandle points with low-profile diesel-powered underground trucks, and then picked up and moved with larger open pit mining equipment, except for material from Pascalis which is close enough to the processing facilities that the underground trucks can haul mill feed directly to the run-of-mine pad next to the crusher.

### 16.5.2 Mineral Resources Considered for Mining

Indicated and Inferred mineral resources in the Monique, Courvan and Pascalis deposits with cut-off grades of 1.50 g/t Au and1.75 g/t Au respectively are considered in the respective mine designs, production plans and schedules.

Additionally, approximately 37,000 tonnes of Measured resources for the Pascalis deposit were also considered. A sectional view of the deposits is provided in Figure 16.2.

#### 16.5.3 Mining Methods

Based upon the PEA work that MMTS had done on the Monique, Courvan and Pascalis deposits, the selected mining methods were longhole retreat (LHR) for Monique and mechanized cut and fill (MCF) for Courvan and Pascalis. There was consideration of including an additional approximate 320,000 tonnes of material at Monique containing 24,000 ounces to be mined by MCF, but the scheduling implications with mining the LHR stopes in the same vicinity suggested that this material should not be brought into the mine plan at this time.

In the PEA, MMTS had looked at the physical geometry of the deposits and their rock mass characteristics.

The rock masses for the three deposits are assumed to be in fair to good quality rock with low stress regime in each as well as in the geographic region. In the PEA, the parameters used to determine the mining methods for the three deposits were:

- Depth – Close to surface ranging from 80 m, 60 m and 25 m from topography to the top of Monique, Courvan and Pascalis respectively with the zones continuing downdip for 380 m, 380 m and 650 m.
- Mineralization widths – Narrow to moderate widths ranging from 1.0 m to 25 m.

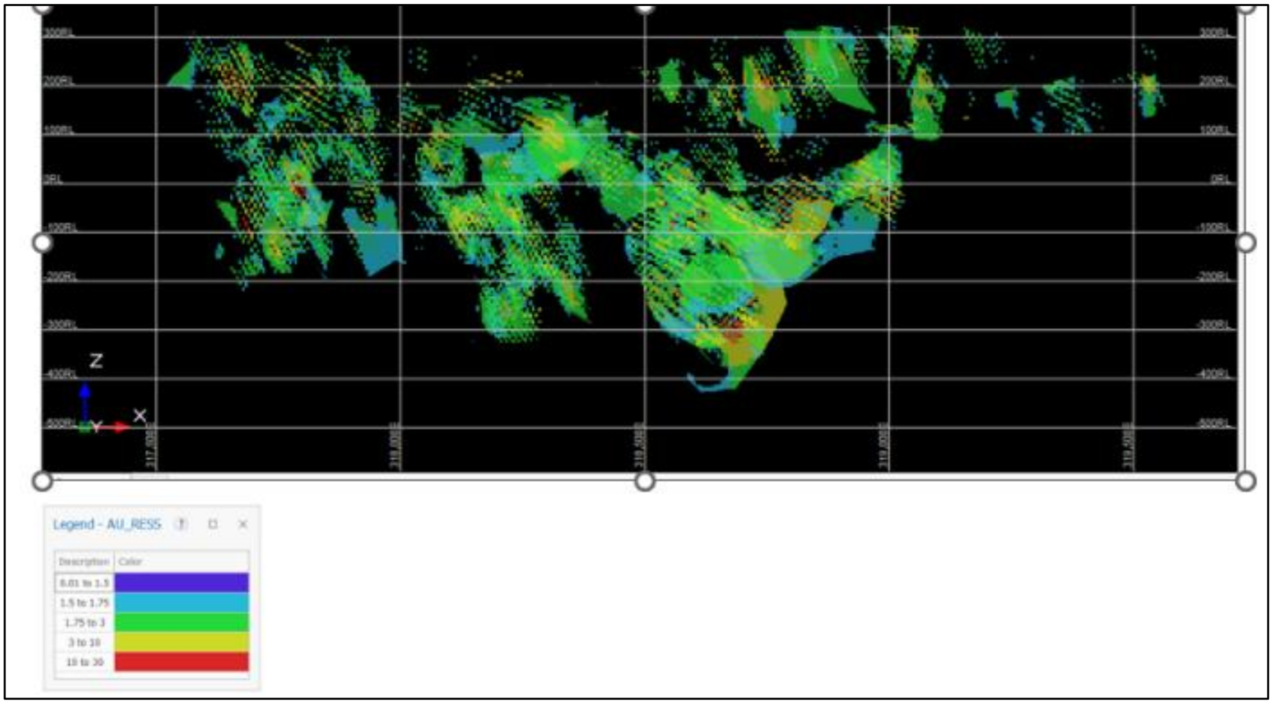
MMTS considered various configurations of sublevel stoping and mechanized cut and fill mining for all three deposits. Open pit mining was ruled out due to depth.

Ultimately, LHR was selected for Monique because of the amount of waste development that would have been required if another variation of sublevel longhole were selected. LHR reduces drastically the amount of waste development needed at the expense of reduced mining flexibility.

The lenses in the Courvan and Pascalis deposits were relatively thin, with gentler dips, which made mechanized cut and fill (MCF) a better option than LHR. MCF stopes are accessed by footwall waste drives, which makes mining very flexible, but this comes at the expense of more waste development.

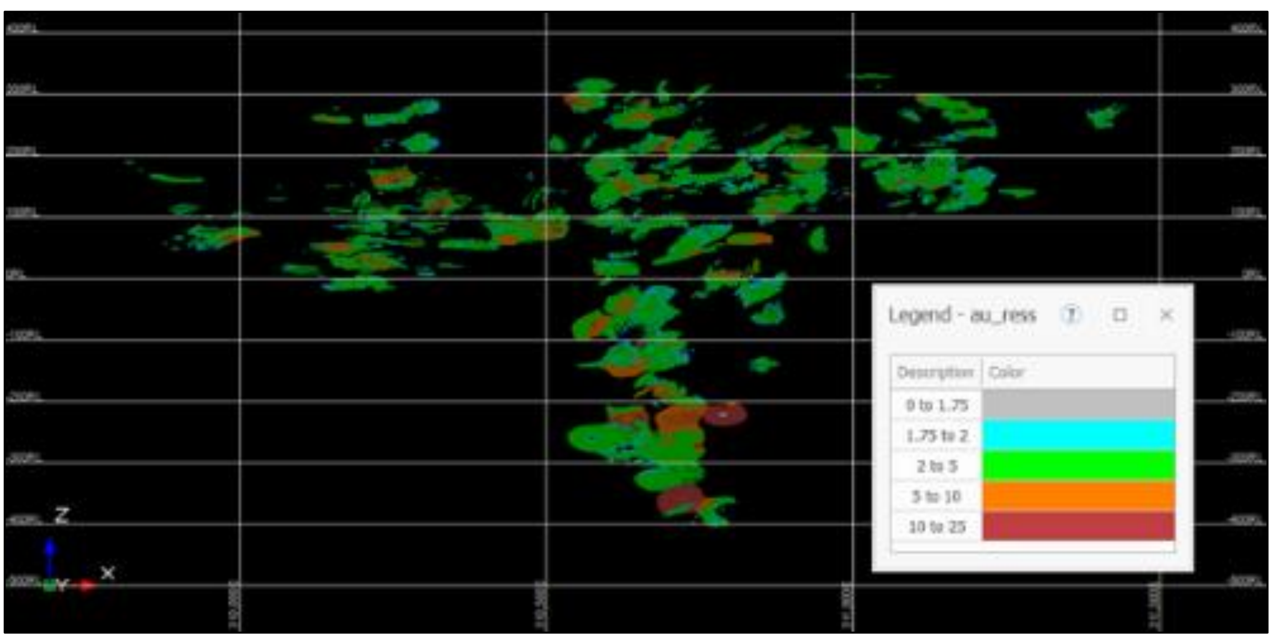
Figure 16-18 shows a longitudinal section of the Monique deposit at the 1.50 g/t Au cut-off grade; Figure 16-19 shows a longitudinal section of the Courvan deposit at the 1.75 g/t Au cut-off grade; and Figure 16-20: shows a longitudinal section of the Pascalis deposit at the 1.75 g/t Au cut-off grade.

**Figure 16-18: Longitudinal Section of the Monique Deposit at the 1.50 g/t Au Cut-off Grade Looking North**



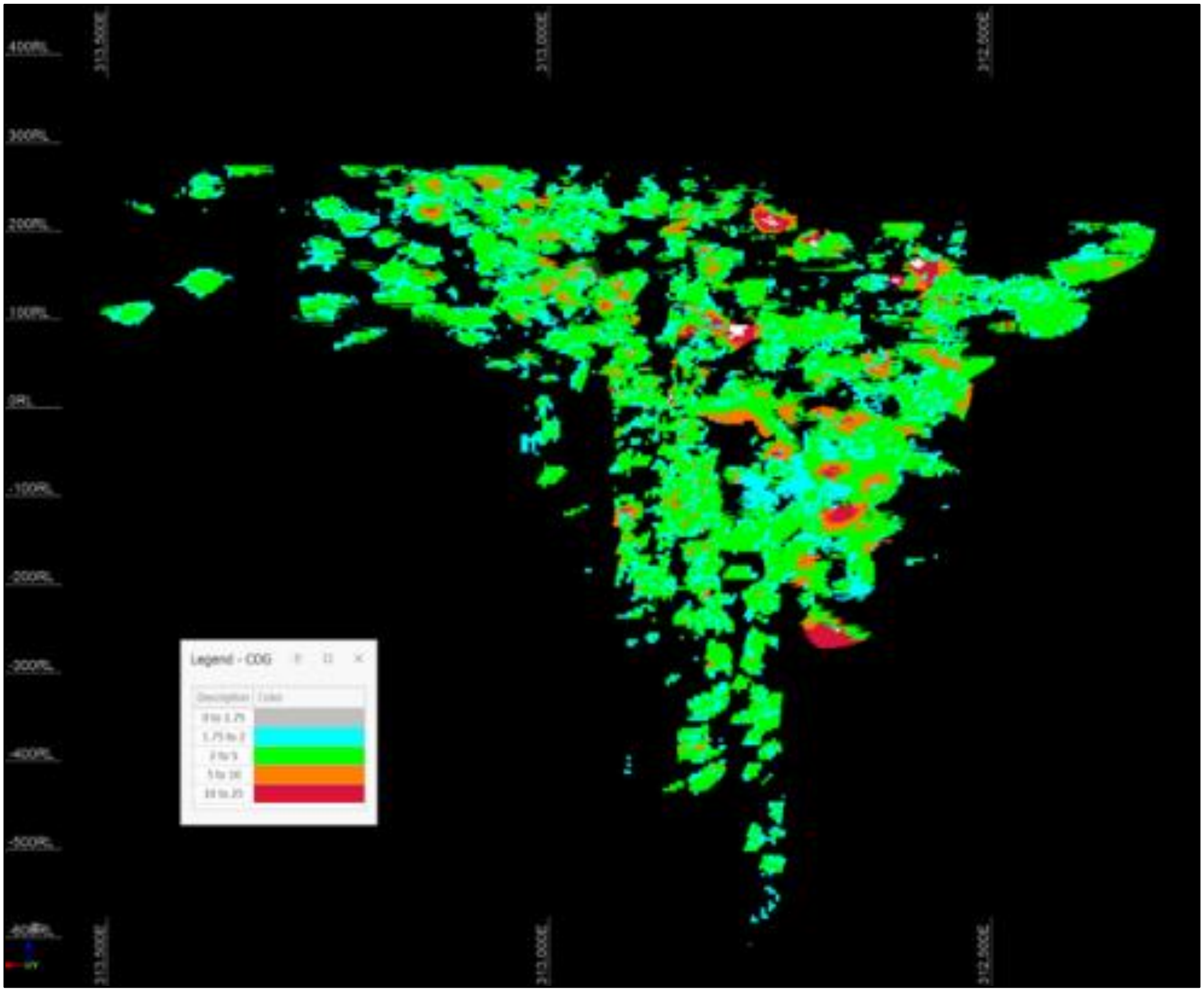

Source: MMTS, 2024.

**Figure 16-19: Longitudinal Section of the Courvan Deposit at the 1.75 g/t Au Cut-off Grade Looking North**




Source: MMTS, 2024.

**Figure 16-20: Longitudinal Section of the Pascalis Deposit at the 1.75 g/t Au Cut-off Grade Looking North**



Source: MMTS, 2024.

Notwithstanding the work that has been done in the two studies thus far, as more information is accumulated, MMTS recommends that a more thorough assessment of mining method selection be carried out.

#### 16.5.3.1 Cut-Off Grade Determination

The cut-off grade used to determine the mineable portions of the deposits and the mine design for the PEA is developed using the parameters listed in Table 16-6.

**Table 16-6: Cut-off Grade Parameters**

| Cut-off Grade Determination | Value | |
|---|---|---|
| Gold (US$/oz) | 1,700.00 | |
| Forex | 1.33 | |
| Gold Mass Conversion | 31.10 | |
| Gold (C$/oz) | 2,261.00 | |
| Gold (C$/g) | 72.69 | |
| Payable Gold % | 1.00 | |
| Refining Cost (C$/oz) | 3.00 | |
| Transportation & Insurance (C$/oz) | 0.84 | |
| Au Value (C$/g) | 72.53 | |
| **Operating Cost** | **Mining Method** | |
| | **Longhole Retreat** | **Mechanized Cut and Fill** |
| Mining (C$/t) | 69.00 | 84.00 |
| G & A (included in Processing) | | |
| Haulage (C$/t) | 3.60 | 3.60 |
| Processing (C$/t) | 16.20 | 16.20 |
| **Total Operating Cost (C$/t)** | **88.80** | **103.80** |
| Recovery (%) | 94.00 | 94.00 |
| Operating Cost Cut-off Grade (g/t Au) | 1.30 | 1.52 |
| Use Cut-off Grade (g/t Au) | | |
| Adjustments for Capital Waste | 15% | 15% |
| Adjusted Cut-off Grade (g/t Au) | 1.50 | 1.75 |
| Use Cut-off Grade (g/t Au) | 1.50 | 1.75 |

Source: MMTS, 2024.

The actual cut-off grades selected were 1.50 g/t Au for LHR stopes and 1.75 g/t Au for MCF stopes and were used in conjunction with Deswick Shape Stope Optimizer (DSO) to generate the mineable portions of the respective deposits. The results from the DSO algorithm were reviewed with orphan blocks manually deleted from the inventory.

#### 16.5.3.2 Mineable Stope Shapes

The mineable stope outlines were generated with DSO software in such a manner as to represent the planned extraction of the mineralized zones, together with any internal dilution (or external dilution) meeting the minimum mining width and stope dimension for the proposed mining method and the cut-off grade.

For the LHR DSO runs, the stope outlines were generated from a 25 m vertical level interval stope height, stope minimum mining width of 2.0 m and stope strike length of 25 m, dip of greater than 55° or more whilst respecting the COG of 1.50 g/t Au.

For the MCF DSO runs, the stope outlines were generated from a 2.5 m vertical cuts, stope minimum mining width of 2.0 m and stope strike length of up to 100 m, dip of less than 55° whilst respecting the COG of 1.75 g/t Au.

#### 16.5.3.3 Throughput Rate and Supporting Assumptions

The proposed mine production rate at the three mines are as follows:

- Monique: 600,000 t/a (1,700 t/d)
- Courvan: 300,000 t/a (850 t/d)
- Pascalis: 300,000 t/a (850 t/d).

Table 16-8 shows the general industry rules of thumb that were used to estimate the production rates for the three deposits:

**Table 16-7: Proposed Production Rates**

| Deposit | NMP | Taylor's Rule | McCarthy and Tatman | Proposed (t/d) |
|---|---|---|---|---|
| Monique | 1,504 | 1,809 | 1,671 | 1,667 (1,700 nominal) |
| Courvan | 640 | 1,050 | 710 | 833 (850 nominal) |
| Pascalis | 758 | 1,111 | 842 | 833 (850 nominal) |

The production rates indicated are deemed to be appropriate given the physical geometry, type and spatial location of the deposits, the available data for the proposed mining method, mine design, and the level of accuracy for the current engineering evaluation. However, MMTS recommends that additional technical evaluation be carried out to revise and optimize the production rate as additional exploration drilling and updated Mineral Resource information become available for the three properties.

### 16.5.4 Modifying Factors

#### 16.5.4.1 Dilution and Mining Recovery

16.5.4.1.1 Longhole Retreat Stopes

- External Dilution – Based upon stope heights of 25 m (drill holes of ~20 m long), MMTS felt that dilution produced by a combination of drill hole deviation and/or wall sloughing of 0.50 m per contact for the entire hole length was reasonable. This produced 16% dilution for the longhole stopes being mined in Monique. Wall dilution material was given a grade of 10% of the block grade. A further 3% dilution was allowed for from backfill but was given a zero grade. Overall recovery of the resource, which includes dilution, is 90% based upon MMTS experience.
- Internal Dilution – An unplanned dilution, which is unavoidable, by low grade and internal waste material contained in the block model for the proposed stope dimensioning.

- Mine Recovery – The mining recovery for the Monique deposit using LHR mining is estimated to be 90%, which assumes a material loss of 10% during extraction of blasted material from the stopes, transportation, and handling of the material from the stopes to the surface processing facility.

16.5.4.1.2 Mechanized Cut and Fill Stopes

- External Dilution – For MCF stopes, external dilution was determined to be 0.25 m per contact based upon a combination of possible wall sloughing and drill hole deviation. This worked out to an average of 6% dilution for the Courvan stopes and 11% average for the Pascalis stopes. In addition to wall dilution, a further 3% dilution for backfill was added. Wall dilution was assigned a grade of 10% of block walls, whilst backfill dilution was given a grade of zero.
- Internal Dilution – Internal dilution was included in the MCF stopes.
- Mine Recovery – The mining recovery for the Courvan and Pascalis deposits using MCF mining is estimated to be 95%, which assumes a material loss of 5% during extraction of blasted material from the stopes, transportation, and handling of the material from the stopes to the surface processing facility.

16.5.4.1.3 Underground Mining Inventory

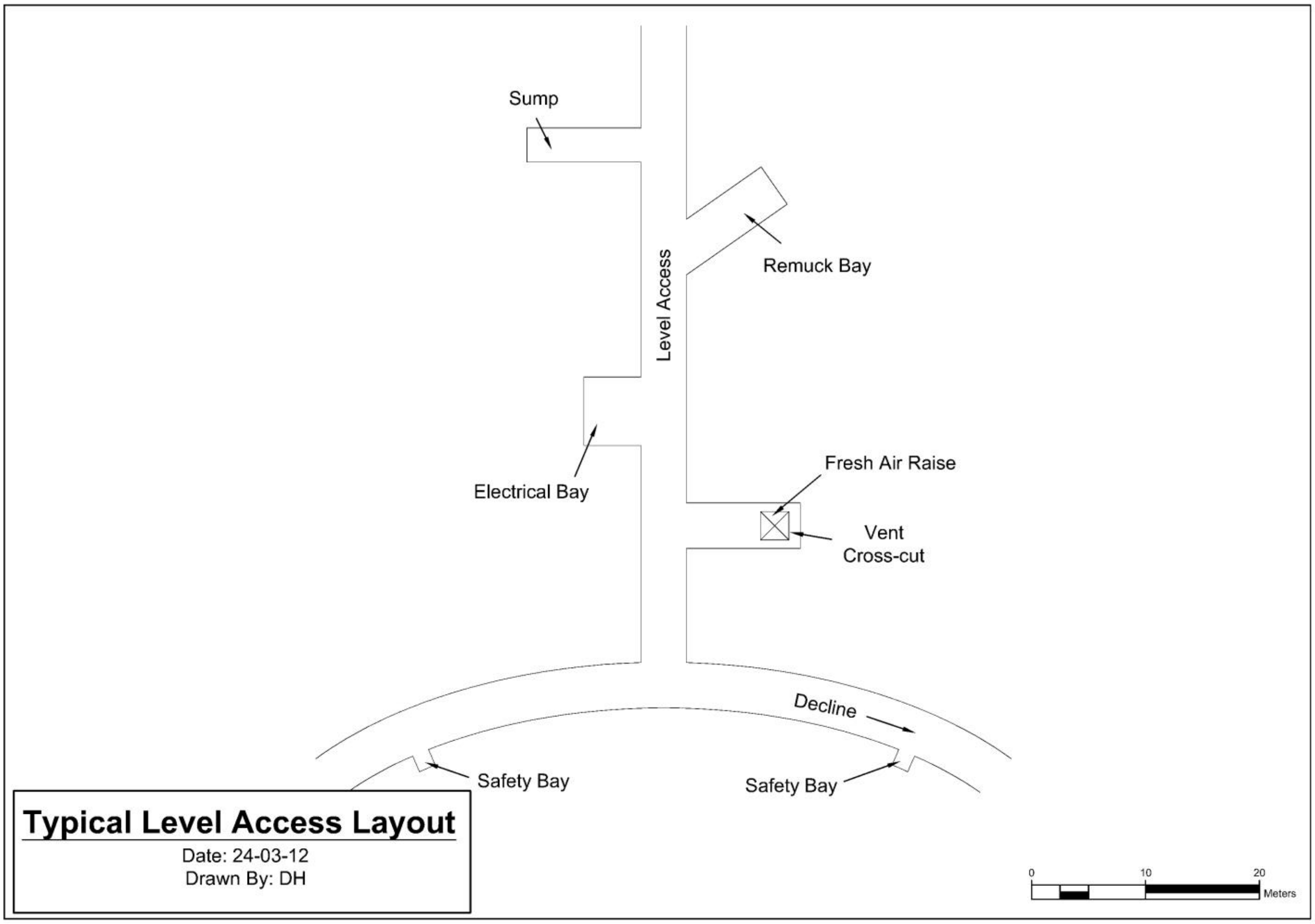
- The materials contained in the DSO stope outlines to be considered in the mine design and production plan, including dilution, and allowing for mining recovery are:
  - Monique: 6,322,500t at an average grade of 2.35 g/t Au
  - Courvan : 2,985,987t at an average grade of 3.80 g/t A
  - Pascalis: 3,110,000t at an average grade of 3.05 g/t Au.

### 16.5.5 Mine Design

The three mine designs were developed to support a nominal mine production rate of approximately 1.2 Mt/a (3,333 t/d) for the proposed mining methods with waste rock from underground the primary source of backfill and supplemental backfill provided by open pit waste. Most of the backfill material will be cemented rock fill (CRF) with uncemented rock fill (URF) being used when the appropriate opportunities arise. All three mine designs were carried out in Deswik UG software.

Each of the three mines contains several discrete zones ranging across different vertical elevations. The concept is to drive the declines to get access to the bottom of the uppermost zones, commence mining at those elevations and advance the declines to the next lowest zone(s) whilst production mining continues above. Mining of the upper zones allows the declines below, as well as other waste development to take place. No sill pillars between zones will be left for later recovery.

**Figure 16-21: Typical Level Access**




Source: MMTS, 2024.

#### 16.5.5.1 Longhole Retreat Mining

Mining commences at the bottom of each deposit with the development of sills, where production drilling, blasting and mineralized material will be extracted from the stope in a longitudinal retreat, fashion towards the crosscut. Unconsolidated waste rock will be placed from the level above during the retreat, forming the working platform for the subsequent extraction panel (i.e., mining bottom up).

Sublevels are 25 m vertically apart. Typically, each sublevel is accessed by a sublevel access, followed by development through waste to the nearest stope. Upon reaching the stope, development will then turn left and right and mine through the stope then through waste to the next stope until the stope extremities both left and right of the level access, have been reached. This mining is performed with mechanized jumbos, bolting machines and load-haul-dump (LHD) units.

Once the initial sublevel access has been developed, a second sublevel 25 m vertical above it, is developed in the same manner. Stopes are then ready to be mined using longhole drills, large explosives trucks and remote-controlled LHD units. First, slot raises are developed at the end of the farthest stopes from the level access. Once mucked out from the lower sublevel, longhole drilling, blasting and mucking takes place retreating to the entrance of the stope, which is 25 m long. This takes place with blasts comprising three to four rows of holes or five to six metres. Once completely mucked out, a bulkhead is built in the sill of the lower sublevel and low-profile trucks haul both CRF and URF through the upper sublevel and dump it into the void. Once this void has been filled and the backfill has set, the same sequence can be repeated initiated with development of the slot raise.

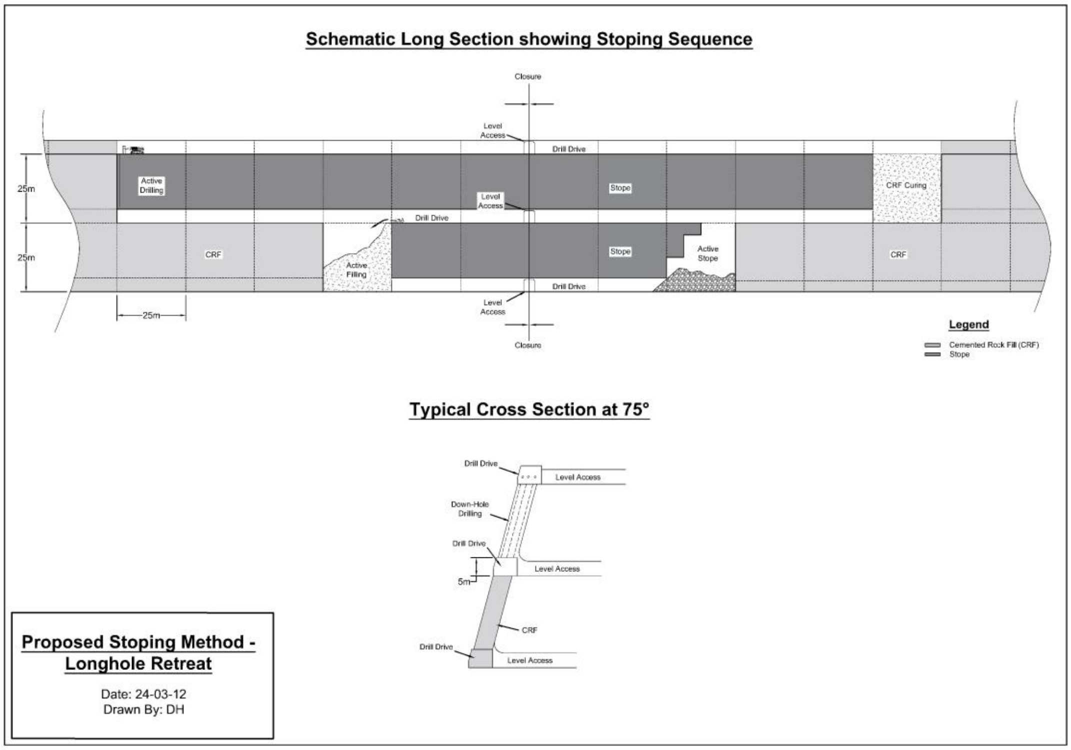
Material mined from the stopes will be mucked to the remuck bay located at the entrance to the stope on the lower sublevel, where it is loaded into 30t trucks for hauling up the primary declines.

Equipment requirements for LHR mining are:

- Development – Two-boom jumbo, 10 t LHD and bolting jumbo, small explosives truck, 30 t low profile haul truck
- Stope Mining – Longhole drill (top hammer), 10 t LHD equipped with remote control, large explosives truck and 30 t low profile haul truck.

Typical LHR stope mining sequence is shown in the figure below.

**Figure 16-22: Proposed LHR Stoping Method**




Source: MMTS, 2024.

### 16.5.5.2 Mechanized Cut and Fill Mining

Sublevels for MCF mining are 25 m apart vertically. Stopes are mined in 2.5 m vertical lifts. Typically, a sublevel is developed with a sublevel access from the ramp, then footwall waste development along the footwall of the stopes. Cross-cuts to the stopes are then driven through waste and perpendicular to the stopes at a gradient of –15%. Upon reaching the stopes, the first cut (sill cut) is mined left and right of the access for 50 m along the stope length in either direction. The first cut will be taken 2.5m wide from the hanging wall, then will be backfilled and a second parallel cut from the the footwall contact to the standing backfill wall be mined and backfilled. If required, a third cut at the same eleveation will be taken. Once the first lift has been completed, the mining crew will retreat to the beginning of the cross-cut and take a second cut at a –7.5% gradient. This is further repeated in 2.5 m vertical cuts for a height of 25 m, at which time, the same process is repeated with the MCF stopes established upon sublevel 25 m higher.

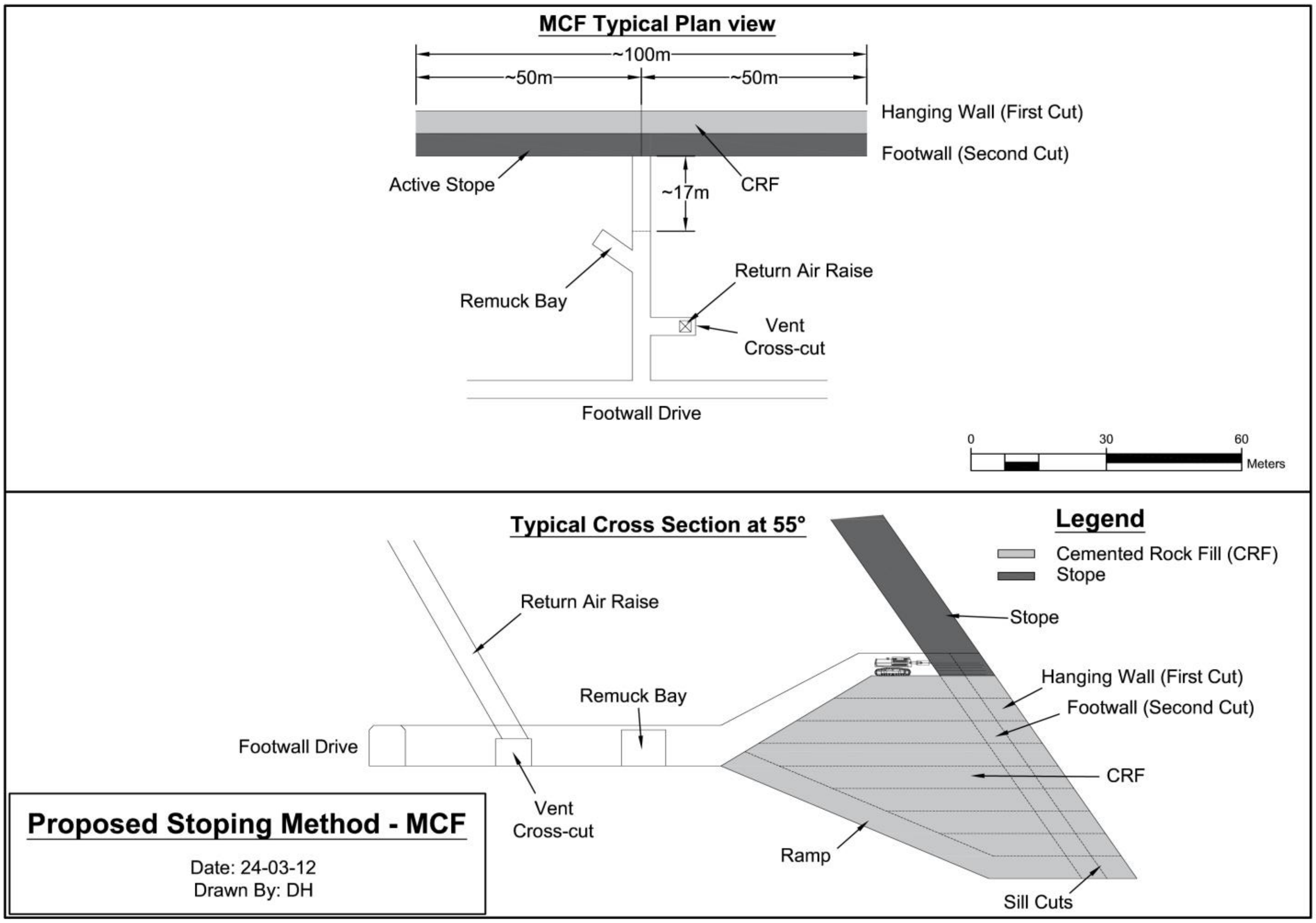
Backfilling will take place with haul trucks placing backfill in remuck bays located at the intersection of the cross-cuts and footwall drive. From there, the 3.5 t LHD units, with a rammer-jammer assembly will place the backfill into the stope, filling the entire lift tight to the back. After allowing for setting, the next cut adjacent (upon the same elevation) or upon the next elevation can take place.

Equipment requirements for MCF mining are:

- Development from the decline through to the end of the sublevel footwall drift: two-boom jumbo, 10 t LHD and bolting jumbo, small explosives truck, 30 t low profile haul truck.
- Stope mining includes the cross-cuts from the footwall drift and the mining within the stopes: one-boom development jumbo, low profile bolting jumbo, 3.5 t LHD, small explosives truck and 30 t low profile haul truck.

Typical MCF mining sequence is shown in the figure below.

**Figure 16-23: Proposed MCF Stoping Method**




Source: MMTS, 2024.

### 16.5.6 Opening Sizing

Stope sizes and crown pillars were based upon geotechnical work carried out by RockEng Inc based in Kingston, ON. All the primary underground development was designed with dimensions of 4.0 m W x 4.5 m H, except for lateral developments such as levels, sills, crosscuts, remucks, safety bays and ventilation drifts, which are sized at 4.0 m W x 4.0 m H. Main ventilation shafts will be excavated with a raise bore and the remaining ventilation raises between levels will be excavated by drilling and blasting.

Tables 16-8 to 16-10 summarize the estimated life-of-mine development length and the proposed excavation dimensions for the Monique, Courvan and Pascalis mines.

**Table 16-8: Estimated Life-of-Mine Development Length and Excavation Dimensions for Monique**

| Monique | | | |
|---|---|---|---|
| Description | Dimensions (m) | | LOM Totals (m) |
| | W | M | |
| Lateral Development | | | |
| Declines | 4.0 | 5.0 | 13,390 |
| Production Development | 7.3 | 5.0 | 12,373 |
| Level Access | 4.0 | 4.5 | 1,660 |
| Sublevel Waste | 4.0 | 4.5 | 10,727 |
| Attack Ramps | 3.5 | 2.5 | - |
| Safety Bays | 1.0 | 2.0 | 1,289 |
| Vent Cross-Cuts | 3.0 | 4.0 | 1,328 |
| Sublevel Sumps | 3.0 | 4.0 | 664 |
| Remuck Bays | 4.0 | 4.0 | 1,245 |
| Refuge Stations | 5.0 | 5.0 | 20 |
| Electrical Bays | 6.0 | 5.0 | 83 |
| Main Dewatering Sumps | 5.0 | 5.0 | 30 |
| **Subtotal Lateral Development:** | | | **42,808** |
| Vertical Development | | | |
| Decline Raises | 2.5 | 2.5 | 1,752 |
| Principal Vent Raises | 3.0 dia | | 1,290 |
| Stope Raises | 2.0 | 2.0 | |
| **Subtotal Vertical Development:** | | | **3,042** |
| **Total Development:** | | | **45,850** |

**Table 16-9: Estimated Life-of-Mine Development Length and Excavation Dimensions for Courvan**

| Courvan | | | |
|---|---|---|---|
| Description | Dimensions (m) | | LOM Totals (m) |
| | W | M | |
| Lateral Development | | | |
| Declines | 4.0 | 5.0 | 15,450 |
| Production Development | 0.0 | 5.0 | 4,599 |
| Level Access | 0.0 | 0.0 | 1,000 |
| Sublevel Waste | 0.0 | 0.0 | 1,495 |
| Attack Ramps | 0.0 | 0.0 | 31,506 |
| Safety Bays | 0.0 | 0.0 | 897 |
| Vent Cross-Cuts | 0.0 | 0.0 | 16,316 |
| Sublevel Sumps | 0.0 | 0.0 | 598 |
| Remuck Bays | 0.0 | 0.0 | 2,336 |
| Refuge Stations | 0.0 | 0.0 | 10 |
| Electrical Bays | 0.0 | 0.0 | 50 |
| Main Dewatering Sumps | 0.0 | 0.0 | 30 |
| **Subtotal Lateral Development:** | | | **74,287** |
| Vertical Development | | | |
| Decline Raises | 2.5 | 2.5 | 1,800 |
| Principal Vent Raises | 3.0 dia | | 1,510 |
| Stope Raises | 2.0 | 2.0 | 5,001 |
| **Subtotal Vertical Development:** | | | **8,311** |
| **Total Development:** | | | **82,598** |

**Table 16-10: Estimated Life-of-Mine Development Length and Excavation Dimensions for Pascalis**

| Pascalis | | | |
|---|---|---|---|
| Description | Dimensions (m) | | LOM Totals (m) |
| | W | M | |
| Lateral Development | | | |
| Declines | 4.0 | 5.0 | 8,519 |
| Production Development | 0.0 | 5.0 | 6,425 |
| Level Access | 0.0 | 0.0 | 975 |
| Sublevel Waste | 0.0 | 0.0 | 6,455 |
| Attack Ramps | 0.0 | 0.0 | 27,403 |
| Safety Bays | 0.0 | 0.0 | 797 |
| Vent Cross-Cuts | 0.0 | 0.0 | 18,315 |
| Sublevel Sumps | 0.0 | 0.0 | 2,582 |
| Remuck Bays | 0.0 | 0.0 | 1,769 |
| Refuge Stations | 0.0 | 0.0 | 10 |

| Pascalis | | | |
| --- | --- | --- | --- |
| Description | Dimensions (m) | | LOM Totals (m) |
| | W | M | |
| Electrical Bays | 0.0 | 0.0 | 49 |
| Main Dewatering Sumps | 0.0 | 0.0 | 30 |
| **Subtotal Lateral Development:** | | | **73,330** |
| Vertical Development | | | |
| Decline Raises | 2.5 | 2.5 | 1,187 |
| Principal Vent Raises | 3.0 dia | | 946 |
| Stope Raises | 2.0 | 2.0 | 2,400 |
| **Subtotal Vertical Development:** | | | **4,533** |
| **Total Development:** | | | **77,863** |

### 16.5.7 Backfill

The backfill to be used is predominantly cemented rock fill (CRF) along with some uncemented rock fill (URF). All development waste from the underground mines will be used as backfill. If the schedule allows, and URF can be used, it will be placed directly into the stopes from the waste development headings. Otherwise, waste will be hauled to surface, passed through the CRF batch plant and hauled underground to the appropriate stopes. CRF will have a 5% cement content.

In the case of the Monique deposit, trucks will haul CRF directly into the stopes and for the Courvan and Pascalis mines, trucks will haul CRF to remuck bays located near the intersection of the cross-cuts and footwall drive, where it will be rehandled by LHD units to fill the MCF stopes, providing working platforms for the subsequence mining lifts.

In all three mines, there will be net deficit of backfill thus requiring makeup backfill, which will be being provided by running open pit waste through a crushing and screening plant, CRF mixing system and then the CRF batch plant.

### 16.5.8 Mine Services

#### 16.5.8.1 Ventilation

A high-level ventilation circuit was laid out and more work in this area is recommended for the next step of the project. Ventilating air required is based upon total horsepower of diesel equipment operating underground at any one time. Tables 16-12 to 16-14 show the ventilation requirements for each mine.

**Table 16-11: Ventilation Requirements for Monique**

| Monique | Engine Power (kW) | Engine Utilization (%) | CFM per Unit | No. of Units | Total CFMs |
|---|---|---|---|---|---|
| Production Equipment | | | | | |
| Truck (30 t / 14.5 m$^3$) | 315 | 80% | 13,700 | 12 | 131,520 |
| LHD (3.5 t / 1.8 m$^3$) | 72 | 80% | 11,300 | 3 | 27,120 |
| LHD (10 t / 4.0 m$^3$) | 157 | 80% | 9,200 | 10 | 73,600 |
| Jumbo – Two Boom | 127 | 50% | 13,600 | 7 | 47,600 |
| Longhole Drill – Top Hammer | 96 | 50% | 6,900 | 1 | 3,450 |
| Small Explosives Truck | 38 | 65% | 5,900 | 2 | 7,670 |
| Large Explosives Truck | 129 | 65% | 7,900 | 2 | 10,270 |
| Bolter | 110 | 50% | 9,200 | 7 | 32,200 |
| Scissor Lift | 129 | 50% | 7,900 | 2 | 7,900 |
| Support Equipment | | | | | |
| Telehandler | 38 | 65% | 5,900 | 1 | 3,835 |
| Utility Vehicle | 16 | 65% | 2,700 | 2 | 3,510 |
| Grader | 146 | 65% | 19,600 | 1 | 12,740 |
| Mechanics Truck | 95 | 65% | 7,300 | 1 | 4,745 |
| Fuel/Lube Truck | 129 | 65% | 7,900 | 1 | 5,135 |
| Electrician Truck | 95 | 65% | 7,300 | 1 | 4,745 |
| Personnel Carrier | 129 | 65% | 7,900 | 3 | 15,405 |
| Supervisor Truck | 95 | 65% | 7,300 | 5 | 23,725 |
| Crew Van / Ambulance | 95 | 65% | 7,300 | 1 | 4,745 |
| Track Dozer (D6) | 146 | 65% | 19,600 | 2 | 25,480 |
| Subtotal | | | 0 | | 445,395 |
| Contingency | 15% | | | | 66,809 |
| **Total** | | | | | **512,204** |

**Table 16-12: Ventilation Requirements for Courvan**

| Courvan | Engine Power (kW) | Engine Utilization (%) | CFM per Unit | No. of Units | Total CFMs |
|---|---|---|---|---|---|
| Production Equipment | | | | | |
| Truck (30 t / 14.5 $m^3$) | 315 | 80% | 13,700 | 5 | 54,800 |
| LHD (3.5 t / 1.8 $m^3$) | 72 | 80% | 11,300 | 5 | 45,200 |
| LHD (10 t / 4.0 $m^3$) | 157 | 80% | 9,200 | 8 | 58,880 |
| Jumbo – 1 Boom | 52 | 50% | 13,700 | 8 | 54,800 |
| Jumbo – 2 Boom | 127 | 50% | 13,600 | 6 | 40,800 |
| Small Explosives Truck | 38 | 65% | 5,900 | 3 | 11,505 |
| Bolter | 110 | 50% | 9,200 | 8 | 36,800 |
| Scissor Lift | 129 | 50% | 7,900 | 4 | 15,800 |
| **Support Equipment** | | | | | |
| Utility Vehicle | 16 | 65% | 2,700 | 2 | 3,510 |
| Grader | 146 | 65% | 19,600 | 1 | 12,740 |
| Mechanics Truck | 95 | 65% | 7,300 | 1 | 4,745 |
| Fuel/Lube Truck | 129 | 65% | 7,900 | 1 | 5,135 |
| Electrician Truck | 95 | 65% | 7,300 | 1 | 4,745 |
| Personnel Carrier | 129 | 65% | 7,900 | 2 | 10,270 |
| Supervisor Truck | 95 | 65% | 7,300 | 4 | 18,980 |
| Crew Van / Ambulance | 95 | 65% | 7,300 | 1 | 4,745 |
| Track Dozer (D6) | 146 | 65% | 19,600 | 1 | 12,740 |
| **Subtotal** | | | **0** | | **396,195** |
| Contingency | 15% | | | | 59,429 |
| **Total** | | | | | **455,624** |

**Table 16-13: Ventilation Requirements for Pascalis**

| Pascalis | Engine Power (kW) | Engine Utilization (%) | CFM per Unit | No. of Units | Total CFMs |
|---|---|---|---|---|---|
| Production Equipment | | | | | |
| Truck (30 t / 14.5 m$^3$) | 315 | 80% | 13,700 | 10 | 109,600 |
| LHD (3.5 t / 1.8 m$^3$) | 72 | 80% | 11,300 | 4 | 36,160 |
| LHD (1 0 t /4.0 m$^3$) | 157 | 80% | 9,200 | 7 | 51,520 |
| Jumbo – 1 Boom | 52 | 50% | 13,700 | 8 | 54,800 |
| Jumbo – 2 Boom | 127 | 50% | 13,600 | 7 | 47,600 |
| Small Explosives Truck | 38 | 65% | 5,900 | 3 | 11,505 |
| Bolter | 110 | 50% | 9,200 | 7 | 32,200 |
| Scissor Lift | 129 | 50% | 7,900 | 2 | 7,900 |
| Support Equipment | | | | | |
| Utility Vehicle | 16 | 65% | 2,700 | 2 | 3,510 |
| Grader | 146 | 65% | 19,600 | 1 | 12,740 |
| Mechanics Truck | 95 | 65% | 7,300 | 1 | 4,745 |
| Fuel/Lube Truck | 129 | 65% | 7,900 | 1 | 5,135 |
| Electrician Truck | 95 | 65% | 7,300 | 1 | 4,745 |
| Personnel Carrier | 129 | 65% | 7,900 | 2 | 10,270 |
| Supervisor Truck | 95 | 65% | 7,300 | 2 | 9,490 |
| Crew Van / Ambulance | 95 | 65% | 7,300 | 1 | 4,745 |
| Track Dozer (D6) | 146 | 65% | 19,600 | 1 | 12,740 |
| Subtotal | | | | | 419,405 |
| Contingency | 15% | | | | 62,911 |
| **Total** | | | | | **482,316** |

As the Monique declines advance, a series of ventilation raises will be carried next to each of them. A fresh air fan and heater will be placed at the top of each of the vent raises at surface and will force air down the raises with exhaust air returning through the declines. On each sublevel, a secondary fan will intercept the air as it flows up the declines and will be used to provide ventilation to the declines faces as they advance. When sublevel development commences, fans in bulkheads on each sublevel, using ventilation ducting, will bring fresh air to the face of the level development, where it will be exhausted and flow back to the main decline up to surface. As the mining faces in the Monique mine become deeper, three principal intake raises will be established bringing fresh air directly down to the active mining levels.

Ventilation for each of the Courvan and Pascalis mines, will be provided in the same manner as for the Monique mine. Fans and mine air heaters will be positioned on top of the fresh air raises located close to the decline portals and will follow the declines providing a fresh air source with the declines being the return airways. Footwall development will be carried out with forced air from auxiliary fans with ducting to the face; exhaust air will flow up the declines.

Once in production, at the end of each footwall drift, fresh air raises will be driven and equipped on surface with fans and heaters. This air will be forced down the fresh air raises, across the footwall drives from where auxiliary fans can intercept it and bring it to the MCF stopes, with the exhaust returning to the footwall drive and flowing to and up the declines to surface.

As the mining horizons for Courvan and Pascalis become deeper, each mine will require additional fresh air raises in addition to the decline raises. For Courvan, this comprises six raises which will be commissioned, then decommissioned as the mining becomes deeper. For the Pascalis mine, only two additional fresh air raises will be required.

For the UPEA stage, there are three principal ventilation raises to surface for Monique mine, and six and two for the Courvan and Pascalis mines.

#### 16.5.8.2 Mine Air Heating

The Novador mines are in a climatic zone where freezing temperatures are experienced for extended periods of time. It is generally advised that mines intake air be heated above the freezing point of water to prevent the following:

- freezing of water in utility lines
- build-up of ice on the surface of the ventilation raises, which could constrict the airflow
- freezing of water on any decline surfaces.

The effect of warming the air for the comfort of the workforce is secondary, since the air temperature rises as the air descends into the mine, due to friction, auto-compression, etc. Mine air is planned to be heated to a temperature of +1.5°C. The pressure, temperature, and humidity of the ambient air flowing into the mine will vary seasonally and diurnally. These variances typically result in the transfer of heat to or from the intake raise walls and are damped by a thermal flywheel effect. Based on the typical annual weather conditions, mine air heating will be required from November through March of every year, with a possible requirement during months of April and October.

#### 16.5.8.3 Compressed Air

Newer mobile mining equipment, one and two-boom jumbos and bolting jumbos, have built-in air compressors and do not need to be connected to the mine compressed air system. However, compressed air will be required by certain mining equipment including jackleg drills and stopers and ANFO loaders. Peak compressed air requirements are estimated to be 12,000 cfm for Monique and 6,000 cfm for each of the Courvan and Pascalis mines. Compressed air will be distributed via 4" lines in the ramps and along sublevels to the stopes, where will be carried in 2" lines.

#### 16.5.8.4 Water Supply

Water will be required for drilling (diamond drills, development and production jumbos, longhole drills, handheld drills and bolting jumbos) as well as for washing down muck piles and development faces. Additionally, water will be required for the dry facilities located at or near each portal site.

To provide water to the portal sites, potable water will be supplies to holding tanks located above or near the portals. Thus, these tanks will be filled on a regular basis with potable water by water trucks from the plant site. Water will be distributed via the mine declines and sublevels in 6" lines, and to the working areas in 3" lines.

#### 16.5.8.5 Electrical

Power is brought to the three mines with 13.8 kV overhead lines with 13.8 MVA|5.0 MVA transformers located as follows:

- two portals at Monique
- a single location approximately midway between the two Courvan portals, which are approximately 450 m apart
- a single portal location for Pascalis.

From each of the portal transformers, a 5kV feed is carried down the decline with electrical 5.0 MVA|600 VA transformers located upon each sublevel access just off the decline. From there 600v power is provided along the decline for auxiliary fans, electric pumps and for the development/production and bolting jumbos.

Power supply required at each of the above locations is 3,000 kW for Monique and 1,500 kW for each of Courvan and Pascalis. Total estimated energy consumption per year at full production is as follows:

- Monique........................................................................................................ 21.0 MkWh
- Courvan........................................................................................................ 10.5 MkWh
- Pascalis........................................................................................................ 10.5 MkWh

#### 16.5.8.6 Mine Dewatering and Water Management

Water sources to the underground comprise the following:

- operational water associated with mining activities such as, drilling, dust suppression and washing rock faces

- groundwater recharge from surrounding bedrock.

For the Monique mine, the primary sumps have been located approximately mid vertical distance from the decline collar and the ultimate bottom of the decline, at an elevation of approximately -25 m. At each sublevel, sumps are located to collect water from the levels and through a series of drill holes and pipes, will carry the water to the main dewatering sumps. For the sublevels below the main dewatering sumps, pumps located in sumps will pump water up to the main pumping level.

The same basic sump design has been made for the Courvan and Pascalis mines as well, with main dewatering sumps located at the 0 m and -50 m elevations respectively. It is recommended that more work be done upon the mine dewatering design.

#### 16.5.8.7 Mine Communications

An underground network of leaky feeder communications will be installed and expanded at depth. Mobile equipment operators, light vehicles, and supervisors will be equipped with hand-held radios to communicate with personnel on surface. Communication protocols will be used to ensure safe travel on the ramps and levels.

#### 16.5.8.8 Mine Safety

Each mine will be equipped with a self-contained portable refuge station, which will generally be located close to the main dewatering areas. The refuge chambers are designed to be equipped with dedicated fresh air, potable water, and first aid equipment; they will also be supplied with a fixed telephone line and emergency lighting. The doors of the refuge chambers are sealed to prevent the entry of gases.

Primary mine access will be through the main portal and declines of each mine. Secondary emergency egress will be through the fresh air raises on each level and connecting to surface. The raises will be equipped with all the necessary equipment to provide secondary egress.

Between the three mines, and upon each of the two working shifts, a fully-equipped mine rescue team will be available 24 hours a day, 365 days per year to respond to emergencies.

### 16.5.9 Underground Infrastructure Facilities

Each underground mine will have the following major infrastructure:

- one two-bay maintenance shop
- one wash bay
- one refuge station/lunchroom
- one explosives/detonators storage area
- one primary dewatering pump.

#### 16.5.10 Production Schedule

The overall production schedule combines the underground and open pit material. The overall production schedule is described in the subsections below and is shown in Table 16-15.

**Table 16-14: Mine Production Schedule**

| | Unit | Total | -1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Open Pit Total to Mill | Mill Feed (kt) | 67,899 | 0 | 4,527 | 5,658 | 5,088 | 4,458 | 4,458 | 5,808 | 5,809 | 5,809 | 5,809 | 5,809 | 5,809 | 5,808 | 3,052 |
| | Gold (g/t) | 1.01 | 0.00 | 2.12 | 1.31 | 1.32 | 1.47 | 1.47 | 0.77 | 0.88 | 1.09 | 1.17 | 0.68 | 0.46 | 0.30 | 0.22 |
| | Recovered Gold (g/t) | 0.96 | 0.00 | 2.04 | 1.26 | 1.27 | 1.41 | 1.42 | 0.72 | 0.83 | 1.04 | 1.11 | 0.65 | 0.44 | 0.28 | 0.21 |
| | Gold Recovery (%) | 95% | 0% | 96% | 96% | 96% | 96% | 96% | 93% | 93% | 95% | 95% | 96% | 95% | 93% | 93% |
| Direct to Mill | In-situ tonnes (kt) | 46,271 | 0 | 4,131 | 4,267 | 4,779 | 4,458 | 4,458 | 4,812 | 5,809 | 5,726 | 3,679 | 3,323 | 830 | 0 | 0 |
| High Grade to Stockpile | In-situ tonnes (kt) | 2,043 | 1,177 | 866 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lower Grade to Stockpile | In-situ tonnes (kt) | 19,585 | 829 | 3,201 | 1,887 | 4,732 | 2,348 | 2,166 | 0 | 704 | 651 | 2,872 | 195 | 0 | 0 | 0 |
| Material Mined | In-situ tonnes (kt) | 572,243 | 30,000 | 64,604 | 63,609 | 62,054 | 53,514 | 55,000 | 54,005 | 55,000 | 54,918 | 37,870 | 39,268 | 2,401 | 0 | 0 |
| High Grade Stockpile Reclaim | In-situ tonnes (kt) | 2,043 | 0 | 396 | 1,391 | 256 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lower Grade Stockpile Reclaim | In-situ tonnes (kt) | 19,585 | 0 | 0 | 0 | 54 | 0 | 0 | 995 | 0 | 82 | 2,130 | 2,485 | 4,979 | 5,808 | 3,052 |
| Total Material Moved | In-situ tonnes (kt) | 593,871 | 30,000 | 65,000 | 65,000 | 62,363 | 53,514 | 55,000 | 55,000 | 55,000 | 55,000 | 40,000 | 41,753 | 7,380 | 5,808 | 3,052 |
| Underground Total to Mill | Mill Feed (kt) | 12,418 | 0 | 0 | 0 | 570 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,048 |
| | Gold (g/t) | 2.87 | 0.00 | 0.00 | 0.00 | 2.93 | 2.85 | 2.82 | 2.71 | 2.69 | 2.76 | 2.91 | 2.93 | 2.98 | 3.14 | 2.92 |
| | Recovered Gold (g/t) | 2.77 | 0.00 | 0.00 | 0.00 | 2.83 | 2.76 | 2.70 | 2.60 | 2.58 | 2.66 | 2.80 | 2.82 | 2.87 | 3.03 | 2.81 |
| | Gold Recovery (%) | 96% | 0% | 0% | 0% | 97% | 97% | 96% | 96% | 96% | 96% | 96% | 96% | 96% | 96% | 96% |
| Total to Mill | Mill Feed (kt) | 80,317 | 0 | 4,527 | 5,658 | 5,658 | 5,658 | 5,658 | 7,008 | 7,009 | 7,009 | 7,009 | 7,009 | 7,009 | 7,008 | 4,100 |
| | Gold (g/t) | 1.30 | 0.00 | 2.12 | 1.31 | 1.49 | 1.76 | 1.76 | 1.10 | 1.19 | 1.38 | 1.46 | 1.06 | 0.89 | 0.79 | 0.91 |
| | Recovered Gold (g/t) | 1.24 | 0.00 | 2.04 | 1.26 | 1.43 | 1.70 | 1.69 | 1.04 | 1.13 | 1.32 | 1.40 | 1.02 | 0.85 | 0.75 | 0.87 |
| | Gold Recovery (%) | 96% | 0% | 96% | 96% | 96% | 96% | 96% | 94% | 94% | 96% | 96% | 96% | 96% | 95% | 96% |

Source: MMTS, 2024.

#### 16.5.11 Open Pit Production Schedule

The production schedule is based on the following parameters:

- bench tonnages by phase
- pre-production lasting one year
- a maximum annual mill feed rate of 5,658 kt/a throughout the first five years of mill life, with 80% of maximum production in Year 1
- a mill expansion to 7,008 kt/a starting in Year 6 for the remainder of the mine life
- stockpiling utilized to increase grades early in the mine schedule
- benches are fully mined before completion of the underlying bench within a given phase
- Pascalis is mined to completion early in life to allow for tailings backfill
- vertical advance rate is limited to 12 benches per year (or one bench per month).

The production schedule is guided to target higher economic margin material earlier in the schedule while keeping overall mining rates at reasonable levels.

## 16.6 Underground Production Schedule

Underground development commencing with establishing portals for all declines starts in Year 2. Declines are advanced far enough to allow the uppermost zones of each mine to be developed with production as follows:

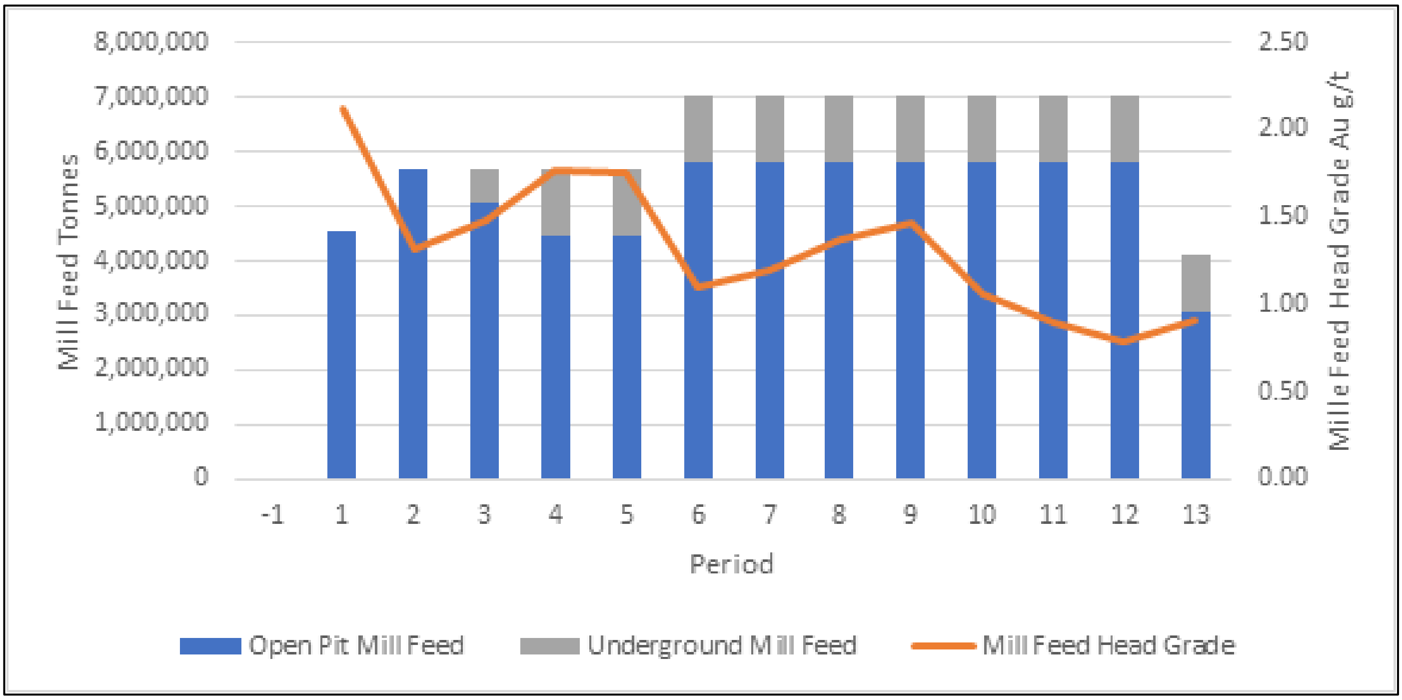
- Monique: production commencing in Year 3 at 7,500 tonnes per month and reaching full output of 50,000 tonnes per month later in the same year.
- Courvan: production commencing in Year 3 at 3,750 tonnes per month and reaching full output of 25,000 tonnes per month later in the same year.
- Pascalis: production commencing in Year 3 at 3,750 tonnes per month and reaching full output of 25,000 tonnes per month later in the same year.

## 16.7 Mining Sequence

Mining operations are planned for a total of 14 years, including both underground and open pit. There is one year of pre-production mining, followed by 13 years of mill feed. Life-of-mine details were previously shown in Table 16-14 above. High-grade material is defined as NSR ≥ \$35/t, and low-grade material is defined as \$14 ≤ NSR < \$35/t.

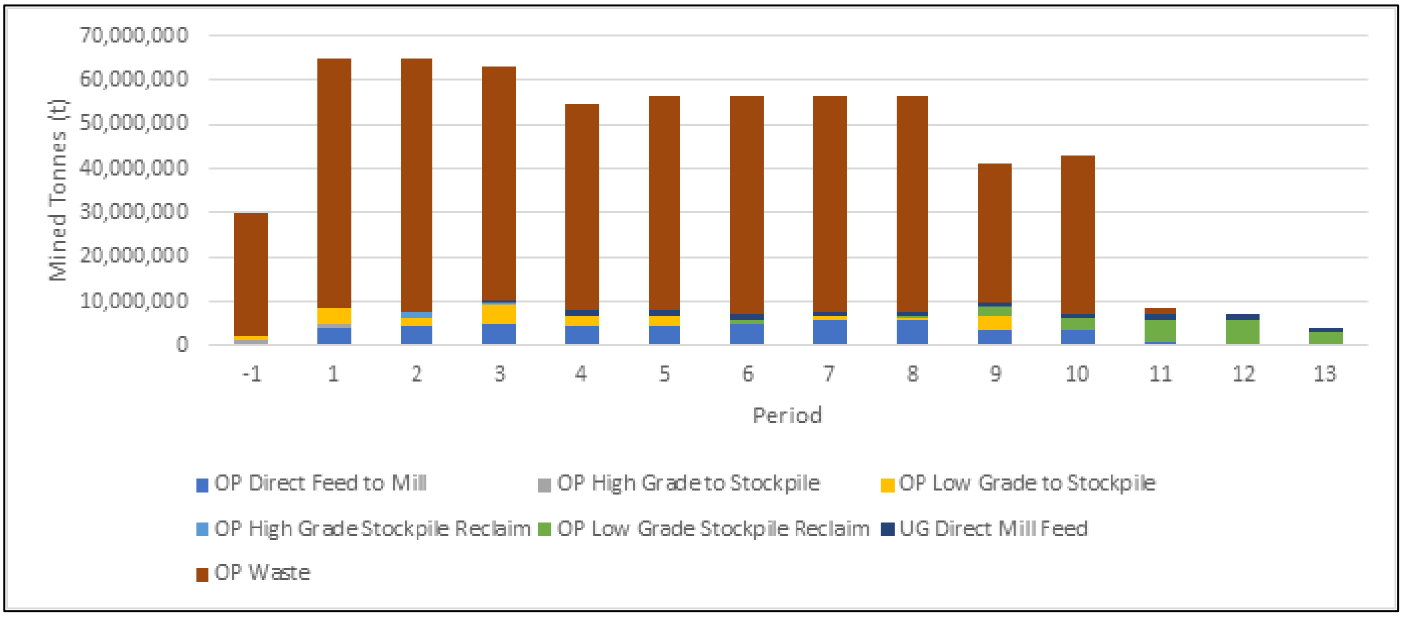
The mine production schedule is shown in Figure 16-22 and includes the production tonnage and grade forecast. Figure 16-23 provides an illustration of the projected mined material.

**Figure 16-24: Production Schedule, Mill Feed Tonnes, and Grade (All Deposits)**




Source: MMTS, 2024.

**Figure 16-25: Mine Production Schedule and Material Mined**




Source: MMTS, 2024.

## 16.8 Open Pit Operations

Mining operations are planned to be typical of similar open pit operations in flat terrain.

Grade control drilling will be carried out to better delineate the resource in upcoming benches. A blast hole grade control system is planned to provide field control and guidance for the loading equipment.

In-situ rock will be drilled and blasted on 12 m (10 m at Highway) benches to create suitable fragmentation for efficient loading and hauling of both mill feed and waste rock. For this study it is assumed that topsoil and overburden do not require blasting.

Loading of mill feed and waste will be completed with electric hydraulic excavators on 12 m benches (10 m at Highway). Bench heights of 6 m in mill feed may be considered based on grade control requirements.

Mill feed and waste rock will be hauled out of the pit to scheduled destinations using 135 t haul trucks.

## 16.9 Underground Operations

Bulk emulsions will be used for all blasting requirements, which include declines, horizontal waste development and blasting of LHR and MCF stopes and all raises. All material to be excavated will require drilling and blasting; no material can be free dug. Small explosives trucks will be used for all development and MCF mining whilst large explosives trucks will be used for mining of LHR stopes. Each mine will have an explosives magazine and a detonator magazine; these will be stocked bi-weekly.

During stope development, grade control will be required when developing sill cuts for the LHR stopes in Monique and for the sill cuts as well as subsequent horizontal breasting for the MCF stopes in Courvan and Pascalis.

Whilst developing sills for LHR and MCF mining, geologists will take face samples, which will be sent to the assay laboratory to determine where the economic limits to the waste rock are, which will define the boundaries of the stopes.

Grade control will be required whilst developing stopes as well as when mucking them. In the case of the LHR stopes, samples will also be taken when the LHD units are mucking the stopes. For the MCF stopes, samples will be taken from the rock pile resulting after each blast. Reconciliations of stope tonnages and grades will be performed at the end of each month.

When development is taking place in the sill cuts of the LHR stopes, if the mineralization/waste contacts are not clearly defined, miners will wait for geologists to take samples and wait for assay results. With MCF stopes, the same will take place on each lift: miners will attempt to make the call on where the mineralization/waste contacts are and will wait for geologists.

## 16.10 Open Pit Mining Equipment

Primary loading and hauling equipment planned is 16 $m^3$ bucket electric hydraulic excavators paired with 135 t rigid body off-road trucks. The list of primary and secondary support open pit mining equipment with maximum fleet size is included in Table 16-16.

**Table 16-15: Open Pit Equipment**

| Equipment | Maximum Units in Fleet |
|---|---|
| Secondary Drills (90 mm Holes) | 2 |
| Grade Control Drill (144 mm) | 1 |
| Production Electric Drills (230 mm Holes) | 4 |
| 12 $m^3$ Bucket Wheel Loader | 1 |
| 16 $m^3$ Bucket Electric Hydraulic Shovel | 4 |
| Rigid Frame Diesel Haul Truck, 135 t Payload | 29 |
| Motor Grader 220 kW, 5.5 m Blade | 3 |
| 90 Tonne Truck with Water Tank – 20 k Gal | 3 |
| Track Dozer, 450 kW | 4 |
| Track Dozer, 260 kW | 1 |
| Wheel Dozer, 370kW | 2 |
| Hydraulic Backhoe Excavator, 4.5 $m^3$ Bucket | 2 |
| Hydraulic Backhoe Excavator, 3 $m^3$ Bucket | 1 |
| 40 t – Fuel Lube Truck | 4 |
| 40 t – Articulated Haul Truck | 2 |
| 8 $m^3$ Bucket Wheel Loader | 2 |
| Ford Transit Crew Shuttle | 6 |
| Pickup Trucks | 16 |
| Light Plants – 8 kW | 10 |
| Water Pumps, 100 $m^3$/h | 6 |
| Kenworth T480 Dump Truck | 2 |
| Kenworth C500 Flatbed Picker Truck | 2 |
| Emergency Response Vehicle | 1 |
| Ford F550 Maintenance Trucks | 4 |
| Mobile 90 t Crane | 1 |
| Tow/Haul RGS/LPM Float Trailer – 125 t capacity | 1 |
| Forklift and Tire Handler – 12 t Capacity | 2 |
| Jaw Crusher | 1 |
| Scissor Lift | 1 |
| Mobile Vertical Lift | 1 |

Source: MMTS, 2024.

## 16.11 Underground Mining Equipment

Table 16-17 shows the maximum equipment requirements for all three underground mines combined. The equipment fleets are similar with the exceptions that Monique deploys longhole drills and Courvan and Pascalis deploy one-boom jumbos. Apart from that, equipment can generally be shuffled from one mine to another to accommodate as-needed demands; the same can be said for staffing.

**Table 16-16: Combined Maximum Equipment Requirements for All Three Underground Mines**

| Total Underground Equipment (Peak Year) | No. of Units |
|---|---|
| **Production Equipment** | |
| Truck (30 t /14.5 $m^3$) | 24 |
| LHD (3.5 t /1.8 $m^3$) | 12 |
| LHD (10 t /4.0 $m^3$) | 8 |
| Jumbo – 1 Boom | 16 |
| Jumbo – 2 Boom | 19 |
| Longhole Drill – Top Hammer | 2 |
| Infill Drill | 2 |
| Small Explosives Truck | 8 |
| Large Explosives Truck | 2 |
| Bolter | 22 |
| Scissor Lift | 8 |
| **Support Equipment** | |
| Telehandler | 1 |
| Utility Vehicle | 6 |
| Grader | 3 |
| Mechanics Truck | 3 |
| Fuel/Lube Truck | 3 |
| Electrician Truck | 3 |
| Personnel Carrier | 7 |
| Supervisor Truck | 11 |
| Crew Van / Ambulance | 3 |
| Track Dozer (D6) | 4 |
| CRF Mixing Plant | 4 |
| **Total Units** | **171** |

Source: MMTS, 2024.

# 17 RECOVERY METHODS

## 17.1 Overview

The process flowsheet has been selected based on preliminary testwork and subsequent economic modelling to optimize the cost efficiency of the Novador Project. The process plant uses conventional technologies typically used in a gold processing plant, with a phased expansion approach in Year 6 to optimize project economics. The unit processes employed in each phase are as follows:

- Phase 1 (5.7 Mt/a) – Primary crushing of run-of-mine material, SAG and ball milling with cyclone classification, gravity recovery, followed by leach/carbon-in-leach (CIL) of the gravity tails and desorption with electrowinning to recover doré. Tailings will be treated to destroy the cyanide, before being thickened, filtered, and deposited onto a drystack tailings stockpile. Tailings filtration ceases in Year 4 of operation with slurry tailings deposited in a mined-out open pit.
- Phase 2 (7.0 Mt/a) – Milling rate expansion achieved with the addition of a secondary crushing circuit, and a pre-leach thickener. The primary grind size, $K_{80}$, is coarsened (from 70 µm to 90 µm) to negate additional milling capacity capital investment.

The key process design criteria are listed below and discussed in Section 17.2:

- Phase 1 is designed for a nominal throughput of 15,500 t/d or 5.7 Mt/a.
- Phase 2 is designed for a nominal throughput of 19,201 t/d or 7.0 Mt/a.
- The crushing plant is designed to an availability of 65%.
- The grinding, leaching, elution, and cyanide reduction circuits are designed to an availability of 92%.
- The tailings filtration plant is expected to demonstrate 84% availability.
- Where applicable, common equipment has been sized to account for Phase 2 capacity.

## 17.2 Process Plant Description

The process design is comprised of the following main circuits:

- crushing of run-of-mine material
- semi-autogenous grinding (SAG) mill with trommel screen in closed circuit, followed by a ball mill with cyclone classification
- gravity recovery of ball mill discharge by semi-batch centrifugal gravity concentrator, followed by intensive
- cyanidation of the gravity concentrate and electrowinning of the pregnant leach solution,
- leach and carbon-in-leach adsorption

- acid washing of loaded carbon and Anglo-American Research Laboratory (AARL) type elution followed by electrowinning and smelting to produce doré
- carbon regeneration
- tailings cyanide destruction using the SO2/O2 process.

### 17.2.1 Design Criteria

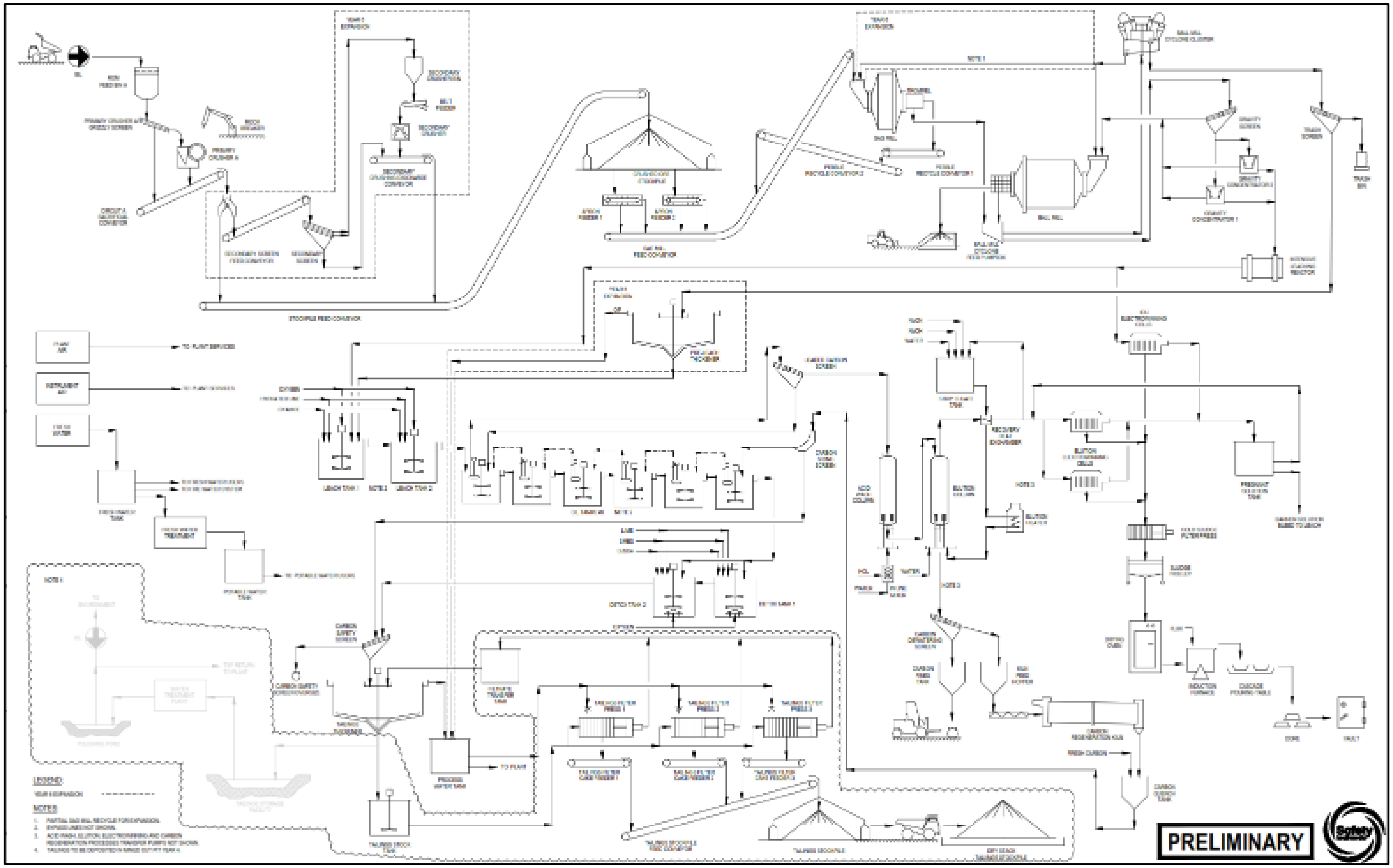
The process design criteria were established after a review of all available metallurgical testwork, comparable industry benchmarks, and best practice. The criteria are summarized in Table 17-1. Figure 17-1 shows the overall process flow diagram.

**Table 17-1: Key Process Design Criteria**

| Criteria | Units | Phase 1 | Phase 2 |
|---|---|---|---|
| Annual Process Plant Throughput | Mt/a | 5.66 | 7.01 |
| Daily Process Plant Throughput | t/d | 15,500 | 19,201 |
| Operation Days per Year | d/a | 365 | 365 |
| Operating Availability, Crushing | % | 65.0 | 65.0 |
| Operating Availability, Grinding | % | 92.0 | 92.0 |
| Operating Availability, Tailings Filtration | % | 84.1 | N/A |
| Run-of-Mine Peak Head Grade, Gold | g/t Au | 2.14 | 1.34 |
| Design Recovery, Gravity Circuit | % | 50.0 | 50.0 |
| Leach Extraction, Design | % | 95.0 | 94.4 |
| Bond Crusher Work Index (CWi) | kWh/t | 20.3 | 20.3 |
| Bond Rod Mill Work Index, 75$^{th}$ percentile (RWi) | kWh/t | 15.3 | 15.3 |
| Bond Ball Mill Work Index, 75$^{th}$ percentile (BWi) | kWh/t | 13.1 | 13.1 |
| SMC Axb, 25$^{th}$ Percentile | - | 34.4 | 34.4 |
| Bond Abrasion Index | g | 0.141 | 0.141 |
| Specific Gravity | - | 2.84 | 2.84 |
| Crushing Circuit Product ($P_{80}$) | mm | 167 | 56 |
| Primary Grind Size ($K_{80}$) | µm | 70 | 90 |
| Leach Circuit Operating Density | % w/w solids | 40 | 50 |
| Leach Minimum Residence Time | h | 6.0 | 6.0 |
| CIL Minimum Residence Time | h | 18.0 | 18.0 |
| Number of Leach Tanks | # | 2 | 2 |
| Number of CIL Tanks | # | 6 | 6 |
| Leach Sodium Cyanide Addition, Design | kg/t | 0.22 | 0.22 |
| Leach Lime Addition, Design | kg/t | 0.80 | 0.80 |
| Elution Column Capacity | t | 10 | 10 |
| Cyanide Detoxification Residence Time | min | 60 | 60 |
| Number of Cyanide Detoxification Tanks | # | 2 | 2 |
| Cyanide Detoxification $SO_2$ Addition, Design | g $SO_2$/g $CN_{WAD}$ | 5.0 | 5.0 |
| Cyanide Detoxification Lime Addition, Design | g/g $SO_2$ | 1.5 | 1.5 |
| Final Tailings Thickener Underflow Density Target | % w/w solids | 65 | N/A |
| Tailings Filter Type | - | Plate and Frame | N/A |
| Filtered Tailings Density Target | % w/w solids | 85 | N/A |
| Filter Cake Stockpile Capacity | h | 12 | N/A |

Source: Ausenco, 2023

**Figure 17-1: Overall Process Flow Diagram**




Source: Ausenco, 2023

### 17.2.2 Phase 1 Design

#### 17.2.2.1 Primary Crushing and Stockpiling

Run-of-mine production is delivered by haul truck to the run-of-mine feed bin to be fed to the crushing circuit. The crushing circuit is designed for an annual operating time of 5,694 hours or 65% availability at a capacity of 994 t/h. Oversized material is removed by a static grizzly screen with an aperture of 800 mm. The run-of-mine bin is equipped with a vibrating grizzly feeder. The vibrating grizzly feeder oversize is fed to the jaw crusher. The jaw crusher discharge combines with the grizzly feeder undersize and is conveyed to a covered stockpile at an 80% passing product size of 169 mm.

The covered stockpile provides approximately 8,424 t or approximately 12 hours of live storage. The stockpile disconnects crushing from the mill to allow for crusher maintenance to be carried out without interrupting feed to the mill. Two apron feeders reclaim material onto the SAG mill feed conveyer.

The crushing circuit includes the following key equipment:

- run-of-mine feed bin
- vibrating grizzly
- C150 (or equivalent) primary jaw crusher
- stockpile reclaim apron feeders
- material handling and dust extraction equipment.

#### 17.2.2.2 Grinding Circuit

The grinding circuit consists of a SAG mill and a ball mill in closed circuit with hydrocyclones. Material is reclaimed from the stockpile onto the SAG mill feed conveyor at a rate of 702 t/h to be fed into the SAG mill. The SAG mill discharges onto the trommel screen, whose undersize reports into the cyclone feed pumpbox to feed the cluster of hydrocyclones and the gravity circuit via dedicated pumps. The SAG mill trommel screen oversize is recirculated to the SAG mill feed via pebble recycle conveyors.

The cyclone underflow feeds the ball mill. From there, the ball mill discharges through a trommel screen. Trommel undersize discharges into the cyclone feed pumpbox and the oversize material, along with grinding media fragments, is discharged to the scats bunker.

Water is added to the cyclone feed pumpbox to achieve the appropriate cyclone feed density before being pumped to the hydro cyclone cluster. The cyclone cluster classifies the material to achieve an overflow at 40% w/w solids and target K80 70 µm. The cyclone overflow then gravitates over the trash screen where the oversize is collected and periodically removed. The cyclone underflow returns to the ball mill for further size reduction, the circulating load within the ball mill hydrocyclone circuit is designed to be 350%. A portion of slurry from the cyclone feed pumpbox is sent to the gravity recovery circuit for coarse gold recovery.

The grinding circuit includes the following key equipment:

- 32 ft diameter x 21 ft effective grinding length (EGL) SAG mill at 11,600 kW
- 20.5 ft diameter x 30 ft EGL ball mill at 6,600 kW
- cyclone feed pumpbox
- gravity and cyclone feed pumps
- classification cyclones
- trash screen.

#### 17.2.2.3 Gravity Recovery

The gravity recovery circuit consists of two centrifugal concentrators and one feed scalping screen. The 2 mm aperture scalping screen is fed from the cyclone feed pumpbox by a dedicated pump. The gravity scalping screen oversize is recycled to the ball mill.

The centrifugal gravity concentrators are fed by the scalping screen undersize. Operation of the gravity concentrator is semi-batch and the gravity concentrate is subsequently leached by the intensive cyanidation reactor circuit. The tails from the gravity concentrator also report to the ball mill.

The gravity recovery circuit includes the following key equipment:

- gravity feed scalping screen
- gravity concentrator.

#### 17.2.2.4 Intensive Leaching

The gravity concentrate reports to the intensive leaching reactor (ILR). The ILR leach solution (mixture of NaCN, NaOH and LeachAid®, an oxidant) is made up within the heated ILR reactor vessel feed tank. From the feed tank, the leach solution is circulated though the reaction vessel, then drained back into the feed tank. The gold extracted, or the ILR pregnant solution, is washed and pumped to the ILR pregnant solution tank to be treated for gold recovery using a dedicated electrowinning cell.

The gold sludge is combined with the sludge from the leach/adsorption elution electrowinning cells and smelted. It can also be smelted separately for metallurgical accounting purposes.

The ILR circuit includes the following key equipment:

- intensive leaching feed tank
- intensive leaching reactor.

#### 17.2.2.5 Leach and Adsorption

Cyclone overflow at 40% w/w solids is sent to a trash screen ahead of the leach and adsorption circuit. The circuit consists of two leach tanks and six carbon-in-leach (CIL) tanks. The leach and CIL tanks have a total circuit residence time of 24 hours, with each tank having a residence time of 3 hours.

Oxygen is sparged to the two leach tanks to maintain adequate dissolved oxygen levels for leaching. Hydrated lime is added to maintain the operating pH at the desired set point and sodium cyanide is added to both leach tanks. Fresh/regenerated carbon from the carbon regeneration circuit is returned to the last tank of the CIL circuit and is advanced counter-currently to the slurry flow by pumping slurry and carbon. The intertank screen in each CIL tank retains the carbon while allowing the slurry to flow by gravity to the following tank. This counter-current process is repeated until the loaded carbon reaches the first CIL tank. Recessed impeller pumps are used to transfer slurry between the CIL tanks and from the lead tank to the loaded carbon screen mounted above the acid wash column in the elution circuit. Slurry from the last CIL tank flows to the cyanide detoxification tanks.

The leach and carbon adsorption circuit includes the following key equipment:

- leach/CIL tanks and agitators
- oxygen supply system
- loaded carbon screen
- intertank carbon screens
- carbon sizing screen.

#### 17.2.2.6 Carbon Acid Wash, Elution, and Regeneration Circuit

Gold-loaded carbon is pumped to the AARL elution circuit for gold recovery. A 10 t acid wash column and a 10 t carbon elution column have been selected. Gold is stripped from carbon using a strong solution of sodium cyanide and sodium hydroxide. Pregnant solution flows into the pregnant solution tank for use in the electrowinning circuit in the gold room. When an elution cycle is complete, the circuit is ready to initiate a new acid wash and elution cycle.

At the end of an elution cycle, the barren carbon is transferred to the carbon regeneration circuit. The carbon flows from the elution column to the carbon dewatering screen. Undersize carbon is collected in the carbon fines tank and bagged, whereas oversize carbon feeds a rotary kiln that will heat the carbon to about 700°C, re-activating the surfaces of the carbon. Regenerated carbon is then cooled with water in the carbon quench tank, mixed with fresh carbon as needed, and returned to the CIP circuit.

The major equipment present in the carbon elution and regeneration circuit is:

- acid wash column
- carbon elution column
- elution solution heater with heat exchangers

- strip eluate and pregnant solution tanks.

#### 17.2.2.7 Gold Room

The electrowinning circuit consist of elution electrowinning cells in parallel and one electrowinning cell dedicated to the ILR pregnant solution. An electric current is applied across the cells, causing gold to deposit on the surface of the cathodes. After an electrowinning cycle, the deposited gold is washed off the cathodes and dewatered in a manually operated filter press. The dewatered gold is dried in an oven and then mixed with the flux. Finally, the mixture is fed to a furnace where the gold is melted and poured in bars.

The main equipment in this area includes the following:

- elution electrowinning cells
- ILR electrowinning cell
- gold sludge filter press
- furnace.

#### 17.2.2.8 Cyanide Destruction and Tailings Management

CIL tailings flow by gravity to the two cyanide detoxification tanks in parallel. The slurry remains in the cyanide detoxification tanks for a total of 60 minutes. The circuit is designed to decrease weak acid dissociable cyanide (CNWAD) concentration from 150 mg/L to less than 1 mg/L.

Cyanide destruction is accomplished using the sulphur dioxide (SO2)/O2 method. Detoxification is carried out at a pH of 8.5, using sodium metabisulphite (SMBS) as a sulphur source and copper sulphate as a catalyst. Lime is used to maintain the pH of the reaction. The cyanide destruction tanks are equipped with oxygen sparging and an agitator to ensure thorough mixing.

The cyanide detoxification tanks discharge to the carbon safety screen. The carbon sizing screen undersize is also fed to the carbon safety screen to minimize carbon losses. The carbon safety screen oversize (recovered carbon) is collected in carbon bulk bags to be shipped offsite for third party processing. The screen undersize is fed to the tailings thickener. The tailings thickener overflow is recycled as process water while the underflow is pumped to the tailings stock tank ahead of tailings filtration and drystacking.

The main equipment in this area includes the following:

- carbon safety screen
- cyanide destruction tanks and agitators
- oxygen supply system
- tailings thickener

- tailings thickener underflow pumps.

#### 17.2.2.9 Tailings Filtration and Dry Stacking (Phase 1)

The slurry from the tailings stock tank is pumped to one of three plate-and-frame pressure filters. The filters will dewater the tailings to approximately 15% moisture before discharging the filter cake onto cake feed conveyors and a stockpile feed conveyor. The filter cake is stockpiled and then hauled to the drystack tailings facility (DSTF) for stacking. The water that is used in the filter presses and removed from the filter cake is recycled to the tailings thickener via a filtrate transfer tank.

The tailings filtration and dry stacking area includes the following key equipment:

- tailings filter presses
- material handling equipment

### 17.2.3 Phase 2 Design

#### 17.2.3.1 Crushing and Stockpiling

A secondary crushing circuit is installed in Year 6 of production. A diversion chute is added to the primary crusher discharge stream, allowing for material to pass through a new secondary crushing circuit or to pass directly to the covered stockpile when the secondary crusher is unavailable. The primary crusher discharge is then conveyed to a double-deck vibrating screen, with top and bottom deck apertures of 100 mm and 50 mm, respectively. The secondary screen oversize feeds the secondary crusher bin, from where the material is conveyed by a belt feeder to the secondary cone crusher. The cone crusher discharge is combined with the secondary screen undersize and is conveyed to the existing 8,424 t covered stockpile at an 80% passing product size of 56 mm. In Phase 2, the covered stockpile live retention time decreases to 10 hours. The drive motors of existing conveyors will also be upgraded to allow for higher operating belt speed.

The crushing circuit expansion in Phase 2 includes the following key equipment:

- secondary screen
- HP 900 (or equivalent) secondary cone crusher
- material handling and dust extraction equipment.

#### 17.2.3.2 Grinding Circuit

The secondary crushing circuit decreases the SAG mill feed size to 80% passing 56 mm, reducing the SAG milling power load, and creating SAG milling capacity. The ball mill product is then increased from a $K_{80}$ of 70 µm to 90 µm, and a portion of the cyclone underflow is recycled to the SAG mill. These changes enable an increase in nominal milling throughput from 15.5 kt/d to 19.2 kt/d. The increase in volumetric flow also necessitates upgrading the hydrocyclone feed pump, associated piping, and adding hydrocyclones to the distribution hub.

#### 17.2.3.3 Gravity Recovery

The gravity recovery circuit is sized for the expansion throughput in the initial phase design.

#### 17.2.3.4 Intensive Leaching

The ILR circuit is sized for the expansion throughput in the initial phase.

#### 17.2.3.5 Leach and Adsorption

A pre-leach thickener is to be installed in Phase 2 to increase the nominal throughput in the leach-CIL circuit from 702 t/h to 870 t/h. By decreasing the operating density, a larger tonnage of material can pass through the circuit at a given time. The pre-leach thickener is fed by the cyclone overflow at 40% w/w solids. Flocculant is added to the feed to the thickener to increase the settling rate of the ground solids. The thickener overflow is recycled as process water in the circuit. The thickener underflow continues to the leach and adsorption circuit at an underflow density of 50% w/w solids. The remainder of the circuit remains as described for Phase 1.

The leach and carbon adsorption circuit expansion for Phase 2 includes the following key equipment:

- pre-leach thickener.

#### 17.2.3.6 Carbon Acid Wash, Elution, and Regeneration Circuit

The AARL elution circuit is sized to accommodate the increase in throughput.

#### 17.2.3.7 Cyanide Destruction and Tailings Management

The cyanide destruction circuit is sized for the expansion throughput in the initial phase design.

#### 17.2.3.8 Slurry Deposition (Year 4+)

Tailings filtration ceases in Year 4 of operation with slurry tailings deposited in a mined-out open pit, where further consolidation of the tailings occurs. The water released from consolidation is decanted, treated, and used as makeup process water within the plant.

The main equipment in this area includes the following:

- tailings pumps
- reclaim pumps
- associated pipelines and slurry transfer equipment.

### 17.2.4 Consumables, Reagent Handling and Storage

The reagents required for the mechanical and chemical treatment of the run-of-mine material can be summarized as follows:

- Hydrated lime (Ca $(OH)_2$) – Used to control the pH in the leach-CIL and detoxification circuit.
- Sodium Cyanide (NaCN) – This is the main gold leaching reagent in the CIP circuit, elution column, and intensive leach reactor circuit.
- Sodium Hydroxide (NaOH) – This will be used in the carbon elution and intensive leach reactor circuits.
- Hydrochloric Acid (HCL) – This will be used in the acid wash circuit to remove scale formation on the carbon.
- Copper Sulphate ($CuSO_4$) Pentahydrate – This is a catalyst in the detoxification reaction.
- Sodium metabisulphite (SMBS) – This is a source of $SO_2$ for cyanide detoxification.
- Oxygen ($O_2$) – Used for leaching and cyanide detoxification.
- Activated Carbon – Carbon is used in the leach-CIL circuit to adsorb dissolved gold.
- Flocculant – This is used as a thickening aid in the thickeners to accelerate settling rates and/or achieve higher pulp densities.
- Leach Aid – This is used in the intensive leach reactor circuit to improve the free gold leaching process.
- Antiscalant – This is used to reduce the formation of scale in the elution and electrowinning circuit equipment and on the activated carbon itself.
- Flux – A flux of silica, sinter and soda ash is used in gold smelting to produce slag and capture metal impurities. hydrochloric acid

The major consumables are grinding media, screening media, crusher and grinding mill liners.

## 17.3 Service and Utilities

### 17.3.1 Plant / Instrument Air

High-pressure air at 750 kPa is produced by compressors to meet plant requirements. The high-pressure air supply is dried and used to satisfy both plant air and instrument air demand. Dried air is distributed via the air receivers located throughout the plant. Compressed air for tailings filtration demand is generated by dedicated tailings filter compressors.

#### 17.3.2 Electrical Power Supply

The estimated installed load for the process plant is 33 MW in both Phase 1 and Phase 2. The estimated average operating load for the process plant is 21 MW in Phase 1 and 19 MW in Phase 2. The operating load is lower in Phase 2 as the tailings filtration equipment is not utilized.

#### 17.3.3 Water Supply

The process will require fresh, raw, reclaimed, and recycled water to maintain the plant water balance.

##### 17.3.3.1 Fresh Water Supply

Fresh water is supplied to the freshwater tank and is used for all purposes requiring clean water with low dissolved solids and low salt content. Total consumption for fresh water is 62 $m^3$/h in Phase 1, increasing to 63 $m^3$/h with the change to in-pit slurry deposition. Consumption rises to 90 $m^3$/h in Phase 2.

The major freshwater users are as follows:

- gland water supply for pumps
- reagent makeup
- elution circuit (AARL requirement)
- potable water users, following treatment
- fire water for use in the sprinkler and hydrant system.

##### 17.3.3.2 Process Water Supply

Overflow from the pre-leach thickener (Phase 2), final tailings thickener, and filtration plant (Phase 1), as well as treated decant return water from the TSF are collected in the process water tank and reused in the process. The nominal process water demand is 1,148 $m^3$/h in Phase 1, decreasing to 1,057 $m^3$/h with the change to in-pit slurry deposition. Phase 2 nominal usage is estimated 104 $m^3$/h in Phase 2.

Process water makeup requirements are 43 $m^3$/h in Phase 1, increasing to 95 $m^3$/h with the change to in-pit slurry deposition, and then to 104 $m^3$/h in Phase 2. This makeup water can be supplied from fresh water sources, rainfall, snowmelt and/or mine runoff when available.

### 17.4 Consumption Rates

The estimated annual consumption rates for major plant reagents based on nominal usage assumptions are shown in Table 17-2.

**Table 17-2: Annual Reagent Consumption Rates**

| Reagent | Unit | Phase 1 | Phase 2 |
|---|---|---|---|
| Sodium Cyanide | t | 1,475 | 1,772 |
| Sodium Hydroxide | t | 318 | 318 |
| Hydrated Lime | t | 10,828 | 10,878 |
| Activated Carbon | t | 150 | 186 |
| Flocculant | t | 114 | 281 |
| Sodium Metabisulphite | t | 6,398 | 5,351 |
| Copper Sulphate Pentahydrate | t | 505 | 390 |
| Oxygen | t | 1,350 | 1,849 |
| Antiscalant | t | 49 | 61 |
| Hydrochloric Acid | t | 227 | 170 |

The annual consumption rates for major wear parts and process consumables that were estimated from testwork data and industry benchmarks are shown in Table 17-3.

**Table 17-3: Annual Consumables Usage Rates**

| Consumable | Unit | Phase 1 | Phase 2 |
|---|---|---|---|
| Jaw Crusher Liner Sets | no. | 3 | 4 |
| Secondary Crusher Liner Sets | no. | - | 6 |
| Secondary Screening Deck Media Sets | no. | - | 6 |
| SAG Mill Liner Sets | no. | 1 | 1 |
| SAG Mill Media | t | 3,264 | 2,690 |
| Ball Mill Liner Sets | no. | 1 | 1 |
| Ball Mill Media | t | 1,384 | 1,675 |

# 18 PROJECT INFRASTRUCTURE

## 18.1 Introduction

The infrastructure required for this project include civil infrastructure, site facilities/buildings, water management infrastructure, a tailings management facility, waste rock storage facilities, and electrical infrastructure. It will include the following facilities and utilities:

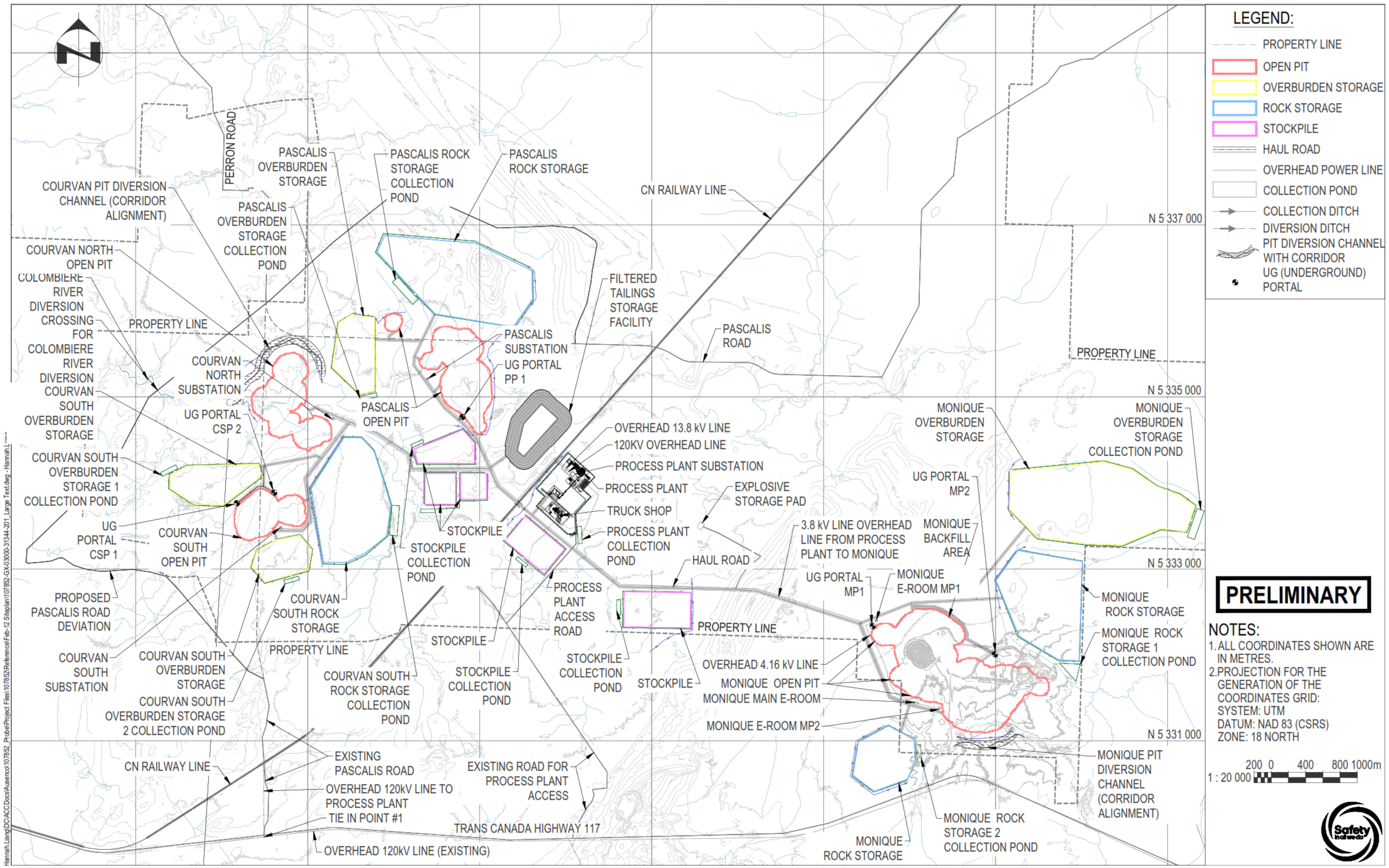
- Mine facilities include the administration offices and truckshop, periodic maintenance truckshop (Year 4 expansion), truck wash, warehouse tire change shop, mine workshop and warehouse, and miscellaneous facilities. In the Year 4 expansion, the periodic maintenance truckshop, tire change shop, and mine dry (i.e., change rooms for UG workers) will be added to the mine facilities.
- Process facilities include the process plant, crusher facilities, process plant workshop, and assay laboratory.
- Dry stack tailings facility (DSTF) and waste rock storage facility (WRSF).
- Common facilities include a gatehouse and administration building.
- Both the mine facilities and process facilities will be serviced with potable water, fire water, compressed air, power, diesel, communication, and sanitary systems.

The locations of the site facilities have been based on the following factors and observations:

- Select a site within Probe Gold's claim boundary.
- Avoid possible building and stockpiling on wetlands.
- Locate the waste rock storage facility near the mine pits to reduce haul distance.
- Locate the primary crushing and run-of-mine pad to reduce hauling from all pits over the life of mine.
- Locate the process plant in an area with reduced risk of flooding.
- Locate the DSTF near the process plant and outside of local flood plains.
- Arrange administration, processing plant, and offices close to each other to limit walking distances (important during extreme cold weather)
- Preserve local water body and fish habitat to the extent practicable.

The overall site layout is shown in Figure 18-1.

**Figure 18-1: Novador Infrastructure Layout Plan**




Source: Ausenco, 2024

## 18.2 Site Access

The Val-d’Or East property can be easily reached from Val-d'Or by travelling approximately 17 km east along Highway 117. The former L.C. Béliveau mine site is approximately 8 km from Highway 117 (6 km north on Perron Road, 2 km east on Pascalis Road, and 200 m south on a gravel road). The former Bussiere mine is also accessible by the Perron Road, about 4 km north from the Highway 117 and then 500 m east on a gravel road, as shown in Figure 18-1. All the roads are well maintained in all seasons. Several logging roads and trails run through the property, providing easy access to its interior.

The property is very close to the TransCanada Highway (Highway 117). A CN railway line crosses the southern part of the property, connecting east through to Montreal and west through the Ontario Northland Railway to the North American rail network. Val-d’Or has a regional airport with regularly scheduled flights to and from Montreal, and acts as a hub for flights to the north. Val-d’Or is a six-hour drive north from Montreal, and there is daily bus service between Montreal and the other cities in the Abitibi region. The power lines and telecommunication systems can be easily accessible with the power line feeding the Beaufor mine located only 1 km away from the property limits.

Furthermore, the multiple access methods to the site for personnel and equipment outside the project region, additional local supplies, labour, and service providers are readily available in the general area (Amos, Rouyn-Noranda and Val-d’Or). Local resources include commercial laboratories, federal government underground mining research office, construction contractors, drilling companies, exploration service companies, engineering and various other consultants, and equipment vendors and suppliers. As much material as possible (reagents, materials, etc) will arrive by rail and the mineralized material will be transported off-site in the same way.

Within the site, the development plans for the Courvan and Pascalis pits necessitate relocating sections of the existing Pascalis and Perron roads, due to their passage through the blasting radius. The relocation will adhere to specific criteria, including a 7-meter-wide access load accommodating dual-lane traffic, positioning at least 1 km away from the open pit's blast radius, and maintaining a maximum grade of 10%.

## 18.3 Built Infrastructure

The existing roads at site will be connected to the project for site accesses. The typical method of clearing, topsoil removal, and excavation will be employed, incorporating drains, safety bunds, and backfilling with granular material and aggregates for road structure. A haul road crossing over the railway line will be required.

Forest clearing and topsoil removal is expected to be required to allow construction of the processing plant and other buildings and facilities.

Site civil work includes design for the following infrastructure:

- light vehicle and heavy equipment roads
- access roads
- topsoil and overburden stockpile area

- mine facility platforms and process facility platforms
- water management ponds and contact and non-contact water channels
- DSTF
- waste rock storage facilities
- Colombière and Tiblemont creek diversion channels.

### 18.3.1 Accommodation

Due to the project's closeness to the city of Val-d'Or, accommodations for the employees at the mine will be based in that area and as a result, onsite accommodations will not be needed.

### 18.3.2 Buildings

The buildings to be built for the project are listed in Table 18-1 below.

**Table 18-1: Buildings**

| Description | Location | Building Construction | Length (m) | Width (m) | Height (m) | Area ($m^2$) |
|---|---|---|---|---|---|---|
| Primary Crusher Building | Plant | Stick-Built | 26.0 | 14.0 | 16.2 | 364.0 |
| Secondary Crusher Building | Plant | Pre-Eng | 18.0 | 12.0 | 21.3 | 216.0 |
| Stockpile Cover Building | Plant | Fabric | 76.0 | 72.0 | 26.0 | 5472.0 |
| Mill Building | Plant | Pre-Eng | 48.0 | 38.0 | 26.6 | 1824.0 |
| Gold Room | Plant | Pre-Eng | 16.6 | 11.1 | 13.0 | 184.3 |
| Reagents Building | Plant | Pre-Eng | 64.4 | 21.9 | 22.6 | 1410.4 |
| Filter Plant Building | Plant | Pre-Eng | 40.5 | 36.0 | 22.5 | 1458.0 |
| Filter Plant Stockpile Building | Plant | Pre-Eng | 47.4 | 29.4 | 20.6 | 1393.6 |
| Administration Building | Plant | Modular | 55.0 | 24.0 | 3.0 | 1320.0 |
| Plant Offices and Mine Dry | Plant | Modular | 18.0 | 9.0 | 3.0 | 162.0 |
| Laboratory | Plant | Modular | By Contractor | | | |
| Warehouse #1 | Plant | Fabric | 24.0 | 15.0 | 9.0 | 360.0 |
| Warehouse #2 | Plant | Fabric | 24.0 | 15.0 | 9.0 | 360.0 |
| Security Gatehouse | Plant | Modular | 9.0 | 3.0 | 3.0 | 27.0 |
| Truck Shop | Truck Shop Pad | Fabric | 44.0 | 41.0 | 15.5 | 1804.0 |
| Warehouse #3 | Truck Shop Pad | Fabric | 44.0 | 41.0 | 15.5 | 1804.0 |
| Truck Wash | Truck Shop Pad | Fabric | 24.0 | 20.5 | 15.5 | 492.0 |
| Truck Shop Office | Truck Shop Pad | Modular | 33.0 | 13.5 | 3.0 | 445.5 |
| Warehouse #4 | Truck Shop Pad | Fabric | 24.0 | 15.0 | 9.0 | 360.0 |
| Portal L1 Office Trailer #1 | Monique Pit | Mining Scope | | | | |
| Mine Rescue Trailer #1 | Monique Pit | Mining Scope | | | | |

| Description | Location | Building Construction | Length (m) | Width (m) | Height (m) | Area (m²) |
|---|---|---|---|---|---|---|
| Lunchroom #1 | Monique Pit | Mining Scope | | | | |
| First Aid Room #1 | Monique Pit | Mining Scope | | | | |
| Mine Dry #1 | Monique Pit | Mining Scope | | | | |
| Underground Mine Central Facility | Monique Pit | Mining Scope | | | | |
| Portal L1 Compressor House #1 | Monique Pit | Mining Scope | | | | |
| QA/QC Laboratory | Monique Pit | Mining Scope | | | | |
| Portal L1 Office Trailer #2 | Courvan Pit | Mining Scope | | | | |
| Mine Rescue Trailer #2 | Courvan Pit | Mining Scope | | | | |
| Lunchroom #2 | Courvan Pit | Mining Scope | | | | |
| First Aid Room #2 | Courvan Pit | Mining Scope | | | | |
| Mine Dry #2 | Courvan Pit | Mining Scope | | | | |
| Portal L1 Compressor House #2 | Courvan Pit | Mining Scope | | | | |
| Portal L1 Office Trailer #3 | Pascalis Pit | Mining Scope | | | | |
| Mine Rescue Trailer #3 | Pascalis Pit | Mining Scope | | | | |
| Lunchroom #3 | Pascalis Pit | Mining Scope | | | | |
| First Aid Room #3 | Pascalis Pit | Mining Scope | | | | |
| Mine Dry #3 | Pascalis Pit | Mining Scope | | | | |
| Portal L1 Compressor House #3 | Pascalis Pit | Mining Scope | | | | |

## 18.4 Stockpiles

When extracting mill feed material from the pit, it will be transported to various destinations, including the plant crusher or the mill feed stockpiles. Stockpiles are placed to minimize wetlands disruption. There are 2 main stockpile location areas; one for the Pascalis and Courvan deposits centrally located near the pit exits and one for Monique mill feed near the process plant towards the Monique deposit. Each stockpile location area has multiple stockpiles to allow for the separation of high and low grade material.

## 18.5 Tailings Storage Facilities

Based on a trade-off study between various potential disposal sites and technologies, Probe Gold selected the concept of filtered and dry stack tailings facility (DSTF) along with slurry in-pit tailings disposal. The tailings concepts have distinct advantages over other options, most notably they are deemed to be significantly safer from a stability prospective and for the environment than conventional wet tailings above ground facilities, as the consequences of any accident, including dam failure, could be readily controlled and limited to a few hundred meters for the DSTF and in the case of in-pit tailings disposal there is no embankment and therefore no potential release of tailings to the surrounding environment. In addition, water usage is significantly reduced for the dry stack facility and even the in-pit disposal due to high groundwater levels. Ausenco updated the initial design of the DSTF and included in-pit tailings disposal for this PEA with the primary objectives of further reducing the project footprint and deferring initial capital costs where possible. The selection of the current DSTF location results in a superior site that is out of the soft soils located to the north of the current location. The current design accommodates 23.6 Mt of tailings in the DSTF and 44.3

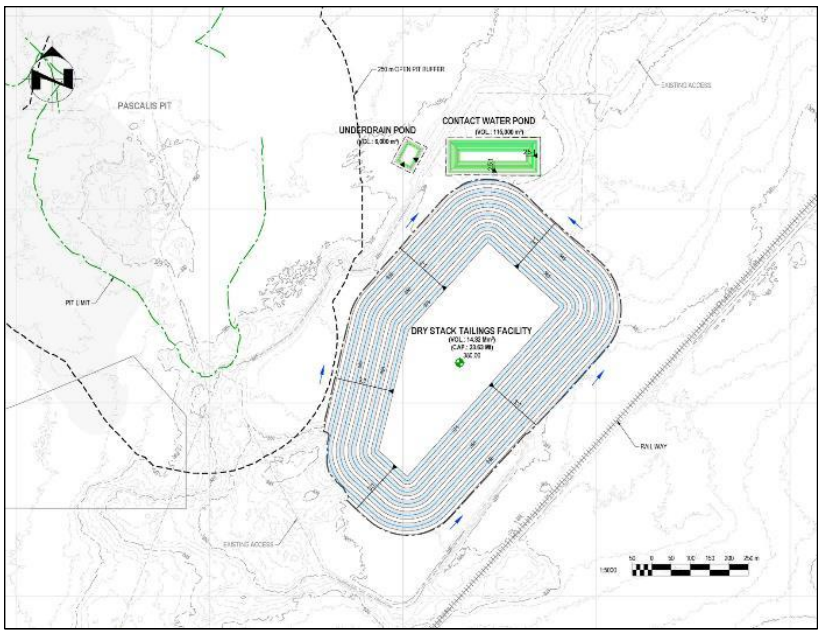
Mt of slurry tailings as in-pit tailings disposal. In addition, the project footprint is kept compact because the project utilizes in-pit tailings disposal, which reduces the size of the DSTF.

### 18.5.1 Dry Stack Tailings Facility and In-Pit Storage Facility (IPSF) Design

Under the PEA scenario using both the DSTF and IPSF, DSTF would be constructed first and receive dewatered tailings at a rate of 15,500 t/d from the filter plant until it reaches its maximum capacity of 23.6 Mt in year 5 and in-pit tailings disposal would receive tailings slurry to a maximum capacity of 44.3 Mt from year 5 through 11.

The layout of the DSTF is provided in Figure 18-2.

**Figure 18-2: Dry Stack Tailings Facility Ultimate Configurations**




Source: Ausenco, 2024

### 18.5.2 Design Criteria

Conceptual design for both the DSTF and IPSF are based on an assumed 11 year mill operation with a total milled tonnes of 67.9 Mt and a maximum annual mining rate of 7.0 Mt/a. The tailings will be dewatered at the filter plant to a target moisture content of approximately 15%, the trucked to the DSTF for years 1 through a portion of year 4, and will be placed and compacted in controlled lifts to a specified minimum compacted density. The dry density of the placed tailings was assumed to be 1.65t/m$^3$ for volumetric calculations. For the remainder of year 4 through year 11, slurry tailings would be discharged into the open pit. The dry density of the placed tailings was assumed to 1.35 t/m$^3$ for volumetric calculations. Key design criteria are summarized in Table 18-2 below.

**Table 18-2: DSTF and IPSF Design Criteria**

| Criteria | Units | Description |
|---|---|---|
| **General** | | |
| Total Annual Mined Tones (maximum) | Mt/a | 7,0 |
| Total Mineralization Mined | Mt | 67.9 |
| DSTF Storage Capacity | Mt | 23.6 |
| IPSF Storage Capacity | Mt | 44.3 |
| **Filtered Tailings** | | |
| Placed Dry Density | t/m³ | 1.65 |
| Target Moisture Content | w/w | 15% |
| Tailings Acid Generation Potential | PAG/NAG | NAG |
| **Slurry Tailings** | | |
| Placed Dry Density | t/m³ | 13.5 |
| Percent Solids | w/w | 35% |
| Tailings Acid Generation Potential | PAG/NAG | NAG |
| **DSTF Transportation and Stacking System** | | |
| Tailings Transport System from Filter Plant to DSTF | -- | Haul Truck |
| Tailings Spreading within DSTF | -- | Dozer |
| Tailings Compaction within DSTF | -- | Vibratory Compactor |
| **DSTF Transportation and Stacking System** | | |
| Tailings Transport System from Plant to IPSF | -- | Haul Truck |
| Slurry Transportation System | -- | Pipeline and Spigots |
| Water Reclaim System | -- | Barge and Pipeline |

### 18.5.3 DSTF Pad Preparation

For the PEA, it was assumed that the DSTF would be constructed in two phases. A perimeter road will be constructed around each phase to define the limits of the facility, and also to provide maintenance access along with a contact water diversion channel that discharges into the contact water pond. Each phase will be cleared of vegetation, topsoil removed and stockpiled for progressive closure. The underdrain will be installed within the subgrade and will consist of trenches excavated into the subgrade, non-woven geotextile, dual wall perforated pipe, and drainage gravel. The underdrain will discharge to the underdrain pond. The subgrade will be compacted to accept filtered tailings.

A more detailed geotechnical site investigation must be performed as part of the next phase of study to confirm suitable foundation conditions and adjust the costs described herein.

For the purposes of the PEA, the outer slopes for the DSTF were designed at a 3.5:1 horizontal to vertical (H:V) slope, based on preliminary stability analysis.

The main features of the DTSF are:

- underdrain

- contact water channels
- underdrain pond and contact water pond
- external filter tailings slopes 3.5:1 H:V
- spread and compacted filter tailings

### 18.5.4 DSTF Stability Analysis

A limited historical geotechnical investigation was used for the PEA dry stack facilities stability analysis. However, additional investigation needs to be performed in the next phase.

Ausenco prepared slope stability analyses based on reasonable strength and material properties based on the limited historical results along with Ausenco's experience with recent dry stack projects in similar geological and climatic environments. The goal of the analyses was to determine the conceptual DSTF configurations. The PEA designs currently reflect the results of these analyses; however, a complete slope stability study must be completed as part of the next phase of study and consider the results of the site geotechnical investigation and tailings characterization.

### 18.5.5 DSTF Water Management

#### 18.5.5.1 Underdrain System

Seeps, springs or upwelling groundwater within the DSTF footprint would be controlled by the installation of an underdrain system consisting of dual-wall perforated central header pipes placed in ditches in the base of existing natural drainages with connecting perforated transverse drains in smaller tributaries to the main drainages. Any seepage that is intercepted by the underdrain would be considered contact water and routed to the underdrain pond below the facility and used for make-up water or treated, if needed and released to the environment.

The underdrain system would be installed in phases as the DSTF advances up the slopes and drainages with temporary stormwater controls in place to ensure that contact or upgradient stormwater is not allowed to enter the underdrain system.

#### 18.5.5.2 Seepage and Storm Water Management

The upper operational surface will be graded so that contact runoff and any seepage reports to Contact Water at the bottom of the DSTF to facilitate pumping back to the process plant for reuse. Contact water diversion channels will be constructed around the DSTFs before any other construction is started. The diversion channels would route contact stormwater run-on around the DSTFs to the contact water pond.

### 18.5.6 DSTF Access Road and Haul Roads

The DTSF will be accessed by dedicated haul roads and access roads that include additional width to support stormwater management and safety berms.

#### 18.5.7 DSTF Tailings Stacking

Haul trucks will be used to transport the dried tailings from the filter plant to either of the DSTFs via dedicated haul roads. The tailings would be end dumped, spread in approximately 100 cm-thick loose lifts with a dozer, and compacted using a vibrating smooth drum roller or sheepsfoot compactor, as appropriate.

#### 18.5.8 DSTF Closure and Reclamation

Reclamation of the outer slopes of the DSTFs would be undertaken concurrent with DSTF construction. As successive lifts of dewatered tailings are placed and compacted, the outer slope face would be covered with rock cladding, topsoil, and vegetated. The final top surface of the DSTF would be graded back to the natural slope and stormwater diversion channels at not less than 2%, covered with topsoil and revegetated.

#### 18.5.9 IPSF Preparation

For the PEA, it was assumed that IPSF only requires the installation of the slurry pipeline and spigots and water reclaim system since open pit provides the containment.

#### 18.5.10 IPSF Stability Analysis

No stability analysis was performed for in-pit disposal since there was a pit wall stability analysis performed.

#### 18.5.11 IPSF Water Management

Surface water management for the open pit was part of the open pit design. The only water management system to be installed is the water reclaim system for the tailings, which consists of a barge, pumps and pipeline back to the process plant.

#### 18.5.12 IPSF Deposition

A slurry tailings pipeline will be installed from the process plant to the open pit along with spigots around the perimeter of the pit to discharge tailings into the pit. The tailings will settle and consolidate where the free water on the surface will be pumped back to the plant for reuse.

#### 18.5.13 IPSF Closure

Reclamation of the open pit is to allow the groundwater around the facility to flood the tailings with 2 to 3 meters of water cover for closure.

## 18.6 Waste Storage Facilities

Waste rock and overburden/topsoil storage facilities are planned at each site to contain waste materials from the open pit. In general, design considerations assumed an overall reclaimed slope of 3.6:1 and a swell factor of 30%. Total waste rock and overburden tonnes by area are as follows:

- Pascalis – 104 Mt
- Courvan – 103 Mt
- Monique – 298 Mt

The maximum height of the waste rock storage facilities is less than 75 m (25 m for the Overburden) The facilities are designed to have sufficient storage capacity for the scheduled material. The stockpiles and rock storage facilities are also planned to avoid existing waterbodies and water courses.

## 18.7 Electrical System Demand

The estimated total connected load at the Novador site (including both the process plant and mine facilities) is 38 MW for both phases, with operating load varying between of 30 and 33 MW depending on mining activities and tailings deposition strategy.

### 18.7.1 Facility Power Supply

Primary power to the Novador site will be provided by Hydro-Québec via a 120 kV high-voltage overhead transmission line. This existing 120 kV overhead line is running parallel to Perron Road and will be branched off from a tie in point at the junction where it crosses with the CN railway line. The new 120 kV branch from the tie in point will then be run along the CN railway line and terminate at the Novador process plant substation.

The voltage will be stepped down from 120 kV to 13.8 kV at the Process plant substation which will have the utility metering. This substation will be with 100% redundancy in transformer capacity. Two 30/40 MVA oil-filled with forced air-cooled type substation transformers are proposed to be installed to carry the maximum power required by the site. This includes future growth and redundancy in the event a single transformer is temporarily out of service.

Power factor correction equipment will be installed to improve the power factor to 0.9 or better at the point of interconnection with the utility.

### 18.7.2 Site Power Reticulation

The site-wide power distribution will be via 13.8 kV overhead power line using wood pole structures to the facilities listed below.

- administration building
- plant offices and mine dry

- laboratory
- warehouses
- security gatehouse
- truck shop and office
- Monique pits
- Courvan pits (North and South)
- Pascalis pits

At the Monique pits, the 13.8 kV will be stepped down to 4.16 kV using a 5.5/7.3 MVA ONAN/ONAF transformer and this will be distributed via 4.16 kV overhead lines to Monique pits 1 and 2.

Pole-mounted or pad-mounted transformers will step down the voltage at each location and supply the low-voltage distribution system to respective facilities.

### 18.7.3 Plant Power Distribution

The plant electrical power distribution system is based on 13.8 kV distribution. 13.8 kV / 4.16 kV distribution transformers as well as 13.8 kV / 600 V distribution transformers at the various electrical rooms will be fed from the plant main 13.8 kV switchgear. The larger motors and their drives (Variable frequency drives and/or direct on line) will have 4.16 kV input. Electrical rooms are proposed in the following areas:

- process plant main
- primary crusher area
- grinding areas
- gold room / elution / CIL areas
- tailings / reagent / plant services areas.

The various electrical rooms will house the 4.16 kV switchgear, 4.16 kV VFDs, 600 V motor control centres (MCCs), LV VFDs, LV soft starters, plant control system cabinets, lighting and services transformers, distribution boards, and uninterrupted power supply (UPS) power distribution.

To reduce installation time, the electrical rooms were considered prefabricated modular buildings, installed on structural framework 2 m above ground level for bottom entry of cables. The electrical rooms will be installed with HVAC units and suitably sealed to prevent ingress of dust. The electrical rooms will be in the process plant area and as close as possible to the main load points to minimize costs.

Stand-alone, 600 V containerised standby diesel generators associated with the applicable electrical rooms, will be provided to power the identified essential loads in the in the event of an interruption of the utility power supply.

## 18.8 Fuel

At site, the fuel station is located northwest of the truckshop and will consist of a 20 m long x 15 m wide open-air, slab-on-grade area with bollards. The fuel station will service the on-site mine equipment and mobile fleet. Diesel fuel will be stored on site near the run-of-mine pad for heavy and light vehicles. Diesel fuel storage and supply will be provided by a fuel supplier and will include fuel storage, offloading pumps, dispensing pumps, associated piping and electronic fuel control/tracking. The intention is for fuel to be delivered by rail. The price for fuel used in this study is $1.30/L in Canadian dollars.

## 18.9 Water Supply and Management

The water system design allows for an effluent treatment plant as well as potable water sterilization skid at 50 $m^3$/d. The effluent treatment plant has been sized to treat all site runoff captured in the tailings facility prior to discharge to the environment. The captured effluent will be treated for the primary elements of concern present in typical gold mine operations such as copper, cyanide species and base metals. The effluent will be treated to a discharge standard in compliance with the metal and diamond mining effluent regulations (MDMER) as well as the Canadian Water Quality Guidelines for the Protection of Aquatic Life. An allowance has been made for all facilities to have a fire suppression system in accordance with the structure's function.

### 18.9.1 Site-Wide Water Management

This section of the outlines the site-wide management, including the planning of water management infrastructure, hydrological assessments, and the overall water balance across the site. Evaluating and understanding climate data, which includes precipitation, snowfall, and evaporation rates, as well as the division of the site into catchment areas is necessary for precise water balance estimation and the development of efficient water management systems.

### 18.9.2 Hydrometeorology

Climate in the Val-d'Or in which the site is located is categorized as continental subarctic and sub-humid. The area experiences long winters and short summer seasons with the hottest month being July and the coldest January (Government of Canada, 2017a). Table 18-2 summarizes the average monthly climate information at Val-d'Or.

Using the Val-d'Or climate station, 20 km from the site, additional data was collected on the site's precipitation depth and intensity during storm events (Tables 18-3 and 18-4). This information was used as inputs during collection and diversion channel sizing proposed at the site. The water management infrastructure for the site has been designed for 1:25-year and 1:100-year storm event scenarios.

**Table 18-3: Val-d'Or Average Monthly Climate Information**

| Parameter | Jan | Feb | Mar | Apr | May | Jun | July | Aug | Sep | Oct | Nov | Dec | Annual Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily Average (°C) | -17.2 | -14.6 | -8.1 | 1.3 | 9.2 | 14.8 | 17.4 | 15.8 | 10.8 | 4.5 | -4 | -12.4 | 1.5 |
| Daily Maximum (°C) | -11.5 | -8.4 | -2 | 6.8 | 15.4 | 21.1 | 23.3 | 21.5 | 15.8 | 8.5 | -0.5 | -7.7 | 6.9 |
| Daily Minimum (°C) | -22.8 | -20.7 | -14.1 | -4.3 | 2.9 | 8.4 | 11.4 | 10 | 5.9 | 0.5 | -7.6 | -17 | -4 |
| Maximum Hourly Speed (km/h) | 50 | 40 | 45 | 48 | 42 | 43 | 37 | 37 | 50 | 47 | 42 | 47 | 50 |
| Direction of Maximum Hourly Speed | SW | SW | SW | SW | SW | SW | SW | SW | SW | SW | SE | SW | SW |

**Table 18-4: Extreme Storm Events Precipitation Depths (mm) for Val-d'Or A Station**

| Station | Duration | 2 | 5 | 10 | 25 | 50 | 100 |
|---|---|---|---|---|---|---|---|
| Val-d'Or | 5 Minutes | 6.9 | 8.9 | 10.3 | 12 | 13.2 | 14.5 |
| | 10 Minutes | 9.8 | 12.2 | 13.8 | 15.8 | 17.3 | 18.7 |
| | 15 Minutes | 11.9 | 14.7 | 16.6 | 19 | 20.8 | 22.5 |
| | 30 Minutes | 15.2 | 19.7 | 22.6 | 26.3 | 29 | 31.8 |
| | 1 Hour | 18.4 | 23.9 | 27.5 | 32.1 | 35.5 | 38.9 |
| | 2 Hours | 21.8 | 27.3 | 31 | 35.6 | 39 | 42.4 |
| | 6 Hours | 30.4 | 37.8 | 42.8 | 49 | 53.6 | 58.2 |
| | 12 Hours | 36.1 | 43.9 | 49 | 55.6 | 60.4 | 65.2 |
| | 24 Hours | 41.1 | 50.2 | 56.3 | 63.9 | 69.6 | 75.2 |

Source: Statistics Canada, Environment, Energy and Transportation Statistics Division, 2017.

**Table 18-5: Extreme Storm Events Precipitation Intensity (mm/h) for Val-d'Or A Station**

| Time (years) | 2 | 5 | 10 | 20 | 25 | 50 | 100 |
|---|---|---|---|---|---|---|---|
| 5 Minutes | 81.02 | 103.38 | 119.02 | 134.69 | 139.79 | 155.96 | 172.69 |
| 10 Minutes | 59.62 | 73.98 | 82.74 | 90.61 | 93.01 | 100.09 | 106.70 |
| 15 Minutes | 48.19 | 59.77 | 66.53 | 72.40 | 74.15 | 79.21 | 83.78 |
| 30 Minutes | 30.10 | 38.32 | 43.93 | 49.44 | 51.21 | 56.77 | 62.40 |
| 1 Hour | 18.23 | 23.39 | 27.09 | 30.88 | 32.13 | 36.14 | 40.37 |
| 2 Hours | 10.97 | 13.85 | 15.84 | 17.80 | 18.43 | 20.42 | 22.45 |
| 6 Hours | 5.10 | 6.31 | 7.18 | 8.06 | 8.35 | 9.28 | 10.25 |
| 12 Hours | 3.06 | 3.76 | 4.24 | 4.70 | 4.85 | 5.33 | 5.81 |
| 24 Hours | 1.74 | 2.13 | 2.38 | 2.62 | 2.70 | 2.94 | 3.17 |

Source: Western University, Computerized Tool for the Development of Intensity-Duration-Frequency Curves under Climate Change – Version 7.0, 2024

### 18.9.3 Water Management Structures

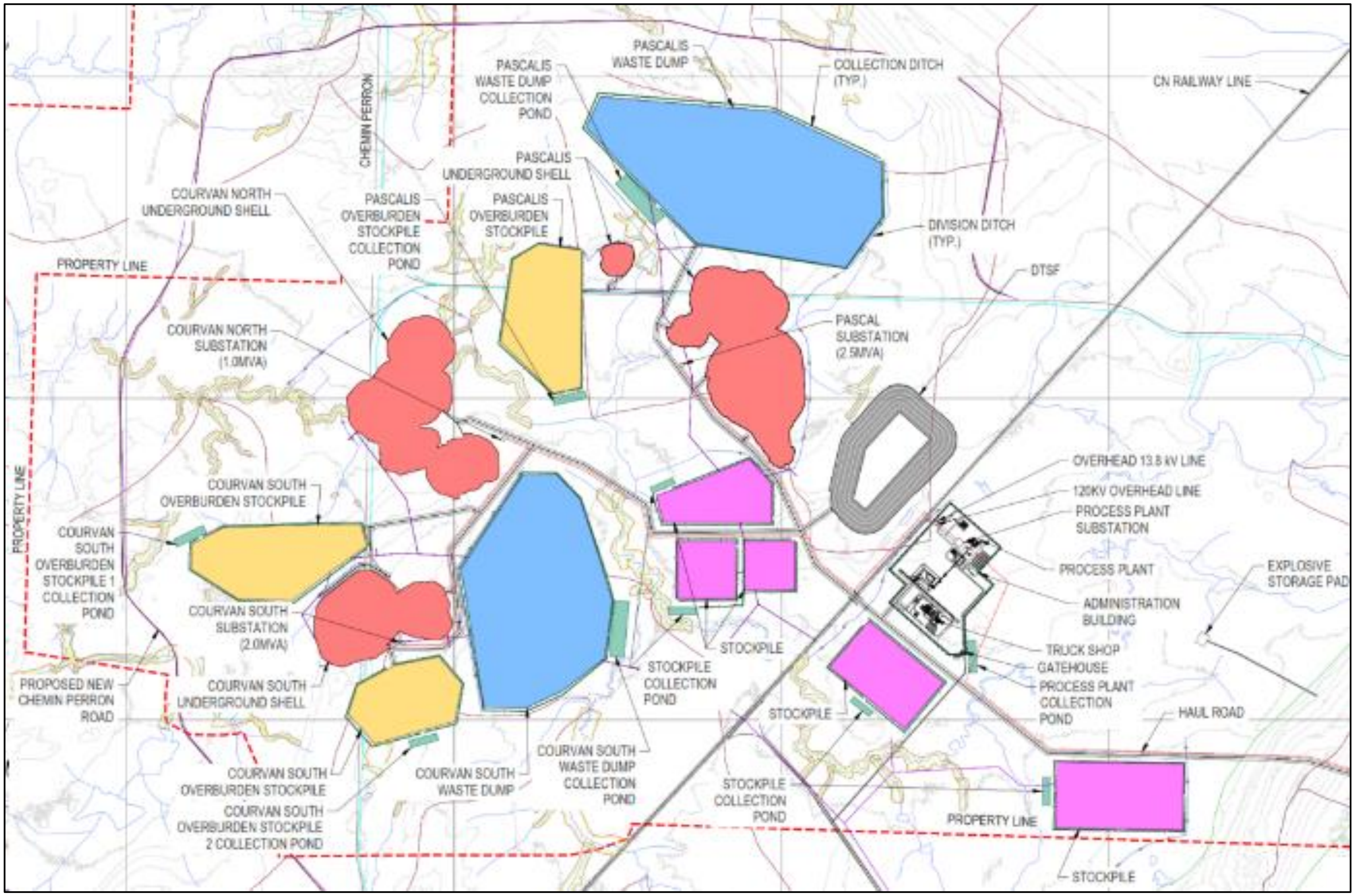
Water management infrastructure at the site was proposed based on the current waste rock dump, stockpile, and mine pit locations. Runoff from each waste rock dump and stockpile will be directed to treatment ponds using contact water channels. Diversion channels were also incorporated into the proposed plan to reroute non-contact water from the active mine areas and reduce quantity of mine affected water requiring treatment.

- Diversion Ditches – Diversion ditches are required to divert non-contact runoff away from mine infrastructure and to minimize the amount of contact runoff to be collected and managed at the site. The design criterion for the diversion channels was the conveyance of 1:25-year, 24-hour event without overflow.
- Collection Ditches – Collection ditches intercept and collect contact runoff from the waste rock dumps, process plant, and stockpiles. The design criterion for collection channels was the conveyance of 1:100-year, 24-hour peak flow without overflow.
- Collection Ponds – Contact water captured in the collection ditches will be conveyed to a series of collection ponds. Ponds have been sized to store contact runoff from a 1:100-year 24-hour event, along with pit and underground dewatering. At this stage, it is envisioned that water collected from stockpile areas will be treated for sediment within the collection ponds before being discharged to the environment. Runoff from waste rock dumps and pit/underground dewatering is assumed to required auxiliary treatment for metals or other constituents of concern.
- River Diversion Channels – To facilitate mining of the Courvan Pit, a portion of the Colombière River will need to be diverted around the proposed pit area. Similarly, a segment of the Tiblemont River will need to be diverted around the Monique Pit. These diversion channels have been sized for a 1:200-year peak flow based on a regional analysis of available flow data.

The site-wide surface water management strategy consists of 30 contact water collection ditches reporting to 13 collection ponds with across the site. Collection channels were sized to convey the peak flow from a 1:100-year 24-hour storm using the Rational method and have 2H:1V side slopes with a 1 m to 1.5 m base with and an overall depth of 0.17 m to 1.2 m. Five ponds will require additional treatment to meet discharge requirements prior to release into the environment or reuse within the site. At this stage modular treatment plants are proposed at four of the ponds to treat runoff from the waste rock dumps along with the dewatering inflow form pit and underground. Inflow to the process area pond is proposed to be sent back to the mill as makeup water thereby eliminating the need for an additional modular treatment unit. A series of diversion ditches are proposed to intercept and re-direct non-contact water through the site and around mining infrastructure. Water management structures are shown on Figure 18-3 and Figure 18-4.

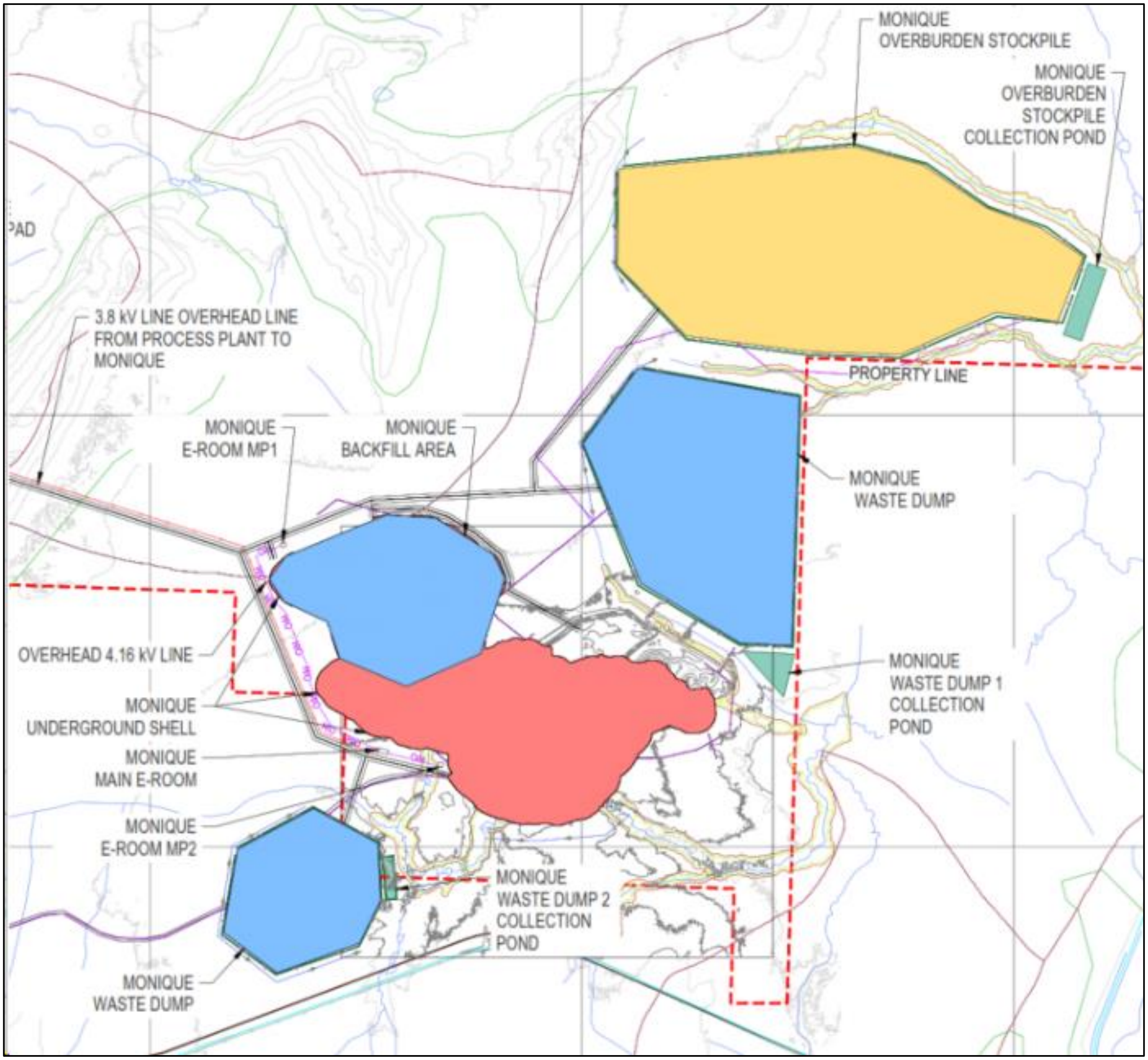
Due to mine phasing, Pascalis ponds and collection and diversion channels will be constructed one year prior the proposed mine start date to accommodate the initial pits being mined at the site. The Monique area water management infrastructure will follow, beginning construction in year one of the mine plan. Courvan north and south infrastructure with begin construction in year three of the mine plan.

**Figure 18-3: Probe Metals Val-d'Or Site Water Management Layout for Pascalis and Courvan Area**




Source: Ausenco, 2024

**Figure 18-4: Probe Metals Val-d'Or Site Water Management Layout for Monique Area**




Source: Ausenco, 2024

#### 18.9.3.1 Collection Ponds

The waste dump collection ponds were designed to store runoff from the waste rock dumps for a 1:100-year, 24-hour storm event. As the waste rock dump ponds also serve to store and attenuate pumped inflows from the pits and underground mining, these ponds have also been sized to hold 14 days' worth precipitation on the pits (under typical meteorological conditions) along with seven-day allotment of dewatering from the underground and/or pits. Ponds have been sized with 3H:1V side slopes and a depth of 6 m (Monique waste dump (1) was reshaped to fit the available area without causing additional disruption to the adjacent river valley and is 7 m deep). Tables 18-6 and 18-7 summarize the collection ponds that will require additional treatment and the mine components whose runoff will be routed to the collection ponds.

**Table 18-6: Rectangular Collection Ponds Requiring Auxiliary Treatment and their Feeding Catchments and Dimensions**

| Collection Ponds Requiring Auxiliary Treatment | Feeding Catchments | Surface Length (m) | Surface Width (m) | Depth (m) | Capacity ($m^3$) |
|---|---|---|---|---|---|
| Pascalis Waste Dump | Pascalis Waste Dump | 350 | 88 | 6 | 140,388 |
| | Highway Pit | | | | |
| | Pascalis Pit | | | | |
| | Pascalis Underground Mine | | | | |
| | Pascalis Underground Mine | | | | |
| Courvan South Waste Dump | Courvan South Waste Dump | 350 | 88 | 6 | 140,388 |
| | Courvan North Pit | | | | |
| | Courvan South Pit | | | | |
| | Courvan North Underground Mine | | | | |
| | Courvan South Underground Mine | | | | |
| Process Plant | Process Plant | 200 | 50 | 6 | 36,888 |
| Monique Waste Dump (2) | Monique Waste Dump (2) | 200 | 50 | 6 | 36,888 |
| Stockpile (1) | Stockpile (1) | 150 | 38 | 6 | 17,388 |
| Stockpile 3+2 | Stockpile (2) | 175 | 44 | 6 | 26,201 |
| | Stockpile (3) | | | | |
| Stockpile (4) | Stockpile (4) | 150 | 38 | 6 | 17,388 |
| Stockpile (5) | Stockpile (5) | 175 | 44 | 6 | 26,201 |

**Table 18-7: Triangular Collection Ponds Requiring Auxiliary Treatment and their Feeding Catchments and Dimensions**

| Collection Ponds Requiring Auxiliary Treatment | Feeding Catchments | Surface Base Length (m) | Surface Height (m) | Depth (m) | Capacity ($m^3$) |
|---|---|---|---|---|---|
| Monique Waste Dump (1) | Monique Waste Dump (1) | 285 | 170 | 7 | 139,220 |
| | Monique Underground Mine | | | | |
| | Monique Pit | | | | |

Table 18-8 provides a summary of the collection ponds that will not require auxiliary treatment.

**Table 18-8: Collection Ponds Not Requiring Auxiliary Treatment and their Feeding Catchments and Dimensions**

| Collection Ponds Not Requiring Auxiliary Treatment | Feeding Catchments | Surface Length (m) | Surface Width (m) | Depth (m) | Capacity ($m^3$) |
|---|---|---|---|---|---|
| Pascalis Overburden Stockpile | Pascalis Overburden Stockpile | 200 | 50 | 6 | 36,888 |
| Courvan South Overburden Stockpile (1) | Courvan South Overburden Stockpile (1) | 200 | 50 | 6 | 36,888 |
| Courvan South Overburden Stockpile (2) | Courvan South Overburden Stockpile (2) | 175 | 44 | 6 | 26,201 |
| Monique Overburden Stockpile | Monique Overburden Stockpile | 350 | 88 | 6 | 140,388 |

### 18.9.4 River Diversion Channels

A regional flood frequency analysis was carried out to estimate the 1:200-year discharge at the two diversion locations using Water Survey of Canada (WSC) data. There are three WSC stations in the vicinity of the project; these were evaluated based on the similarity of topographical and hydrological features, proximity to the project site, and the duration of available historical data. Table 18-9 shows a brief description of their geographical location relative to the site and their data history period.

**Table 18-9: Regional Climate Stations Locations Adjacent to Val-d'Or**

| Station | | Drainage Area | Latitude | Longitude | Data Period |
|---|---|---|---|---|---|
| Name | ID | ($km^2$) | | | |
| Riviere Harricana a Amos | 04NA001 | 3,680 | 48° 36' 02" N | 78° 06' 34" W | 1924 - 2023 |
| Riviere Kinojevis a Clericy | 02JB013 | 2,590 | 48° 22' 00" N | 78° 51' 12" W | 1965 - 2023 |
| Riviere Megiscane (Megiscane) | 03AC002 | 8,310 | 48° 20' 13" N | 77° 04' 48" W | 1924 - 1949; 1951 - 1965 |

Recurrence intervals were assessed using a comprehensive frequency analysis that involved fitting both Log-Pearson Type III (LP3) and Gumbel distributions. The LP3 distribution proved to be the most suitable fit and was chosen for the analysis of extreme values. The resulting 1:200-year peak flows for each WSC station are shown in Table 18-9.

**Table 18-10: Peak Flow Rates for Various Recurrence Intervals at Three Climate Stations**

| Return Period $T_R$ (Years) | Peak Flow for ($m^3$/s) | | |
|---|---|---|---|
| | Riviere Harricana a Amos 04NA001 | Riviere Kinojevis a Clericy 02JB013 | Riviere Megiscane (Megiscane) 03AC002 |
| 1:200- | 318.52 | 520.88 | 1356.36 |

Peak flows for the diversion locations were estimated through the method of watershed transfer, which involves estimating flood flow from a gauged (flow monitored; in this case the WSC stations) watershed to an ungauged watershed based on watershed areas. The catchment areas of the Courvan Diversion Channel and Monique Diversion Channel are 67 $km^2$ and 14 $km^2$, respectively. The highest peak flow from the analysis was adapted for each of the diversions:

- Courvan Diversion Channel (Colombière River): 1:200-year peak flow of 13.39 $m^3/s$
- Monique Diversion Channel (Tiblemon River): 1:200-year peak flow of 2.78 $m^3/s$.

The Courvan Diversion Channel (Colombière River) was size as a 3 m wide channel (base width) with 2H:1V side slopes. Based on the available topographical data, the channel will have a longitudinal slope of approximately 0.5% which will allow it to tie in downstream. The Monique Diversion Channel (Tiblemon River) is a 2 m wide channel (base width) with 2H:1V side slope and a longitudinal slope of approximately 0.4%. Given the low design velocities of the channels, revetment or riprap is not envisioned to be needed at this stage. If required, both channels will be lined with clay which is available onsite.

At this stage, a 100 m wide corridor for the channel has been assumed to facilitate a meandering alignment. It is envisioned that the diversions will incorporate a series of environmental considerations such as substrate material, pools, natural cover and habitat enhancement (such as fallen logs). Specific diversion channel features and hydraulic considerations will be refined in the next stages of the design.

## 18.10 Water Balance

A conceptual water balance analysis was carried out to quantify the amount of water that can be expected to require treatment. The combined catchments for the various WRD ponds along their expected timelines are shown in Table 18-10. The resulting annual treatment volume, based on typical precipitation (based on climate normal for the Val-d'Or Station) are presented in Table 18-11.

**Table 18-11: Conceptual Water Balance Inputs**

| Pond | Year Commissioned | Inflow Catchment ($m^3$) | | Pit and Underground Dewatering inflows ($m^3$/d) |
|---|---|---|---|---|
| | | Waste Rock Dumps | Pit Catchments | |
| Pascalis Waste Dump | Year -1 | 1,277,045 | 642,682 | 1480 (1) |
| Courvan South Waste Dump | Year 3 | 985,631 | 913,420 | 1786 (2) |
| Monique Waste Dump (1) | Year 1 | 938,162 | 904,733 | 4,437 (3) |
| Monique Waste Dump (2) | Year 1 | 398,054 | 0 | 0 |
| Process Plant Area | Year -1 | 370,800 | 0 | 0 |
| Stockpile Ponds | Year 1 | 983,967 | 0 | 0 |

Notes: **1.** Includes Highway pit, Pascalis underground mine (large shell), Pascalis underground mine (small shell). **2.** Includes Courvan North and South pits, Courvan North and South underground mines. 3. Includes Monique underground mine and Monique pit.

**Table 18-12: Annual Contact Water Treatment Volumes**

| Year | Combined Runoff ($m^3$) | Dewatering Inflows ($m^3$) | Total Volume to Treat ($m^3$) | Average Daily Flow ($m^3$/d) |
|---|---|---|---|---|
| -1 | 1,566,225 | 540,200 | 2,106,425 | 5,771 |
| 0 | 1,566,225 | 540,200 | 2,106,425 | 5,771 |
| 1 | 3,771,330 | 2,159,705 | 5,931,035 | 16,249 |

| Year | Combined Runoff (m³) | Dewatering Inflows (m³) | Total Volume to Treat (m³) | Average Daily Flow (m³/d) |
|---|---|---|---|---|
| 2 | 3,771,330 | 2,159,705 | 5,931,035 | 16,249 |
| 3 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 4 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 5 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 6 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 7 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 8 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 9 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 10 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 11 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 12 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 13 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |
| 14 | 5,191,604 | 2,811,595 | 8,003,199 | 21,927 |

## 18.11 Hazard Considerations

To better understand the seismic risk to infrastructure at the site, a deterministic and probabilistic local seismic hazard study is proposed for the next study phase. This will allow for appropriate design amendments to me made to infrastructure where necessary.

In addition to this, the current design standards for the DSTF also adhere to federal and provincial guidelines for constructing mine tailings facilities in Canada. Regulations and guidelines, including the Technical Bulletin by the Canadian Dam Association (CDA) and Directive 019 specific to the mining industry in Québec, were utilized to determine dam hazard classification and establish minimum target levels for design criteria such as the inflow design flood (IDF) and earthquake design ground motion (EDGM).

The DSTF is classified as "significant" by the CDA due to the anticipated failure mode being a slump style rather than a flood style, typical of conventional tailing storage facilities. Recommended design storm events and earthquake designs during operations are set at 1:100-year return periods. Additionally, the DSTF is classified as "high" by the CDA, with a design storm event defined as one-third between the 1:1,000-year and probable maximum flood (PMF) return periods, and the earthquake design set at a 1:2,475-year return period.

## 18.12 Comments on Project Infrastructure

The Novador Project is a greenfield site and the infrastructure proposed takes advantage of the proximity to Val D'Or in that there is overhead line connection, no camp requirement, and the transport of as much material as possible to and away from site using the rail line. Design challenges in the area are mostly related to the esker, and the environmental constraints due to the extensive wetlands. The two river diversions considered the reinstatement as much as possible to a more natural habitat.

# 19 MARKET STUDIES AND CONTRACTS

## 19.1 Introduction

It was assumed in this PEA that the Novador Project will produce gold in the form of doré bars. The market for doré is well-established and accessible to new producers. The doré bars will be refined in a certified North American refinery—there are many in the eastern United States and Canada—and the gold will be sold on the spot market.

The QP for this section has reviewed the market analysis and, in the QP's opinion, the data supports the assumptions in this technical report.

## 19.2 Market Studies

No market studies have been conducted by Probe Gold or its consultants on the gold doré that will be produced at the Novador Project. Gold is a freely traded commodity on the world market and there is a steady demand from numerous buyers. Gold production is expected to be sold on the spot market. Terms and conditions included as part of the sales contracts are expected to be typical for this commodity. Gold is bought and sold on many markets, and it is not difficult to obtain a market price at any time. The gold market is liquid, with many buyers and sellers active at any given time.

## 19.3 Commodities Prices

As of February 14, 2024 the trailing two-year gold price was US$1,991/oz (Figure 19-1). For this PEA, a gold price of US$1,750/oz was assumed. The exchange rate used in the study is C$1.00 to US$0.74.

**Figure 19-1: Two-Year Gold Price in US Dollars**


Source: Goldprice.org, 2024.

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

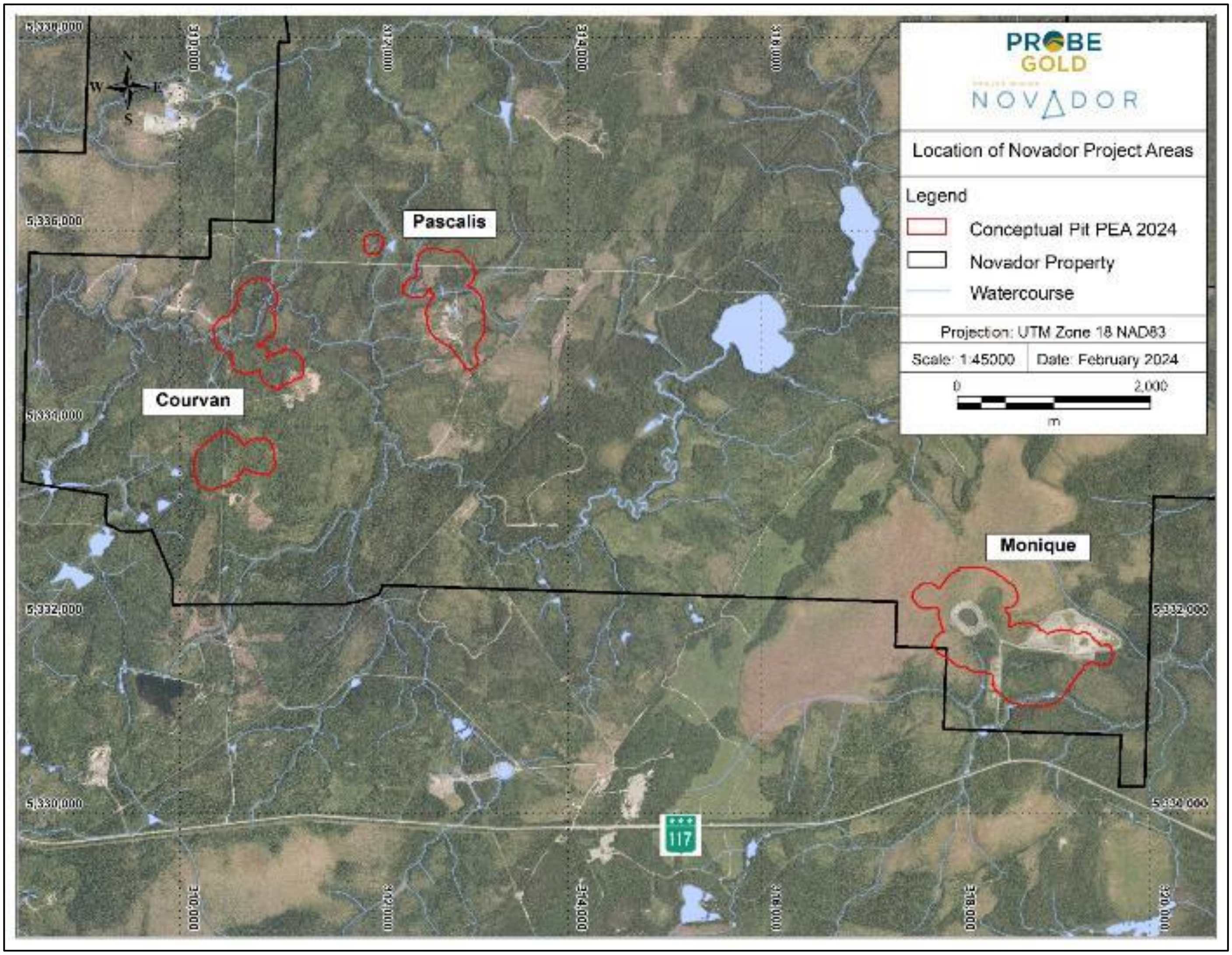
## 20.1 Environmental Studies

Since 2017, Probe Gold has initiated a series of environmental studies with SNC-Lavalin to understand the environmental conditions on portions of the Pascalis and Courvan areas. The Pascalis-Courvan area was largely covered by the studies carried out in 2017, 2018 and 2020, for a total of 1,533 ha (SNC-Lavalin, 2020a and 2020b). The actual report is also based on the observations and conclusions of the environmental study completed by AECOM for Richmont Mines in 2010 and 2011, which covered an area of 539 ha including the former Monique open pit mine and infrastructure (AECOM, 2011).

More recently, in 2022, Probe Gold mandated the consultant firm Groupe DDM to carry out field inventories for various biological components (vegetation and wetlands, birds, fish and water environments) (Groupe DDM, 2022a, 2022b, 2023). These inventories covered the three areas of the Novador Project, namely Pascalis, Courvan and Monique (Figure 20-1).

The environmental permitting process require an understanding of the physical (surface water, groundwater, air, noise, etc.), biological (fauna and flora) and social (land and resource uses, archaeology, landscape, etc.) environments, and include an evaluation of the potential impacts of the project and proposed mitigation measures. The environmental and social potential risks associated with project are presented in Section 25.

**Figure 20-1: Location of Courvan, Pascalis and Monique Areas**




Source: Probe Gold, 2024

### 20.1.1 Physical Environment

#### 20.1.1.1 Topography and Geomorphology

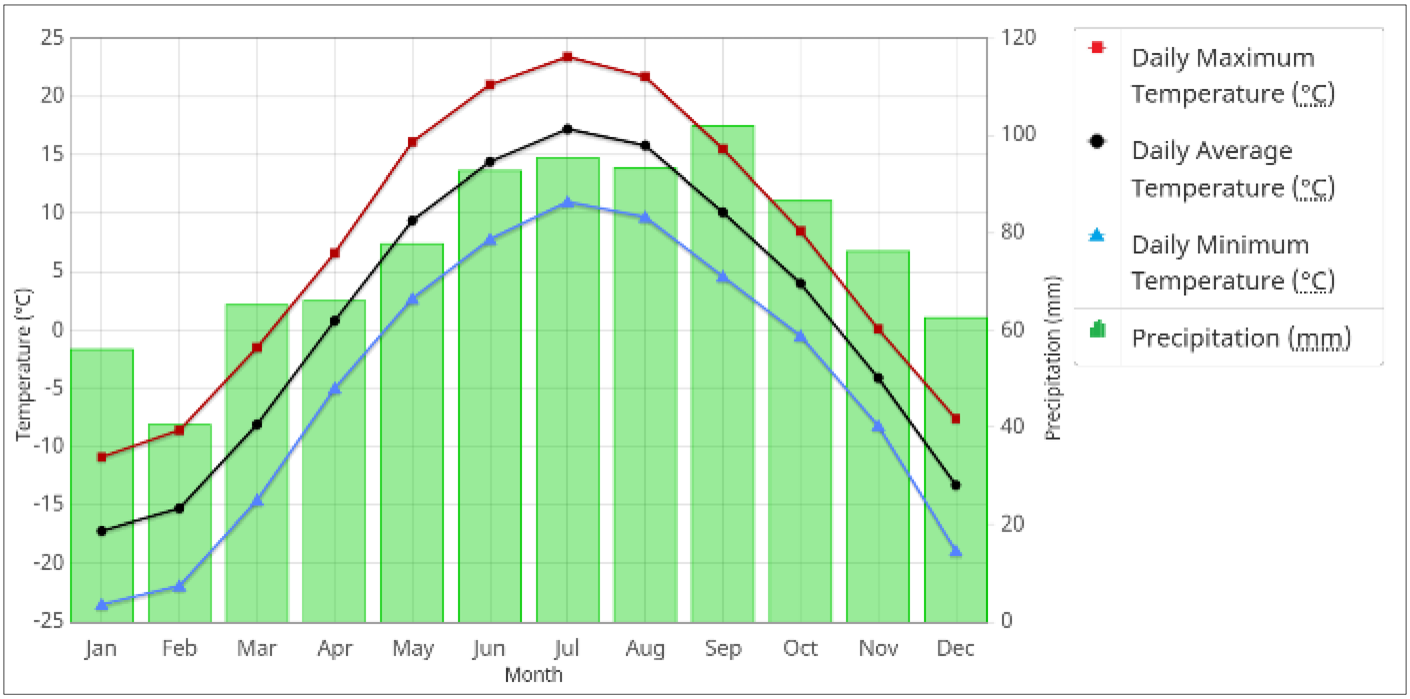
The landscape consists of a vast plain with very few hills (Robitaille and Saucier, 1998). The project site is part of the Plaine de l'Abitibi ecological region, which is composed of glaciolacustrine plains that were put in place in Ojibway Lake during the last glaciation (Blouin and Berger, 2002). The topographic relief of the project site is generally flat. Elevation on Pascalis-Courvan area ranges from 315 to 355 m above sea level and from 323 to 337 m in the Monique area.

Organic and glaciolacustrine deposits dominate the surface deposits in the vicinity of the project site. Overburden thickness varies from 0 to 50 m in both areas, and it consists mainly of sand, gravel and glacial moraine.

#### 20.1.1.2 Climate

The climate of the Val-d'Or area is continental subarctic and sub-humid (Robitaille and Saucier, 1998). The closest available weather station is at the Val-d'Or regional airport, located approximately 20 km from the project site. For the period between 1971-2000, the annual average temperature is 1.2°C with a monthly average varying from 17.2°C in July to -17.2°C in January. For the same period, the total annual precipitation is 914 mm (635.2 mm of rainfall and 300.4 cm of snowfall) (Environment and Natural Resources Canada, 2023). Climatological data from the Val-d'Or regional airport station between 1971 and 2000 are presented in Figure 20-2.

**Figure 20-2: Temperature and Precipitation for 1971 to 2000 at the Val-d'Or Regional Airport Station**

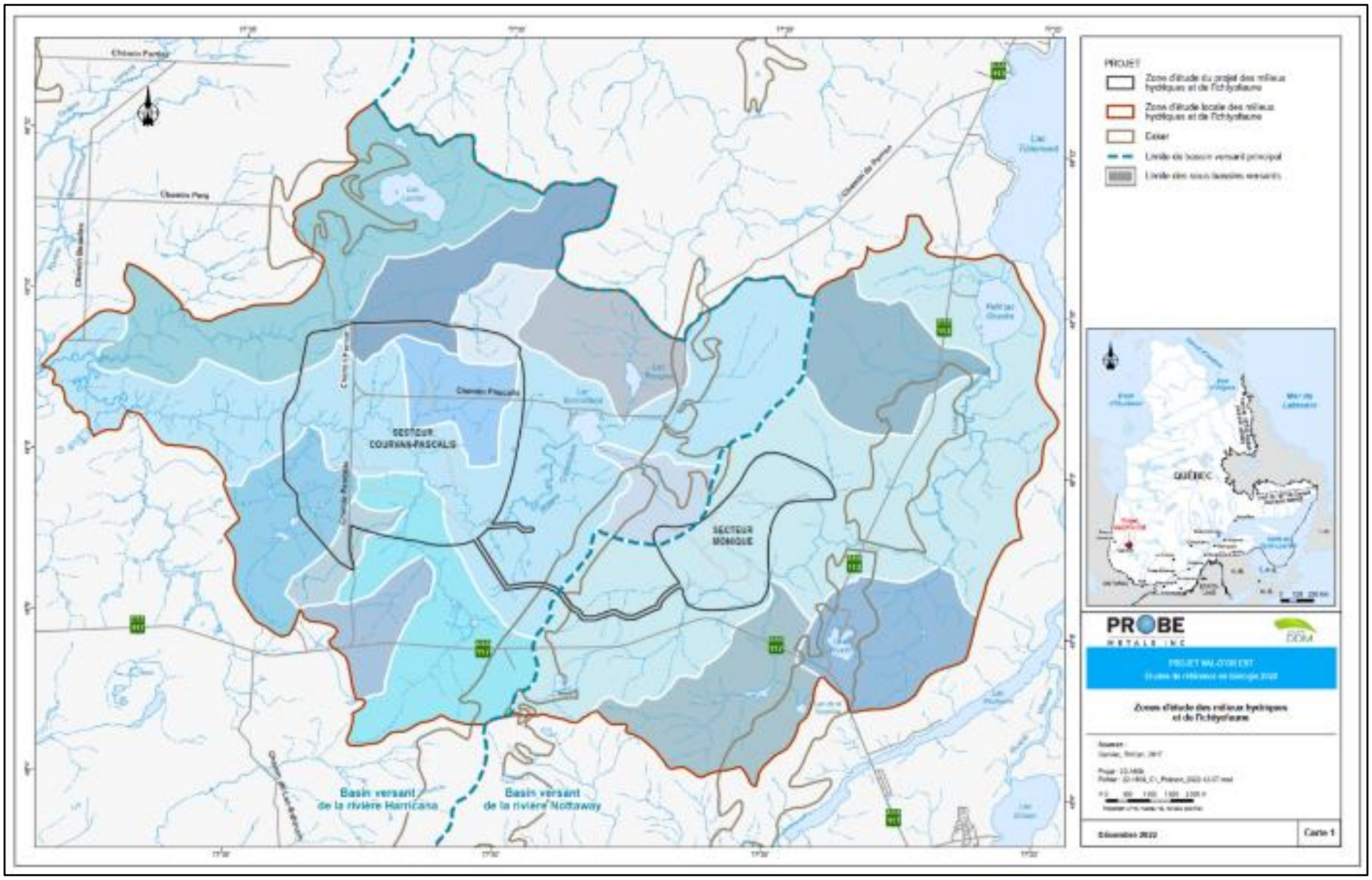



Source: Environment and Natural Resources Canada, 2023

#### 20.1.1.3 Hydrology

The Pascalis-Courvan area (Figure 20-3) is drained by the Colombière River and a few of its tributaries (SNC-Lavalin, 2020a). It is part of the Bourlamaque River watershed, which covers 683 $km^2$ (MELCCFP, 2023). The Bourlamaque River watershed is itself located in the upper section of the Harricana River watershed, which ultimately empties into James Bay.

**Figure 20-3: Surface Water Characterization**




Source: Groupe DDM, 2023

In the Pascalis-Courvan area, surface water flows from east to west through a network of wetlands and small creeks to Colombière Lake located 8 km west of the area (Richelieu Hydrogéologie, 2020a). There are no lakes in the Pascalis-Courvan area, but beaver ponds are present along some watercourses. Most of the Colombière River tributaries are smaller creeks with shallow depth and a permanent or intermittent flow. Some watercourses seem to be of anthropogenic origin (past-operations ditches).

During the inventories carried out in 2022, 50 watercourses were characterized in the Pascalis-Courvan area, for a total length of 34,557 m (Groupe DDM, 2023). Nearly 29,000 m of permanent watercourses and more than 5,400 m of intermittent watercourses have been characterized in 2022 in the Pascalis-Courvan area. These inventories were carried out to complement those previously conducted by SNC-Lavalin in 2020 (SNC-Lavalin, 2020).

The Monique area is drained on the surface by Tiblemont River, located south of the former Monique mine (Figure 20-3). The Tiblemont River is a tributary of Tiblemont Lake, which empties into James Bay by the Bell River (Richelieu Hydrogéologie, 2020b). According to the average of three hydrological stations located nearby the project site, the recurrence low flow rate of Tiblemont River for two years over seven consecutive days (Q2-7) is 175.7 L/s or 15,180 $m^3$/d. The peak flow or maximum flow of this watercourse is estimated at 49.3 $m^3$/s (Richelieu Hydrogéologie, 2020b). All ponds found in the Monique area are due to beaver dams.

During the inventories carried out in 2022, 5 watercourses were characterized in the Monique area, for a total length of 11,534 m (Groupe DDM, 2023). This represents 8,671 m of permanent watercourses and 2,421 m of intermittent watercourses characterized in the Monique area in 2022. The lentic channel type flow is the most common in both areas. In terms of surface area, the largest flow facies in both areas are lentic channels, but also lotic channels for the Pascalis-Courvan area.

#### 20.1.1.4 Hydrogeology

A hydrogeological study was completed for the Novador Project in 2023 by Richelieu Hydrogéologie (Richelieu Hydrogéologie, 2023a). More specifically, this hydrogeological study included geotechnical boreholes, installation of observation wells, piezometric surveys, permeability tests as well as groundwater sampling. For the study area, the groundwater flow is consistent with the topographic surface. The recharge areas are corresponding to the rock outcrops areas. Permeability tests demonstrate that the upper part of the bedrock has low permeability with an average hydraulic conductivity of $1.6 \times 10^{-4}$ cm/s (ranging from $3.3 \times 10^{-7}$ to $4.4 \times 10^{-3}$ cm/s).

To assess groundwater inputs towards the proposed open pits and underground mines, as well as the resulting drawdowns, the hydrogeological model developed for the Pascalis-Courvan and Monique areas has been updated to incorporate the new hydrogeological data collected and the new mining plan (Richelieu Hydrogéologie, 2023b). The Visual MODFLOW software has been used for this update. This assessment was calculated assuming that all open pits and underground infrastructures are in operation at the same time. This assumption is conservative since underground mining stopes will be backfilled during the mining sequence as well as two of the open pits. This assumption simplifies the situation but it amplifies the impacts on the drawdowns. The project impacts should be smaller than those modelled. According to this model, the drawdown varies from 200 to 1,000 m from the projected limits of the pits of the Pascalis-Courvan area and from 850 to 1,650 m from the projected limits of the pit of the Monique area. The estimated rates of groundwater inflow in the pits and underground mines for the Pascalis-Courvan and Monique areas are as follows:

- Courvan South Pit: 663 $m^3$/d
- Courvan North Pit: 521 $m^3$/d
- Pascalis Pit (2, 3a and 3b): 742 $m^3$/d
- Highway Pit: 146 $m^3$/d
- Courvan South Underground Mine: 105 $m^3$/d
- Courvan North Underground Mine: 497 $m^3$/d
- Pascalis Underground Mine: 296 $m^3$/d
- Monique Pit: 3,554 $m^3$/d

- Monique Underground Mine: 883 $m^3/d$

The thickness of the unconsolidated deposits reaches up to 60 m at the location of the drill holes. The following hydrostratigraphic units have been identified and permeability tests were done in each unit:

- On the surface, an organic horizon whose composition varies from topsoil to peat bog composed of sphagnum moss whose thickness could reach almost four meters.
- An aquitard composed of fine sediments varying from a grey, massive clay to a grey clay with traces of sand or gravel and sometimes to silt to silty sand.
- A granular aquifer whose composition includes silty sand, till, and glaciofluvial sand and gravel.
- The bedrock, which, through its network of fissures, plays the role of an aquifer on a large regional scale. At the local scale, the aquifer potential of the bedrock varies considerably from one place to the other, depending on the density of fractures and their interconnectedness.

The geometric mean of the hydraulic conductivities of the units is as follows:

- Upper part of the bedrock: $3.3 \times 10^{-7}$ to $4.4 \times 10^{-3}$ cm/s, with geometric mean of $1.6 \times 10^{-4}$ cm/s.
- Till: $1.6 \times 10^{-6}$ to $8.4 \times 10^{-4}$ cm/s, with geometric mean of $6.6 \times 10^{-5}$ cm/s.
- Silty sand: $3.0 \times 10^{-5}$ to $2.6 \times 10^{-3}$ cm/s, with geometric mean of $3.0 \times 10^{-4}$ cm/s.
- Clay: single value at $3.2 \times 10^{-6}$ cm/s.
- Peat: single value at $1.7 \times 10^{-3}$ cm/s.

#### 20.1.1.5 Surface Water Quality

Surface water was sampled in 2017, 2018, and 2020 to determine the surface water quality in watercourses of the Pascalis-Courvan area (SNC-Lavalin, 2020). Analyzed parameters include those recommended by the MDDELCC (2015), as well as cyanide and mercury, which were added due to the mining history on the site. The results were compared to the provincial criteria for surface water and the Canadian Council of Ministers of the Environment's (CCME) Canadian Water Quality Guidelines for the Protection of Aquatic Life at the federal level.

The surface water of the Pascalis-Courvan area can be described as clear, with a pH near-neutral, poor in nutrients, slightly mineralized and with a good buffering capacity. Concentrations of most of the major ions, except for calcium, were low in all sampling campaigns. The surface water sampled is unlikely to eutrophication. Fecal coliforms were detected at all stations and could be explained by the presence of beavers. There were no issues identified that would likely have an impact on resource extraction and project development.

Surface water quality in watercourses of the Monique area (AECOM, 2011) was characterized during the fish inventory in October 2010. Dissolved oxygen was higher than the MDDEP (2011) and the CCME (2011) recommendations. Conductivity was low (below 31 µS/cm) and the pH was slightly acidic (3.35 to 4.58). These acidic pH measurements are explained by the fact that all watercourses in the study area are fed by the peatbog. A peatbog is typically characterized by an acidic pH.

#### 20.1.1.6 Groundwater Quality

Groundwater was sampled in 2018, 2020 and 2023 for the Pascalis-Courvan area (Richelieu Hydrogéologie, 2020a and 2023a). In general, groundwater is of the calcium bicarbonate type. The pH is slightly basic, and groundwater is poorly mineralized. Some exceedances of the drinking water criteria were observed for arsenic, ammoniacal nitrogen, manganese and sulphides. Regarding the resurgence criteria, some exceedances were observed for copper, $C_{10}$-$C_{50}$ petroleum hydrocarbon, mercury, total phosphorus and sulphides.

For the Monique area, groundwater was sampled from 2011 through 2020 and in 2023 (Richelieu Hydrogéologie, 2023a). Samples were also taken in the peat bog in 2011 and in 2023. Some exceedances of the drinking water criteria were observed for aluminium, antimony, arsenic, ammoniacal nitrogen, manganese and sulphides. In addition, some exceedances of drinking water criteria were also measured on the esker (arsenic, ammoniacal nitrogen, manganese and sulphides). Regarding the resurgence criteria, some exceedances were observed for copper, $C_{10}$-$C_{50}$ petroleum hydrocarbon and mercury.

### 20.1.2 Biological Environment

An initial environmental baseline study was undertaken on a portion of the Pascalis-Courvan area by SNC-Lavalin in 2017. In 2018, the study area was enlarged to include the area of Colombière River, and it was enlarged again in 2020 to include the Courvan gold trend. The Monique area was covered by an environmental study in 2010 and 2011 (AECOM, 2011 and 2012). The studies reviewed available information across several disciplines, including geology and soils, hydrology, flora, and fauna. It also included site visits and characterization by SNC-Lavalin during June to September 2017, in June 2018, and in August 2020.

During 2022, field inventories were carried out by Groupe DDM for various components of the biological environment (vegetation and wetlands, birds, surface water environments) in order to take into account the development of the project. These inventories covered all the areas of the Novador Project, namely Pascalis, Courvan and Monique.

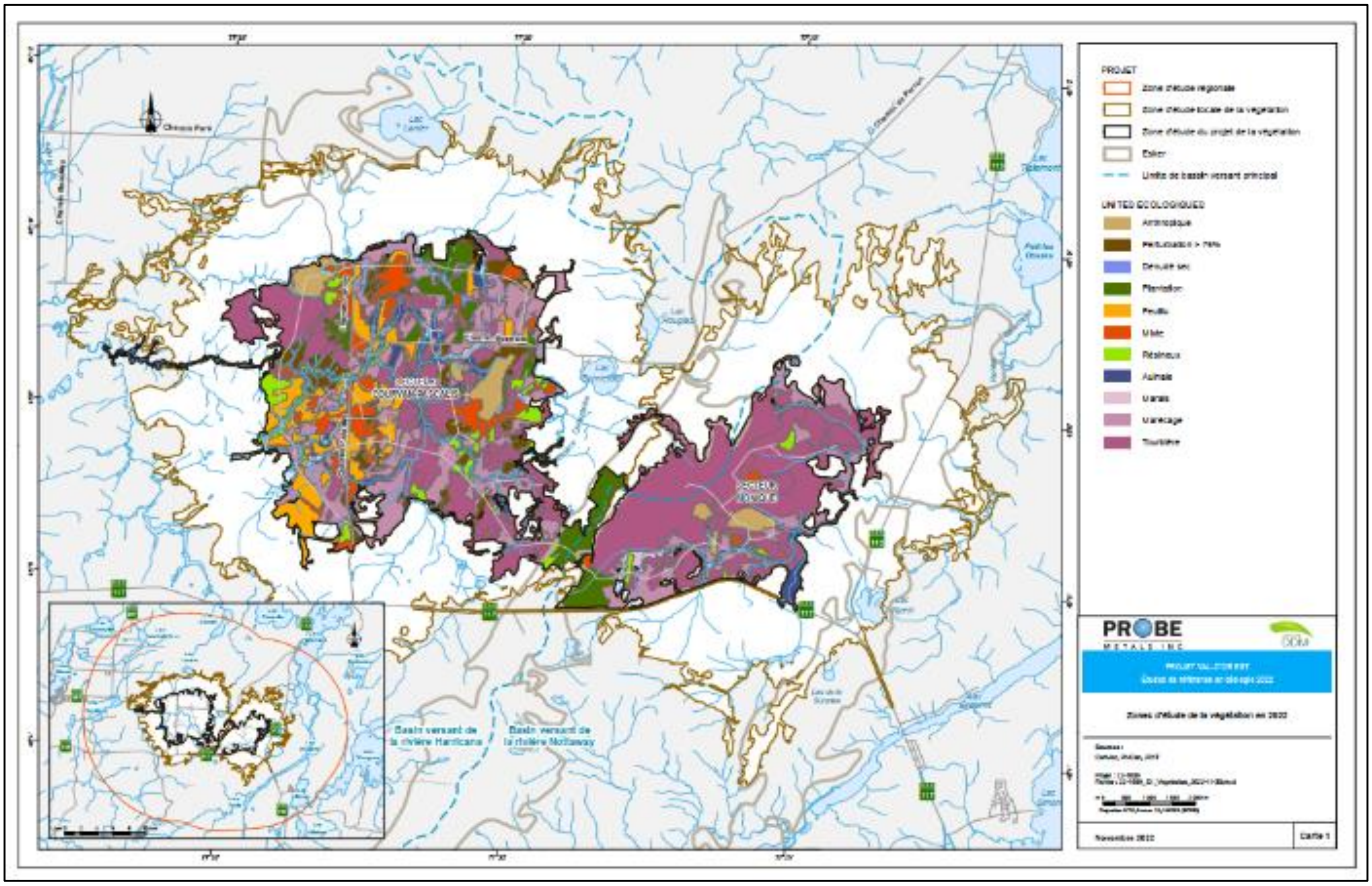
#### 20.1.2.1 Vegetation and Wetlands

As part of the 2022 vegetation and wetlands inventories, the study area includes a project study area and a local study area (Figure 20-4) (Groupe DDM, 2022a). The project study area corresponds to the footprint of the mining project (i.e., where the different mining infrastructures will be developed), while the local study area corresponds to a buffer zone approximately 1.5 km wide around the project study area.

In the project study area as well as in the local study area, wetlands are very present. Wetlands include the following ecological units: alder, marsh, swamp and bog. Out of a total area of 5,531.2 ha, wetlands occupy an area of 3,771 ha in the project study area while in the local study area, wetlands occupy an area of 5,741.6 ha out of a total area of 8,991.1 ha. A peat bog (#830106) is inventoried in the Monique area (Buteau, 1989). The photo-interpreted wetlands were subject to a detailed characterization, in accordance with MELCCFP protocols (Lachance et coll., 2021).

It should be noted that the hidden-fruit bladderwort (*Utricularia geminiscapa*), already observed in the Monique area in previous field work (AECOM, 2011 and 2012), is no longer considered a species with conservation status (Gouvernement du Québec, 2022a). No species with conservation status were detected in 2022 during field work.

**Figure 20-4: Vegetation and Wetlands Study Areas**




Source: Groupe DDM, 2022a

Four invasive exotic plant species were identified during the 2022 field inventories in the Pascalis-Courvan and Monique areas (Groupe DDM, 2022). These invasive exotic plant species are the reed canarygrass (*Phalaris arundinacea*), the smooth bedstraw (*Galium mollugo*), the common parsnip (*Pastinaca sativa*) and the purple loosestrife (*Lythrum salicaria*). The most common species was reed canarygrass.

The project will have an impact on wetlands and bodies of water. In accordance with the Regulation Respecting Compensation for Adverse Effects on Wetlands and Bodies of Water (Q-2, r.9.1), costs have been estimated and considered in this update PEA. Cost estimates were based on the areas of wetlands and watercourses impacted directly by the project infrastructure (pits, waste rock and overburden piles, tailings area, process plant, roads).

#### 20.1.2.2 Fish and Fish Habitat

A characterization of surface water environment, fish and fish habitat was conducted in 2022 in the Pascalis-Courvan and Monique areas (Groupe DDM, 2023) and previously in both sectors (SNC-Lavalin, 2020 and AECOM, 2011). The main watercourses are the Colombière River in the Pascalis-Courvan area and the Tiblemont River in the Monique area. The characterization was carried out by a homogeneous segmentation of the watercourses. The segmentation is mainly determined according to the flow facies and other physical conditions. The watercourses were surveyed by walking and by boat when possible. The capture of fish in the watercourses was carried out using bait traps, fyke nets and electric fishers. The captures allowed length measurements to be taken on certain individuals.

In 2022, 15 watercourses in the Pascalis-Courvan area and 5 watercourses in the Monique area were subject to a fish inventory. Nearly 29,000 m of permanent watercourses and more than 5,400 m of intermittent watercourses were characterized in 2022 in the Pascalis-Courvan area. In the Monique area, 8,671 m of permanent watercourses and 2,421 m of intermittent watercourses were characterized in 2022.

Figure 20-5 shows the location of watercourses characterized in both project areas in 2022 (red) and previously (orange).

In the Pascalis-Courvan sector, a total length of 8,694 m is considered good quality for fish, while a length of 11,581 m is considered low quality. There is no segment considered to be of good quality in the Monique sector. In the latter sector, most segments are considered to be of low (9,369 m) or no (1,456 m) quality for fish. Neither of the segments in the two characterized sectors is of very good quality fish habitat.

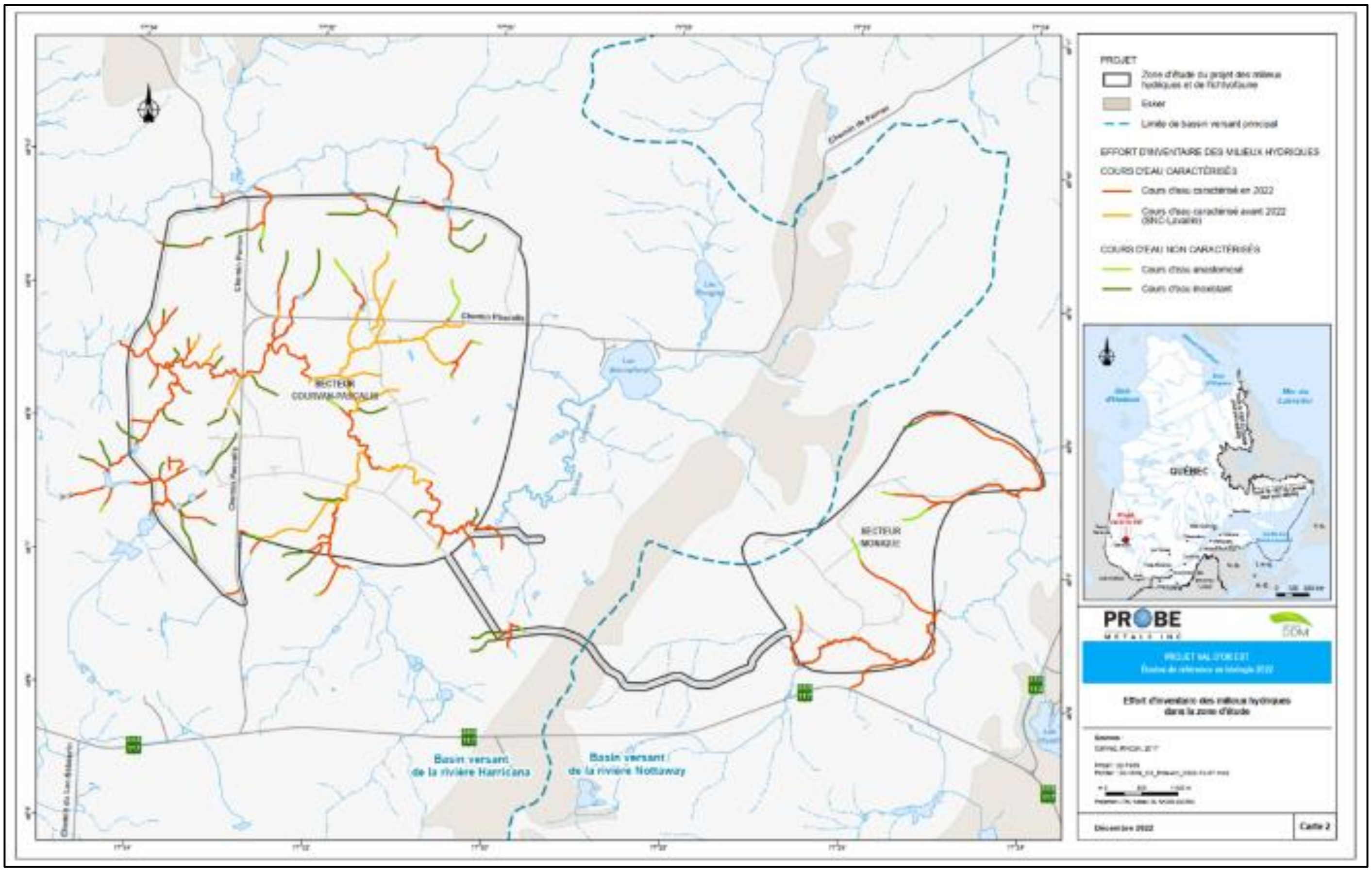
In 2022, at least 15 species of fish were caught with fishing gear for all 20 watercourses surveyed. The three most common species by number of occurrences were Brook Stickleback (*Culaea inconstans*) (14 watercourses), Northern Pearl Dace (*Margariscus margarita*) (10 watercourses) and Lake Chub (*Couesius plumbeus*) (8 watercourses).

Watercourses CEO26 (10 species) and CEO36 (9 species) supported a greater number of species compared to other watercourses. These two watercourses are located in Pascalis-Courvan area.

No species with conservation status were captured or observed in 2022. Only one sport species, Burbot (*Lota lota*) has been caught in the Monique area.

Watercourses where fish presence was confirmed and other watercourses with potential fish habitat are considered to be fish habitat (i.e., a regulated wildlife habitat). These habitats benefit from a legal status of protection under the Regulation Respecting Wildlife Habitats (C-61.1, r.18) at the provincial level and under the *Fisheries Act* (R.S.C., 1985, c. F-14) at the federal level. Since the project requires the diversion of a segment of the Colombière River (CE036) in the Pascalis-Courvan area and a segment of the Tiblemont River (CE073) in the Monique area, an offsetting plan in accordance with the information requirements set out in the Authorizations Concerning Fish and Fish Habitat Protection Regulations must be developed and implemented. This offsetting plan must be approved by the Ministry of Fisheries and Oceans Canada. Moreover, authorizations will be necessary in compliance with legislation if other fish habitats are affected by the project.

**Figure 20-5: Watercourses Characterized in the Pascalis-Courvan and Monique Areas**




Source: Groupe DDM, 2023

### 20.1.2.3 Wildlife

Avifauna inventories were carried out in 2022 in the Pascalis-Courvan and Monique areas (Groupe DDM, 2022b). These surveys focused on three target species groups: songbirds, waterfowl, and species with conservation status. A variety of counting methods were used during the surveys, including point counts (songbirds), observations from fixed ground positions near the shore of lakes (waterfowl), sound recorders, and one-time visits (species with conservation status).

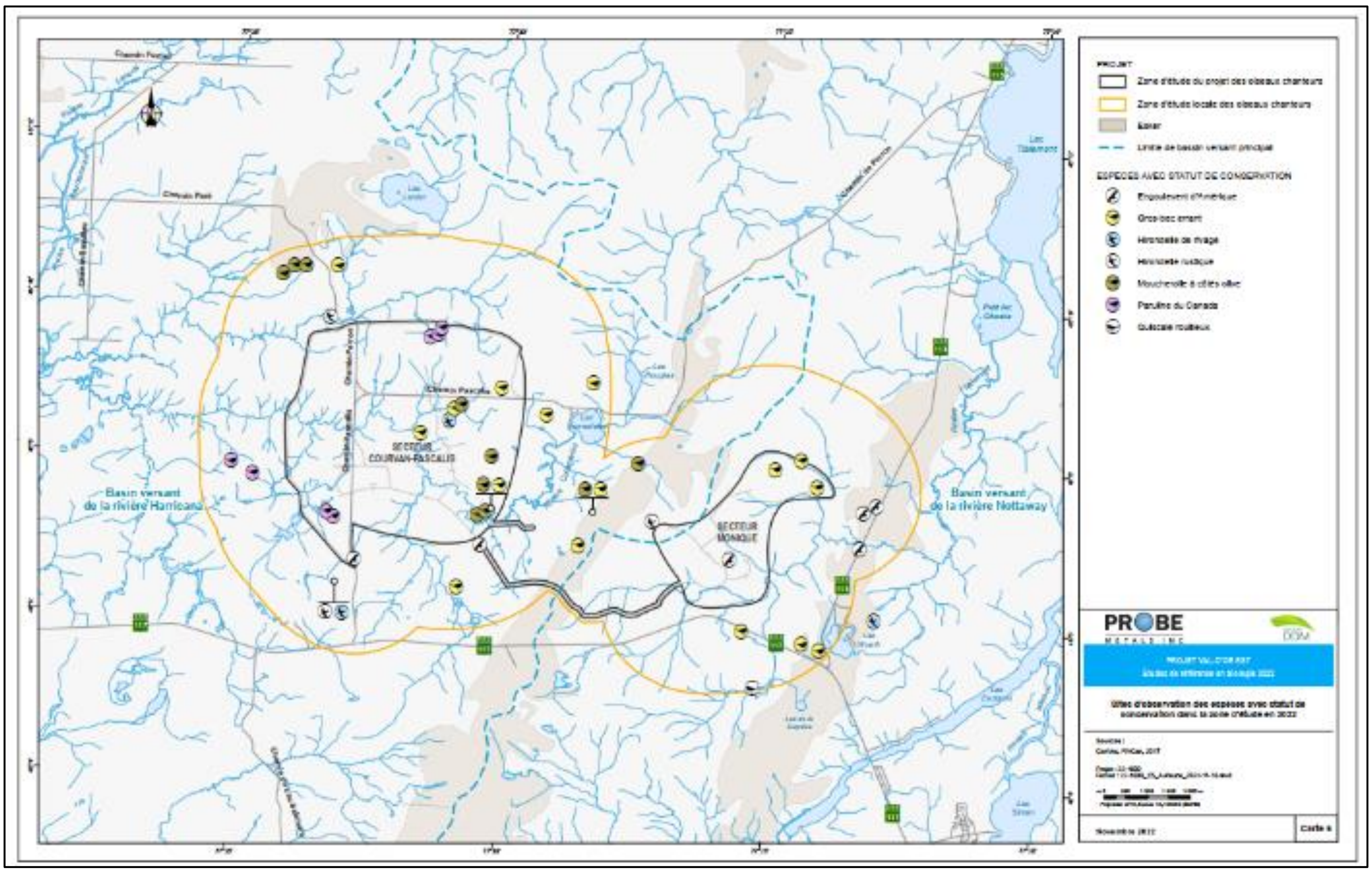
A total of 62 songbird species were observed at all sampling stations. The most generalist species are also the most abundant. These species include the White-throated Sparrow (*Zonotrichia albicollis*), Nashville Warbler (*Leiothlypis ruficapilla*), Red-eyed Vireo (*Vireo olivaceus*), Swainson's Thrush (*Catharus ustulatus*), and Hermit Thrush (*Catharus guttatus*). All inventoried habitats have average densities of similar individuals.

At least 13 species of Anatidae (geese and ducks) were observed during the fall on the water bodies inventoried. The most abundant species were diving ducks such as the Red-breasted Merganser (*Mergus serrator*), the Lesser Scaup

(*Aythya affinis*) or Greater Scaup (*Aythya marila*), the Ring-necked Duck (*Aythya collaris*) and the Common Goldeneye (*Bucephala clangula*).

As shown on Figure 20-6, the seven bird species with conservation status observed are the Common Nighthawk (*Chordeiles minor*), Evening Grosbeak (*Coccothraustes vespertinus*), Sand Martin (*Riparia riparia*), Barn Swallow (*Hirundo rustica*), Olive-sided Flycatcher (*Contopus cooperi*), Canada Warbler (*Cardellina canadensis*) and Rusty Blackbird (*Euphagus carolinus*). Among these species with conservation status, the Canada Warbler is the only confirmed nesting in 2022.

**Figure 20-6: Observation Site of Species with Conservation Status**




Source: Groupe DDM, 2022b

Wildlife species inventories (amphibian, avifauna, and large mammals) were conducted in 2011 in the Monique area (AECOM, 2011) and will be update in the upcoming years to include all the areas of the Novador Project. These inventories included listening stations and visual observation in the field. The presence of three anurans species were identified: the cruciferous tree frog, the green frog and the northern frog. For avifauna, 36 species were identified: 27 species of passerines, 4 species of Anatidae, 3 species of waders, 1 species of galliforme, and 1 species of bird of prey. No direct observation of large mammals has been carried out during inventory, but signs of presence of the following species were noted: bear, moose, fox, hare, wolf and marten. Apart from the avian species with conservation status observed in 2022, no species of threatened, vulnerable or likely to be designated status has been identified during the inventories in 2011.

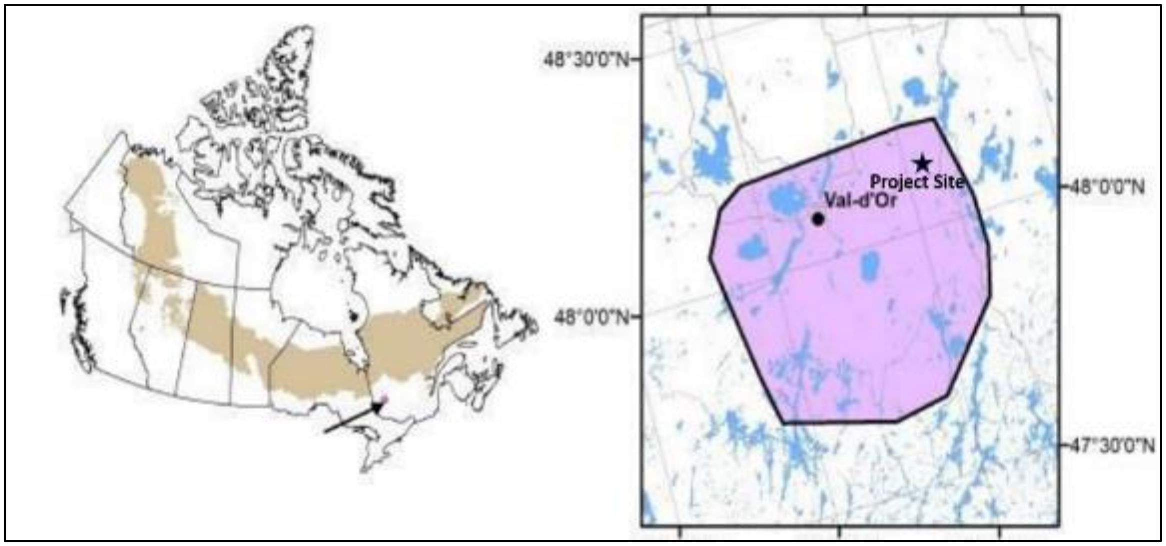
#### 20.1.2.4 Endangered Wildlife

The core area of the woodland caribou (Val-d'Or population) range is located just south of the project site (i.e., south of Highway 117) (MRN, 2013). This small declining population is isolated from the rest of this ecotype's range. The woodland caribou is designated "vulnerable" in Quebec under the *Act Respecting Threatened or Vulnerable Species* (E-12.01). A provincial recovery plan of the Quebec woodland caribou, covering 2013 to 2023, was published in 2013 (Équipe de rétablissement du caribou forestier, 2013). A specific development plan for the Val-d'Or population was also produced in 2013 for the 2013 to 2018 period (MRN, 2013). The MFFP announced in February 2020 the implementation of exceptional measures to protect the population of Val-d'Or, including the extension of the moratorium on logging in the caribou wildlife habitat and the temporary enclosure of the caribou of the Val-d'Or population to ensure their survival by protecting them from their predators (MFFP, 2020). These interim measures for caribou habitat management are still effective.

The Pascalis-Courvan and Monique areas of the Novador Project are just outside the area covered by this plan (the site faunique du caribou au sud de Val-d'Or) (Figure 20-8 on the following page). There are no legal wildlife habitats within the meaning of the Regulation Respecting Wildlife Habitats in these sectors of the Novador Project.

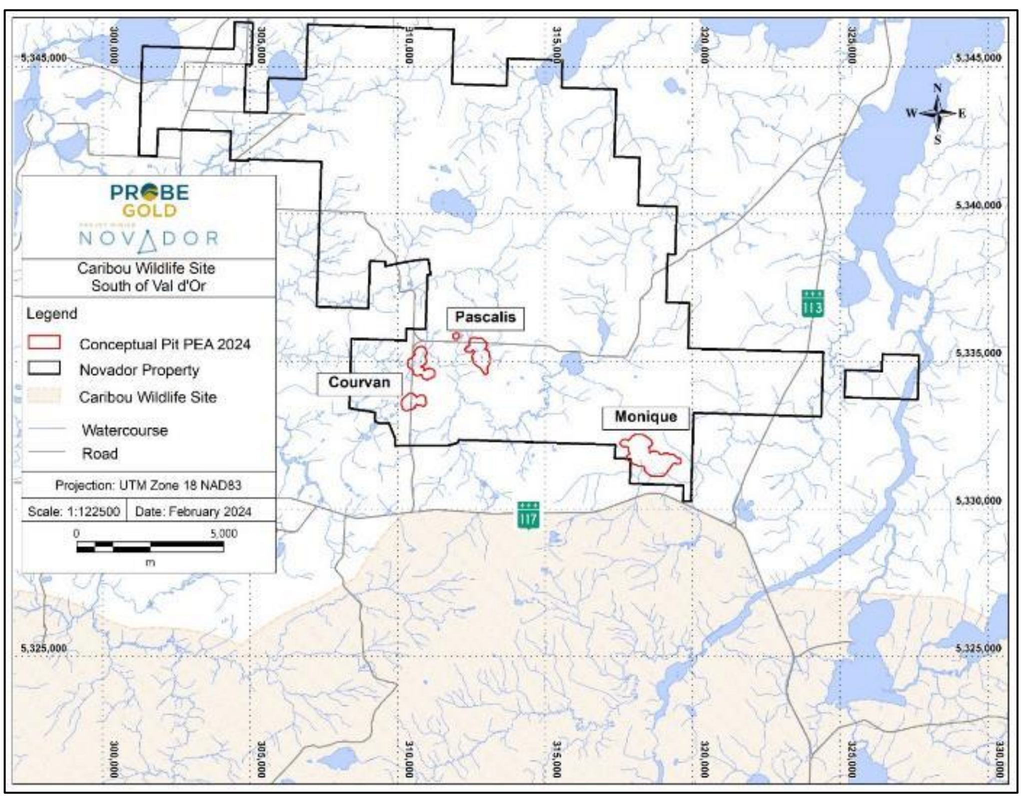
However, at the federal level, the woodland caribou (Boreal population) is listed as "threatened" in Schedule 1 of the *Species at Risk Act* (S.C. 2002, c. 29). A National Recovery Strategy was published in 2012 (Environment Canada, 2012) and amended in 2019 (ECCC, 2019). The Novador Project is located in the QC1 range (Val-d'Or), which is designated critical habitat (Figure 20-7 below). This designation ensures that a minimum of 65% of the QC1 range is maintain as undisturbed habitat. Located at the north-east limit, the Novador Project site occupied a very limited surface of the QC1 range.

**Figure 20-7: Critical Habitat – Val-d'Or Range (QC1)**




Source: ECCC, 2019

**Figure 20-8: Caribou Wildlife Site South of Val-d'Or**



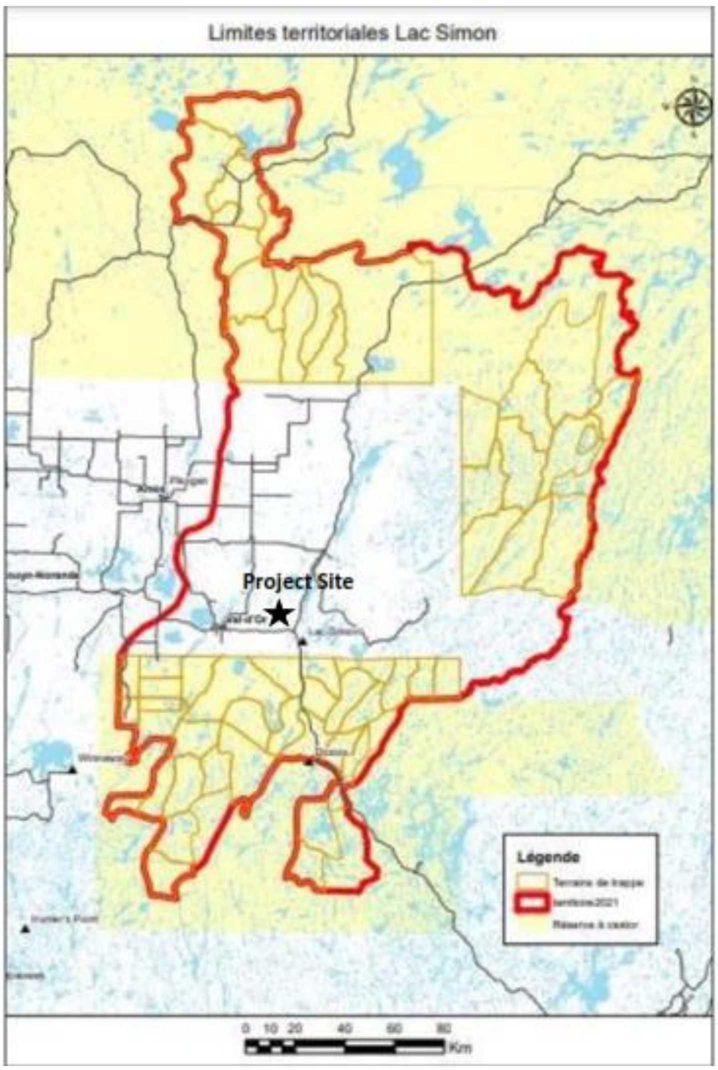

Source: Gouvernement du Québec, 2022b

### 20.1.3 Social Environment

There are different land users within the project site and its surrounding area. There are several gold mines and mining exploration activities, as well as forestry activities in the area. The project site is located approximately 25 km east of the city of Val-d'Or and approximately 8 km north-west of the Lac-Simon Anishnabe community. There are a few cottages on the north shore of Bonnefond Lake, approximately 1.5 km east of the Pascalis-Courvan sector. In addition, several people have hunting camps and surface rights on the project site and its surroundings.

The ancestral land of the Algonquin Anishinabeg Nation of Lac-Simon overlaps the project site (Figure 20-9). The project site is located on the Anishnabe Aki, territory on which the Anishnabe practice hunting, fishing, trapping and gathering activities.

**Figure 20-9: Ancestral Territory of Lac-Simon Community**




Source: Radio-Canada, 2022

## 20.2 Waste Rock, Mineralized Rock and Tailings Characterization

Geochemical characterizations of waste rock and mineralized rock from the Pascalis, Courvan and Monique areas were carried out in 2017 (Lamont, 2017) and 2020 (Lamont, 2020a; 2020b, 2020c) with the objective of evaluating how to store waste rock and tailings to ensure the protection of surface water and groundwater. Additional sampling was carried out for geochemical characterization on the Monique project in 2023 (Lamont, 2024). Geochemical characterization was also performed on Pascalis waste (rejects) produced by the particle sorting testwork (Lamont, 2021). The following assays were carried out:

- total sulphur and total carbon by LECO
- acid-base accounting (Sobek, 1978 modified by Lawrence (MEND, 1991))
- trace metals (protocol MA.200 Met 1.2 (CEAEQ, 2014))
- toxicity characteristic leaching procedure or “TCLP” (protocol MA.100 Lix.com.1.1 (CEAEQ, 2012))
- synthetic precipitation leaching procedure or “SPLP” (protocol MA.100 Lix.com.1.1 (CEAEQ, 2012))
- CTEU-9 leaching procedure (protocol MA.100 Lix.com.1.1 (CEAEQ, 2012)).

Table 20-1 summarizes the geochemical characterization programs and includes the number of samples and laboratories where the assays were achieved.

Kinetic column field tests for waste rock from the Monique area and particle sorting rejects from Pascalis area began in 2023 and will continue in 2024 (Figure 20-10). The objective of these tests is to measure the physicochemical parameters and metal concentrations of the rainwater after it has flowed through the mining materials. Water quality prediction models can be produced using these data.

**Table 20-1: Geochemical Characterization Programs**

| Study | Number of Samples | | | Assays | | | | | | Laboratory |
|---|---|---|---|---|---|---|---|---|---|---|
| | Waste Rock | Mineralized Rock | Tailings or Rejects | Total Sulphur & Total Carbon | Acid-Base Accounting | Trace Metals | TCLP | SPLP | CTEU-9 | |
| Pascalis (Lamont, 2017; Lamont, 2020a) | 50 | 22 | - | 72 | 47 | 47 | 30 | 30 | - | Techni-Lab (ActLabs) |
| Pascalis (Lamont, 2021) | - | - | 8 | 8 | 8 | 8 | 4 | 4 | 4 | SGS Lakefield |
| Courvan (Lamont, 2020b) | 92 | 15 | - | 107 | 107 | 107 | 61 | 61 | 61 | AGAT Laboratories |
| Monique (Lamont, 2020c) | 81 | 19 | - | 100 | 100 | 100 | 89 | 89 | 89 | AGAT Laboratories |
| Monique (Lamont, 2024) | 54 | 16 | - | 70 | 70 | 70 | - | - | - | Techni-Lab (ActLabs) |

**Figure 20-10: Kinetic Column Field Tests from Monique Area**


Source: Photo courtesy of Probe Gold (2023)

### 20.2.1 New Béliveau (Pascalis) – Waste Rock and Mineralized Rock

For the characterization program of the Pascalis area, 72 samples were taken from the three deposits: New Béliveau, Highway and the North Zone. The geochemical characterization tests were used to evaluate the potential of the samples to generate acidity. According to the modified acid-base accounting test and the criteria of the MELCC Guide (2020) applicable in Quebec, the results demonstrate that all waste rocks and mineralized rocks will be non-acidogenic. The results show that only two waste rock samples (gabbro) from the Highway deposit and two mineralized rock samples (one gabbro from the Highway deposit and one agglomerate from the New Béliveau deposit) would be potentially acidogenic. All the other samples show a total sulphur concentration of less than 0.04% (first criterion of the guide) or a sufficiently high neutralization potential (second criterion of the guide). According to Price's criterion (MEND, 2009), largely used elsewhere in Canada, only the two mineralized rock samples would be potentially acidogenic. However, sulphur and carbon analyses showed that these are extreme values in the data distribution and are not representative of the whole waste rock nor the whole mineralized material. Thus, according to the information currently available, the overall waste rocks and mineralized rocks can be considered as non-potentially acid-generating.

Laboratory tests were also used to evaluate the metal leaching potential. According to the criteria of the Quebec MELCC Guide (2020) based on metal analysis and leaching tests, it is appropriate to use the results of the SPLP test rather than those obtained during the TCLP test since the latter is under strongly acidic pH conditions and the samples are not considered to be acidogenic. Waste rock samples with metal concentrations exceeding criterion A did not exceed the water quality criterion (RES) during SPLP leaching tests. Only one exceedance for mercury in a gabbro mineralized rock sample from the Highway deposit was observed on the SPLP test. No other exceedances were noted during the SPLP test for the mineralized rock samples. No exceedance of the criterion for high-risk residues was observed in the TCLP and SPLP tests. Based on the information currently available, the overall waste rocks and mineralized rocks are considered non-leachable.

From the geochemical characterization results, it was shown at Pascalis that the total sulphur analyzes are representative of sulphides and therefore of the acidity potential; and that the total carbon analyzes are representative of carbonates and therefore of the neutralization potential. Correlations were studied with other elements analyzed as part of the lithogeochemical program. Correlations were found between total carbon and loss on ignition (LOI), as well as between total sulphur analyzed with LECO and ICP assays. The lithogeochemical database, containing more than 1,814 analyzes, was therefore used to estimate the acid generation potential of these samples. With more than 358 samples in the 2019 conceptual pits, the interpretation of these data complements the information obtained during the environmental geochemical characterization. The data currently available show that all the waste rock and mineralized rocks from the Pascalis project are non-acidogenic.

### 20.2.2 New Béliveau (Pascalis) – Particle Sorting Waste Rock

Geochemical characterization program was accomplished on eight samples of waste rock produced from the particle sorting testwork performed on New Béliveau mineralized rock samples. According to the criteria of the Quebec MELCC Guide (2020), the waste rock samples are all considered as non-potentially acid-generating and non-potentially metal leachable. Trace metals results show that manganese concentrations are equal to the criterion A (background level) for five of the eight samples. Metals mobility was evaluated by the leaching and no exceedance of the water quality criterion (RES) was detected for manganese. Waste rock resulting from the particle sorting can therefore be classified as “low risk” according to the criteria of the MELCC Guide (2020). In addition, based on currently available data, waste rock is classified as Category I material (unrestricted use) following the Guide for the evaluation of the valorization of inorganic residual materials as a construction material (MENV, 2002).

### 20.2.3 Courvan – Waste Rock and Mineralized Rock

For this characterization program of the Courvan area, 107 samples (92 samples of waste rock and 15 samples of mineralized rock) were taken from the footprint of the Bussiere-Creek and Southwest pits. Geochemical characterization tests were used to evaluate the acid generation potential of the samples. According to the criteria of the MELCC Guide (2020) applicable in Quebec, the results show that five mineralized rock samples out of a total of 15 are potentially acidogenic, as well as two waste rock samples out of a total of 92. According to Price's criterion (MEND, 2009), largely used elsewhere in Canada, only one of these samples would be potentially acidogenic and four would be in the uncertainty zone. The other samples (102) are all non-acidogenic. Based on the information currently available, it can be considered that the overall waste rock will not be potentially acid generating. As for the mineralized rock, most of the samples are non-acidogenic but further testing might be required. Additional tests could be performed to provide more information on the long-term acid potential and depletion rates of neutralizing versus acid-generating minerals. Mitigation measures might also be taken to control acid generation, if necessary, during the temporary storage of mineralized material on the site.

Laboratory tests were completed to evaluate the leaching potential. Only one waste rock sample and one mineralized rock sample are considered potentially leachable in copper following the SPLP test (for the waste rock sample) or the CTEU-9 test (for the mineralized rock sample). It can be considered that the overall waste rocks and mineralized rock will not be potentially leachable based on the information currently available. No exceedance of the criteria for high-risk residues was observed for the leaching tests.

### 20.2.4 Monique – Waste Rock and Mineralized Rock

For the characterization program of the Monique area, 100 samples (81 samples of waste rock and 19 samples of mineralized material) were taken from the footprint of the pits. Additional samples (54 samples of waste rock and 16 samples of mineralized material) were taken in 2023 to cover the areas not sampled in 2020. Results from the 2023 characterization have not yet been reported but a screening of the data revealed similar results than the results of the 2020 characterization.

Geochemical characterization tests were used to determine the acid generation potential of the samples. According to the criteria of the MELCC Guide (2020) applicable in Quebec, the results obtained show that four mineralized rock samples out of a total 19 are potentially acidogenic, as well as two waste rock samples out of a total of 89. According to Price's criterion (MEND, 2009), largely used elsewhere in Canada, only one of these samples would be potentially acidogenic and five would be in the uncertainty zone. The other samples are all non acidogenic. Based on the information currently available, it can be considered that the overall waste rock and mineralized rock will not be potentially acid generating.

Laboratory tests were completed to evaluate the leaching potential. Only one waste rock sample and one mineralized rock sample are considered potentially leachable in copper following the SPLP test (for the waste rock sample) or the CTEU-9 test (for the mineralized rock sample). Only one waste rock sample is potentially leachable in barium following the CTEU-9, and a one mineralized rock sample is potentially leachable in silver following the CTEU-9. There was therefore no exceedance for 99% of the waste rock samples, and no exceedance for 88% of the mineralized rock samples. The exceedances are very close to the comparison criteria. It can be considered that the overall waste rock and mineralized rock will not be potentially leachable based on the information currently available. No exceedance of the criteria for high-risk residues was observed for the leaching tests.

## 20.3 Permitting Requirements

The construction, operation, and closure of a mine is subjected to several laws and regulation at three different levels: federal, provincial and municipal. The following sections give an overview of the regulatory environment for the Novador mining project.

Probe Gold began the environmental assessment process for the Novador mining project at the federal level in the fall of 2023. The environmental assessment process at the provincial level will begin during 2024.

### 20.3.1 Federal Legislation and Regulations

Under the *Impact Assessment Act* (IAA, 2019), only projects designated by the Physical Activities Regulations (SOR/2019-285) are subjected to the environmental assessment procedure. Thus, an environmental assessment under the IAA is required for a project that involves the construction, operation, decommissioning, and abandonment of a new metal mine, other than a rare earth element mine, placer mine or uranium mine, with an mineralized material production capacity of 5,000 t/d or more. This is the case for the Novador Project.

In October 2023, the Supreme Court of Canada released its decision on the constitutionality of the IAA and the Physical Activities Regulations. The Supreme Court of Canada confirmed the Government of Canada's constitutional authority to put in place impact assessment act, but said the federal law is subject to an overly broad interpretation and needs to focus more explicitly on areas of federal jurisdiction. Nevertheless, Probe Gold has made de decision to continue its collaboration with the Impact Assessment Agency of Canada (IAAC).

The federal impact assessment process consists of five phases, starting with the filling of the initial project description ending with a decision from the federal authorities. The entire process may take up to several years. The initial project description for the Novador Project was submitted to the IAAC in October 2023. The public consultations of the IAAC on the initial project description took place in December 2023 and the summary of questions was issued in January 2024. The detailed project description, including answers to the summary of questions, will be completed in the upcoming months.

Under the *Fisheries Act*, the Metal and Diamond Mining Effluent Regulations (MDMER) provide the framework for mining activities regarding the protection of fish and fish habitats. The MDMER sets criteria for mining effluents.

Other regulations apply to mining activities. For example, the project must comply with the *Migratory Birds Convention Act*, *Explosives Act*, *Species at Risk Act*, and similar legislation.

### 20.3.2 Provincial Environment Quality Act

The opening and operation of a gold mine that has a production capacity of 2,000 t/d or more triggers an environmental impact assessment and review procedure under the Regulation Respecting the Environmental Impact Assessment and Review of Certain Projects (Q-2, r.23.1) of the *Environment Quality Act* (EQA) for the emission of a ministerial decree. After that, authorizations under section 22 of the EQA must be obtained for the project activities. The Ministry Natural Resources and Forests published a document that provides an exhaustive list of permits required (MERN, 2017).

Because the environmental assessment process begins as soon as exploration activities take place at a site, a company must identify and know the stakeholders. It must first approach close stakeholders, such as the Band Council of the First Nation community where exploration activities are carried out and the mayor of the closest municipality. If there are any camp, cottages, or houses involved, the company should communicate with those land users to ensure they are informed about project activities. Moreover, the *Mining Act* (M-13.1) regulates the communication activities required during exploration work. Once exploration activities are sufficiently advanced to publish a resource estimate, the company should continue to inform stakeholders about its activities and ensure that stakeholder concerns are taken into account, where appropriate.

Early in the process, it is recommended to start baseline studies to identify any fatal flaw or environmental issues like protected areas, species at risk, waterbodies, fish habitats, etc. The results of those studies will have to be considered to identify project alternatives. Also, studies of the physical, biological and social environments must be carried out to identify the sensitive elements of the receiving environment (e.g., sources of drinking water, major waterbodies, wetlands, archaeology sites, etc.).

### 20.3.3 Provincial Mining Act

The *Mining Act* (M-13.1) provides a framework for the mining lease, rehabilitation and restoration plan, and financial guarantee. The mining lease is required to extract mineralized material. To obtain the mining lease, the project's survey plan must be formalized by the Office of the Surveyor-General of Quebec, the rehabilitation and restoration plan must be approved by the Ministry Natural Resources and Forests and the authorization under the *Environmental Quality Act* (EQA) must be issued.

## 20.4 Social or Community Requirements

It is important to engage early in the project development to ensure that the concerns and issues that it could raise with stakeholders are clearly identified to take them into account in the project.

As part of the development of its Novador Project, Probe Gold representatives held several information and consultation meetings with stakeholders and First Nation authorities. The main objective of these meetings was to initiate a dialogue with the various stakeholders and First Nation authorities concerned by the completion of the project. In addition, these first meetings also made it possible to present Probe Gold and its representatives, to provide a summary description of the project and its main preliminary components, as well as to present the information and consultation process. These meetings were also an opportunity for participants to ask questions, share their comments and express their concerns regarding the project.

The engagement process implemented by Probe Gold made possible to meet various stakeholders concerned by the project, including municipal and regional authorities, development economic organizations, environmental groups, nearby cottagers and land users.

Moreover, meetings were also held with representatives of the Anishnabe Nation Council of Lac Simon and the Abitibiwinni First Nation Council. In general, these discussions highlighted the importance for these First Nations to be involved in the development of the project. They are not against development and want to ensure that their rights are respected.

## 20.5 Rehabilitation and Restoration Plan

A rehabilitation and restoration plan is a requirement under the provincial *Mining Act* (M-13.1, article 232.1). It must be approved before the mining lease is issued, and a financial guarantee to fully implement the plan must be provided in three payments in the first two years following the approval of the plan.

Progressive reclamation activities are planned for waste rock piles and filtered tailings storage facility. Moreover, backfilling of some of the open pits are planned during the mining operation.

Rehabilitation would involve all activities after mining operations in accordance with the approved plan. Finally, monitoring would ensure that rehabilitation has been done successfully. Once all these steps are completed to the satisfaction of the MRNF, the land could be returned to the province.

Estimated closure costs have been benchmarked against recent projects in similar jurisdictions and could be approximately C$64 million.

## 20.6 Site Selection for the Project Facilities

The proposed location of the project facilities (i.e. processing plant, filtered tailings storage facility, waste rock piles, overburden piles) has been preliminary determined considering several criteria, as listed below:

- distance from cottages (lac Bonnefond)
- quality of the ground (overburden, rock, sediment)
- location of waterbodies and watercourses
- presence of fish habitat
- presence of eskers
- presence of wetlands
- presence of road 117 (avoid crossing road 117)
- expansion capacity (filtered tailings storage facility).

Considering these first criteria, the best options on the technical, environmental, social and economic aspects were retained for the location of the various project facilities. Their respective locations are shown on Figure 18-1. Compensation will be required since some of these storage facilities encroach on wetlands and bodies of water.

# 21 CAPITAL AND OPERATING COSTS

## 21.1 Introduction

The capital and operating cost estimates presented in this PEA provide substantiated costs that can be used to assess the preliminary economics of the Novador Project. The estimates are based on open pit and underground mining operations and the construction of a process plant, tailings filtration and dry stacking, tailings pit deposition, and management facilities, infrastructure, as well as Owner's costs and provisions.

## 21.2 Capital Costs

The capital cost estimate conforms to Class 5 guidelines for a PEA-level estimate with ±50% accuracy according to the Association for the Advancement of Cost Engineering International (AACE International). The capital cost estimate was developed in Q4 2023 Canadian dollars based on Ausenco's in-house database of projects and studies, as well as experience from similar operations.

### 21.2.1 Overview

The estimate includes open pit and underground mining, processing, on-site infrastructure, tailings, off-site infrastructure, project indirect costs, project delivery, Owner's costs, and contingency. The capital cost summary is presented in Table 21-1. The total initial capital cost for the Novador Project is C$602.2 million; and life-of-mine sustaining costs are C$817.5 million. Closure costs are estimated at C$63.7 million, with salvage credits of C$26.0 million. Note that closure costs and salvage credits are not included in the summary table below.

**Table 21-1: Summary of Capital Costs**

| WBS | WBS Description | Initial Capital Cost (C$M) | Sustaining Capital Cost (C$M) | Total Capital Cost (C$M) |
|---|---|---|---|---|
| 1000 | Mining | 118.4 | 709.5 | 827.9 |
| 2000 | On-Site Infrastructure | 78.5 | 27.3 | 105.8 |
| 3000 | Process Plant | 259.7 | 10.2 | 269.9 |
| 4000 | Off-Site Infrastructure | 8.5 | 2.9 | 11.3 |
| | **Total Directs** | **465.1** | **749.9** | **1215.0** |
| 5000 | Project Indirects | 11.5 | 3.3 | 14.8 |
| 6000 | Project Delivery | 32.4 | 2.2 | 34.6 |
| 7000 | Owner's Cost | 23.2 | - | 23.2 |
| 8000 | Contingency | 70.0 | 62.1 | 132.1 |
| | **Total Indirects** | **137.1** | **67.7** | **204.8** |
| | **Project Totals** | **602.2** | **817.5** | **1419.7** |

### 21.2.2 Basis of Estimate

The following parameters and qualifications were considered:

- No allowance has been made for exchange rate fluctuations.
- There is no escalation added to the estimate.
- A growth allowance was included.

Data for the estimates have been obtained from numerous sources, including the following:

- mine schedules
- conceptual engineering design by Ausenco and MMTS
- mechanical equipment costs determined from sizing using first principles and pricing for supply and installation from Ausenco's database of recent Canadian studies and projects
- electrical equipment costs were determined from sizing using first principles and pricing for supply and installation from Ausenco's database of recent Canadian studies and projects
- material take-offs for concrete, steel, instrumentation, in-plant piping, and platework were factored by benchmarking against similar projects with equivalent technologies and unit operations
- engineering design at a preliminary economic assessment level
- topographical information from the site survey
- geotechnical investigations
- budgetary equipment quotes from suppliers based in the USA, Canada and overseas
- data from similar recently completed studies and projects.

Major cost categories (permanent equipment, material purchase, installation, subcontracts, indirect costs, and Owner's costs) were identified and examined.

Costs were developed based on Ausenco's in-house database of costs and labour rates. The estimate is prepared in the base currency of Canadian dollars (currency: CAD; symbol: C$). Pricing has been converted to Canadian dollars from United States dollars (currency: USD; symbol: US$) at an exchange rate of 0.74 CAD:USD.

### 21.2.3 Mine Capital Costs

Mining direct capital cost consists of the capital required for pit and underground development as well as associated infrastructure.

Mine capital costs have been derived from manufacturers quotes and MMTS' database based on similar projects located in Northern Quebec. These estimates are expressed in Canadian dollars, with no allowance for escalation or exchange rate fluctuations. The assessed accuracy of the estimate is ±50%.

Pre-production mine operating costs (i.e., all mine operating costs incurred before mill start-up) are capitalized and included in the capital cost estimate. Pre-production operating costs include drilling, blasting, loading hauling, auxiliary support, and general mining expense (GME) costs. Mine operations site development costs completed in pre-production such as clearing and grubbing, topsoil stripping, haul road construction, stockpile preparation, pit dewatering, and explosive pad preparation, are also capitalized.

The open pit mining capital cost estimate assumes an owner-operated mining scenario where the owner will lease the mining equipment. Capital costs assumed for the major equipment fleet are shown in Table 21-2. Mining initial capital costs are summarized in Table 21-3.

The following items are also capitalized:

- maintenance tooling and supplies
- spare parts inventory
- dispatch and mine fleet management system
- explosives plant and magazine
- radio communication systems
- mine survey gear and supplies
- geology, grade control and mine planning software licenses
- geotechnical instrumentation
- mine rescue gear and safety supplies
- piping for pit dewatering.

Underground development costs begin after mill start-up and are not part of the initial capital cost.

**Table 21-2: Major Mining Fleet Capital Costs**

| Fleet Description | C$M per Unit | No. Units during Capital Period | Maximum No. of Units |
|---|---|---|---|
| 135 t Haul Truck | 4.0 | 9.0 | 29.0 |
| 16 m$^3$ Bucket Electric Hydraulic Shovel | 7.9 | 3.0 | 4.0 |
| Production Electric Drills (230 mm holes) | 4.5 | 2.0 | 4.0 |

Source: MMTS, 2024.

**Table 21-3: Initial Capital Costs – Mining**

| Cost Area | Initial Capital C$M |
|---|---|
| Open Pit Pre-Production Mining | 70.6 |
| Open Pit Mobile Equipment | 40.8 |
| Open Pit Mine Area Infrastructure | 4.9 |
| Open Pit Mine Explosives | 2.1 |

Source: MMTS, 2024.

### 21.2.4 On-Site Infrastructure Capital Costs (WBS 2000)

On-site infrastructure costs are summarized in Table 21-4. The costs were developed based on Ausenco's in-house database of costs and labour rates and include the following:

- bulk earthworks
- power supply
- fuel storage
- warehousing, office and workshops
- site water services
- site water management
- dry tailings storage and management facilities.

**Table 21-4: On-Site Infrastructure Capital Costs**

| WBS | WBS Description | Initial Capital Cost (C$M) | Sustaining Capital Cost (C$M) | Total Capital Cost (C$M) |
|---|---|---|---|---|
| 2100 | Bulk Earthworks | 7.6 | - | 7.6 |
| 2200 | Power Supply | 21.2 | 5.1 | 26.3 |
| 2300 | Fuel Storage | 0.2 | - | 0 |
| 2400 | Warehousing, Office and Workshops | 14.7 | - | 14.7 |
| 2600 | Site Water Services | 13.5 | 4.5 | 18.0 |
| 2700 | Site Water Management | 13.1 | 16.8 | 29.9 |
| 2800 | Dry Tailings Storage and Management Facilities | 8.2 | 0.9 | 9.1 |
| | **On-Site Infrastructure Total** | **78.5** | **27.3** | **106** |

### 21.2.5 Process Capital Costs (WBS 3000)

Process plant costs are summarized in Table 21-5. Process equipment requirements are based on conceptual process flowsheets and process design criteria as defined in Section 17. All major equipment was sized based on the process design criteria to derive a mechanical equipment list. Mechanical equipment and building supply costs were based on recent and historical budget quotes from similar projects, adjusted to reflect the size of the project.

Major electrical equipment was also sized based on the project's equipment list. Electrical equipment costs were based on recent and historical budget quotes from similar projects, adjusted to reflect the size of the project.

In support of the major mechanical and electrical equipment packages, the process plant and infrastructure engineering designs were completed to a PEA study level of definition, allowing for the bulk material quantities (i.e., steel, concrete, earthworks) to be derived for the major commodities.

The materials and equipment total direct costs for other disciplines were developed by applying factors (percentages) to the total direct cost (supply and installation) of the mechanical equipment. The factors are based on Ausenco's historical data for similar types of work and are specific to both discipline and area.

**Table 21-5: Summary of Process Capital Costs**

| WBS | WBS Description | Initial Capital Cost (C$M) | Sustaining Capital Cost (C$M) | Total Capital Cost (C$M) |
|---|---|---|---|---|
| 3100 | Primary Crushing | 14.9 | 7.1 | 22.0 |
| 3200 | Grinding | 110.0 | 0 | 110.0 |
| 3300 | Gravity Gold | 3.2 | 0 | 3.2 |
| 3400 | Gravity Tails / Leach Absorption | 24.0 | 2.8 | 26.8 |
| 3500 | Elution / Carbon Regeneration / Gold Room | 24.5 | - | 24.5 |
| 3600 | Cyanide Detoxification / Tailings Dewatering | 7.1 | 0.2 | 7.4 |
| 3700 | Tailings Filtration | 62.3 | - | 62.3 |
| 3800 | Plant Services | 3.8 | - | 3.8 |
| 3900 | Reagents Offloading and Storage | 9.8 | 0 | 9.8 |
| | **Process Plant Total** | **260** | **10** | **270** |

### 21.2.6 Off-Site Infrastructure Capital Costs (WBS 4000)

Off-site infrastructure costs are summarized in Table 21-6 and include re-surfacing the main site access road, building a high-voltage power line, and completing the Pascalis Road diversion. Costs were estimated from first principles and Ausenco's database of historical projects. A total of C$11.3 million was estimated for off-site infrastructure costs.

**Table 21-6: Off-Site Infrastructure Capital Costs**

| WBS | WBS Description | Initial Capital Cost (C$M) | Sustaining Capital Cost (C$M) | Total Capital Cost (C$M) |
|---|---|---|---|---|
| 4100 | Main Access Road | 0.068 | 0 | 0.068 |
| 4200 | High-Voltage Power Supply | 4.98 | 0 | 4.98 |
| 4300 | Public Road Diversion | 3.40 | 2.85 | 6.25 |
| | **Off-Site Infrastructure Total** | **8.45** | **2.85** | **11.30** |

### 21.2.7 Indirect Capital Costs

Indirect costs are summarized in Table 21-7 and described in the following subsections.

**Table 21-7: Indirect Costs**

| WBS | WBS Description | Initial Capital Cost (C$M) | Sustaining Capital Cost (C$M) | Total Capital Cost (C$M) |
|---|---|---|---|---|
| 5000 | Project Indirects | 11.5 | 3.3 | 14.8 |
| 6000 | Project Delivery | 32.4 | 2.2 | 34.6 |
| 7000 | Owner's Costs | 23.2 | 0 | 23.2 |
| | **Indirects Total** | **67.1** | **5.5** | **72.6** |

Note: Figures have been rounded and may not sum.

#### 21.2.7.1 Project Indirects (WBS 5000)

Project indirects are required during the project delivery period to enable and support construction activities. Indirect costs include the following:

- temporary construction facilities and services
- commissioning representatives and assistance
- on-site materials transportation and storage
- spares (commissioning, initial, and insurance)
- first fills and initial charges
- freight and logistics.

The project indirect costs have been based on Ausenco's historical project costs of similar nature and have been included at a rate of 3% of the total non-mining direct cost, or C$14.8 million.

#### 21.2.7.2 Project Delivery (WBS 6000)

The project delivery cost has been calculated at 7% of total non-mining direct costs based on Ausenco's historical project costs of similar nature. This includes the following:

- engineering, procurement, and construction management services (EPCM)
- commissioning services.

Project delivery costs are estimated at C$34.6 million.

#### 21.2.7.3 Owner (Corporate) Capital Costs (WBS 7000)

Owner's costs were factored from total directs and are 5% of total direct costs (C$23.2 million) and include the following:

- project staffing and miscellaneous expenses
- pre-production labour
- home office project management
- home office finance, legal, and insurance.

### 21.2.8 Contingency (WBS 8000)

Contingency accounts for the difference in costs from the estimated and actual costs of materials and equipment. The level of contingency varies depending on the nature of the contract and the client's requirements. Due to uncertainties at the time the capital cost estimate was developed, it is essential that the estimate include a provision to cover the risk from these uncertainties.

The estimate contingency does not accommodate the following:

- abnormal weather conditions
- changes to market conditions affecting the cost of labour or materials
- changes of scope within the general production and operating parameters
- effects of industrial disputations
- financial modelling
- technical engineering refinement
- estimate inaccuracy.

The estimated contingency includes 20% of total direct costs (C$132 million).

#### 21.2.9 Sustaining Capital

The total life-of-mine sustaining costs for the project are C$817 million, as presented in Table 21-8.

**Table 21-8: Sustaining Capital Costs (C$M)**

| WBS | WBS Description | C$M by Year | | | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 1000 | Mining & Stockpiling | 66 | 175 | 218 | 110 | 56 | 24 | 16 | 9 | 10 | 6 | 5 | 2 | 696 |
| 1800 | Mining Infrastructure | 0 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 2200 | Power Supply | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 2600 | Site Water Services | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 2700 | Site Water Management | 4 | 3 | 5 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 2800 | Dry Tailings Storage and Management Facilities | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9 |
| 3100 | Primary Crushing | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 3400 | Gravity Tails / Leach Adsorption | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 3600 | Cyanide Detoxification / Tailings Disposal | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 |
| 3800 | Plant Services | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| 4000 | Off-Site Infrastructure | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5000 | Plant Indirects | 0.6 | 1.0 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 6000 | Project Delivery | 0.7 | 0 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8000 | Provisions | 2 | 20 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| | **Total** | **80** | **210** | **285** | **113** | **57** | **25** | **16** | **9** | **10** | **6** | **5** | **2** | **817** |

##### 21.2.9.1 Mining

Down payments and monthly lease payments for the mine equipment fleet purchased throughout the life of mine and the start-up of the underground mining are capitalized through the sustaining periods of the project. The sustaining costs for mining also include the cost of open pit mining operation infrastructure, as well as underground mining development and operation infrastructure. A life-of-mine total of C$262.6 million is estimated for the open pit mine equipment costs. MMTS applied a 15% lease down payment and a five-year lease rate of 10%.

##### 21.2.9.2 Infrastructure and TMF

Infrastructure sustaining costs include power supply expansions, site services, site water management structures, and tailings storage and management facilities. A life-of-mine total of C$18 million was estimated for infrastructure and TMF costs.

#### 21.2.10 Closure Costs

The estimated total reclamation and closure costs, excluding taxes and contingency, is C$64 million. Closure costs have been benchmarked against recent projects in similar jurisdictions.

### 21.2.11 Salvage Value

Salvage value for project is estimated at C$26 million. Salvage value was calculated as 10% of the processing plant initial capital cost.

### 21.2.12 Exclusions

The following costs and scope are excluded from the capital cost estimate:

- land acquisitions
- taxes not listed in the financial analysis
- sales taxes
- scope changes and project schedule changes and the associated costs
- any facilities/structures not mentioned in the project summary description
- geotechnical unknowns/risks
- any costs for demolition or decontamination for the current site
- further testwork and drilling programs
- environmental approvals
- this study or any future project studies, including environmental impact studies
- operating costs
- operational readiness costs
- working capital
- any facilities/structures not mentioned in the project summary description.

## 21.3 Operating Costs

The operating cost estimate is presented in Q4 2023 Canadian dollars (currency: CAD; symbol: C$). The estimate was developed to have an accuracy of ±50%. The estimate includes mining, processing, and general and administration (G&A) costs.

The overall life-of-mine operating cost is C$3,576 million over 13 years, or an average of C$44.52/t milled. The operating costs averaged $54.38/t milled in Phase 1 and C$39.35/t milled in Phase 2. Table 21-9 provides a summary of the project operating costs.

**Table 21-9: Operating Cost Summary**

| Cost Area | Phase 1 | | Phase 2 | | LOM (total) | |
|---|---|---|---|---|---|---|
| | C$M/a | $/t milled | C$M/a | $/t milled | C$M | $/t milled |
| Mining | 219.4 | 40.4 | 194.5 | 29.3 | 2,653 | 33.0 |
| Process | 68.4 | 12.1 | 59.8 | 8.5 | 787 | 9.8 |
| G&A | 10.8 | 2,0 | 10.8 | 1.5 | 136 | 1.7 |
| **Total** | **298.6** | **54.5** | **265.1** | **39.3** | **3,576** | **44.5** |

### 21.3.1 Overview

Unless stated otherwise, all costs presented in this chapter are in Canadian dollars. This estimate aligns with the principles of a Class 5 level estimate with a ±50% accuracy according to the Association for the Advancement of Cost Engineering International (AACE International).

Common to all operating cost estimates are the following assumptions:

- Cost estimates are based on Q4 2023 pricing without allowances for inflation.
- For material sourced in US dollars, an exchange rate of 1.33 Canadian dollar to 1.00 US dollar was assumed.
- Estimated cost for diesel was C$1.30/L.
- The annual power costs were calculated using a unit price of C$0.07/kWh. This cost was provided by Probe Gold.

### 21.3.2 Mine Operating Costs

#### 21.3.2.1 Open Pit Mining

Open pit mine operating costs are built up from first principles and applied to the open pit mine production schedule. Cost inputs are derived from manufactures quotes and historical data collected by MMTS. This includes cost and consumption rates for such inputs as fuel, lube, explosives, tires, undercarriage, ground engaging tools (GET), drill bits/rods/strings, machine parts, machine major components and operating and maintenance labour ratios.

Labour rates are supplied by Probe Gold. Equipment and labour productivity inputs are estimated for the specific equipment fleet based using haul cycle profiles for trucks and loading/spot/wait times for shovels. Manufacturers quotes are also used where available.

Annual production tonnes are taken from the mine production schedule. Drilling, loading, and hauling hours are calculated based on the capacities and parameters of the specific equipment fleet. The production tonnes and primary fleet hours also provide the basis for blasting consumable and support fleet inputs.

Estimated yearly open pit unit mining costs are shown in Table 21-10.

#### 21.3.2.2 Underground Mining

For the underground mine design, the basis for the estimates was derived using a combination of experience, first principles and benchmarking from other projects.

**Table 21-10: Open Pit Mine Operating Cost Summary by Year (C$/t mined)**

| | Life of Mine | Life of Mine No Pre-production | Y-1 | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 | Y8 | Y9 | Y10 | Y11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Direct Costs** | **2.63** | **2.67** | **2.05** | **2.20** | **2.41** | **2.80** | **2.57** | **2.62** | **2.47** | **2.72** | **2.70** | **3.39** | **2.44** | **9.64** |
| Grade Control | 0.03 | 0.04 | 0.02 | 0.04 | 0.03 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.04 | 0.05 | 0.03 | 0.06 |
| Drilling | 0.19 | 0.20 | 0.14 | 0.21 | 0.17 | 0.25 | 0.17 | 0.17 | 0.15 | 0.23 | 0.22 | 0.21 | 0.20 | 0.20 |
| Blasting | 0.54 | 0.53 | 0.62 | 0.54 | 0.45 | 0.54 | 0.49 | 0.50 | 0.46 | 0.54 | 0.57 | 0.66 | 0.63 | 1.59 |
| Loading | 0.19 | 0.20 | 0.16 | 0.15 | 0.20 | 0.17 | 0.18 | 0.21 | 0.20 | 0.18 | 0.18 | 0.19 | 0.22 | 1.03 |
| Hauling | 1.15 | 1.18 | 0.61 | 0.87 | 1.06 | 1.30 | 1.15 | 1.22 | 1.11 | 1.27 | 1.23 | 1.67 | 0.78 | 4.05 |
| Road Maintenance | 0.10 | 0.11 | 0.06 | 0.08 | 0.09 | 0.10 | 0.12 | 0.11 | 0.11 | 0.09 | 0.11 | 0.17 | 0.10 | 0.20 |
| Waste Dump Maintenance | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 | 0.05 | 0.03 | 0.04 | 0.03 | 0.05 | 0.05 | 0.04 | 0.04 | 0.03 |
| Primary Pit Support | 0.26 | 0.27 | 0.21 | 0.20 | 0.24 | 0.28 | 0.26 | 0.23 | 0.30 | 0.24 | 0.22 | 0.29 | 0.33 | 1.33 |
| Secondary Pit Support | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.45 |
| Mine Maintenance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.07 |
| Geotechnical / Site | 0.04 | 0.03 | 0.11 | 0.01 | 0.08 | 0.02 | 0.07 | 0.03 | 0.03 | 0.01 | 0.01 | 0.02 | 0.02 | 0.07 |
| Unallocated Labour Costs | 0.03 | 0.03 | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.03 | 0.56 |
| **General Mine Expenses** | **0.21** | **0.21** | **0.31** | **0.15** | **0.16** | **0.16** | **0.19** | **0.18** | **0.19** | **0.18** | **0.18** | **0.26** | **0.25** | **1.84** |
| Mine Operations Labour | 0.09 | 0.09 | 0.14 | 0.06 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.11 | 0.11 | 0.92 |
| Mine Maintenance Labour | 0.05 | 0.05 | 0.06 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.07 | 0.06 | 0.43 |
| Technical Services Labour | 0.07 | 0.07 | 0.10 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.09 | 0.08 | 0.50 |
| **Total Operating Cost** | **2.85** | **2.88** | **2.35** | **2.36** | **2.57** | **2.96** | **2.76** | **2.80** | **2.66** | **2.90** | **2.88** | **3.66** | **2.69** | **11.48** |

### 21.3.3 Process Operating Costs

This estimate aligns with the principles of a Class 5 estimate with a ±50% accuracy according to the Association for the Advancement of Cost Engineering International (AACE International). The processing operating cost estimate includes costs relating to reagent and consumable consumption, plant maintenance, power use, the laboratory, process plant labour, and processing mobile equipment. General and administration (G&A) are developed with the processing operating costs, but are considered separate.

The life-of-mine process and G&A operating cost is C$923 million over 13 years. On average, the process operating costs are estimated as an average of C$12.08/t of milled in Phase 1, reducing to C$8.54/t milled after the cessation on tailings filtration in Year 4 of operation. The annual G&A costs are estimated at C$10.8 million per year, or C$1.91/tonne milled in Phase 1 and C$1.54/tonne milled in Phase 2.

The process and G&A operating costs in a typical year are C$14.00/t milled in Phase 1 and C$10.08/t milled in Phase 2. A summary of the included costs are shown in Table 21-11.

**Table 21-11: Processing Operating Cost Summary**

| Cost Area | Phase 1 | | Phase 2 | |
|---|---|---|---|---|
| | C$M/a | $/t milled | C$M/a | $/t milled |
| Labour | 18.50 | 3.26 | 13.90 | 1.98 |
| Power | 11.70 | 2.07 | 10.60 | 1.51 |
| Reagents | 20.70 | 3.66 | 21.90 | 3.12 |
| Consumables | 8.42 | 1.49 | 8.61 | 1.23 |
| Laboratory | 0.25 | 0.05 | 0.25 | 0.04 |
| Mobile Equipment | 4.27 | 0.75 | 0.29 | 0.04 |
| Maintenance | 3.35 | 0.59 | 2.83 | 0.40 |
| Effluent Treatment Plant | 1.15 | 0.20 | 1.46 | 0.21 |
| Processing Subtotal | 68.40 | 12.08 | 59.80 | 8.54 |
| General & Administration | 10.80 | 1.91 | 10.80 | 1.54 |
| **Process and G&A Total** | **79.20** | **14.00** | **70.60** | **10.08** |

#### 21.3.3.1 Process Plant Labour

The labour requirement was estimated by benchmarking against similar projects the region with access to similar labour pools, and consulting with Probe Gold. The labour costs incorporate requirements for plant operation, such as management, metallurgy, operations, maintenance, site services, assay lab, and a contractor allowance. The total process plant labour averages 142 employees in Phase 1, decreasing to 106 employees after the cessation of tailings filtration in Year 4 of operation until the end of mine life.

Individual personnel were divided into their respective positions and classified as either 8-hour or 12-hour shift employees. Salaries, benefits and bonses were provided by Probe Gold. An organizational staffing plan outlining the labour requirement for the process plant is shown in Table 21-12. Costs include all benefits and bonuses. Process plant labour represents 27% of the total process operating cost at $3.26/t milled in Phase 1 and $1.98/t milled in Phase 2, or 23% of the operating cost.

**Table 21-12: Operations and Maintenance Staffing Plan**

| Labour / Contractor Summary | Phase 1 | | | | | Year 4+ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Persons/Shift | No. Shifts | Total Persons | Cost per Person (C$/a) | Total Cost (C$/a) | Persons/Shift | No. Shifts | Total Persons | Cost per Person (C$/a) | Total Cost (C$/a) |
| Chief Metallurgist/Operations Superintendent | 1 | 1 | 1 | 197,188 | 197,188 | 1 | 1 | 1 | 197,188 | 197,188 |
| Senior Metallurgist | 1 | 1 | 1 | 205,563 | 205,563 | 1 | 1 | 1 | 205,563 | 205,563 |
| Maintenance Planner | 1 | 2 | 2 | 132,115 | 264,231 | 1 | 2 | 2 | 132,115 | 264,231 |
| Chief Assayer | 1 | 1 | 1 | 167,551 | 167,551 | 1 | 1 | 1 | 167,551 | 167,551 |
| Maintenance Superintendent | 1 | 1 | 1 | 197,188 | 197,188 | 1 | 1 | 1 | 197,188 | 197,188 |
| Subtotal | 5 | 6 | 6 | | 1,031,721 | 5 | 6 | 6 | | 1,031,721 |
| Shift Foreman | 1 | 4 | 4 | 160,464 | 641,855 | 1 | 4 | 4 | 160,464 | 641,855 |
| Control Room Operator | 1 | 4 | 4 | 143,712 | 574,850 | 1 | 4 | 4 | 143,712 | 574,850 |
| Crusher Operator | 1 | 4 | 4 | 129,796 | 519,184 | 2 | 4 | 8 | 129,796 | 1,038,368 |
| Crusher Labourer | 1 | 4 | 4 | 101,963 | 407,853 | 1 | 4 | 4 | 101,963 | 407,853 |
| Grinding Operator | 1 | 4 | 4 | 129,796 | 519,184 | 1 | 4 | 4 | 129,796 | 519,184 |
| Leach/Detoxification Operator | 1 | 4 | 4 | 129,796 | 519,184 | 1 | 4 | 4 | 129,796 | 519,184 |
| Reagents Labourer | 1 | 4 | 4 | 101,963 | 407,853 | 2 | 4 | 8 | 101,963 | 815,705 |
| Elution/Gravity Operator | 1 | 4 | 4 | 129,796 | 519,184 | 1 | 4 | 4 | 129,796 | 519,184 |
| Filter Plant Operator | 1 | 4 | 4 | 129,796 | 519,184 | 0 | 0 | 0 | 0 | 0 |
| Filter Plant Labourer | 1 | 4 | 4 | 101,963 | 407,853 | 0 | 0 | 0 | 0 | 0 |
| Gold Room Operator | 1 | 2 | 2 | 143,712 | 287,425 | 1 | 2 | 2 | 143,712 | 287,425 |
| TMF Truck Driver | 6 | 4 | 24 | 126,296 | 3,031,106 | 0 | 0 | 0 | 0 | 0 |
| TMF Loader/Dozer Operator | 2 | 4 | 8 | 126,296 | 1,010,369 | 0 | 0 | 0 | 0 | 0 |
| TMF Compactor/Water Truck Operator | 1 | 4 | 4 | 126,296 | 505,184 | 0 | 0 | 0 | 0 | 0 |
| Surface Crew/Tailings | 4 | 4 | 16 | 115,880 | 1,854,073 | 4 | 4 | 16 | 115,880 | 1,854,073 |
| Subtotal | 24 | 58 | 94 | | 11,724,340 | 15 | 38 | 58 | | 7,177,682 |
| Plant Metallurgist | 2 | 1 | 2 | 125,028 | 250,057 | 2 | 1 | 2 | 125,028 | 250,057 |
| Metallurgical Technician | 2 | 1 | 2 | 106,022 | 212,044 | 2 | 1 | 2 | 106,022 | 212,044 |
| Assay Laboratory Technician | 2 | 2 | 4 | 106,022 | 424,088 | 2 | 2 | 4 | 106,022 | 424,088 |
| Subtotal | 6 | 4 | 8 | | 886,189 | 6 | 4 | 8 | | 886,189 |
| Maintenance Foreman | 1 | 2 | 2 | 146,290 | 292,579 | 1 | 2 | 2 | 146,290 | 292,579 |
| Electrician | 2 | 2 | 4 | 129,796 | 519,184 | 2 | 2 | 4 | 129,796 | 519,184 |
| Electrical Apprentice | 1 | 2 | 2 | 101,963 | 203,926 | 1 | 2 | 2 | 101,963 | 203,926 |
| Welders | 2 | 2 | 4 | 123,980 | 495,921 | 2 | 2 | 4 | 123,980 | 495,921 |
| Instrument Technician | 2 | 2 | 4 | 129,796 | 519,184 | 2 | 2 | 4 | 129,796 | 519,184 |
| Millwright/Fitter | 4 | 4 | 16 | 129,796 | 2,076,737 | 4 | 4 | 16 | 129,796 | 2,076,737 |
| Mechanical Apprentice | 1 | 2 | 2 | 101,963 | 203,926 | 1 | 2 | 2 | 101,963 | 203,926 |
| Subtotal | 13 | 16 | 34 | | 4,311,458 | 13 | 16 | 34 | | 4,311,458 |
| Allowance - Mill Relining | | | | | 500,000 | | | | | 500,000 |
| **Subtotal - Process Labour** | **48** | **84** | **142** | | **18,453,708** | **39** | **64** | **106** | | **13,907,049** |

#### 21.3.3.2 Power

The processing power draw was based on the average power utilization of each motor on the electrical load list for the process plant and services. During Phase 1, an estimated 168 GWh are nominally required per year, resulting in an annual power cost of $11.7 million or $2.07/t milled. This represents 17% of the total processing operating costs. The demand drops to 151 GWh when the tailings filtration circuit is removed after Year 4. This demands an annual cost of $10.6 million or $1.51/t milled, representing 18% of the total processing operating costs in Phase 2. Table 21-13 provides a summary of the power consumption and cost summary for both phases of the project.

**Table 21-13: Power Consumption and Cost Summary**

| Area | Phase 1 | | | Phase 2 | | |
|---|---|---|---|---|---|---|
| | Installed Power (kW) | Power Consumption (kWh/a) | Power Cost (C$/a) | Installed Power (kW) | Power Consumption (kWh/a) | Power Cost (C$/a) |
| Crushing | 646 | 1,810,398 | 126,728 | 1,702 | 4,768,486 | 333,794 |
| Grinding | 19,202 | 117,222,130 | 8,205,549 | 19,202 | 116,472,624 | 8,153,084 |
| Gravity Gold | 214 | 989,860 | 69,290 | 214 | 989,860 | 69,290 |
| Leach / Adsorption | 1,868 | 8,525,658 | 596,796 | 2,273 | 9,674,692 | 677,228 |
| Elution & Gold Room | 4,196 | 8,223,018 | 575,611 | 4,196 | 8,223,018 | 575,611 |
| Cyanide Detox & Tailings | 652 | 1,937,440 | 135,621 | 1,127 | 3,036,733 | 212,571 |
| Tailings Filtration | 4,979 | 20,835,523 | 1,458,487 | 0 | 0 | 0 |
| Air Services | 88 | 407,882 | 28,552 | 88 | 407,882 | 28,552 |
| Water Services | 424 | 1,962,636 | 137,384 | 461 | 2,151,870 | 150,631 |
| Reagents | 221 | 909,177 | 63,642 | 221 | 909,177 | 63,642 |
| HVAC, Buildings | 750 | 4,848,660 | 339,406 | 750 | 4,848,660 | 339,406 |
| **Total** | **33,240** | **167,672,383** | **11,737,067** | **30,236** | **151,483,004** | **10,603,810** |

#### 21.3.3.3 Reagents and Consumables

Individual reagent consumption rates were estimated based on the metallurgical testwork results, Ausenco's in-house database and experience, industry practice, and peer-reviewed literature. Major reagent unit costs were obtained from quotes to the Probe Gold site, including SAG and ball mill grinding media, flocculant, hydrochloric acid, sodium cyanide (NaCN), and sodium metabisulphite (SMBS). Other reagent costs were obtained through benchmarking from recently received Canadian quotes.

Other consumables (e.g., liners for the primary crusher, SAG mill, ball mill, and ball media for the mills) were estimated using the following:

- metallurgical testing results (Bond ball work index testing)
- industry benchmarks
- Ausenco's in-house calculation methods, including simulations.

Reagents represent approximately 30% of the process operating cost in Phase 1 and 37% in Phase 2 at $3.66/t milled and $3.12/t milled, respectively. Consumables represent approximately 12% of the process operating cost in Phase 1 and 14% in Phase 2 at $1.49/t milled and $1.23/t milled, respectively.

#### 21.3.3.4 Laboratory

Operating costs associated with laboratory and assay activities were estimated according to the anticipated number of assays per day and per year, estimated by Ausenco. Assay costs include plant solid samples taken from various samplers throughout the plant, solution samples, tests on the loaded, barren, and regenerated carbon, bullion bar testing, cyanide detoxification sampling, and environmental sampling and assaying. The laboratory and assays comprise approximately 0.4% of the total process operating cost. Approximately 13,000 internal assays are required per year.

#### 21.3.3.5 Mobile Equipment

Vehicle costs are based on a scheduled number of light vehicles and mobile equipment (including fuel, maintenance, spares and tires, and annual registration and insurance fees). Mobile equipment required in Phase 1 includes light vehicles, forklifts, front end loaders, a flatbed truck, and all mobile equipment related to the drystack tailings facility. The cost of operating and maintaining the processing mobile vehicles is estimated as $0.75/t milled in Phase 1, dropping to $0.05/t milled when the drystack filtration fleet is removed from service after Year 4. The cost further decreases to $0.04/t milled in Phase 2, as no additional process plant fleet is added.

#### 21.3.3.6 Equipment Maintenance

Annual maintenance costs were calculated based on the total installed mechanical capital cost by area using weighted average factors based on industry benchmarks ranging between 2% and 5%, as shown in Table 21-14. The factors were applied to the cost of the mechanical equipment as shown in the capital cost estimate. The total maintenance consumables operating cost is $0.59/t milled in Phase 1, decreasing to $0.45/t milled when tailings filtration is decommissioned. The maintenance costs reduce further to $0.40/t milled in Phase 2 due to the higher milled rate. This is equivalent to 5% of the total process operating costs in Phase 1 and Phase 2.

**Table 21-14: Maintenance Cost Summary**

| Area | Maintenance Factor (%) | Phase 1 | | Phase 2 | |
|---|---|---|---|---|---|
| | | Equipment Cost (C$) | Maintenance Cost (C$/a) | Equipment Cost (C$) | Maintenance Cost (C$/a) |
| Crushing | 5 | 4,369,586 | 218,479 | 7,957,277 | 397,864 |
| Grinding | 5 | 32,688,334 | 1,634,417 | 28,177,839 | 1,408,892 |
| Gravity Gold | 3 | 1,274,217 | 38,227 | 8,098,602 | 404,930 |
| Leach / Adsorption | 4 | 4,527,504 | 181,100 | 32,688,334 | 1,634,417 |
| Elution & Gold Room | 4 | 7,117,509 | 284,700 | 1,274,217 | 38,227 |
| Cyanide Detox & Tailings | 3 | 4,080,103 | 122,403 | 6,586,710 | 263,468 |
| Tailings Filtration | 4 | 20,033,795 | 801,352 | 7,117,509 | 284,700 |
| Air Services | 2 | 195,804 | 3,916 | 4,241,521 | 127,246 |
| Water Services | 2 | 563,603 | 11,272 | 613,397 | 12,268 |

| Area | Maintenance Factor (%) | Phase 1 | | Phase 2 | |
|---|---|---|---|---|---|
| | | Equipment Cost (C$) | Maintenance Cost (C$/a) | Equipment Cost (C$) | Maintenance Cost (C$/a) |
| Reagents | 2 | 2,799,441 | 55,989 | 195,804 | 3,916 |
| **Total** | | **77,649,896** | **3,351,855** | **63,665,328** | **2,826,156** |

#### 21.3.3.7 Effluent Treatment Plant

The water treatment plant size and cost are influenced by the water balance and tailings management facility. The cost estimate includes maintenance, labour, power, and consumables. For the Novador Project, the cost was scaled directly from quotes for similar effluent treatment plants in the region. Based on a nominal 216 $m^3$/h feed rate in Phase 1, the operating cost related to the effluent treatment plant is expected to be $0.20/t milled. In Phase 2, the effluent treatment plant feed rate is estimated to increase to 274 $m^3$/h. This increases the expected operating cost to $0.21/t milled.

### 21.3.4 General and Administrative Operating Costs

General and administrative (G&A) costs are expenses not directly related to the operation of the process plant but required to support safe and effective operation of the facility and satisfy legislative requirements in some cases.

These costs were developed using Ausenco's in-house data on existing operations, and include costs such as the following:

- human resources, including training, recruiting, and community relations
- site administration, maintenance, and security, including subscriptions, memberships, advertisement, office supplies and garbage disposal
- health and safety, including personal protective equipment, hospital service cost, and first aid
- environmental, including water sampling and tailings management facility operating costs
- IT & telecommunications, including hardware and support services
- contract services, including insurance, consulting, sanitation and cleaning, licence fees, and legal fees.

The annual costs are estimated at C$10.8 million or C$1.91 per tonne milled in Phase 1, and C$1.54 per tonne milled in Phase 2. The overall annual cost does not change between phases.

# 22 ECONOMIC ANALYSIS

## 22.1 Forward-Looking Information Cautionary Statements

The results of the economic analyses discussed in this chapter represent forward-looking information as defined under Canadian securities law. The results depend on inputs that are subject to known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here.

Information that is forward-looking includes the following:

- mineral resource estimates
- assumed commodity prices and exchange rates
- proposed mine production plan
- projected mining and process recovery rates
- assumptions regarding mining dilution and estimated future production
- sustaining costs and proposed operating costs
- assumptions regarding closure costs and closure requirements
- assumptions regarding environmental, permitting, and social risks.

Additional risks to the forward-looking information include the following:

- changes to costs of production from what is assumed
- unrecognized environmental risks
- unanticipated reclamation expenses
- unexpected variations in quantity of mineralized material, grade, or recovery rates
- accidents, labour disputes, and other risks of the mining industry
- geotechnical or hydrogeological considerations during mining being different from what was assumed
- failure of mining methods to operate as anticipated
- failure of plant, equipment, or processes to operate as anticipated
- changes to assumptions as to the availability of electrical power, and the power rates used in the operating cost estimates and financial analysis
- changes to site access, use of water for mining purposes, and to time to obtain environment and other regulatory permits
- ability to maintain the social licence to operate

- changes to interest rates
- changes to tax rates.

Readers are cautioned that a preliminary economic assessment is preliminary in nature. It includes 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 will be realized.

Mineral resources are not mineral reserves and do not have demonstrated economic viability.

## 22.2 Methodologies Used

The project was evaluated using a discounted cash flow analysis based on a 5% discount rate. Cash inflows consisted of annual revenue projections. Cash outflows consisted of capital expenditures, including pre-production costs; operating costs; refining and transport costs; taxes; and royalties. These were subtracted from the inflows to arrive at the annual cash flow projections.

Cash flows were taken to occur at the midpoint of each period. It must be noted that tax calculations involve complex variables that can only be accurately determined during operations and as such, actual post-tax results may differ from estimates. A sensitivity analysis was performed to assess the impact of variations in gold price, discount rate, exchange rate, initial capital costs, operating costs, and mill head grades.

The capital and operating cost estimates are presented in Section 21 in Q4 2023 Canadian dollars. The economic analysis was run based on a constant dollar value with no inflation.

## 22.3 Financial Model Parameters

The economic analysis was performed assuming a gold price of US$1,750/oz, which was based on consensus analyst estimates. The forecasts are meant to reflect the average metals price expectation over the life of the project. No price inflation or escalation factors were taken into account. Commodity prices can be volatile, and there is the potential for deviation from the forecast.

The economic analysis also used the following assumptions:

- Construction will take 18 months.
- The project has a mine life of 12.6 years (last year is a partial year).
- The results are based on 100% ownership.
- The project will be capital cost funded with 100% equity (no financing cost assumed).
- All cash flows are discounted to the start of construction using a mid-period discounting convention.
- All metal products will be sold in the same year they are produced.
- Project revenue will be derived from the sale of gold doré.

- No contractual arrangements for refining currently exist.

#### 22.3.1 Taxes

The project has been evaluated on an after-tax basis to provide an approximate value of the potential economics. The tax model was compiled with assistance from third-party taxation professionals.

The calculations are based on the tax regime in place as of the date of the preliminary economic analysis. At the effective date of the cashflow, the project was assumed to be subject to the following tax regime:

- The overall effective tax rate over the life of mine is 36.8%, comprised of 22% for income tax and 14.8% for Quebec mining tax.

At the base case gold price assumption, total tax payments are estimated to be C$914 million over the life of mine.

#### 22.3.2 Working Capital

An estimate of working capital has been incorporated into the economic analysis based on the following assumptions:

- Accounts Receivable .......... 0 days
- Inventories .......... 30 days
- Accounts Payable .......... 30 days

#### 22.3.3 Closure Costs and Salvage Value

Closure costs and salvage value are applied at the end of the life of mine. Closure costs were estimated to be C$64 million, and salvage value was estimated to be C$26 million.

#### 22.3.4 Royalties

A net equivalent royalty of 0.8% was used in the model, assuming a C$1.75 million royalty buyback, which is included in the financial model and takes place prior to production.

### 22.4 Financial Analysis

The pre-tax NPV discounted at 5% is C$1,530 million; the IRR is 34.4%; and payback period is 3.5 years. On a post-tax basis, the NPV discounted at 5% is C$910 million; the IRR is 24.4%; and payback period is 4.4 years.

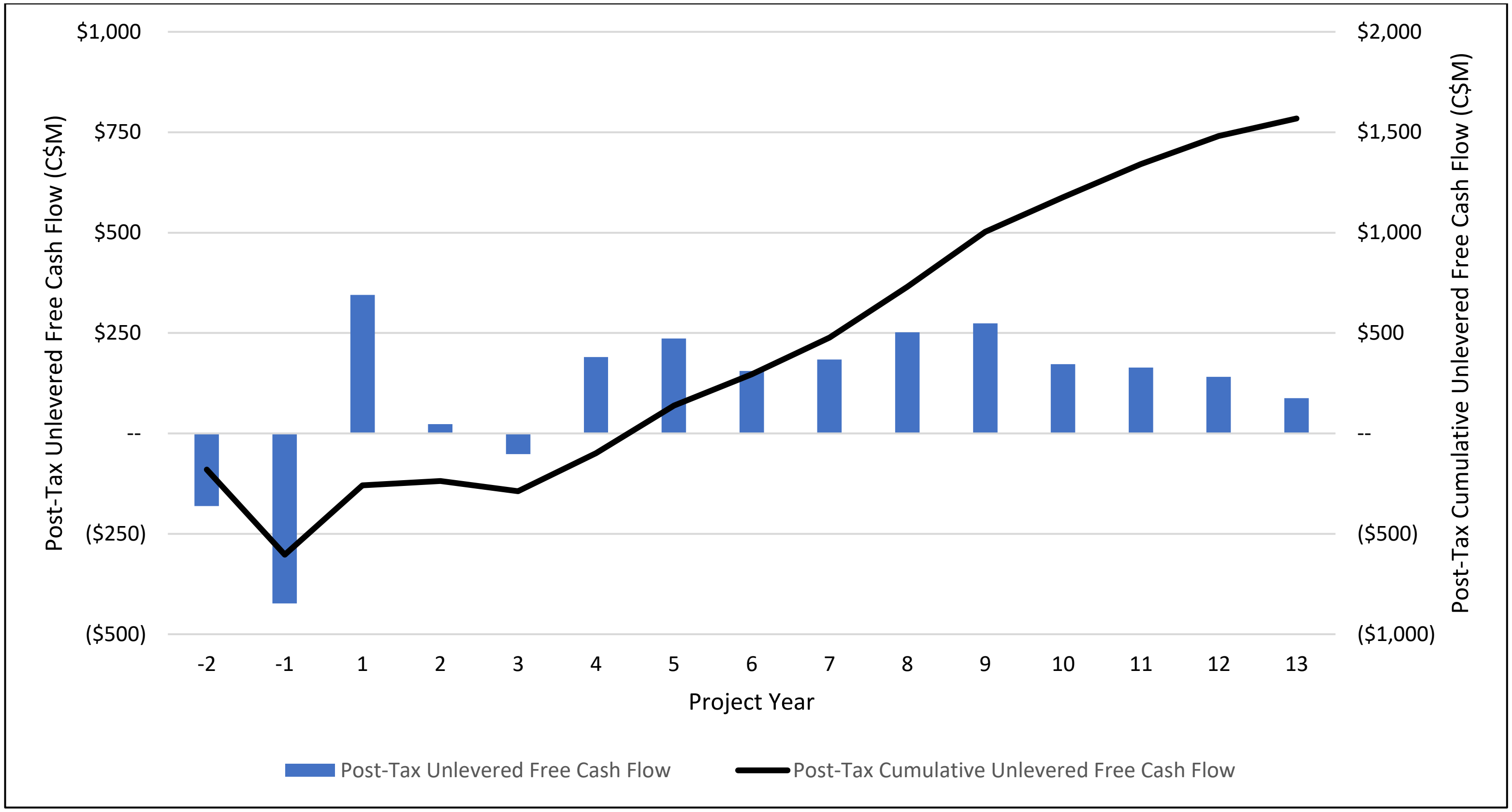
A summary of project economics is shown in Table 22-1 and illustrated in Figure 22-1. The analysis was done on an annual cashflow basis; the cashflow output is in Table 22-2.

**Table 22-1: Economic Analysis Summary**

| Description | Unit | Life-of-Mine Total / Average |
|---|---|---|
| **General Assumptions** | | |
| Discount Rate | % | 5.0 |
| Gold Price | US$/oz | 1,750 |
| Exchange Rate | USD/CAD | 0.74 |
| Mine Life | years | 12.6 |
| Total Overburden and Waste Tonnes Mined | kt | 504,344 |
| Total Mill Feed Tonnes | kt | 80,317 |
| Total Underground Mill Feed Tonnes | kt | 12,418 |
| Total Open Pit Mill Feed Tonnes | kt | 67,899 |
| Strip Ratio | w:o | 7.43 |
| **Production** | | |
| Mill Head Grade | g/t | 1.30 |
| Mill Recovery Rate | % | 95.7 |
| Total Mill Ounces Recovered | koz | 3,210 |
| Total Average Annual Production | koz | 255 |
| **Transport, Refining, Royalties** | | |
| Gold Payable | % | 99.95 |
| Refining & Transport Cost | C$/oz Au | 2.50 |
| Net Equivalent Royalty After Buyback | % | 0.80 |
| **Operating Costs** | | |
| Open Pit Mining Cost | C$/t mined | 2.88 |
| Underground Mining Cost | C$/t mined | 88.07 |
| Processing Cost | C$/t milled | 9.80 |
| G&A Cost | C$/t milled | 1.69 |
| Total Operating Cost | C$/t milled | 44.52 |
| **Cash Costs and All-In Sustaining Costs** | | |
| Cash Costs* | US$/oz Au | 841 |
| All-In Sustaining Cost (AISC)** | US$/oz Au | 1,038 |
| **Capital Expenditures** | | |
| Initial Capital Cost | C$M | 602 |
| Sustaining Capital Cost | C$M | 818 |
| Closure Capital Cost | C$M | 64 |
| Salvage Value | C$M | (26) |
| **Economics** | | |
| Pre-Tax NPV @ 5% | C$M | 1,530 |
| Pre-Tax IRR | % | 34.4 |
| Pre-Tax Payback | years | 3.5 |
| Post-Tax NPV @ 5% | C$M | 910 |
| Post-Tax IRR | % | 24.4 |
| Post-Tax Payback | years | 4.4 |

Notes: * Cash costs consist of mining costs, processing costs, mine-level G&A, refining and transport charges and royalties. ** AISC includes cash costs plus sustaining capital, closure costs, and salvage value.

**Figure 22-1: Projected Life-of-Mine Post-Tax Unlevered Free Cash Flow**




Source: Ausenco, 2024.

**Table 22-2: Cash Flow Forecast on an Annual Basis**

| Dollar Figures in Real 2024 C$M Unless Otherwise Noted<br>Macro Assumptions | Units | Total / Avg. | Y-2 | Y-1 | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 | Y8 | Y9 | Y10 | Y11 | Y12 | Y13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gold Price - Flat | **US$/oz** | **1,750** | **-** | **-** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** | **1,750** |
| FX | **USD/CAD** | **0.74** | **-** | **-** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** | **0.74** |
| **Free Cash Flow Valuation** | | | | | | | | | | | | | | | | | |
| **Revenue** | **C$M** | **7,587** | **-** | **-** | **702** | **542** | **614** | **730** | **727** | **555** | **600** | **701** | **746** | **543** | **455** | **400** | **272** |
| Operating Cost | C$M | (3,576) | - | - | (223) | (246) | (326) | (344) | (346) | (328) | (335) | (335) | (309) | (276) | (197) | (182) | (131) |
| Refining & Transport Charges | C$M | (8) | - | - | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (1) | (0) | (0) | (0) |
| Royalties | C$M | (61) | - | - | (6) | (4) | (5) | (6) | (6) | (4) | (5) | (6) | (6) | (4) | (4) | (3) | (2) |
| **EBITDA** | **C$M** | **3,942** | **-** | **-** | **473** | **291** | **283** | **380** | **375** | **223** | **260** | **360** | **431** | **262** | **253** | **214** | **139** |
| Initial Capex | C$M | (602) | (181) | (422) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Sustaining Capex | C$M | (818) | - | - | (80) | (210) | (285) | (113) | (57) | (25) | (16) | (9) | (10) | (6) | (5) | (2) | - |
| Closure Capex | C$M | (64) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | (64) |
| Salvage Value | C$M | 26 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 26 |
| Royalty Buyback | C$M | (2) | - | (2) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Change in Working Capital | C$M | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Pre-Tax Unlevered Free Cash Flow** | **C$M** | **2,483** | **(181)** | **(423)** | **393** | **81** | **(2)** | **267** | **318** | **198** | **244** | **351** | **421** | **256** | **248** | **212** | **101** |
| *Pre-Tax Cumulative Unlevered Free Cash Flow* | C$M | | *(181)* | *(604)* | *(211)* | *(130)* | *(132)* | *135* | *453* | *651* | *895* | *1,246* | *1,667* | *1,922* | *2,170* | *2,382* | *2,483* |
| **Unlevered Cash Taxes** | C$M | (914) | - | - | (48) | (58) | (49) | (77) | (81) | (43) | (60) | (99) | (147) | (83) | (84) | (71) | (14) |
| **Post-Tax Unlevered Free Cash Flow** | **C$M** | **1,569** | **(181)** | **(423)** | **345** | **23** | **(51)** | **190** | **237** | **155** | **184** | **252** | **274** | **173** | **164** | **141** | **88** |
| *Post-Tax Cumulative Unlevered Free Cash Flow* | C$M | | *(181)* | *(604)* | *(259)* | *(237)* | *(288)* | *(98)* | *139* | *294* | *478* | *729* | *1,004* | *1,176* | *1,340* | *1,481* | *1,569* |
| **Production** | | | | | | | | | | | | | | | | | |
| Total Resource Mined - UG | kt | 12,418 | - | - | - | - | 570 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 1,048 |
| Total Resource Mined - OP | kt | 67,899 | - | 2,005 | 8,198 | 6,154 | 9,511 | 6,806 | 6,624 | 4,812 | 6,513 | 6,377 | 6,550 | 3,518 | 830 | - | - |
| Total Overburden and Waste - OP | kt | 504,344 | - | 27,995 | 56,406 | 57,455 | 52,543 | 46,708 | 48,376 | 49,193 | 48,487 | 48,541 | 31,320 | 35,750 | 1,571 | - | - |
| Strip Ratio - OP | w:o | 7.43 | - | 13.96 | 6.88 | 9.34 | 5.52 | 6.86 | 7.30 | 10.22 | 7.44 | 7.61 | 4.78 | 10.16 | 1.89 | - | - |
| Total Material Mined | kt | 584,662 | - | 30,000 | 64,604 | 63,609 | 62,624 | 54,714 | 56,200 | 55,205 | 56,200 | 56,118 | 39,070 | 40,468 | 3,601 | 1,200 | 1,048 |
| Mill Feed | kt | 80,317 | - | - | 4,527 | 5,658 | 5,658 | 5,658 | 5,658 | 7,008 | 7,009 | 7,009 | 7,009 | 7,009 | 7,009 | 7,008 | 4,100 |
| Mill Head Grade (Au) | g/t | 1.30 | - | - | 2.12 | 1.31 | 1.49 | 1.76 | 1.76 | 1.10 | 1.19 | 1.38 | 1.46 | 1.06 | 0.89 | 0.79 | 0.91 |
| Mill Recovery (Au) | % | 95.7 | - | - | 96.4 | 96.1 | 96.1 | 96.4 | 96.1 | 94.4 | 94.4 | 95.6 | 95.7 | 95.9 | 95.8 | 95.5 | 95.7 |
| Gold Production | koz | 3,210 | - | - | 297 | 229 | 260 | 309 | 308 | 235 | 254 | 296 | 316 | 230 | 192 | 169 | 115 |
| **Payable Gold** | **koz** | **3,208** | **-** | **-** | **297** | **229** | **260** | **309** | **307** | **235** | **254** | **296** | **316** | **229** | **192** | **169** | **115** |
| **Total Revenue** | **C$M** | **7,587** | **-** | **-** | **702** | **542** | **614** | **730** | **727** | **555** | **600** | **701** | **746** | **543** | **455** | **400** | **272** |
| **Operating Costs** | | | | | | | | | | | | | | | | | |
| **Total Operating Costs** | **C$M** | **3,576** | **-** | **-** | **223** | **246** | **326** | **344** | **346** | **328** | **335** | **335** | **309** | **276** | **197** | **182** | **131** |
| Mine Operating Costs - Open Pit | C$M | 1,559 | - | - | 152 | 163 | 184 | 148 | 154 | 144 | 160 | 158 | 138 | 106 | 28 | 14 | 11 |
| Mine Operating Costs - Underground | C$M | 1,094 | - | - | - | 3 | 63 | 117 | 113 | 113 | 104 | 106 | 100 | 99 | 99 | 98 | 79 |
| Mill Processing | C$M | 787 | - | - | 60 | 68 | 68 | 68 | 68 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 35 |
| G&A Costs | C$M | 136 | - | - | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 6 |
| **Refining, Transport & Royalties** | | | | | | | | | | | | | | | | | |

| Dollar Figures in Real 2024 C$M Unless Otherwise Noted | Units | Total / Avg. | Y-2 | Y-1 | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 | Y8 | Y9 | Y10 | Y11 | Y12 | Y13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Macro Assumptions** | | | | | | | | | | | | | | | | | |
| **Refining & Transport Charges** | **C$M** | **8** | **-** | **-** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **0** | **0** | **0** |
| **Royalties** | **C$M** | **61** | **-** | **-** | **6** | **4** | **5** | **6** | **6** | **4** | **5** | **6** | **6** | **4** | **4** | **3** | **2** |
| **Cash Costs** | | | | | | | | | | | | | | | | | |
| Cash Cost * | US$/oz Au | 841 | - | - | 571 | 810 | 944 | 840 | 848 | 1,048 | 992 | 852 | 740 | 905 | 776 | 814 | 856 |
| All-in Sustaining Cost (AISC) ** | US$/oz Au | 1,038 | - | - | 770 | 1,488 | 1,756 | 1,110 | 985 | 1,126 | 1,038 | 874 | 763 | 926 | 795 | 823 | 1,099 |
| **Capital Expenditures** | | | | | | | | | | | | | | | | | |
| **Initial Capital** | **C$M** | **602** | **181** | **422** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| Mining | C$M | 118 | 36 | 83 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| On Site Infrastructure | C$M | 78 | 24 | 55 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Process Plant | C$M | 260 | 78 | 182 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Off Site Infrastructure | C$M | 8 | 3 | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Project Indirects | C$M | 12 | 3 | 8 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Project Delivery | C$M | 32 | 10 | 23 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Owner's Costs | C$M | 23 | 7 | 16 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Provisions | C$M | 70 | 21 | 49 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Total Sustaining Capital** | **C$M** | **818** | **-** | **-** | **80** | **210** | **285** | **113** | **57** | **25** | **16** | **9** | **10** | **6** | **5** | **2** | **-** |
| Mining | C$M | 710 | - | - | 66 | 185 | 220 | 110 | 56 | 24 | 16 | 9 | 10 | 6 | 5 | 2 | - |
| On Site Infrastructure | C$M | 27 | - | - | 10 | 3 | 10 | 2 | 1 | 1 | - | - | - | - | - | - | - |
| Process Plant | C$M | 10 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - |
| Off Site Infrastructure | C$M | 3 | - | - | - | - | 3 | - | - | - | - | - | - | - | - | - | - |
| Project Indirects | C$M | 3 | - | - | 1 | 1 | 1 | 0 | - | - | - | - | - | - | - | - | - |
| Project Delivery | C$M | 2 | - | - | 1 | - | 2 | - | - | - | - | - | - | - | - | - | - |
| Owner's Costs | C$M | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Provisions | C$M | 62 | - | - | 2 | 20 | 39 | 0 | - | - | - | - | - | - | - | - | - |
| **Closure Cost** | **C$M** | **64** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **64** |
| **Salvage Value** | **C$M** | **(26)** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **(26)** |
| **Total Capital Expenditures Including Salvage Value** | **C$M** | **1,457** | **181** | **422** | **80** | **210** | **285** | **113** | **57** | **25** | **16** | **9** | **10** | **6** | **5** | **2** | **38** |

## 22.5 Sensitivity Analysis

A sensitivity analysis was conducted on the base case pre-tax and post-tax NPV and IRR of the project using the following variables: gold price, discount rate, exchange rate, initial capital costs, operating costs, and mill head grades.

Table 22-3 shows the pre-tax sensitivity analysis results; post-tax sensitivity results are shown in Table 22-4.

**Table 22-3: Pre-Tax Sensitivity Analysis**

| | Pre-Tax NPV 5% Sensitivity To Discount Rate (C$M) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Discount Rate | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | 1.0% | 1,652 | 2,251 | 2,850 | 3,450 | 4,049 |
| | 3.0% | 1,333 | 1,854 | 2,374 | 2,895 | 3,415 |
| | 5.0% | 1,075 | 1,530 | 1,985 | 2,441 | 2,896 |
| | 8.0% | 773 | 1,150 | 1,527 | 1,904 | 2,281 |
| | 10.0% | 615 | 950 | 1,285 | 1,621 | 1,956 |

| | Pre-Tax IRR Sensitivity To Discount Rate (%) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Discount Rate | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | 1.0% | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |
| | 3.0% | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |
| | 5.0% | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |
| | 8.0% | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |
| | 10.0% | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |

| | Pre-Tax NPV 5% Sensitivity To Exchange Rate (C$M) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Exchange Rate (USD/CAD) | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 2,289 | 2,858 | 3,427 | 3,996 | 4,565 |
| | (10.0%) | 1,614 | 2,120 | 2,626 | 3,132 | 3,638 |
| | -- | 1,075 | 1,530 | 1,985 | 2,441 | 2,896 |
| | 10.0% | 634 | 1,047 | 1,461 | 1,875 | 2,289 |
| | 20.0% | 266 | 645 | 1,024 | 1,404 | 1,783 |

| | Pre-Tax IRR Sensitivity To Exchange Rate (%) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Exchange Rate (USD/CAD) | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 47.8 | 57.7 | 67.3 | 76.7 | 85.9 |
| | (10.0%) | 35.9 | 44.9 | 53.7 | 62.3 | 70.8 |
| | -- | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |
| | 10.0% | 17.8 | 25.5 | 33.1 | 40.5 | 47.8 |
| | 20.0% | 10.5 | 18.0 | 25.1 | 32.1 | 38.9 |

| | Pre-Tax NPV 5% Sensitivity To Operating Costs (C$M) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Operating Costs | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 1,576 | 2,032 | 2,487 | 2,942 | 3,397 |
| | (10.0%) | 1,326 | 1,781 | 2,236 | 2,691 | 3,147 |
| | -- | 1,075 | 1,530 | 1,985 | 2,441 | 2,896 |
| | 10.0% | 824 | 1,279 | 1,735 | 2,190 | 2,645 |
| | 20.0% | 574 | 1,029 | 1,484 | 1,939 | 2,394 |

| | Pre-Tax IRR Sensitivity To Operating Costs (%) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Operating Costs | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 34.7 | 42.6 | 50.5 | 58.2 | 65.8 |
| | (10.0%) | 30.4 | 38.6 | 46.5 | 54.4 | 62.1 |
| | -- | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |
| | 10.0% | 21.5 | 30.0 | 38.3 | 46.5 | 54.4 |
| | 20.0% | 16.8 | 25.6 | 34.0 | 42.3 | 50.5 |

| | Pre-Tax NPV 5% Sensitivity To Initial Capital (C$M) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Initial Capital | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 1,191 | 1,646 | 2,101 | 2,557 | 3,012 |
| | (10.0%) | 1,133 | 1,588 | 2,043 | 2,499 | 2,954 |
| | -- | 1,075 | 1,530 | 1,985 | 2,441 | 2,896 |
| | 10.0% | 1,017 | 1,472 | 1,927 | 2,383 | 2,838 |
| | 20.0% | 959 | 1,414 | 1,869 | 2,325 | 2,780 |

| | Pre-Tax IRR Sensitivity To Initial Capital (%) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Initial Capital | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 32.7 | 42.8 | 52.8 | 62.7 | 72.3 |
| | (10.0%) | 29.0 | 38.1 | 47.1 | 55.9 | 64.5 |
| | -- | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |
| | 10.0% | 23.5 | 31.2 | 38.7 | 46.0 | 53.2 |
| | 20.0% | 21.4 | 28.5 | 35.5 | 42.2 | 48.9 |

| | Pre-Tax NPV 5% Sensitivity To Mill Head Grade (C$M) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Mill Head Grade | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (2.0%) | 978 | 1,424 | 1,870 | 2,316 | 2,762 |
| | (1.0%) | 1,027 | 1,477 | 1,928 | 2,378 | 2,829 |
| | -- | 1,075 | 1,530 | 1,985 | 2,441 | 2,896 |
| | 1.0% | 1,124 | 1,583 | 2,043 | 2,503 | 2,962 |
| | 2.0% | 1,172 | 1,636 | 2,101 | 2,565 | 3,029 |

| | Pre-Tax IRR Sensitivity To Mill Head Grade (%) | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Gold Price (US$/oz) | | | | |
| Mill Head Grade | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (2.0%) | 24.3 | 32.4 | 40.4 | 48.3 | 56.0 |
| | (1.0%) | 25.2 | 33.4 | 41.5 | 49.4 | 57.2 |
| | -- | 26.1 | 34.4 | 42.5 | 50.5 | 58.3 |
| | 1.0% | 26.9 | 35.3 | 43.5 | 51.6 | 59.5 |
| | 2.0% | 27.8 | 36.3 | 44.5 | 52.6 | 60.6 |

**Table 22-4: Post-Tax Sensitivity Analysis**

| | Post-Tax NPV 5% Sensitivity To Discount Rate (C$M) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Discount Rate | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | 1.0% | 1,041 | 1,408 | 1,771 | 2,130 | 2,482 |
| | 3.0% | 811 | 1,133 | 1,450 | 1,762 | 2,069 |
| | 5.0% | 626 | 910 | 1,188 | 1,461 | 1,730 |
| | 8.0% | 410 | 648 | 880 | 1,107 | 1,330 |
| | 10.0% | 297 | 511 | 718 | 920 | 1,118 |

| | Post-Tax IRR Sensitivity To Discount Rate (%) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Discount Rate | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | 1.0% | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |
| | 3.0% | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |
| | 5.0% | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |
| | 8.0% | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |
| | 10.0% | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |

| | Post-Tax NPV 5% Sensitivity To Exchange Rate (C$M) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Exchange Rate (USD/CAD) | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 1,371 | 1,708 | 2,041 | 2,372 | 2,698 |
| | (10.0%) | 962 | 1,269 | 1,571 | 1,869 | 2,164 |
| | -- | 626 | 910 | 1,188 | 1,461 | 1,730 |
| | 10.0% | 319 | 608 | 867 | 1,121 | 1,371 |
| | 20.0% | 57 | 327 | 593 | 832 | 1,065 |

| | Post-Tax IRR Sensitivity To Exchange Rate (%) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Exchange Rate (USD/CAD) | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 33.6 | 40.1 | 46.2 | 52.3 | 58.1 |
| | (10.0%) | 25.5 | 31.7 | 37.5 | 43.1 | 48.5 |
| | -- | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |
| | 10.0% | 12.0 | 18.1 | 23.6 | 28.7 | 33.6 |
| | 20.0% | 6.3 | 12.2 | 17.8 | 22.8 | 27.6 |

| | Post-Tax NPV 5% Sensitivity To Operating Costs (C$M) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Operating Costs | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 937 | 1,212 | 1,482 | 1,748 | 2,014 |
| | (10.0%) | 784 | 1,063 | 1,337 | 1,606 | 1,872 |
| | -- | 626 | 910 | 1,188 | 1,461 | 1,730 |
| | 10.0% | 446 | 754 | 1,036 | 1,313 | 1,585 |
| | 20.0% | 262 | 583 | 881 | 1,162 | 1,438 |

| | Post-Tax IRR Sensitivity To Operating Costs (%) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Operating Costs | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 24.9 | 30.3 | 35.5 | 40.5 | 45.4 |
| | (10.0%) | 21.8 | 27.5 | 32.9 | 38.0 | 43.0 |
| | -- | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |
| | 10.0% | 14.8 | 21.2 | 27.1 | 32.6 | 37.9 |
| | 20.0% | 10.9 | 17.7 | 23.9 | 29.8 | 35.2 |

| | Post-Tax NPV 5% Sensitivity To Initial Capital (C$M) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Initial Capital | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 742 | 1,026 | 1,304 | 1,577 | 1,846 |
| | (10.0%) | 684 | 968 | 1,246 | 1,519 | 1,788 |
| | -- | 626 | 910 | 1,188 | 1,461 | 1,730 |
| | 10.0% | 568 | 852 | 1,130 | 1,403 | 1,672 |
| | 20.0% | 510 | 794 | 1,072 | 1,345 | 1,614 |

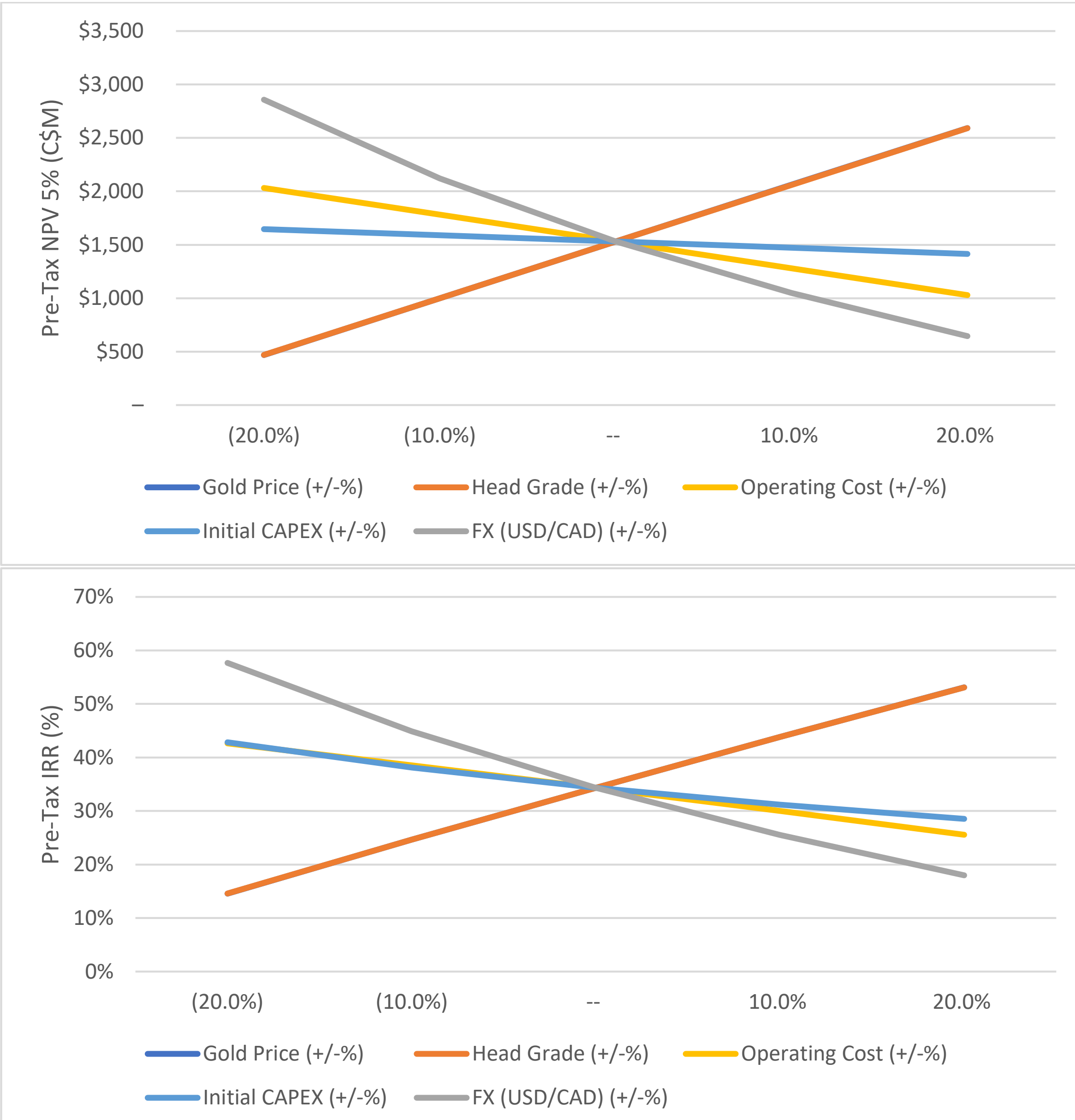
| | Post-Tax IRR Sensitivity To Initial Capital (%) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Initial Capital | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 23.9 | 31.2 | 38.1 | 44.6 | 50.8 |
| | (10.0%) | 20.9 | 27.5 | 33.6 | 39.5 | 45.1 |
| | -- | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |
| | 10.0% | 16.4 | 21.9 | 27.1 | 32.0 | 36.7 |
| | 20.0% | 14.6 | 19.7 | 24.6 | 29.1 | 33.5 |

| | Post-Tax NPV 5% Sensitivity To Mill Head Grade (C$M) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Mill Head Grade | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 562 | 844 | 1,118 | 1,387 | 1,652 |
| | (10.0%) | 594 | 877 | 1,153 | 1,424 | 1,691 |
| | -- | 626 | 910 | 1,188 | 1,461 | 1,730 |
| | 1.0% | 657 | 942 | 1,223 | 1,498 | 1,769 |
| | 2.0% | 687 | 975 | 1,258 | 1,535 | 1,808 |

| | Post-Tax IRR Sensitivity To Mill Head Grade (%) | | | | | |
|---|---|---|---|---|---|---|
| | | Gold Price (US$/oz) | | | | |
| Mill Head Grade | | $1,600 | $1,750 | $1,900 | $2,050 | $2,200 |
| | (20.0%) | 17.1 | 23.1 | 28.7 | 34.0 | 39.0 |
| | (10.0%) | 17.8 | 23.8 | 29.4 | 34.7 | 39.7 |
| | -- | 18.5 | 24.4 | 30.1 | 35.4 | 40.5 |
| | 1.0% | 19.1 | 25.1 | 30.8 | 36.1 | 41.2 |
| | 2.0% | 19.8 | 25.8 | 31.4 | 36.8 | 41.9 |

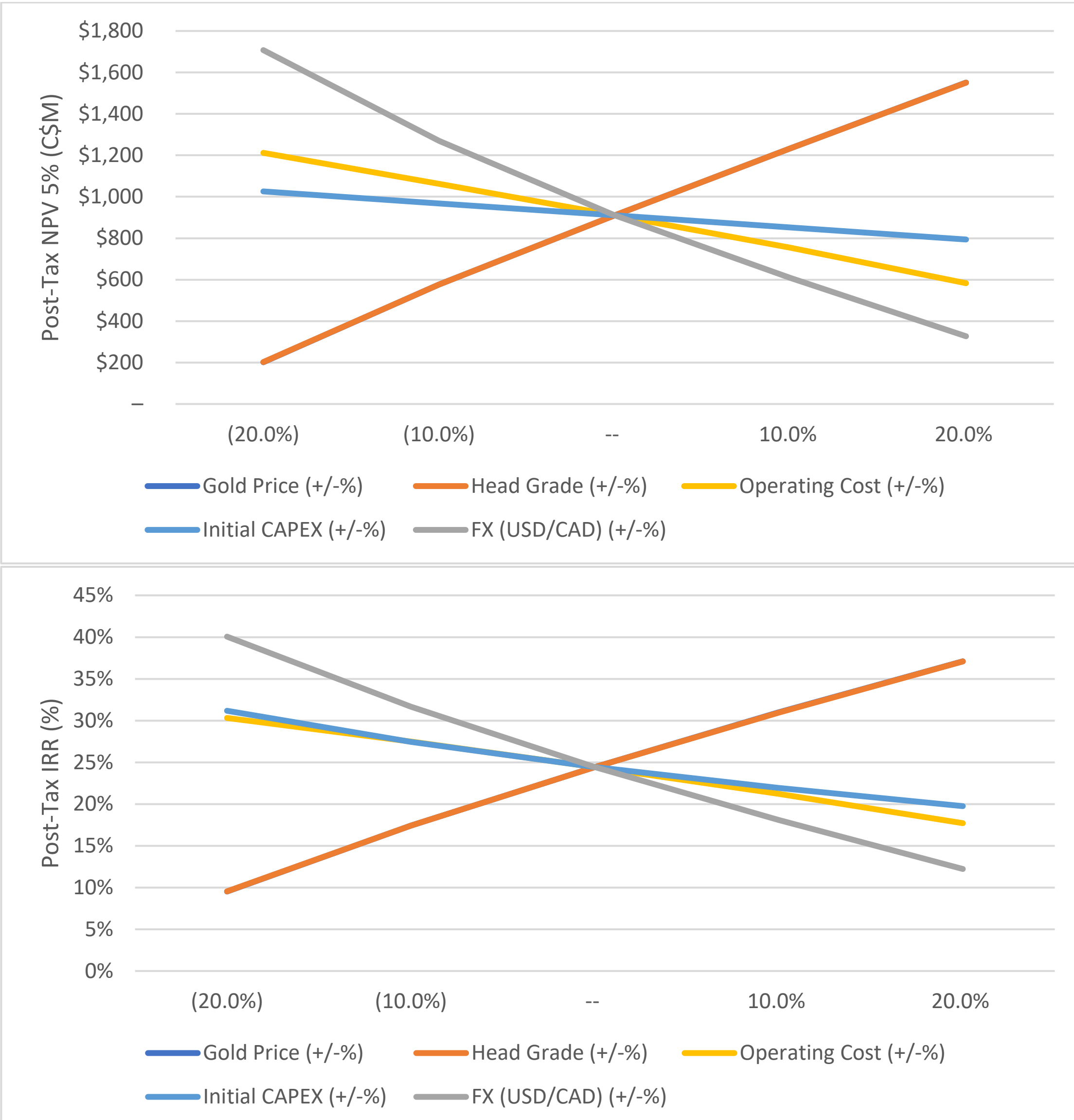
As presented in Figure 22-2 and Figure 22-3, the sensitivity analysis showed that the project is most sensitive to changes in gold price, head grade and foreign exchange.

**Figure 22-2: Pre-Tax NPV, IRR Sensitivity Results**




Note: Series lines for Gold Price and Head Grade overlap in the above figure. Source: Ausenco, 2024.

**Figure 22-3: Post-Tax NPV, IRR Sensitivity Results**

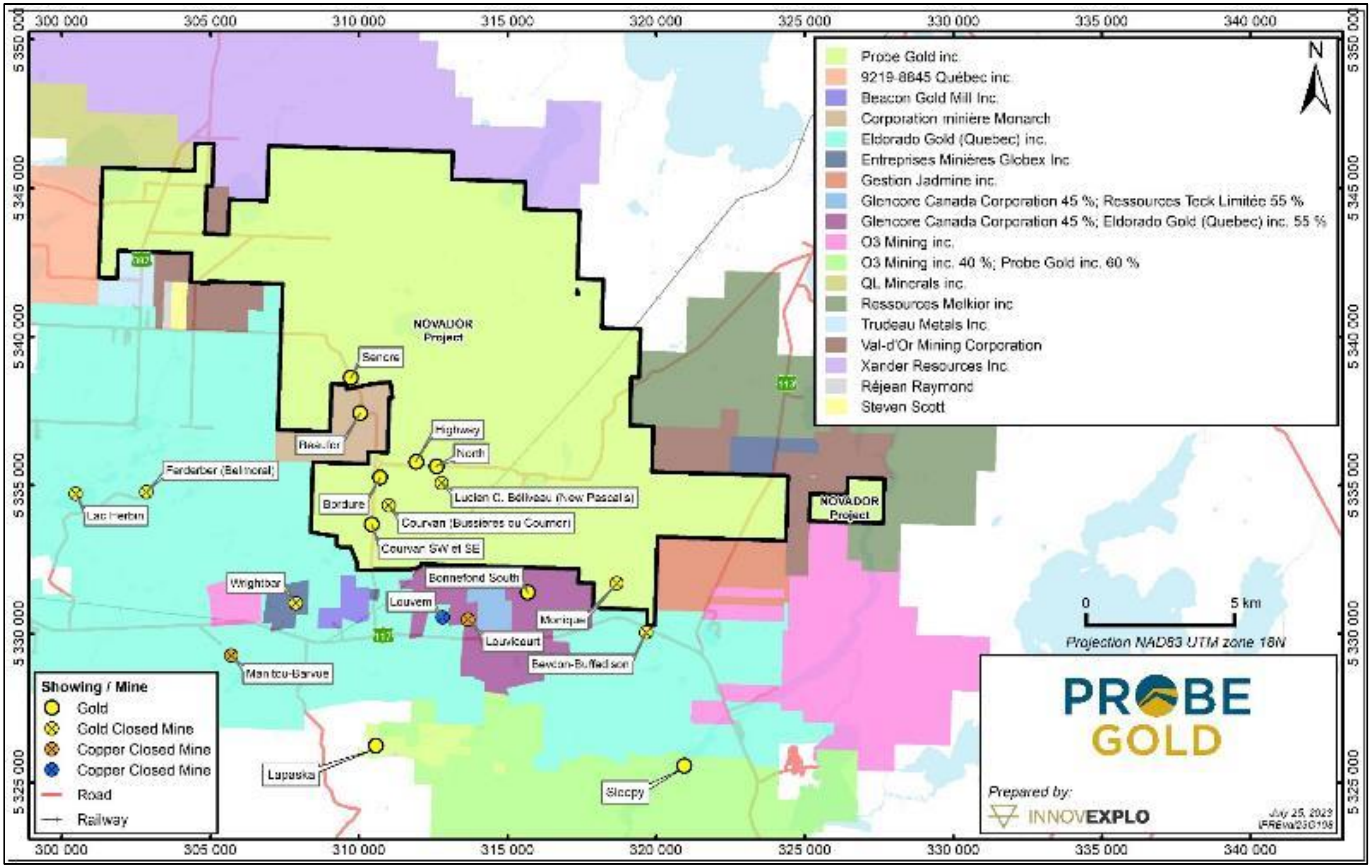



Note: Series lines for Gold Price and Head Grade overlap in the above figures. Source: Ausenco, 2024.

# 23 ADJACENT PROPERTIES

As of the effective date of this Technical Report, the GESTIM database shows several claim blocks under different ownership around the Property (Figure 23.1). The QPs have not verified the publicly available information for these adjacent properties. Nearby mineralized occurrences do not necessarily indicate that the Property hosts similar types of mineralization. The QPs are not aware of any active exploration activities in the immediate area of the Property that would be relevant to the 2024 PEA.

**Figure 23-1: Adjacent Properties**




Source: InnovExplo, 2023.

# 24 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information for this PEA.

# 25 INTERPRETATION AND CONCLUSIONS

## 25.1 Mineral Resource

The objective of InnovExplo's mandate was to update the mineral resource estimate for the Novador Project (the "2023 MRE"). The 2023 MRE includes estimates for seven (7) deposits: Courvan SE, Courvan SW, Bussiere Mine, Bussiere, New Béliveau and North. The deposits lie within the Courvan and Pascalis gold trends. Mineral resource that are not mineral reserves do not have demonstrated economic viability.

The authors conclude the following:

- The database supporting the 2023 MRE is complete, valid and up to date.
- The key parameters of the 2023 MRE (density, capping, compositing, interpolation, search ellipsoid, etc.) are supported by data and statistical and/or geostatistical analysis.
- The 2023 MRE includes indicated and inferred mineral resources for a combination of two mining methods: open pit and underground long hole. Three cut-off grades were used: 0.42 g/t Au, 0.4 g/t Au and 1.43 g/t Au. They respectively correspond to a potential open pit for the Monique deposit, a potential open pit for the other deposits, and underground long-hole mining scenarios for all the deposits.
- The pit-constrained MRE is reported at a cut-off grade of 0.42 g/t Au for the Monique deposit and 0.40 g/t Au for the other deposits, both values higher than the base case cut-off grade of 0.26 g/t Au. The use of a higher cut-off should allow the issuer to select in-pit mineralized waste (0.20-0.42 g/t Au for Monique and 0.20-0.40 g/t Au for the other deposits) for potential upgrade through an industrial sorter process.
- Cut-off grades were calculated at a gold price of US$1,700 per troy ounce, an exchange rate of 1.33 USD/CAD, and reasonable mining, processing and G&A costs.
- In a combined pit and underground mining scenario, the project contains an estimated measured and indicated mineral resource of 67,591,000 t at 1.63 g/t Au for 3,547,000 ounces of gold and an inferred mineral resource of 16,717,900 t at 2.03 g/t Au for 1,089,300 ounces of gold.
- The issuer has demonstrated with a series of performance tests that the industrial sorting technology works well with the type of mineralization found on the Novador Project. By applying industrial sorting to mineralized waste, an additional indicated resource of 24,997,100 t at 0.31 g/t Au for 246,900 ounces of gold and an inferred resource of 10,021,200 t at 0.28 g/t Au for 90,100 ounces of gold could be extracted.
- A total of 75% of the mineral resources are pit constrained.
- Monique and Pascalis gold trend deposits represent 83% of the pit-constrained MRE.

The results of the 2023 MRE, combining the mineral resources and the additional pit-constrained mineral resources from industrial sorting, represent a 111% increase in total measured and indicated mineral resources compared to the previous 2021 MRE (Raponi et al., 2021). This increase is mainly due to the addition of 200,565 m of drilling on the Pascalis, Courvan and Monique gold trends since the last MRE.

The gold resources of other Val-d'Or properties currently stand at an inferred resource of 239,200 ounces of gold, including the Lapaska and Sleepy deposits (Raponi et al., 2021).

The authors consider the 2023 MRE to be reliable, thorough, and based on quality data, reasonable hypotheses, and parameters prepared in accordance with NI 43-101 requirements and CIM Definition Standards.

## 25.2 Metallurgical Testwork

Metallurgical testwork programs were conducted to quantify metallurgical performance of the mineralized zones in the Novador properties. Several processing options including mineralized material sorting, flotation, gravity concentration and cyanidation were considered. The most recent testwork program included solid liquid separation and cyanide destruction testwork.

All samples exhibited free milling gold recoveries amenable to grinding through conventional semi-autogenous grinding (SAG) and ball mill grinding, gravity concentration and cyanide leaching. Gravity concentration and cyanide leaching at a grind size $K_{80}$ of 70 µm was determined to be the optimum process option for this deposit. The samples were determined to be amenable to thickening and pressure filtration.

The metallurgical testwork and associated analytical procedures were appropriate to the mineralization type, appropriate to investigate the optimal processing routes, and were performed using samples that are typical of the mineralization styles found within the various mineralized zones. Samples selected for testing were representative of the various types and styles of mineralization. Samples and were selected from a range of depths within the deposits. Sufficient samples were taken so that tests were performed on sufficient sample mass.

There is no evidence of any deleterious elements in significant quantities that would impair recovery or result in low-quality doré. Gold recoveries are expected to range between 95 and 96% at design and average life-of-mine grades.

## 25.3 Mining Methods

The scoping-level mine planning work demonstrates robust economics for the extraction of approximately 80 million tonnes of mill feed at an average mill feed gold grade of 1.30 g/t.

The economic open pit mine designs for the Monique, Pascalis, Courvan and Highway deposits capture 81% of the mineral resources reported in July 2023, and underground mining methods capture additional economic material below the open pit mining limits.

The total open pit mill feed for the Novador Project is estimated to be 67.9 Mt at a grade of 1.01 g/t Au (2.11 Moz of contained gold). Additional underground mill feed is estimated to be 12.4 Mt at a grade of 2.87 g/t Au (1.11 Moz of contained gold).

## 25.4 Recovery Methods

The process plant is designed to process material at a rate of 5.7 Mt/a in Phase 1 and 7.0 Mt/a in Phase 2, to produce doré. The process plant flowsheet designs were based on testwork results and industry-standard practices. The flowsheet was developed for optimum recovery while minimizing capital expenditure and life-of-mine operating costs. The process methods are conventional to the industry. The comminution and recovery processes are widely used with no significant elements of technological innovation.

## 25.5 Project Infrastructure

### 25.5.1 Project Infrastructure

The main site infrastructure consists of open pit mining, a DSTF, waste rock storage facilities, access roads connecting the various pits to the main plant site, and a truckshop. The main plant access area will be gated for security.

Based on the analysis and planning outlined in the preceding sections, the development of the Val-d’Or project site is poised to address critical infrastructural needs and operational requirements. The project encompasses a wide range of facilities and infrastructure, including mine facilities, process facilities, dry stack tailings and waste rock storage facilities, and common amenities such as gatehouses and administration buildings. The strategic positioning of these facilities takes into account various factors such as site boundaries, environmental considerations, operational efficiency, and accessibility, ensuring optimal functionality and minimal environmental impact.

Furthermore, the integration of emergency power generation systems, electrical infrastructure upgrades, and road relocations underscores the project's commitment to safety, reliability, and operational continuity for the planned LOM. Collaborative efforts with regulatory bodies, stakeholders, and the surrounding community, coupled with adherence to industry best practices and standards, reinforce the project's commitment to responsible and sustainable development.

### 25.5.2 Tailings Facility

The project is progressing with filter tailings and a dry stack tailings facility for the 1$^{st}$ 5 years and transition to slurry in-pit tailings disposal from year 5 through 11. The DSTF has been designed to store approximately 23.6 Mt of tailings over a 4.5-year period and 44.3 Mt of slurry tailings as in-pit tailings disposal. The DSTF will be built in two phases to reduce sediment generation along with progressive closure of permanent slopes. The facility includes gravel underdrains and surface water collection channels that convey water to the underdrain pond and contact water pond, respectively. The water will be used for process requirements and any excess water will go to the water treatment plant for discharge to the environment. The DSTF and IPSF were designed in accordance with provincial and national standards for tailings management facilities.

### 25.5.3 Water Management

The proposed water management structures for the project include a series of diversion channels, as well as collections ditches and ponds. Contact runoff from the plant site, waste rock facilities, and overburden stockpile areas will either be stored in collection ponds for treatment and release to the environment following meeting discharge criteria or reused for process purposes. A high-level estimate of excavation volumes was completed using the proposed geometries of the structures and elevation profile along the alignment of channels and ditches.

Efforts to optimize site management extend to water management infrastructure, which forms a crucial component of the project's operational framework. Thorough hydrological assessments, climate data analysis, and planning have informed the design and implementation of water diversion and collection systems, as well as the sizing and placement of ponds for runoff storage and treatment. By adhering to stringent design criteria and incorporating provisions for potential storm events, the project aims to effectively manage water resources while mitigating environmental risks associated with mining activities.

## 25.6 Environmental Studies, Permitting and Social or Community Impact

The construction, operation, and closure of the mine is subjected to a number of laws and regulation at the federal, provincial, and municipal levels. An environmental assessment under the IAA 2019 is required for a project that involves the construction, operation, decommissioning, and abandonment of a new metal mine, other than a rare earth element mine, placer mine or uranium mine, with a mineralized material production capacity of 5,000 t/d or more. This is the case for the Novador Project. At the provincial level, the opening and operation of a gold mine that has a production capacity of 2,000 t/d or more triggers an environmental impact assessment and review procedure. Moreover, the *Mining Act* (M-13.1) provides a framework for the mining lease, rehabilitation and restoration plan, and financial guarantee.

Since 2017, Probe Gold has initiated a series of environmental studies with different consultant firms to understand the actual environmental conditions of the project site. More recently, in 2022, Probe Gold mandated the consultant firm Groupe DDM to carry out field inventories for various biological. These inventories covered the three areas of the Novador Project, namely Pascalis, Courvan and Monique.

As part of the development of the project, Probe Gold representatives held several information and consultation meetings with stakeholders and First Nation authorities. The engagement process implemented by Probe Gold made possible to meet various stakeholders concerned by the project, including municipal and regional authorities, development economic organizations, environmental groups, nearby cottagers and land users. Meetings were also held with representatives of the Anishnabe Nation Council of Lac Simon and the Abitibiwinni First Nation Council.

## 25.7 Cost Estimates

The capital cost estimate conforms to Class 5 guidelines for a PEA-level estimate with a ±50% accuracy according to the Association for the Advancement of Cost Engineering International (AACE International). The capital cost estimate was developed in Q4 2023 Canadian dollars based on Ausenco's in-house database of projects and studies as well as experience from similar operations.

The estimates are based on the following:

- open pit and underground mining operation

- construction of a process plant
- construction of associated water management and tailings management facilities
- additional on-site and off-site infrastructure
- Owner's costs and provisions.

The total initial capital cost for the Novador project is C$602 million; and life-of-mine sustaining costs are C$817 million. Closure costs are estimated at C$64 million, with salvage credits of C$26 million. For more information, refer to Section 21.2.

## 25.8 Economic Analysis

The Project was evaluated using a discounted cash flow (DCF) analysis based on a 5% discount rate. Cash inflows consisted of annual revenue projections. Cash outflows consisted of capital expenditures, including pre-production costs; operating costs; refining and transport costs; taxes; and royalties. These were subtracted from the inflows to arrive at the annual cash flow projections. Cash flows were taken to occur at the mid-point of each period. The economic analysis was run on a constant dollar basis with no inflation.

The pre-tax NPV discounted at 5% is C$1,530 million; the IRR is 34.4%; and payback period is 3.5 years. On a post-tax basis, the NPV discounted at 5% is C$910 million; the IRR is 24.4%; and payback period is 4.4 years.

A sensitivity analysis was performed to assess the impact of variations in gold price, discount rate, exchange rate, initial capital costs, operating costs, and mill head grades. The sensitivity analysis showed that the project is most sensitive to changes in gold price, head grade and foreign exchange.

The preliminary economic assessment is preliminary in nature, that it includes 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 preliminary economic assessment will be realized.

## 25.9 Risks & Opportunities

### 25.9.1 Risks

#### 25.9.1.1 Mineral Resource

Mineral Resources are not Mineral Reserves and do not necessarily demonstrate economic viability. There is no certainty that all or any part of this Mineral Resource will be converted into Mineral Reserve. Inferred Mineral Resources are too speculative geologically to have economic considerations applied to them to enable them to be categorized as Mineral Reserves.

Mineral Resource estimates may be materially affected by the quality of data, natural geological variability of mineralization and / or metallurgical recovery and the accuracy of the economic assumptions supporting reasonable prospects for economic extraction including metal prices, and mining and processing costs.

The authors considered that the geological models were based on strong geological knowledges. Nevertheless, the deposits are geologically complex and it’s possible that new exploration data may result in changes in the geological knowledge, mainly at depth.

Mineral Resources may also be affected by the estimation methodology and parameters and assumptions used in the grade estimation process including top-cutting (capping) of data or search and estimation strategies, although it is the opinion of the QPs that there is a low likelihood of this having a material impact on the Mineral Resource estimate.

#### 25.9.1.2 Metallurgical Testwork

The following risks are associated with the metallurgical testwork to date:

The most recent test work program focused on two major deposits (Monique and New Béliveau). The metallurgical response of material from Courvan, which is also a major contributor, is not well defined.

The process design has assumed a coarsening of the grind size to a $K_{80}$ of 90 µm to enable a milling rate expansion in year 6 of operation with no additional milling capacity and minimal recovery impact. Testwork confirmation on expected blends is required to confirm this hypothesis.

#### 25.9.1.3 Mining Methods

The following risks are associated with the mining method design to date:

The topsoil surface is not defined. Consideration of this material will require the addition of topsoil storage areas, impacting the overall project footprint.

The addition of ramps into the designs of the WRSF may impact the footprint limits, the available capacity, or the heights of these facilities.

#### 25.9.1.4 Recovery Methods

The following list provides some of the main risks associated with the process plant design:

- Multiple deposits – the Novador Project is comprised of multiple deposits (Béliveau, Monique, North, Courvan, Highway). The majority of the testwork for the 2023 PEA Update was performed on the Béliveau and Monique deposits. From the few tests performed on the smaller deposits, there does not seem to be a significant risk that these smaller deposits behave differently to the Monique and Béliveau samples. However, additional testwork should be performed on these other deposits to ensure the selected flowsheet is optimal for all mill feeds.
- Crushing equipment design and circulation is based on an assumed typical run-of-mine particle size distribution and may be undersized should the run-of-mine particle size distribution be coarser than the design values.

- Process conditions, residence times, and reagent usage may change with additional testing.

#### 25.9.1.5 Project Infrastructure

Potential risks for project infrastructure at site include the following:

##### 25.9.1.5.1 Water Management

- Flood plain overlaps proposed infrastructure. As a result, the development of a flood forecasting and response plan will be developed to identify early warnings of flooding. Additionally, mine water management infrastructure has been designed with freeboard to accommodate increased flow scenarios.

##### 25.9.1.5.2 Tailings Facility

- If the geotechnical or hydrogeological considerations for the DSTF are worse than what was assumed, the capital, sustaining capital and operating cost of the project will be increased. To combat this, additional geotechnical studies must be conducted to ensure the accuracy of the plans and make design adjustments where necessary to increase stability as well as reduce unexpected costs.

#### 25.9.1.6 Environmental Studies, Permitting and Social or Community Impact

General risks to the forward-looking information include:

- unrecognized environmental risks
- unanticipated reclamation expenses
- geochemical, or hydrogeological considerations during mining being different from what was assumed
- ability to maintain the social license to operate.

#### 25.9.1.7 Cost Estimates

Estimates were based on recent quotes that may not reflect actual prices at the time of project execution. These costs should be updated as market conditions change.

Reagent and consumable consumption rates were estimated based on limited testwork.

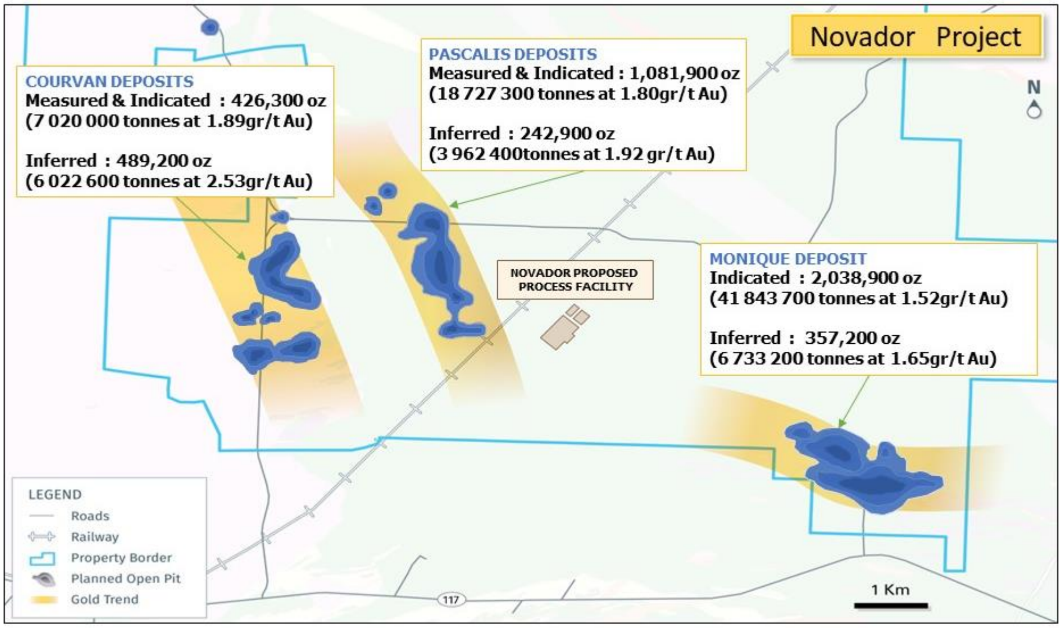
### 25.9.2 Opportunities

#### 25.9.2.1 Mineral Resource

Additional diamond drilling could potentially upgrade some of the inferred resources to the indicated category and potentially add to the inferred mineral resource since most of the mineralized zones have not been fully explored along strike or at depth (Figure 25-1).

There is also a potential to identify new prospects on the property by performing exploration works.

**Figure 25-1: Gold Trends on Novador Project**




Source: Probe Bold, 2023. MRE 2023.

#### 25.9.2.2 Metallurgical Testwork

Further opportunities exist to optimize the LOM grind size selected for this project to reduce grinding mill size and operating costs.

Reagent consumption for all unit processes has not been optimized, notably consumption of cyanide, lime and sulphur dioxide.

Filterability of the tailings should be studied further to improve filterability and potentially reduce filter cycle times.

#### 25.9.2.3 Mining Methods

The presence of clay materials in the footprint of WRSF and stockpiles have an impact on the overall slopes achievable. Additional auger holes and further studies may support increased overall slopes for overburden and waste dump facilities, thereby increasing storage capacity within the same footprint. Draining and pre-settling the clay foundations (using sequenced material placement) may also allow for higher facilities with steeper slopes.

#### 25.9.2.4 Recovery Methods

The optimum grind size ($P_{80}$) investigated to further optimize the grinding mill size and enhance the project economics.

#### 25.9.2.5 Project Infrastructure

There is an opportunity to improve the process plant layout to reduce the footprint. There is also an opportunity to refine the earthworks quantities once more boreholes in the process plant area become available.

#### 25.9.2.6 Water Management

The water treatment and pit inflows are currently calculated based on the maximum flows into the pits. Once the mining is sequenced in more detail, the pit flows and water treatment can be optimized.

#### 25.9.2.7 Environmental Studies, Permitting and Social or Community Impact

Environmental studies should continue to be involved and developed early in the project development so that the biological and social environments can be considered in the mine design. The footprint of the mine site could be optimized, and appropriate mitigation measures can be implemented to reduce environmental and social impacts. Consultations with stakeholders are ongoing and their concerns will be considered in the project development.

#### 25.9.2.8 Capital Estimates

The reagent and consumable consumption rates can be further optimized with more testwork on the mineralized material.

# 26 RECOMMENDATIONS

## 26.1 Cost Estimate for Recommended Work

A cost estimate has been prepared for the recommended work program to serve as a guideline. The budget for the proposed program is presented in Table 26-1. Expenditures are estimated at C$14.7 million (including 15% for contingencies).

**Table 26-1: Estimated Costs for the Recommended Work Program**

| Work Program | Description | Budget Cost (C$M) |
|---|---|---|
| Drilling | 50,000 m @ $160 per metre | 8.00 |
| Metallurgy and Recovery Methods | Additional variability, thickening filtration, comminution tests, PFS level engineering study | 1.10 |
| MRE Update on Previous Deposits | Up-to-date geological and block modelling to bring the Highway, Bordure, and Senore areas to the same Novador MRE standard | 0.05 |
| Mining | PFS-level study | 0.48 |
| Infrastructure - Geotechnical | Additional boreholes with additional testing, site-wide factual and interpretive reports | 0.42 |
| Infrastructure - DSTF and In-pit Disposal | Update tailings deposition strategy, stability model, perform liquification assessment, solicit budgetary quotes | 0.25 |
| Environmental baselines studies, Social Impact | Environmental impact assessment, stakeholder engagement with First Nations and others, and environmental baselining | 2.50 |
| Contingency (15%) | | 1.92 |
| **Total** | | **14.7** |

## 26.2 Drilling

The authors recommend additional work be carried out to continue exploring the Property and enhance the economic potential of the Project. In addition to the programs executed in the first quarter of 2024, more drilling is recommended to test the extensions of the Pascalis, Courvan, and Monique deposits laterally and at depth and along their gold trends. Drilling is also warranted to test other known occurrences on the Property. The authors believe the character of the Property is of sufficient merit to justify a significant exploration program.

The authors believe that there is reasonable potential to find new discoveries on the Property. The authors recommend extending the Pascalis, Courvan, and Monique integrated geological and structural model for the overall Property and conducting additional exploration work (stripping, mapping, geophysics, and drilling).

## 26.3 Metallurgy and Recovery Methods

Ahead of the next stage of the Novador Project, additional variability tests should be performed on minor deposits not covered in the current program to determine if they warrant inclusion into the mine plan.

Furthermore, grind size determination testwork should be conducted at smaller grind size intervals, with tests performed at 80 µm, 90 µm, and 100 µm to improve the data resolution. This should be be supported with additional comminution testwork to establish the variability of hardness within the deposits. Dewatering testwork and reagent optimization in leaching and detoxification should also be confirmed in this program once target grind is optimized.

A single sample from the felsic porphyry domain of the Monique deposit was found to have anomalously low recovery compared to the body of available leaching tests. Additional testing should be completed on this minor domain to determine if this single lower recovery value is representative of the domain as a whole.

An additional sample that is representative of early mine life production should also be tested specifically to examine the metallurgical performance of the mill during the payback period of the project.

The estimated cost is approximately C$250k for pre-feasibility testwork. Engineering analysis and design based on the resulting testwork is expected to cost approximately C$850k for a total budget of C$1.1 million.

## 26.4 MRE Update on Previous Deposits

The authors recommend a complete update of the Bordure, Highway and Senore area and bring them to the new geological and engineering parameters used for the other deposits.

## 26.5 Mining Methods

MMTS recommends that a PFS-level mining study is completed for the Novador Project. This study would the typical mine planning sequence of ultimate pit limit analysis, sensitivity analysis’, detailed design, mine schedule optimization and costing. This PFS would also include a drilling and blasting study, detailed analysis of incremental UG mining areas, additional detail on WRSF build-up (including sequencing in the thicker clay areas), and ventilation details for UG mining.

The estimated cost for the PFS-level mining study is approximately C$480k.

## 26.6 Project Infrastructure

### 26.6.1 Geotechnical

Ausenco makes the following site-wide geotechnical recommendations to support a PFS.

- Completion of seven 250-m geotechnical boreholes, 26 test pits, and geophysics in the areas of the DSTF, plant site, and other infrastructure (excluding open pits) and to investigate and confirm foundation conditions, along with depth to groundwater and to bedrock.

- Geotechnical laboratory program index testing, including compaction tests, mechanical strength tests, and permeability tests on foundation soils and potential borrow materials. The laboratory testing program to also confirm the physical characteristics of the filtered tailings, including strength, trafficability, and permeability tests at both low and very high confining stresses to represent the height of the DSTF.
- Development of site-wide, excluding open pits, factual and interpretative reports.

The estimated cost is approximately C$416k including the drilling and excavator rental.

#### 26.6.2 DSTF and In-Pit Tailings Disposal

For the design of the DSTF and In-Pit Tailings Disposal for the PFS, Ausenco recommends the following:

- Confirm geochemical characterization of tailings and waste rock from additional waste characterization studies.
- Develop seepage predictions and seepage control measures for the DSTF and IPSF.
- Update the tailings deposition strategy to optimize material handling for DSTF and in-pit tailings disposal, including trafficability of material handling equipment for the DSTF, including stacking plan, in-pit deposition plan, and water management.
- The stability model should be reviewed and updated, as required, with consideration of the final stacking plan using updated data about the material properties of the tailings, and the foundations for both the DSTF and WRSF.
- Perform a liquefaction assessment with consideration of updated information on material properties and the updated stacking plan for the DSTF.
- Solicit budgetary quotes for earthworks and geosynthetics (i.e., geomembrane, geotextile, and piping) to get more accurate pricing for the next cost estimates.
- Develop material take-offs for capital, sustaining capital, and operating costs for DSTF.

The estimated cost for the recommended work is approximately C$245k.

### 26.7 Environmental Studies, Permitting and Social or Community Impact

With the filling of the Novador Project to an environmental assessment, both at the federal and provincial levels, the main following studies or activities should be carried out during the pre-feasibility phase. These studies or activities will also make possible to ensure that the development of the project limits the impacts on the receiving environment.

- Continue information and consultation activities with stakeholders, including First Nations.
- Continue the characterization of the physical environment (e.g., surface water, groundwater, soils, air quality, etc.).
- Continue the geochemical characterization of waste rock, mineralized rock, overburden, and tailings.
- Continue the baseline studies for the biological environment (e.g., fauna, flora, and species at risk).

- Document the land and resource uses, including the land and resource uses for traditional purposes by First Nations.
- Assess the potential impacts of the project on the physical, biological, and social environments.

The estimated cost of the above work is C$2.5 million.

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