NI 43-101 Technical Report

Feasibility Study for the Cariboo Gold Project

District of Wells, British Columbia, Canada

Prepared for:

Osisko Development Corp.

Effective Date: April 25, 2025

Signature Date: June 11, 2025

OSISKO DEVELOPMENT

Cariboo Gold Project

Prepared by the following Qualified Persons:

- Mathieu Belisle, P.Eng...............BBA Engineering Ltd.
- Amanda Fitch, P.Eng................BBA Engineering Ltd.
- Sebastien Guido, P.Eng............Alius Mine Consulting Inc.
- Philip Clark, P.Eng.....................Clean Energy Consulting Inc.
- Rob Griffith, P.Eng. ....Falkirk Environmental Consultants Ltd.
- Katherine Mueller, P.Eng. ....Falkirk Environmental Consultants Ltd.
- Nikolay Sidenko, P.Geo. ....Falkirk Environmental Consultants Ltd.
- Eric Lecomte, P.Eng..................InnovExplo Inc.
- Carl Pelletier, P.Geo. ....InnovExplo Inc.
- Tessa Scott, P.Geo. ....InnovExplo Inc.
- A. J. MacDonald, P.Eng. ....Integrated Sustainability Consultants Ltd.
- Jean-François Maillé, P.Eng.....JDS Energy & Mining Inc.
- Yapo Allé-Ando, P.Eng.............M.A. O'Kane Consultants Inc.
- Rachel Sawyer, P.Eng...............M.A. O'Kane Consultants Inc.
- Paul Gauthier, P.Eng.................WSP Canada Inc.

Date and Signature Page

This technical report is effective as of the 25th day of April 2025.

"Signed and sealed on file"	*June 11, 2025*
Mathieu Bélisle, P.Eng. BBA Engineering Ltd.	Date

"Signed and sealed on file"	*June 11, 2025*
Amanda Fitch, P.Eng. BBA Engineering Ltd.	Date

"Signed and sealed on file"	*June 11, 2025*
Sebastien Guido, P.Eng. Alius Mine Consulting Inc.	Date

"Signed and sealed on file"	*June 11, 2025*
Philip Clark, P.Eng. Clean Energy Consulting Inc.	Date

"Signed and sealed on file" | *June 11, 2025*

Rob Griffith, P.Eng. | Date
Falkirk Environmental Consultants Ltd.

"Signed and sealed on file" | *June 11, 2025*

Katherine Mueller, P.Eng. | Date
Falkirk Environmental Consultants Ltd.

"Signed and sealed on file" | *June 11, 2025*

Nikolay Sidenko, P.Geo. | Date
Falkirk Environmental Consultants Ltd.

"Signed and sealed on file" | *June 11, 2025*

Eric Lecomte, P.Eng. | Date
InnovExplo Inc.

"Signed and sealed on file"	*June 11, 2025*
Carl Pelletier, P.Geo. InnovExplo Inc.	Date

"Signed and sealed on file"	*June 11, 2025*
Tessa Scott, P.Geo. InnovExplo Inc.	Date

"Signed and sealed on file"	*June 11, 2025*
A.J. MacDonald, P.Eng. Integrated Sustainability Consultants Ltd.	Date

"Signed and sealed on file"	*June 11, 2025*
Jean-François Maillé, P.Eng. JDS Energy & Mining Inc.	Date

"Signed and sealed on file"	*June 11, 2025*
Yapo Allé-Ando, P.Eng. M.A. O'Kane Consultants Inc.	Date

"Signed and sealed on file"	*June 11, 2025*
Rachel Sawyer, P.Eng. M.A. O'Kane Consultants Inc.	Date

"Signed and sealed on file"	*June 11, 2025*
Paul Gauthier, P.Eng. WSP Canada Inc.	Date

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CERTIFICATE OF QUALIFIED PERSON

Mathieu Bélisle, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

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

1. I am a Metallurgist with the firm BBA Engineering Ltd., I am located at 990 route de l'Église, Suite 590, Québec, QC, G1V 3V7, Canada.
2. I am a graduate of Laval University, with a Bachelor of Engineering in Metallurgy and Materials in 2002.
3. I am a member of the Ordre des Ingénieurs du Québec (OIQ 128549), Professional Engineers of Ontario (PEO 10210546), and the Engineers and Geoscientists of British-Colombia (EGBC 49319).
4. My relevant experience includes 20 years of experience working for mining operations and engineering consultants. I have been involved in numerous projects requiring detailed engineering design and produced several studies for the mining industry.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for the preparation of Chapters 13 and 17, and Sections 21.1.4.8, 21.1.5.9, and 21.2.5. I am also co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have not visited the Cariboo Property that is the subject of the Technical Report.
9. I have prior involvement with the Property that is the subject of the Technical Report as I was a qualified person for the Preliminary Economic Assessment ("PEA") report for the Cariboo Gold Project prepared for Barkerville Gold Mines Ltd. dated August 18, 2019, for the PEA report prepared for Osisko Development Corp. dated May 24, 2022, and for the Feasibility Study report prepared for Osisko Development Corp., dated January 10, 2023 and amended January 12, 2023.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Mathieu Bélisle, P.Eng.

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CERTIFICATE OF QUALIFIED PERSON

Amanda Fitch, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

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

1. I am Regional Director – Mining and Metals Market with the firm BBA Engineering Ltd., I am located at 1050 West Pender Street, Suite 800, Vancouver, BC V6E 3S7, Canada.
2. I am a graduate of McGill University, with a Bachelor of Engineering in Mining in 2010.
3. I am a member of the Engineers and Geoscientists of British-Columbia (EGBC 176727), the Ordre des Ingénieurs du Québec (OIQ 5016750), and the Nevada State Board of Professional Engineers & Land Surveyors (NVBPELS 025156)
4. My relevant experience includes 15 years of experience working for engineering consultants, and mining operations. I have been involved in numerous Preliminary Economic Assessments, Prefeasibility and Feasibility Studies for the mining industry.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am responsible for the following chapters and sections: 1, 2, 3.2, 18, 18.1, 18.2, 18.2.1, 18.2.1.1, 18.3, 18.3.5, 18.3.5.4, 18.3.6, 18.3.6.7, 18.3.6.9, 18.4, 19, 21, 21.1, 21.1.1, 21.1.2, 21.1.2.1, 21.1.2.2, 21.1.3, 21.1.4, 21.1.4.6, 21.1.4.10, 21.1.4.11, 21.1.5, 21.1.5.6, 21.1.5.7, 21.2, 21.2.1, 21.2.2, 21.2.7, 21.2.8, 22, 25, 26 and 27.
8. I have visited the proposed Mine Site Complex in Wells and the Bonanza Ledge site on November 8, 2024.
9. I have prior involvement with the property that is the subject of the Technical Report. I was the lead integrating engineer for the Preliminary Economic Assessment ("PEA") report for the Cariboo Gold Project prepared for Barkerville Gold Mines Ltd. dated August 18, 2019, for the PEA report prepared for Osisko Development Corp. dated May 24, 2022, and for the Feasibility Study report prepared for Osisko Development Corp., dated January 10, 2023 and amended January 12, 2023.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Amanda Fitch, P.Eng.

Alius Mine Consulting
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www.aliusmining.com

CERTIFICATE OF QUALIFIED PERSON

Sebastien Guido, P.Eng., M.Sc.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

I, Sebastien Guido, P.Eng., M.Sc., as a co-author of the Technical Report, do hereby certify that:

1. I am a Senior Engineer, Rock Mechanics with Alius Mine Consulting Inc., located at 985 rue du Mont-Saint-Denis, Quebec City, Québec, Canada, G1S 1B4.
2. I am a graduate of Université Laval (Bachelor of Engineering) in Mining Engineering. I also obtained a Master of Science from the same university.
3. I am a member of the Ordre des ingénieurs du Québec (OIQ No. 5067847) and Engineers and Geoscientists British Columbia (EGBC No. 53592).
4. My relevant experience includes ten years in various roles, including a site geotechnical engineer, a consulting engineer and in academia (undergraduate level). I have actively worked as a geotechnical engineer since 2015.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for Section 16.2. I am also co-author of the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have visited the Cariboo Property that is the subject of the Technical Report, on January 20 and 21, 2025 as part of this current mandate.
9. I have had prior involvement with the Cariboo Project that is the subject of the Technical Report as I supported the mine during the construction of the Cow Portal, the underground development and bulk sample associated with the Lowhee Zone. I have also supported the mine engineering team at Bonanza Ledge from July 2021 to August 2024.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Sebastien Guido, P.Eng., M. Sc.

CERTIFICATE OF QUALIFIED PERSON

Philip Clark, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

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

1. I am employed as a senior transmission line engineer/VP, Operations with the firm Clean Energy Consulting Inc., located at 640 - 650 West Georgia St, Vancouver, BC V6B 4N8, Canada.
2. I am a graduate of the University of Canterbury, Christchurch, New Zealand with a Bachelor of Mechanical Engineering (with Honours), 2007.
3. I am a member of I am a member of Engineers and Geoscientists BC (EGBC), registration #46421
4. My relevant experience includes more than 15 years in the areas of transmission lines and power supply. I have been directly involved in all levels of engineering studies from conceptual designs, preliminary economic assessments (PEAs), pre-feasibility studies, feasibility studies, and detailed design on various projects.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for the preparation of Section(s) 18.3.6.6, 18.4.2, 21.2.4, and coauthor for the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have not visited the Property that is the subject of the Technical Report, as it was not required for the purpose of this mandate.
9. I have had no prior involvement with the Property that is the subject of the Technical Report. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
10. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Philip Clark, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

Rob Griffith, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

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

1. I am a sub-consultant to the firm Falkirk Environmental Consultants Ltd., located at 1199 West Hastings St, Vancouver, BC, V6E 3T5.
2. I graduated with a bachelor's degree in water resources engineering from the University of Guelph in 2002.
3. I am a practising member of Engineers and Geoscientists BC (EGBC), licence number 32112.
4. I have over 20 years of experience in consulting for the mining industry. Relevant experience includes hydrologic and meteorological site characterization, water management planning, hydraulic design, water balance modelling and water quality modelling.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for Sections 16.3, 18.3.2 and 20.3.3.1. I am also co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have not visited the Property that is the subject of the Technical Report, as it was not required for the purpose of this mandate.
9. I have had prior involvement with the Property that is the subject of the Technical Report as I have participated on previous reports titled:
   - Bonanza Ledge Mine, Water Balance and Water Quality Model 2022 Update – Round Two, Prepared by Mavin Terra Solutions. Prepared for Barkerville Gold Mines Ltd. December 31, 2022.
   - Bonanza Ledge Mine, Post Closure Water Balance and Water Quality Model Validation Plan, Prepared by Mavin Terra Solutions. Prepared for Barkerville Gold Mines Ltd. December 31, 2022.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Rob Griffith, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

Katherine Mueller, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

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

1. I am a Professional Engineer with the firm Falkirk Environmental Consultants Ltd., located at 378 Esplanade E, North Vancouver, BC V7L 1A4.
2. I am a graduate of University of Saskatchewan, with a BSc in Engineering.
3. I am a practising member of Engineers and Geoscientists BC, membership #40116.
4. I have 26 years' experience as an engineer. My relevant experience includes environmental and regulatory compliance management for mining operations, including comprehensive expertise in environmental assessment and mine permitting in British Columbia.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for the preparation of Sections 4.6, 4.7, and Chapter 20, except Sections 20.3.1 and 20.3.2. I am also co-author of the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have visited the Cariboo Property that is the subject of the Technical Report, on June 15 and 16, 2022.
9. I have prior involvement with the Property that is the subject of the Technical Report. I was a qualified person for the Preliminary Economic Assessment report for the Cariboo Gold Project prepared for Osisko Development Corp., dated May 24, 2022, and for the Feasibility Study report prepared for Osisko Development Corp., dated January 10, 2023 and amended January 12, 2023.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and guidelines.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Katherine Mueller, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

Nikolay Sidenko, P.Geo.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

I, Nikolay Sidenko, P.Geo., as a co-author of the Technical Report, do hereby certify that:

1. I am a Principal Geochemist with the firm Falkirk Environmental Consultants Ltd., located at 1199 West Hastings St, Vancouver, BC, V6E 3T5.
2. I am a graduate of Novosibirsk State University (Russia) with a Master of Science degree in geochemistry
3. I am a practising member of the Association of Professional Engineers and Geoscientists of British Columbia (Member #45969).
4. My relevant experience includes 29 years of combined academic and consulting experience in geochemistry of mine waste and acid rock drainage.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for Section 20.3.1, 20.3.2., 20.3.3.2., and co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have not visited the property that is the subject of the Technical Report as it was not required for the purpose of this mandate.
9. I have had no prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Nikolay Sidenko, P.Geo.

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CERTIFICATE OF QUALIFIED PERSON

Eric Lecomte, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

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

1. I am a Senior Engineer at InnovExplo Inc., 560 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. I am a graduate from Laval University, Québec, Canada with a Bachelor's degree in Mining Engineering in 1998.
3. I am a Professional Engineer registered with the Ordre des ingénieurs du Québec (OIQ Licence: 122047), Professional Engineers of Ontario (PEO 100574333), and Professional Engineers and Geoscientists of British-Colombia (EGBC 56488).
4. I have worked as Mine Engineer for a total of twenty-four (24) years since graduating from university. My expertise was acquired while working as a mining engineer. During these years, I have occupied different positions, both technical and operational, related to mining engineering, and this, in underground operations as well as in open pit
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible of Chapter 15 and Sections 14.12, 16.1, 16.4, 16.5, 16.8, 16.9, 16.10 and Sections 21.1.4.1, 21.1.5.1, 21.1.5.8, 21.2.3 (except for 21.2.3.10). . I am also co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have visited the Cariboo Project that is the subject of the Technical Report, on February 25, 2022 and on September 11, 2024.
9. I have prior involvement with the property as I was a qualified person for the Preliminary Economic Assessment report for the Cariboo Gold Project prepared for Osisko Development Corp. and dated May 24, 2022, and the Feasibility Study for the Cariboo Gold Project dated January 10, 2023, and amended January 12, 2023.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Eric Lecomte, P.Eng.

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CERTIFICATE OF QUALIFIED PERSON

Carl Pelletier, P.Geo.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

I, Carl Pelletier, P.Geo., as a co-author of the Technical Report, do hereby certify that:

1. I am the Director of Mining at InnovExplo Inc., 560 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. I graduated with a Bachelor's degree in Geology (B.Sc.) from *Université du Québec à Montréal* (Montréal, Québec) in 1992, and I initiated a Master's degree at the same university for which I completed the course program but not the thesis.
3. I am a member of the Ordre des Géologues du Québec (OGQ, no. 384), the Association of Professional Geoscientists of Ontario (APGO, no. 1713), the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC, no. 43167) and of the Canadian Institute of Mines (CIM).
4. My relevant experience includes a total of 31 years since my graduation from university. My mining expertise has been acquired at the Silidor, Sleeping Giant, Bousquet II, Sigma-Lamaque and Beaufor mines. My exploration experience has been acquired with Cambior Inc. and McWatters Mining Inc. I have been a consulting geologist for InnovExplo Inc. since February 2004 where I contributed to multiple mandates of mineral resources estimation. I have relevant experience in various types of mineral deposits: precious metals (Au, Ag), base metals (Cu, Zn, Ni), industrial and high technology (graphite, Li, Be, Ta, U, Sc and REE) as well as for different types of operations (underground and open pit mines).
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101
7. I am author and responsible for the following Chapters and Sections: 3.1 and 23. I am co-author and share responsibility on Chapters and Sections 4.1 to 4.5, 5 through 12 and 14 except 14.12. I am also co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27.
8. I have visited the Cariboo Project on two different occasions, February 1-4, 2016 and on May 3-12, 2016.
9. I have prior involvement with the Property that is the subject of the Technical Report. I was a qualified person for the NI 43-101 Technical Report for the Cariboo Gold Project and Mineral Resource Estimate ("MRE") on the Barkerville Mountain Deposit dated May 16, 2017, the NI 43-101 Technical Report and MRE Update for the Cariboo Gold Project dated June 14, 2018, the NI 43-101 Technical Report and MRE Update for the Cariboo Gold Project dated July 11, 2019, the Preliminary Economic Assessment ("PEA") report for the Cariboo Gold Project prepared for Barkerville Gold Mines Ltd. dated August 18, 2019, the PEA report prepared for Osisko Development Corp. dated May 24, 2022, and the Feasibility Study for the Cariboo Gold Project dated January 10, 2023 and amended January 12, 2023.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Carl Pelletier, P.Geo.

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CERTIFICATE OF QUALIFIED PERSON

Tessa Scott, P.Geo.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

I, Tessa Scott, P.Geo., as a co-author of the Technical Report, do hereby certify that:

1. I am a Senior Resource Geologist with the firm InnovExplo Inc. located at 1245 Brickyard Rd g30, Salt Lake City, UT 84106, USA.
2. I am a graduate of Western Washington University with a bachelors in geology.
3. I am a practicing member of Engineers and Geoscientists BC, membership #169677.
4. My relevant experience includes 14 years as a geologist for mining operations and as a consultant. I have worked on numerous exploration and mining projects,
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am a co-author and share responsibility for the following Chapters and Sections: 4.1 to 4.5, 5 through 12, and 14 except 14.12. I am also co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27.
8. I have not visited the proposed Mine Site Complex in Wells and the Bonanza Ledge for the purpose of the Technical Report.
9. I have prior involvement with the Property that is the subject of the Technical Report. I was the chief resource geologist from 2017 to the end of 2021. I was involved in the 3D modeling and estimation for the NI 43-101 Technical Report and Mineral Resource Estimate Update for the Cariboo Gold Project dated June 14, 2018, the NI 43-101 Technical Report and Mineral Resource Estimate Update for the Cariboo Gold Project dated July 11, 2019, and the Preliminary Economic Assessment ("PEA") report for the Cariboo Gold Project prepared for Barkerville Gold Mines Ltd. dated August 18, 2019.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Tessa Scott, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

A.J. MacDonald, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

I, A.J. MacDonald, P.Eng., as a co-author of the Technical Report, do hereby certify that:

1. I am Vice President, Engineering / Senior Technical Specialist with Integrated Sustainability Consultants Ltd., located at Suite 620 - 1050 West Pender Street, Vancouver BC, V6C 3S7, Canada.
2. I am a graduate of Queen's University, Kingston, Canada (B.Sc., 2005) and Carleton University, Ottawa, Canada (M.A.Sc., 2007).
3. I am a Professional Engineer, and member of Engineers and Geoscientists British Columbia, Association of Professional Engineers and Geoscientists of Alberta, Association of Professional Engineers and Geoscientists of Saskatchewan, Professional Engineers Ontario, Professional Engineers Yukon, Engineers and Geoscientists New Brunswick, Professional Engineers and Geoscientists of Newfoundland and Labrador, and Nevada Board of Professional Engineers and Land Surveyors.
4. I have practiced my profession for 19 years. I have been involved or associated with the mining industry since 2007. I have participated in dozens of mining and other resource sector projects, with a particular focus on water treatment process engineering, primarily in Western North America. My experience spans all phases of project delivery including preliminary analysis, conceptual design, detailed design, construction, commissioning and optimization of infrastructure at industrial water treatment facilities in Canada and around the world.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for Sections 18.3.5.2, 18.3.6.4, 21.1.4.5, 21.2.6. I am also co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have not personally visited the Property that is the subject of the Technical Report, as it was not required for the purpose of this mandate.
9. I have had prior involvement with the Property that is the subject of the Technical Report as I have participated as qualified person on the previous report titled NI 43-101 Feasibility Study for the Cariboo Gold Project prepared for Osisko Development Corp., dated January 10, 2023 and amended January 12, 2023.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

A.J. MacDonald, P.Eng.

900-999, West Hastings St.
Vancouver, BC, V6C 2W2

CERTIFICATE OF QUALIFIED PERSON

Jean-François Maillé, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

I, Jean-François Maillé, P.Eng., as a co-author of the Technical Report, do hereby certify that:

1. I am a Project Manager with JDS Energy & Mining Inc., located at 900-999, West Hastings St., Vancouver, BC.
2. I am a graduate of École de Technologie Superieure (ÉTS) in Montreal, Québec.
3. I am a member in good standing of the Ordre des ingénieurs du Québec (OIQ) member #143426.
4. I have 18 years of experience as a project manager. My relevant experience includes mining construction and heavy civil projects.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am responsible for the following chapters and sections 18.3.1, 18.3.5.3, 18.3.5.5, 18.3.6.1, 18.3.6.2, 18.3.6.3, 18.3.6.5, 18.3.6.8, 18.4.1, 21.1.2.3, 21.1.4.4, 21.1.4.7, 21.1.4.9, 21.1.5.4, 21.1.5.5, 21.3, 24. I am also co-author of the relevant portions of Chapters 1, 2, 25, 26, 27.
8. I have visited the proposed Mine Site Complex in Wells and the Bonanza Ledge Site on October 21 and 22, 2024. This site visit was intended as a refresher after having previously carried out field work at the Bonanza Ledge site from January to September 2021 that is the subject of the Technical Report.
9. I have prior involvement with the Property that is the subject of the Technical Report, as I was a qualified person for the NI 43_101 Feasibility Study for the Cariboo Gold Project prepared for Osisko Development Corp., dated January 10, 2023 and amended January 12, 2023. I have been under contract by Barkerville Gold Mines Ltd., wholly subsidiary of Osisko Development Corp. since 2021 to perform construction management on site.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and guidelines.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Jean-François Maillé, P.Eng.

CERTIFICATE OF QUALIFIED PERSON

Yapo Allé-Ando, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

I, Yapo Allé-Ando, P.Eng., as a co-author of the Technical Report, do hereby certify that:

1. I am Professional Engineer with M.A. O'Kane Consultants Inc., located at 905C Industrial Road 2, V1C 4C9 Cranbrook, British Columbia, Canada.
2. I am a graduate of École Polytechnique Montréal, with a Bachelor of Engineering in Engineering Physics in 2001 and of the University of British Columbia with a Master of Applied Science in Civil Engineering in 2005.
3. I am a member of Engineers and Geoscientists BC (EGBC 39379), Engineers Yukon (4146) and Association of Professional and Geoscientists of Alberta (APEGA 320327).
4. My relevant experience includes over 20 years in the mining industry with expertise on mine water management and water stewardship, including water strategy, policy, governance frameworks, management standards, and sustainability development initiatives. My technical expertise includes climate and hydrology studies, infrastructure design, water balance modelling, and mine water management planning.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for Sections 18.2.1.2 and 18.3.3 and 18.3.4. I am also co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I have visited the Mine Site Complex and Bonanza Ledge site on October 2-3, 2024 as part of this current mandate.
9. I have had no prior involvement with the Property that is the subject of the Technical Report.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Yapo Allé-Ando, P.Eng.
M.A. O'Kane Consultants Inc.

CERTIFICATE OF QUALIFIED PERSON

Rachel Sawyer, P.Eng.

This certificate applies to the NI 43-101 Technical Report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" (the "Technical Report"), prepared for Osisko Development Corp., dated June 11, 2025, and effective as of April 25, 2025.

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

1. I am a Professional Engineer with M.A. O'Kane Consultants Inc., located at 700 – 1000 7th Ave SW, T2P 5L5, Calgary, Alberta, Canada.
2. I am a graduate of the University of Saskatchewan, with a Bachelor of Science in Geological Engineering in 1999.
3. I am a member of Engineers and Geoscientists BC (EGBC 58041), Association of Professional Engineers and Geoscientists (APEGA 72617), Engineers Yukon (EY 3858), Professional Engineers Ontario (PEO 100636663), Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG L5747).
4. My relevant experience includes over 25 years in the mine and tailings industry in both consulting and directly for the operator. My experience spans from conceptual design through to construction, operations, and closure of complex mine and tailings earthwork structures. I have led large field teams and integrated planning groups responsible for the tactical haulage and construction plans through to the strategic life-of-mine plans.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am author and responsible for the preparation of Sections 18.2.2 and 18.3.5.1. I am also co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27 of the Technical Report.
8. I did not personally visit the Cariboo Property that is the subject of the Technical Report.
9. I have had prior involvement with the Property that is the subject of the Technical Report. I was a Qualified Person for the Cariboo Gold Project – Waste Rock Storage Facility Phase 1 Detailed Design and Specifications prepared for Osisko Development Corp. dated October 23, 2024.
10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 11th day of June 2025.

Signed and sealed on file

Rachel Sawyer, P.Eng.
M.A. O'Kane Consultants Inc.

CERTIFICATE OF QUALIFIED PERSON PAUL GAUTHIER, P.Eng.

I, Paul Gauthier, P.Eng, state that:

(a) At the effective date of the Technical Report, I was a Senior Principal Mining Engineer at:
WSP Canada Inc.
1135, boulevard Lebourgneuf,
Quebec, QC, Canada, G2K 0M5

(b) This certificate applies to the technical report titled "Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" with an effective date of: Aprill 25, 2025 (the "Technical Report").

(c) I am a "qualified person" for the purposes of National Instrument 43-101 ("NI 43-101"). My qualifications as a qualified person are as follows. I am a graduate of Laval University with a B. SC in Mining Engineering in 1977 and am registered with Ordre de Ingénieurs du Québec (OIQ #31178), Professional Engineer Ontario (PEO, #100080984) and Professional Engineer and Geoscientist of BC (#56779). My relevant experience after graduation and over 45 years for the purpose of the Technical Report includes working in the mining engineering operation departments in different roles for over 45 years in different commodities mines such as base metal, gold and diamond. I have also managed multiple feasibility studies of simple and complex natures from scoping through feasibility studies, detailed engineering, and mine development in Canada and USA.

(d) The requirement for a site visit is not applicable to me.

(e) I am responsible for Sections 16.6, 16.7, 21.1.4.2, 21.1.4.3, 21.1.5.2, 21.1.5.3, 21.2.3.10 of the Technical Report, and co-author for the relevant portions of Chapters 1, 2, 25, 26 and 27.

(f) I am independent of the issuer as described in section 1.5 of NI 43-101.

(g) My prior involvement with the property that is the subject of the Technical Report is as follows. I was a qualified person for the PEA report prepared for Osisko Development Corp. dated May 24, 2022, and for the Feasibility Study report prepared for Osisko Development Corp., dated January 10, 2023, and amended January 12, 2023.

(g) I have read NI 43-101 and the part of the Technical Report for which I am responsible has been prepared in compliance with NI 43-101; and

(h) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of Technical Report for which I am responsible, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated in Quebec City, Quebec, this 11th of June 2025

Signed and sealed on file

________________________________ [Professional Seal or Stamp]

[Signature of Qualified Person]

____

Paul Gauthier, P.Eng. Professional Engineer and Geoscientist of BC (#56779)

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

List of Abbreviations and Units of Measurement

Abbreviation	Description
$ or CAD	Canadian dollar
$/oz	dollars per ounce
$/t	dollars per tonne
%	percent
¢/kWh	cents per kilowatt hour
°C	degrees Celsius
µm	micron
3D	three dimensional
A	ampere
AACE	American Association of Cost Engineers
AAS	atomic absorption spectroscopy
ABA	acid-base accounting
ADSS	all-dielectric self-supporting
Ag	silver
Ai	abrasion index
AIS	air insulated switchgear
AISC	all-in sustaining cost
Al	aluminum
Al_2O_3	aluminium oxide
Alius	Alius Mining Consulting Ltd.
ALR	Agricultural Land Reserve
ALS	ALS Minerals
ARD	acid rock drainage
As	Arsenic
ASG	apparent specific gravity
ATV	all-terrain vehicle
Au	gold
Au-in soil	gold-in-soil
AXPL	axial planar
Ba	barium
Bar	unit of pressure equal to 100,000 Pa (100 kPa)
Base Met Labs	Base Metallurgical Laboratories Ltd.
BBA	BBA Engineering Ltd.
BC	British Columbia statutory
BCEAA	*British Columbia Environmental Assessment Act*

Abbreviation	Description
BCMWRPRC	British Columbia Mine Waste Rock Pile Research Committee
BCSC	British Columbia Securities Commission
BGM	Barkerville Gold Mines Ltd.
BH	borehole
BL	Bonanza Ledge
BM	Barkerville Mountain
BM-CM-IM	Barkerville Mountain-Cow Mountain-Island Mountain
BMPs	Best Management Practices
BOM	bill of material
BWi	Bond work index
C	carbon
CA	channel aggregation
CAA	Caribou Assessment Area
CAC	criteria air contaminants
CAM	Chlumsky, Armbrust and Meyer LLC
CaO	calcium oxide (lime)
CAPEX	capital expenditure
CB	cable bolt
CCLUP	Cariboo Chilcotin Land Use Plan
CDC	Conservation Data Centre
Ce	cerium
CEC	Clean Energy Consulting Inc.
CEMP	Construction Environmental Management Plan
CFM	cubic feet per minute
CGL	conglomerate
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIP	carbon-in-pulp
Cl	chloride
CLMV	Calcareous Mafic Volcaniclastic
CLSI	calcareous siltstone
CLSS	calcareous sandstone
cm	centimetre
CM	Cow Mountain
cm^3	cubic centimetre
CMS	Cavity Monitoring System
CMT	Construction Management Team
CN	cyanide

Abbreviation	Description
Co	cobalt
CoG	cut-off grade
Conc.	concentrate
COO	Chief Operating Officer
COPC	constituent of potential concern
CPT	cone penetration test
Cr	chromium
CRD	Cariboo Regional District
CRM(s)	certified reference material(s)
CSA	Canadian Standards Association
CSI	carbonaceous siltstone
CTO	cease trade order
Cu	copper
CWi	Crusher Work index
CZ	Cow Zone
d	day (24 hours)
Datamine	Datamine Studio™ RM Pro 1.11.300.0
DDH	diamond drill hole
deg or °	angular degree
DFO	Department of Fisheries and Oceans
DMR	digital mobile radio
DRIPA	BC's *Declaration on the Rights of Indigenous Peoples Act*
DRP	Decommissioning and Closure Plan
DSO	Deswik Stope Optimizer
DTH	down the hole
DWi	DWI = Drop Weight index
EA	Environmental Assessment
EAC	Environmental Assessment Certificate
EAO	Environmental Assessment Office
EBA	EBA Engineering Consultants Ltd.
EBIT	earnings before interest and tax
ECCC	Environment and Climate Change Canada
EDF	Environmental Design Flood
EGBC	Engineers & Geoscientists British Columbia
E-GRG	extended gravity recoverable gold test
EL	elevation
ELOS	estimated linear overbreak and sloughing

Abbreviation	Description
EMA	*Environmental Management Act*
EMLI	BC Ministry of Energy, Mines and Low Carbon Innovation
ENV	Ministry of Environment and Parks
EOH	end of hole
EPCM	Engineering, Procurement, Construction Management
ERT	Emergency Response Team
ESS	electrical substation
et al.	et alla (and others)
EXT	extensional
F_{80}	80% passing - feed size
FA	fire assay
FAAS	Flame Atomic Absorption Spectroscopy
Falkirk	Falkirk Environmental Consultants Ltd.
FCF	Free Cash Flow
Fe	iron
Fe_2O_3	iron (III) oxide
FEC	Falkirk Environmental Consulting
FIDQ	Fish Inventories Data Queries (Fisheries Information Data Queries)
FIFO	fly-in fly-out
FLNRORD	Forests, Lands, Natural Resource Operations, and Rural Development
FMR	flood management reservoir
FoS	factor of safety
FS	Feasibility Study
FSR	forest service road
ft or '	feet (12 inches)
FW	footwall
g	gram
G&A	general and administration
GA	general arrangement
GAC	granular activated carbon
GEMS	GEOVIA GEMS™ software v.6.7
Geoex	Geoex Ltd.
GHG	Green House Gas
GHz	gigahertz
Gold City Mining	Gold City Mining Corp.
Golden Cariboo	Golden Cariboo Resources Ltd.
Golder	Golder Associated Ltd.

Abbreviation	Description
GPa	gigapascal
Gpr	grams per revolution
h	hour (60 minutes)
h/day	hour per day
ha	hectare
HADD	harmful alteration, disruption, or destruction
HCT	humidity cell test
HDPE	high-density polyethylene
HDS	High-Density Sludge
HIT	Hardness Index Test
HMI	human-machine interface
hp	horsepower
HQ	HQ - drill core diameter (63.5 millimetres)
HSE	health, safety and environment
HSRC	Health, Safety, and Reclamation Code
Hudson Bay	Hudson Bay Mining and Smelting Co. Ltd.
HVAC	heating, ventilation, and air conditioning
HW	hanging wall
Hy-Tech	Hy-Tech Drilling Ltd.
I/O	input/output
IBA	Impact Benefit Agreement
ICP	inductively coupled plasma
ICP-MS	inductively coupled plasma mass spectroscopy
ID	identification
ID2	inverse distance squared
IDF	Inflow Design Flood
IEC	International Electrotechnical Commission
IFA	Issued for Approval
IFC	Issue for Construction
IGM	Island Mountain Gold Mines Ltd.
IHA	Interior Health Authority
IM	Island Mountain
in or "	inch
InnovExplo	InnovExplo Inc.
IOT	Integrated Operations Team
IP	induced polarization
IRR	internal rate of return

Abbreviation	Description
IRS	intact rock strength
IS	Integrated Sustainability Consultants Ltd.
ISO	International Organization for Standardization
IT	information technology
IWAs	Important Wildlife Areas
IWGM	International Wayside Gold Mines Ltd.
JDS	JDS Energy & Mining Inc.
JPA	Joint Permit Application
K	potassium
K_2O	potassium oxide
K_{80}	80% passing – particle size
KCB	Klohn Crippen Berger Consultants
KCC	KCC Geoconsulting Inc.
kcfm	kilowatt cubic foot per minute
kg	kilogram
kgD.S	kilogram dry solid
KL	KL Zone (deposit) separately
km	kilometre
kN	kilonewton
koz	thousand ounces
kPa	kilopascal
kt	kilotonne
kV	kilovolt
kW	kilowatt
kWh	kilowatt hour
L	litre
La	lanthanum
lb	pound(s)
LBMA	London Bullion Market Association
LCT	locked cycle test
LeapFrog	LeapFrog GEO™ v.2021.2.4
LECO	A type of elemental analyzer
LHD	load-haul-dump (scooptram)
Li	lithium
LOM	life of mine
LOO	License of Occupation
LP	layer parallel

Abbreviation	Description
LPG	Liquified petroleum gas
LPT	large penetration testing
LSA	local study area
LST	limestone
LST	limestone
LTE	long-term evolution
m	metre
M	million
m^2	square metre
m^3	cubic metre
m^3/day	cubic metres per day
m^3/s/kW	cubic metres per second per kilowatt
Ma	mega annum (million years)
masl	metres above sea level
MBBR	moving bed biofilm reactor
Mbps	Megabits per second
MBR	membrane biological reactor
MC	Mosquito Creek
MCC	Motor Control Centre
MCM	Mining and Critical Minerals
MD&A	Management Discussion and Analysis
mesh	US Mesh
Mg	magnesium
mg	milligram
MgO	magnesium oxide
Mi	ore work index (includes Mia, Hih and Mic)
Mia	coarse ore work index
MIBC	methyl isobutyl carbinol
Mic	Crushing ore work index
Mih	HPGR ore work index
Min	minimum
min	minute (60 seconds)
MINFILE	Mineral Inventory of BC
ML	metal leaching
ml	millilitre
MLARD	Metal Leaching and Acid Rock Drainage
mm	millimetre

Abbreviation	Description
MnO	manganese(II) oxide
MOF	Ministry of Forests
Mosquito Creek Gold	Mosquito Creek Gold Mining Company Ltd.
MOTI	Ministry of Transportation and Infrastructure
Moz	million ounces
MPa	megapascal
mPa	millipascal
mPa.s	Millipascal-second
MRE	Mineral Resource Estimate
MRMR	Mineral Resources and Mineral Reserves
M-S	mesh-strap
MSC	Mine Site Complex
msl	mean sea level
MSO	Minable Shape Optimiser®
Mt	million tonnes
MTO	material take off
MVA	mega volt ampere
MW	megawatt
MX	mineral exploration (permit)
MZ	Mosquito Zone
Na	sodium
Na_2O	sodium oxide
NaCN	sodium cyanide
NE	northeast
Newmont	Newmont Mining Corporation
NF	nanofiltration
NHA	Northern Health Authority
Ni	nickel
NI 43-101	National Instrument 43-101
NN	nearest neighbour
No. or #	number
NO_2	nitrogen dioxide
NPAG	non-potentially acid generating
NPC	Natal Portland Cement
NPV	net present value
NQ	NQ - drill core diameter (47.6 millimetres)
NS	no sample

Abbreviation	Description
NSR	net smelter return
NYSE	New York Stock Exchange
Ø	diameter
O&M	Operation and Maintenance
O/S	oversize
ODV or the Company	Osisko Development Corp.
OGR	Osisko Gold Royalties Ltd.
OK	ordinary kriging
Okane	M.S. O'Kane Consultants Inc.
OPEX	operational expenditure
OREAS	Ore Research and Exploration Pty Ltd.
OSC	ore sorter concentrate
oz	troy ounce
P_2O_5	phosphorus pentoxide
P_{80}, P80	80% passing - product size
Pa	pascal
Pa·s	pascal-second
PAG	potentially acid generating
Pan Orvana	Pan Orvana Resources Inc.
PAX	potassium amyl xanthate
Paycore	Paycore Drilling
Pb	lead
PD	positive displacement
PDT	project development team
PEA	preliminary economic assessment
Peregrine	Peregrine Petroleum Ltd.
PFS	pre-feasibility study
pH	potential of hydrogen
PLC	programmable logic controller
PoC	Push-to-talk Over Cellular
PPE	personal protective equipment
ppm	parts per million
PQ	PQ – drill core diameter (85.0 millimetres)
PSD	particle size distribution
psi	pounds per square inch
Q1, Q2, Q3, Q4…	first, second, third, forth… quarter

Abbreviation	Description
QA/QC	quality assurance / quality control
QEMSCAN	quantitative evaluation of materials by scanning electron microscopy
QP(s)	qualified person(s)
QR	Quesnel River
QR Mill	Quesnel River Mill
QSRMP	Quesnel Sustainable Resource Management Plan
R&D	research and development
RB	rebar
RCP	Reclamation and Closure Plan
RFP	request for proposal
RLCE	Reclamation Liability Cost Estimate
RMR	rock mass rating
RO	Reverse Osmosis
ROM	run of mine
rpm	rotations per minute
RQD	rock quality designation
RSA	regional study area
RWi	Road Work index
s	second
S	sulphur
SARA	*Species at Risk Act*
SC	shotcrete
SCP	Sediment Control Pond
SCSE	SAG Circuit Specific Energy
SD	standard deviation
SDM	Statutory Decision Maker
Se	selenium
SEDAR+	System for Electronic Document Analysis and Retrieval
SG	specific gravity
SGS	Société Générale de Surveillance
SI	siltstone
SiO_2	silica dioxide
SMA	Screen metallic analysis
Snowden	Snowden Mining Industry Consultants Pty
SOP	standard operating procedure
SP	self-potential
Sr	strontium

Abbreviation	Description
SRK	SRK Consulting (Canada) Inc.
SS	sandstone
SST	site services team
st	short ton (2,000 lb)
Supervisor	Datamine Supervisor v.8.14.3
SZ	Shaft Zone
t	tonne (1,000 kg) (metric ton)
t CO_2eq	Tonnes of carbon dioxide equivalent
t CO_2eq	tonne carbon dioxide equivalent
Talisker	Talisker Exploration Services Inc.
TCC	total cash cost
TCS	triaxial compressive strength
TiO_2	titanium dioxide
TL	Transmission Line
TOC	total organic carbon
tpd	tonnes per day
tph	tonnes per hour
TSF	tailings storage facility
TSS	total suspended solids
TSX	Toronto Stock Exchange
TSXV	TSX Venture Exchange
U	uranium
U/F	underflow
U/G	underground
U/S	undersize
UCS	uniaxial or unconfined compressive strength
UDS	underground distribution system
UF	ultrafiltration
U-Pb	uranium-lead (dating)
USD	United States dollar (example of use: USD 2.5M)
USWG	United States Water Gallon
UTM	Universal Transverse Mercator
UWR	Ungulate Winter Range
V	vanadium
V	volt
VCs	valued components
VLF-EM	very-low-frequency electromagnetic

Abbreviation	Description
vs	versus
VWP	vibrating wire piezometer
VZ	Valley Zone
w/w	weight per weight
WAN	wide area network
WBM	water balance model
WBS	work breakdown structure
Wells	District of Wells
WGC	World Gold Council
WHA	Wildlife Habitat Area
WLRS	Ministry of Water, Land, and Resource Stewardship
WMP	water management plan
WQM	water quality model
WRSF	waste rock storage facility
WSP	WSP Canada Inc.
wt%	percentage by weight
wt% solids	percent solids by weight
WTP	water treatment plant
WTS	water treatment system
WWM	welded wire mesh
XRD	X-ray diffraction
XRT	X-ray transmission
y	year (365 days)
Zn	zinc
Zr	zirconium

1. Summary

This NI 43-101 Technical Report Feasibility Study ("FS") for the Cariboo Gold Project (the "Project") (the "Report") was prepared and compiled by BBA Engineering Ltd. at the request of Osisko Development Corp. ("ODV"). The Project is an advanced stage gold exploration project located in the historic Wells-Barkerville mining camp, in the District of Wells ("Wells"), British Columbia ("BC"), Canada. The purpose of this Report is to summarize the results of the FS for the Project in accordance with the guidelines of the Canadian Securities Administrators National Instrument 43-101 ("NI 43-101") and Form 43-101F1.

This Report was prepared based on contributions from several independent consulting firms including BBA Engineering Ltd. ("BBA"), InnovExplo Inc. ("InnovExplo"), WSP Canada Inc. ("WSP"), JDS Energy & Mining Inc. ("JDS"), Falkirk Environmental Consultants Ltd. ("Falkirk"), Integrated Sustainability Consultants Ltd. ("IS"), M.A. O'Kane Consultants Inc. ("Okane"), Alius Mine Consulting Inc. ("Alius"), and Clean Energy Consulting Inc. ("CEC"). This Study provides a base case assessment for developing the Cariboo Gold deposit as an underground mine with a Services Building, including a concentrator located at the Mine Site Complex ("MSC") at Wells, and a new water treatment plant ("WTP").

The Project is designed for one phase, for a total mine life of 10 years, a concentrator is designed to have a capacity of 4.900 tpd, and a new WTP will be built at the MSC. The waste rock storage facility ("WRSF") will be located at Bonanza Ledge. The Mine Site consists of the MSC and Bonanza Ledge. The Mine Site surface and underground footprints are shown in Figure 1-1.

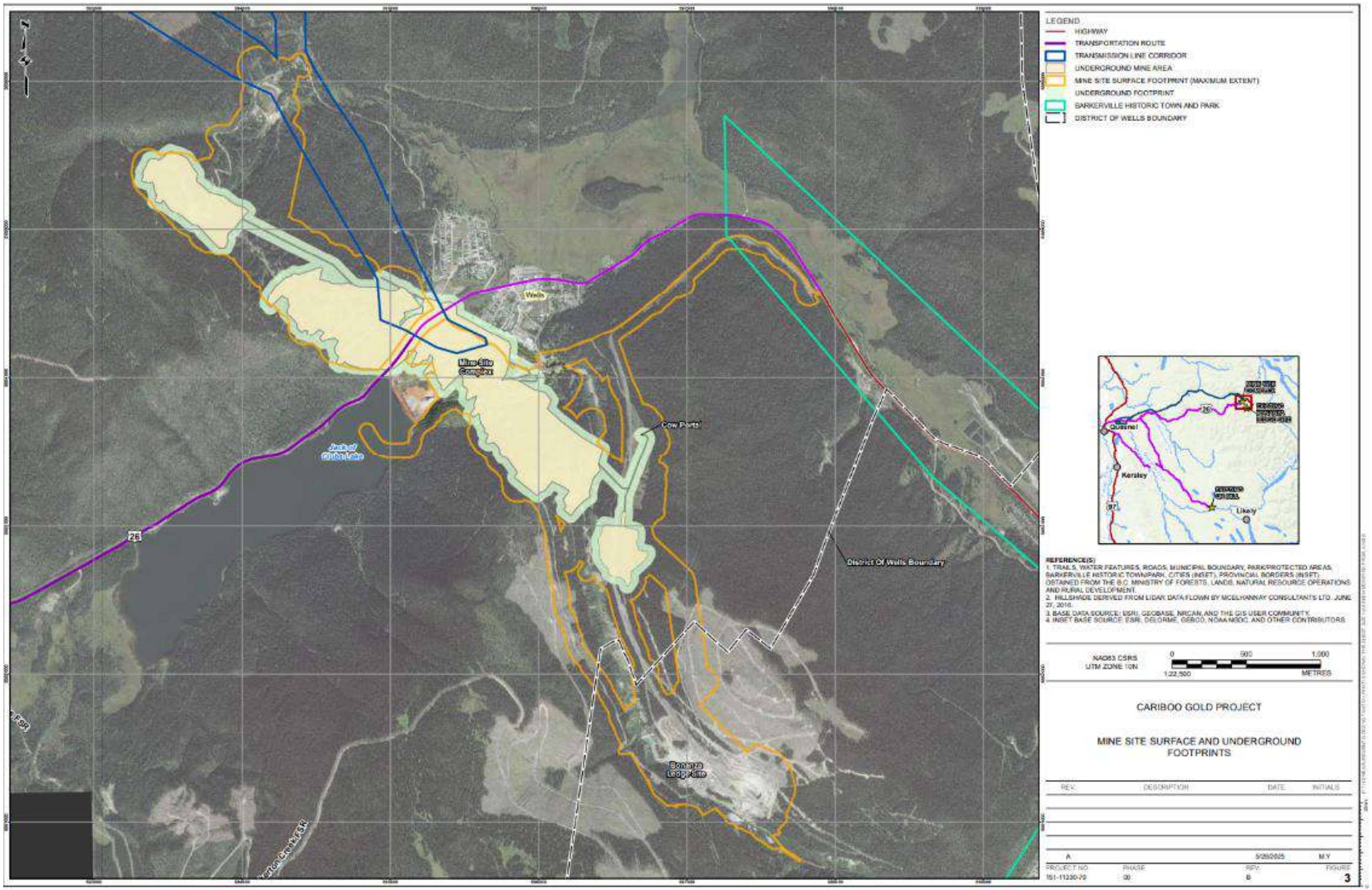


Figure 1-1: Mine Site surface and underground footprint

All monetary units in the Report are in Canadian dollars ("CAD" or "$"), unless otherwise specified. Costs are based on second quarter (Q2) 2025 dollars. Quantity and grades are rounded to reflect that the reported values represent approximations.

1.1 Contributors

The major FS contributors and their respective areas of responsibility are presented in Table 1-1.

Table 1-1: Report contributors

Qualified Person	General Overview of Responsibilities
BBA Engineering Ltd. ("BBA")	
▪ Mathieu Bélisle, P.Eng. ▪ Amanda Fitch, P.Eng.	▪ Metallurgical test work analysis, processing plant design; ▪ Process plant capital and operating costs; ▪ Electrical and IT infrastructure design and costs for the process plant only; ▪ Market studies section and contracts; ▪ General and administration operating costs; ▪ Financial analysis and overall NI 43-101 integration.
InnovExplo Inc. ("InnovExplo")	
▪ Carl Pelletier, P.Geo. ▪ Tessa Scott, P.Geo. ▪ Eric Lecomte, P.Eng.	▪ Current and historical geology, exploration, drilling, sample preparation and QA/QC, and data verification; ▪ Geological modelling and mineral resource estimate; ▪ Mineral reserves estimate; ▪ Underground mine design, mine services (ventilation, dewatering, underground electrical distribution, mine equipment, underground communication network), production scheduling, mine personnel, underground capital costs and operating costs; ▪ Historical data review; ▪ Capital and operating costs for the underground mine (production, development, and services).
WSP Canada Inc. ("WSP")	
▪ Paul Gauthier, P.Eng.	▪ Underground material handling systems; ▪ Backfill strategy, design of distribution system underground, flow model analysis, paste piping and pumps, booster stations; ▪ Capital and operating costs for the underground material handling and paste fill system.

Qualified Person	General Overview of Responsibilities
JDS Energy & Mining Inc. ("JDS")	
▪ Jean-François Maillé, P.Eng.	▪ Surface mobile equipment selection; ▪ Water treatment conveyance infrastructure design (pumping and pipelines); ▪ Fuel storage and distribution; ▪ Site preparation and road designs; ▪ Ancillary facilities including office complex and dry, air intake raises, ERT garage, sewage treatment, potable water treatment, Ballarat Camp; ▪ Construction and execution schedule; ▪ Construction personnel; ▪ Capital and operating costs associated to listed site infrastructure, water and waste management, and indirect capital cost estimation.
Falkirk Environmental Consultants Ltd.	
▪ Katherine Mueller, P. Eng. ▪ Rob Griffith, P.Eng. ▪ Nikolay Sidenko, P.Geo.	▪ Environmental studies; ▪ Environmental liabilities; ▪ Management and monitoring; ▪ Water quantity and quality; ▪ Hydrogeology input to underground mine design; ▪ Geochemistry; ▪ Considerations of Social and Community Impacts; ▪ Mine Closure requirements; ▪ Permitting and required approvals.
Integrated Sustainability	
▪ A.J. MacDonald, P.Eng.	▪ Water treatment design and strategy (for Bonanza Ledge and new MSC); ▪ Capital and operating costs for the water treatment at the Site.
M.A. O'Kane Consultants Inc. (Okane)	
▪ Yapo Allé-Ando, P.Eng. ▪ Rachel Sawyer, P.Eng.	▪ Water management infrastructure strategy and design (Bonanza Ledge and MSC); ▪ Waste rock storage facility strategy and design (Bonanza Ledge).
Alius Mine Consulting Inc. (Alius)	
▪ Sebastien Guido, P.Eng.	▪ Rock mass characterization and rock mechanics input to underground mine design and ground control; ▪ Underground support recommendations.
Clean Energy Consulting Inc. (CEC)	
▪ Philip Clark, P.Eng.	▪ Site electrical distribution and transmission line engineering; ▪ Substation design (MSC); ▪ Initial capital cost estimate for transmission line and substation (leading to preliminary financing agreement).

1.2 Key Project Outcomes

The reader is advised that the results of the FS summarized in this Report are intended to provide an initial, high-level review of the Project and potential design options. The FS has been updated from the 2023 version ("2023 FS") with key changes tabulated in Section 1.3. The FS mine plan and economic model include numerous assumptions. Only Measured and Indicated Mineral Resources are used as the basis for estimating Proven and Probable Reserves, and have been used in the economic analysis as defined by Canadian Securities Administrators' NI 43 101 in FS studies.

The following list details the key Project outcomes of the Report:

- Robust returns with base case after-tax net present value ("NPV") at 5% rate of $943 million ("M"), unlevered after-tax internal rate of return ("IRR") of 22.1% and payback[1] of 2.8 years at $2,400 per ounce ("$/oz") gold price assumption. Using spot gold price of $3,300/oz, NPV5% improves to $2,066M, IRR 38.0%, and payback[1] of 1.6 years;
- Cariboo Gold Mineral Resources: 17.38 million tonnes ("Mt") at 2.88 grams per tonne ("g/t") gold ("Au") (Measured and Indicated) and 18.77 Mt at 3.09 g/t Au (Inferred), exclusive of Mineral Reserves;
- Total Proven and Probable Mineral Reserve: 17.81 Mt at 3.62 g/t Au average diluted gold grade;
- Process recovery of 92.6%;
- Average annual production of ~190,000 ounces ("oz") of gold over a 10-year mine life (202,000 oz in the first 5 years), totalling 1.918 million ounces ("Moz") of gold over life of mine ("LOM");
- First gold anticipated in the second half of Year -1, following 24 months of construction and 6 months of pre-production;
- Average total cash cost ("TCC") of USD 947/oz and All-in Sustaining Costs ("AISC") of USD 1,157/oz over the LOM, placing the Project within the lower half of the global cost curve for gold mines[2];
- Average base case LOM annual Free Cash Flow ("FCF") of $158M ($296M per year in the first 5 years);
- Improved single-phase build over 24 months and direct ramp-up to 4,900 tonnes per day ("tpd") with total initial capital cost of $881M and sustaining capital of $525M over the LOM;
- Reclamation costs of approximately $135M, and a salvage value of approximately $36M;

[1] Payback is calculated from commercial production, which is defined as the achievement of reaching a minimum of 30 consecutive days of operations during which the mill operated at an average of 60% of nameplate throughput of 4,900 tpd.
[2] Based on S&P's Global Market Intelligence, Metals & Mining, 2024 global gold cost curve for TCC and AISC.

- Operating costs (total) of $110.7 per tonne mined;
- LOM taxes and duties of $640.1M and royalties of $292M;
- Streamlined processing facilities into a single location and improved flowsheet design with incorporation of a gravity circuit and production of higher-grade concentrate product;
- Strong support for local employment with up to 613 direct jobs created during peak construction and 525 permanent jobs during operations;
- Significant opportunities to potentially enhance Project economics and extend mine life through conversion of Mineral Resources adjacent to Mineral Reserves through infill drilling.

1.3 Summary of Changes from 2023 Feasibility Study

The 2025 FS incorporates several important improvements and de-risking initiatives over the 2023 FS that better position the Project from an execution, financing, and operational perspective. Notable changes include:

- **Accelerated Development Sequence:** Single-phase construction and ramp up directly to nameplate capacity of 4,900 tpd, which increases the LOM average gold production profile by 16% to 190,000 oz per year, and 202,000 oz per year in the first 5 years.
- **Streamlined Processing:** A single milling facility at the Mine Site reduces the need (as had been previously contemplated) to transport flotation concentrate 116 kilometres (“km”) to the Quesnel River Mill (“QR Mill”). This reduces capital and operating costs by consolidating operations into one location.
- **Improved Flowsheet Design:** Updated metallurgical studies and testing has resulted in the addition of a gravity circuit which, combined with a rougher and cleaner flotation circuit, resulted in overall project gold recovery of 92.6% and the production of ~66 tpd higher-grade concentrate product (versus 590 tpd in 2023 FS Phase 2[1]) averaging ~133 grams per tonne (“g/t”) Au (versus 28 g/t Au in 2023 FS Phase 2). Approximately 46% of gold is expected to be recovered by gravity.
- **Underground Mine Design:** Increased average stope size by ~60% compared to the 2023 FS, significantly reducing the total number of stopes required to achieve average daily throughput. Optimization of the geotechnical design of the mined stopes, supported by recent trial mining, allows for more operational flexibility of underground operations.
- **Mineral Reserves:** Probable Mineral Reserves remained largely unchanged, increasing slightly to 2.071 Moz Au (17.8 Mt grading 3.62 g/t Au).
- **Permitted:** Project design and sequencing proposed in the 2025 FS is aligned with the BC *Mines Act* and *Environmental Management Act* permits obtained in Q4 2024.

[1] Phase 1: 2023 FS 1,500 tpd operation
Phase 2: 2023 FS 49,00 tpd operation

Table 1-2: Comparison of changes from 2023 to 2025 FS

Category	Concept and Engineering 2023 FS	Changes in Concept and Engineering 2025 Updated FS
Mineral Resource	▪ No depletion of Lowhee Bulk Sample and development	▪ No change on Main CGP site ▪ Depletion of Lowhee Bulk Sample and development
Cut-off Grade	▪ Resource cut-off grade of 2.0 g/t Au	▪ Resource cut-off grade is now 1.8 g/t Au)
Mineral Reserve	▪ Reserve production cut-off grade of 2.3 g/t Au	▪ Reserve production cut-off grade is now 2.0 g/t Au
Mining Methodology	▪ Average stope size of 3,490 t	▪ Average stope size of 5,577 t
Mine Plan	▪ Two-phased approach for mine plan (2023 FS Phase 1 and Phase 2)	▪ One-phase approach for mine plan, ramping up to 4,900 tpd in under 3 years
Mineral Processing Concept	▪ Two-phase first 3 years at 1,500 tph, ramp-up to 4,900 tpd in Year 4 ▪ Two processing sites: Quesnel River Mill and Wells MSC	▪ No phase approach direct production at 4,900 tpd ▪ One processing site at the Wells MSC
Mineral Processing Methodology	▪ Ore sorter, flotation and leaching	▪ No leaching ▪ Addition of a gravity recovery circuit ▪ Addition of flotation cleaning circuit ▪ Sell flotation concentrate to smelter
Metallurgical Recovery	▪ Average recovery of 92.0%	▪ Average recovery of 92.6%
Waste Rock Storage	▪ Design not adapted for progressive closure and reclamation	▪ Configuration of the WRSF structure (maximizing storage, increased volume and footprint), ready for closure
Water Balance / Water Treatment	▪ Two water treatment plants: one at Bonanza Ledge and another at MSC for LOM	▪ One water treatment plant with larger capacity at MSC to manage Bonanza Ledge and MSC contact water during most LOM ▪ Larger amount to treat at Bonanza Ledge due to increased footprint area of WRSF
Water Management	▪ Bonanza Ledge contact water treated and released at Bonanza Ledge	▪ Bonanza Ledge contact water is conveyed to MSC for treatment after construction
Underground Materials Handling Systems	▪ Primary Jaw Crusher and Secondary Cone Crusher	▪ Primary Jaw Crusher and modified secondary crusher to a second jaw, to reduce fine production and increase ore sorting throughput

Category	Concept and Engineering 2023 FS	Changes in Concept and Engineering 2025 Updated FS
Surface Electrical	▪ 69 kV power line connecting BC Hydro's Barlow Substation to the MSC 69 kV/13.8 kV substation	▪ The transmission line and substation to provide required electrical power at 69 kV based on availability at the Barlow Substation. The line and onsite substation will be designed to accommodate a future load case of 138 kV
Permitting	▪ BC Environmental Assessment ("EA") process was underway to assess the Project	▪ EA certificate has been granted ▪ *Mines Act* permit issued ▪ *Environmental Management Act* permits issued ▪ Minor amendment to existing approvals to authorize water treatment changes will be pursued
Environmental	▪ Robust environmental baseline studies were completed in support of EA and permitting requirements	▪ No major updates
Communities	▪ Engagement with communities was well-established throughout the Project planning process	▪ Revised MSC Layout following extended discussions with the community

1.4 Property Description and Ownership

The Project is located in the historic Wells-Barkerville mining camp of BC and extends for approximately 60 km from northwest to southeast.

The Project falls within the Cariboo Regional District ("CRD"), a division of the local government system in BC. The main towns in the Project area are the District of Wells ("Wells") and Barkerville Historic Town & Park. Wells is situated 74 km east of Quesnel, approximately 115 km southeast of Prince George, and approximately 500 km north of Vancouver.

ODV's land holdings consist of 384 mineral titles totalling 142,885.12 hectares ("ha") in one contiguous property block known as the Cariboo Main Block. The reader is reminded that the land holdings are registered in the names of Barkerville Gold Mines Ltd. ("BGM") and will be referred to as such in the following sections. These mineral titles include mineral claims, mineral leases, placer claims, and placer leases.

BGM holds 100% of interest in 62 Cariboo Main Block placer titles, and the mineral lease #1105995. BGM holds 100% of interest in 366 of the 384 Cariboo Main Block mineral and placer claims and placer leases. A total of 17 mineral claims are jointly owned with other companies and individuals: BGM holds 97.5% of interest in six mineral claims, 85% of interest in two mineral claims, and 50% interest in the other nine mineral claims.

The Project also contains 546 private land parcels from Crown-granted mineral claims (3,330.20 ha) that overlap many of the mineral titles, where BGM is the registered owner on title of the surface and/or undersurface rights to the parcels. A net smelter return ("NSR") royalty of 5% payable to Osisko Gold Royalties Ltd. ("OGR") is the only royalty that applies to the mineral resource area of the Project.

1.5 Geology and Mineralization

The Project lies within the Kootenay Terrane of the Omineca Tectonic Belt in the south-central Canadian Cordillera. The Omineca rocks were complexly deformed by Middle Jurassic to Early Tertiary compressional tectonics, and by Tertiary transtension and extension. The Kootenay Terrane in the vicinity of the Project is subdivided into the eastern Cariboo and western Barkerville subterranes. The Cariboo Subterrane is juxtaposed on the Barkerville Subterrane by the east-dipping Pleasant Valley Thrust.

The Snowshoe Group, central to the Barkerville Subterrane, hosts the Project.

The Barkerville and Cariboo Subterranes comprise metamorphosed equivalents of continent-derived siliciclastic protoliths with interlayered marble units and granitic orthogneiss. The subterranes are pericratonic in character and are thought to have formed near the current western margin of Laurentia. Various authors suggest that both Barkerville and Cariboo Subterranes share the same tectostratigraphic position and depositional environment.

The principal gold-producing areas in the Barkerville Subterrane are hosted in rocks metamorphosed to lower-greenschist facies (sub-biotite isograd); amphibolite-facies rocks are locally found on the Project but are not associated with any significant mineralization. The S1 and S2 fabrics are defined by phyllosilicate minerals (sericite and chlorite); they generally define foliation suggesting that peak metamorphic temperature coincided with the formation of cleavage.

Lode-gold mineralization in the Wells-Barkerville mining camp (Cariboo Gold District) shares many characteristics with an orogenic gold deposit model. Gold mineralization is associated with orogenic silica-carbonate-sericite-pyrite stable fluids moving along secondary permeability controlled by metamorphic fabrics, vein arrays, faults, lithologic contacts, and rheological contrasts.

Deposit types on the Project consist of vein and replacement-type mineralization grouped into five inter-related styles: 1) Fault-fill breccia veins subparallel to foliation (S1), hosted in carbonaceous mudstone; 2) Vertical northeast-trending extensional (axial planar) veins dominantly hosted in sandstone units in S3 cleavages; 3) Fractured moderately dipping east-northeast-trending shear veins, hosted in sandstone units; 4) Gold bearing sulphide replacements hosted in fold hinges of calcareous sandstone units; and 5) Gold-bearing sulphide replacement mineralization hosted in fault-bounded calcareous siltstone units.

1.6 Status of Exploration and Drilling

ODV's exploration team executed a systematic methodology to the exploration program on the Project. The program included geological mapping, channel, soil, underground sampling, and diamond drilling.

The exploration team has continued its geological mapping across the Project's area to identify lithologic contacts, define alterations and geochemical signatures, record micro- and macro-scale structural data, and to collect select rock samples. The targeted deposit types within the Project are structurally and/or geochemically controlled, thus the mapping data continues to play a vital role in refining the geologic model of the area and defining mineralized zones.

The objectives for the 2020 and 2021 diamond drilling programs were to test new brownfields targets adjacent to known deposits, infill high-grade vein corridors modelled from the 2019 Preliminary Economic Assessment ("PEA") classified as Inferred and explore the depth potential of known deposits.

The focus of the 2022 diamond drilling program was the infill of a proposed underground bulk-sampling area, the continued category conversion from Inferred to Indicated status of modelled vein corridors, and the delineation of additional vein corridors.

The objective of the 2023 program was to provide geotechnical information along the proposed underground development towards a bulk sample area to aid with safe and productive extraction methods. The Cow portal geotechnical drill holes enabled the identification of faults, rock mass designation testing, lithologic contacts, rock mass abrasiveness, and Metal Leaching ("ML") and Acid Rock Drainage ("ARD") hazards, to aid in the planning for underground development towards the Lowhee Zone bulk sample.

The objective of the 2024 underground development program was to access the mineralization at the Lowhee deposit for the eventual extraction and analysis of a 10,000 tonne ("t") bulk sample. The Cow portal construction was completed in Q4 2021. During Q1 2024, the Company commenced development of the underground ramp from the existing Cow portal into the

Project's mineral deposit at the Lowhee Zone. The development has been completed, and bulk sample taken to assess mineability was in line with the FS parameters. A further ~150 metres ("m") of development has advanced on the 1,260-elevation level, cross-cutting the vein corridors Mapping and structural analysis of the development has confirmed the local geological model. Data collection, analysis and interpretation from the bulk sample are pending as of the effective date of the Report.

1.7 Mineral Resource Estimate

The 2025 FS Mineral Resource Estimate ("MRE") for the Project, effective April 22, 2025, encompasses resources for the deposits of Cow Mountain (Cow Zone and Valley Zone), Island Mountain (Shaft Zone and Mosquito Zone), and Barkerville Mountain (Lowhee Zone, KL Zone, BC Vein Zone, and the Bonanza Ledge Zone).

There have been no changes for the resource estimation as previously reported in the 2022 FS MRE, however, there has been mining depletion for Lowhee and changes to the cut-off grade assumptions.

The silver ("Ag") has been removed from the 2025 MRE due to limited supporting data and the estimated ounces were not material.

The 2022 FS MRE for Cow, Valley, Mosquito, Shaft, KL, Lowhee, and BC vein was prepared by Daniel Downton, P.Geo., of Osisko Development Corp. ("ODV"). The Bonanza Ledge deposit remained unchanged.

The Lowhee Zone is depleted by the underground workings and the bulk sample stope. As mineralization is present in the walls of the bulk sample, a 5 m buffer has not been added as there is still mining potential. Both the underground workings and bulk sample are current as of the end of January 2025.

The depletion was reviewed and validated by Carl Pelletier, P.Geo., and Tessa Scott, P.Geo., both of InnovExplo Inc. ("InnovExplo"), using all available information.

The 2025 FS MRE covers all the deposits in the Cow-Island-Barkerville Mountain Corridor. The Mineral Resource area for the Cow/Island segment covers a strike length of 3.7 km and a width of approximately 700 m, down to a vertical depth of 600 m below surface. The estimate for the Barkerville segment covers a strike length of 3 km and a width of approximately 700 m, down to a vertical depth of 500 m below surface.

Two diamond drill hole databases cover the Project: Bonanza Ledge and BM-CM-IM (Barkerville Mountain including the BC Vein, KL, and Lowhee deposits, Cow Mountain including the Cow and

Valley deposits, and Island Mountain including the Shaft and Mosquito deposits). These databases were filtered by deposit (Cow, Shaft, Valley, Mosquito, BC Vein, KL, or Lowhee) before the work in Datamine. A subset of drill holes was used to generate the 2022 FS MRE database for each deposit, as follows:

- The Cow deposit contains 1,219 validated drill holes;
- The Valley deposit contains 254 validated drill holes;
- The Shaft deposit database contains 1,010 validated drill holes;
- The Mosquito deposit contains 841 validated drill holes;
- The Lowhee deposit contains 158 validated drill holes;
- The BC Vein and KL Zone deposits contain 420 validated drill holes.

The qualified persons ("QPs") reviewed and validated the resource estimation process followed by ODV, including all parameters, geological interpretation, basic statistics, variography, interpolation parameters, block model construction, scripts that run the model, volumetric report, and the validation process.

Historical work subject to verification consisted of the holes used for the 2022 PEA MRE (Hardie et al., 2022). Basic cross-check routines were performed between the current ODV Databases and the previously validated database for the 2022 PEA MRE.

The QPs were granted access to the assay certificates for all holes in the 2021 drilling programs. Assays were verified for 5% of the drill holes. No discrepancies were found.

Overall, the QPs data verification demonstrates that the data, protocols, and estimation process for the Project are acceptable. The QPs consider the ODV databases to be valid and of sufficient quality to be used for the MRE herein.

A total of 482 geological solids were created for the deposits and remain unchanged from the 2022 FS.

A solid representing a 5 m halo surrounding the axial planar ("AXPL") vein corridors was also created for each of the Mosquito, Shaft, Valley, Cow, Lowhee, and KL deposits. These were created to limit and provide a halo of dilution around the AXPL mineralized veins.

The classification is unchanged since the 2022 FS MRE. The MRE was classified as Measured, Indicated, and Inferred Mineral Resources based on data density, search ellipse criteria, drill hole density, and interpolation parameters. The 2025 FS MRE is considered to be reliable and based on quality data and geological knowledge. The MRE follows the 2014 CIM Definition Standards on Mineral Resources and Reserves and the 2019 CIM Best Practice Guidelines.

Table 1-3 displays the results from the 2025 FS MRE, exclusive of the reserves, for the Project for all eight deposits: Cow, Valley, Shaft, Mosquito, KL, Lowhee, BC Vein, and Bonanza Ledge.

Table 1-3: Cariboo Gold Project 2025 FS MRE reported at a 1.8 g/t Au cut-off grade (except for Bonanza Ledge reported at a 3.5 g/t Au cut-off grade)

Category	Deposit	Tonne '000	Au Grade (Au g/t)	Au Ounce '000
Measured	Bonanza Ledge	47	5.06	8
Indicated	Bonanza Ledge	32	4.02	4
	BC Vein	1,057	3.00	102
	KL	527	2.80	47
	Lowhee	1,333	2.76	118
	Mosquito	1,553	2.96	148
	Shaft	6,121	2.92	575
	Valley	2,718	2.70	236
	Cow	3,991	2.91	374
Total Indicated Mineral Resources		**17,332**	**2.88**	**1,604**
Total Measured & Indicated		**17,380**	**2.88**	**1,612**
Inferred	BC Vein	596	3.17	61
	KL	2,514	2.53	205
	Lowhee	486	3.01	47
	Mosquito	1,883	3.08	186
	Shaft	7,457	3.44	826
	Valley	2,470	3.01	239
	Cow	3,368	2.78	301
Total Inferred Mineral Resources		**18,774**	**3.09**	**1,864**

Mineral Resource Estimate notes:

1. The independent and QPs for the Mineral Resources estimates, as defined by NI 43-101, are Carl Pelletier, P.Geo., and Tessa Scott, P.Geo. of InnovExplo Ltd. The effective date of the 2025 FS MRE is April 22, 2025.
2. These Mineral Resources, exclusive of the reserves, are not Mineral Reserves as they do not have demonstrated economic viability.
3. The MRE follows the 2014 CIM Definition Standards on Mineral Resources and Reserves and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.
4. A total of 481 vein zones were modelled for the Cow Mountain (Cow and Valley), Island Mountain (Shaft and Mosquito), Barkerville Mountain (BC Vein, KL, and Lowhee) deposits and one gold zone for Bonanza Ledge. A minimum true thickness of 2.0 m was applied, using the gold grade of the adjacent material when assayed or a value of zero when not assayed.

5. The estimate is reported for a potential underground scenario at a cut-off grade of 1.8 g/t Au, except for Bonanza Ledge at a cut-off grade of 3.5 g/t Au. The cut-off grade for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee deposits was calculated using a gold price of USD 2,400/oz; a USD:CAD exchange rate of 1.35; an underground mining cost of $66.3/t; a processing and transport cost of $30.80/t; a G&A plus Environmental cost of $22.40/t; and a sustaining CAPEX cost of $45.6/t. No changes have been applied for the Bonanza Ledge. The cut-off grade for the Bonanza Ledge deposit was calculated using a gold price of USD 1,700/oz; a USD:CAD exchange rate of 1.27; a global mining cost of $79.13/t; a processing and transport cost of $65.00/t; and a G&A plus Environmental cost of $51.65/t. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.).
6. Density values for Cow, Shaft, Lowhee, and BC Vein were estimated using the ID^2 interpolation method, with a value applied for the non-estimated blocks of 2.80 g/cm^3 for Cow, 2.78 g/cm^3 for Shaft, 2.74 g/cm^3 for Lowhee, and 2.69 g/cm^3 for BC Vein. Median densities were applied for Valley (2.81 g/cm^3), Mosquito (2.79 g/cm^3), and KL (2.81 g/cm^3). A density of 3.20 g/cm^3 was applied for Bonanza Ledge.
7. A four-step capping procedure was applied to composited data for Cow (3.0 m), Valley (1.5 m), Shaft (2.0 m), Mosquito (2.5 m), BC Vein (2.0 m), KL (1.75 m), and Lowhee (1.5 m). Restricted search ellipsoids ranged from 7 to 50 g/t Au at four different distances ranging from 25 m to 250 m for each deposit. High-grades at Bonanza Ledge were capped at 70 g/t Au on 2.0 m composited data.
8. The gold Mineral Resources for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee vein zones were estimated using Datamine Studio™ RM 1.9 software using hard boundaries on composited assays. The OK method was used to interpolate a sub-blocked model (parent block size = 5 m x 5 m x 5 m). Mineral Resources for Bonanza Ledge were estimated using GEOVIA GEMS™ 6.7 software using hard boundaries on composited assays. The OK method was used to interpolate a block model (block size = 2 m x 2 m x 5 m).
9. Results are presented in situ. Ounce (troy) = metric tons x grade / 31.10348. Calculations used metric units (metres, tonnes, g/t). The number of tonnes was rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects. Rounding followed the recommendations as per NI 43-101.
10. The QPs responsible for this section of the technical report are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the MRE.

1.8 Mineral Reserve Estimate

The Mineral Reserves for the Project have been estimated in accordance with the 2014 CIM Definition Standards and the 2019 CIM Best Practices Guidelines, as required by NI 43-101. The reserves are derived from Measured and Indicated Mineral Resources and exclude any contribution from Inferred Mineral Resources. Estimations consider mining recovery, dilution, and economic viability, based on current cost and pricing assumptions.

The reserve estimate is based on the resource block model dated September 8, 2022. Stope optimization and economic filtering were performed using cut-off grades that reflect total costs, recovery rates, and gold pricing assumptions. Internal and external dilution, mining losses, and method-specific recovery factors were integrated into the reserve calculations. Stope shape optimization was completed using Deswik Stope Optimizer software, and ESG modifying factors were reviewed to ensure alignment with current standards and permitting status.

A summary of Mineral Reserves Estimate is illustrated in the Table 1-4.

Table 1-4: Cariboo Gold statement of mineral reserves (Effective date: April 10, 2025)

Category	Tonnage	Grade	Contained Gold
	(t)	Au (g/t)	(oz)
Proven			
-	-	-	-
Probable			
Cow	3,999,971	3.35	430,548
Valley	3,238,636	3.59	374,058
Shaft	8,548,295	3.72	1,021,599
Mosquito	1,105,370	3.94	140,102
Lowhee	923,162	3.52	104,491
Total Proven & Probable	**17,815,435**	**3.62**	**2,070,798**

Mineral Reserve Estimate notes:

1. The QP for the Mineral Reserve Estimate is Eric Lecomte, P.Eng. (InnovExplo, a subsidiary of Norda Stelo).
2. The Mineral Reserve Estimate has an effective date of April 10, 2025.
3. Estimated at USD 1,915/oz Au using an exchange rate of USD 1.32:CAD 1.00, variable cut-off value from 1.70 g/t to 2.0 g/t Au.
4. Mineral Reserves include both internal and external dilution along with mining recovery. The average external dilution is estimated to be 10.1%. The average mining recovery factor is 91.3% to account for mineralized material left in each block in the margins of the deposit.
5. Metallurgical recovery is assumed to be 92.1%
6. The cut-off grade incorporates assumptions for mining cost ($54.19/t), processing cost ($30.53/t), sustaining capital ($25.63/t), G&A and environment ($16.85/t), royalties (5%) and refining cost (USD 5.00/t).
7. Mineral Reserve tonnage and mined metal have been rounded to reflect the accuracy of the estimate and numbers may not add due to rounding.
8. Stope dimensions, mining sequences, and extraction methods were designed according to geotechnical classification and operational constraints.
9. ESG considerations, including existing permits, tailings management (underground paste backfill), and community agreements, have been factored into the reserve classification.

The reserve estimate confirms the economic viability of the under current assumptions and supports the ongoing development and planning of mining operations.

1.9 Mining Methods

1.9.1 Overview

The Project consists of three main zones (Cow, Shaft, and Valley) with two smaller satellite zones (Lowhee and Mosquito). The rate of exploitation of each deposit will change over time, while the overall steady state production rate of 4,900 tpd is expected to be met by the first half of Year 1 and will be maintained until Year 10, before decreasing. The LOM production plan represents a 10-year mine life.

The selected mining method is mainly long hole longitudinal retreat with some stopes using a modified long hole longitudinal retreat method or transverse. Primary materials handling fleet will be comprised of 10 t scooptram Load Haul Dump ("LHD") and 51 t haul trucks.

Stope production is set to begin in the second half of Year -1 and progressively ramp up until full production of 4,900 tpd is achieved in Q2 Year 1. Underground mine life is set to last until the first half of Year 10.

1.9.2 Geotechnical Evaluation

Geotechnical characterization for the Project was undertaken through two core logging campaigns conducted in 2018 and 2021, complemented by laboratory testing. The results supported the development of a geotechnical classification system (Classes 1 to 5), each with corresponding stope design guidelines. The classification ranges from Class 1, representing the most competent ground conditions, to Class 5, representing the least competent ground. Classes 1 through 4 are considered suitable for open stoping, whereas Class 5 requires a cut-and-fill mining approach.

Approximately 95% of the planned stopes were assigned a geotechnical class. For design purposes, a single representative class was selected for each vein corridor, based on the class associated with the median stope tonnage. Classes 1 to 3 were designed using industry-accepted empirical methods. To validate the proposed stope design guidelines for Classes 3L and 4, a back-analysis was conducted using stope performance data from the Bonanza Ledge Mine. This analysis compared planned versus actual stope geometries for 21 stopes, using data from Cavity Monitoring System ("CMS") surveys. The rock mass quality of these stopes was also compared with that of the Cariboo Gold Project to confirm the relevance of the back-analysis results.

Typical stope dimensions are approximately 30 m in height (floor-to-floor). For longitudinal stopes with widths less than 8 m, the strike length ranges from 15 to 25 m, depending on the geotechnical class. Higher classes were assigned increasing dilution factors, and reduced geotechnical recovery was applied to Class 4 areas.

1.9.3 Hydrogeology

A hydrogeological investigation program was completed to provide key groundwater related inputs to the FS, namely, to estimate potential mine dewatering rates, to understand further the regional groundwater flow regime, and to characterize potential impacts of mine dewatering on groundwater and surface water systems.

1.9.4 Mining Method Description

The long hole mining method was primarily selected due to the sub vertical geometry of mineralized vein corridors and the relatively lower cost. This method involves driving two drifts longitudinally along the mineralized vein corridors to define a stope. The top access serves as a drilling platform while the bottom access allows for mucking of drilled then blasted material. Once empty, these stopes are then backfilled with paste fill. Stopes are mined retreating towards the access. This method allows for simultaneous mining of stopes along different vein corridors as well as along the same corridor if a pillar exists between active levels. A few mining horizons will include some stopes using transversal long-hole stoping. This decision was driven by the average vein width, contained metal (value), and ground conditions.

The minimum designed stope width for all zones is 3.7 m and the sill-to-sill stope height for all zones is 30 m. The maximum permissible strike length (the distance along strike that can be mined before backfilling is required) is a function of geotechnical constraints and differs by zone.

1.9.5 Mine Design

There will be two portals providing access to the underground ramps as well as one portal to connect the underground incline conveyor to the processing plant. The Cow portal, already excavated, will serve as the initial access point to develop the underground zones during the early stages of the Project. The Valley portal will be brought into service in parallel with development toward the Shaft Zone. Once established, it will serve as the primary production access due to its strategically central location within the deposit. A portal for the conveyor access will be developed simultaneously and ready for conveyor install prior to commissioning of the process plant.

The zones are accessed via main ramps connected to haulage drifts, with each zone featuring its own internal ramp system. The Mosquito Zone, located farther west, is connected to the Shaft Zone by a 1,083 m long haulage drift.

Mining in each zone will primarily use the longitudinal retreat longhole method. A few marginal stopes, either too wide or located in low-competency ground, will be mined using the transverse method or a modified version of the longitudinal longhole method. Sublevels are spaced at 30 m (sill to sill), and mined stopes will generally be backfilled with paste fill. Stope strike lengths will vary by zone based on individual geotechnical assessments. Each zone is capped with a crown pillar—22 m for Cow and Lowhee, 32 m for Mosquito and Shaft, and 25 m for Valley—with depth varying according to local geological conditions.

1.9.6 Development Schedule

The development schedule has been created with a combination of traditional Jumbo development and Roadheaders. The Roadheaders are scheduled to provide a lateral advance of 200 m per month in single heading conditions and will be concentrated on the ramps. Jumbo equipment is expected to achieve an average lateral development rate ranging from 244 m to 292 m per month per Jumbo crew, depending on the type of excavation, when multiple active headings are available simultaneously.

Initial development will be carried out by contractors at the start of the Project. ODV will gradually assume development responsibilities beginning in Year -2 and is expected to fully take over all development activities by Year 1.

1.9.7 Underground Electrical Distribution and Communication

Power is supplied at 13.8 kilovolt ("kV") and stepped down to 600 volt ("V") and 1,000 V using dual-output substations. Two feeders from the Cow and Valley portals will distribute power to underground levels, ensuring redundancy and load balancing.

Fixed equipment such as fans, pumps, and chargers will operate at 600 V, while mobile mining equipment like Jumbos and bolters will use 1,000 V. Auxiliary services including lighting, heating, ventilation and air conditioning ("HVAC"), and controls will be powered at 120/208 V. The electrical design includes single-line diagrams, load lists, and bills of material, and complies with all applicable codes and standards.

The load list reflects a high but reasonable level of mining activity and will be refined as the production plan advances. Mobile substations rated between 1 mega volt ampere ("MVA") and 2 MVA are planned for each level, with flexibility to adjust quantities and reuse units based on mine development progress.

1.9.8 Mine Automation and Monitoring Systems

The mine's automation strategy includes teleoperated LHD mucking from stopes and loading bays, with transitional ore storage in re-muck areas. Loading bays on access levels will separate teleoperated from manually operated equipment, ensuring regulatory compliance while enabling remote loading operations. On levels without a loading bay, fully automated mucking will be secured through physical barriers restricting access to other vehicles in the affected area. The communication network structure, the integration of the original equipment manufacturer's automation system, and the LHD units—already equipped with the necessary automation options—will enable autonomous operation. It is assumed that one operator will remotely control two LHDs during the automation period. Starting in Year 2, autonomous mucking is expected to account for approximately 30% of stope production over a 12-hour shift, assuming optimal operating conditions.

1.9.9 Ventilation

The ventilation system has been designed to comply with British Columbia regulations. The airflow required to ventilate diesel engines was compiled using a 0.06 cubic metres per second per kilowatt ("$m^3/s/kW$") rate.

The system will be comprised of four independent intake fresh air raises, one exhaust raise and remaining exhaust through the main ramps and the Cow portal. The total estimated airflow required to meet production is 1,255 kilo cubic feet per minute ("kcfm") (592 m^3/s).

1.9.10 Production Rate

Project development will begin in Year -3, and the total ore production rate will ramp up until reaching the nominal full production target of 4,900 tpd in the first half of Year 1, with each zone contributing a different ratio to production over time.

1.9.11 Production Plan

The LOM has a 10-year mine life at average production rates of 4,900 tpd. Production ramp-up to a steady state of 4,900 tpd will be achieved by the second half of Year 1. The different zones were divided into three distinct sectors: South (Valley Upper, Cow and Lowhee zones), North (Mosquito and Upper Shaft zones) and Deep (Lower Shaft and Valley zones), each production sector to contribute to a third of the nominal production. The overall mine plan comprises 17.8 Mt of ore mined at an average grade of 3.6 g/t of Au. The mine will produce 8.0 Mt of waste from the development over LOM.

Table 1-5: Ore mined per year

Year	Unit	-3	-2	-1	1	2	3	4
Lowhee	t	1,662	33,552	134,696	561,937	186,025	5,290	-
	g/t	1.86	4.33	3.75	3.60	3.02	2.35	-
Cow	t	-	-	8,226	56,670	238,925	251,626	327,103
	g/t	-	-	3.78	4.31	4.22	3.86	3.61
Valley	t	-	2,541	52,207	164,253	228,149	246,371	434,465
	g/t	-	3.12	3.23	3.51	4.02	3.26	3.97
Shaft	t	-	7,123	224,669	912,205	1,135,506	1,285,713	1,025,358
	g/t	-	2.28	4.16	3.95	4.37	4.04	4.07
Mosquito	t	-	-	-	-	-	-	-
	g/t	-	-	-	-	-	-	-
Total	t	**1,662**	**43,216**	**419,798**	**1,695,065**	**1,788,605**	**1,788,999**	**1,786,926**
	g/t	**1.86**	**3.92**	**3.90**	**3.80**	**4.16**	**3.91**	**3.96**
Year	**Unit**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Lowhee	t	-	-	-	-	-	-	-
	g/t	-	-	-	-	-	-	-
Cow	t	322,541	359,549	576,463	691,972	538,224	586,986	41,686
	g/t	3.00	3.44	3.31	3.35	3.06	2.91	4.18
Valley	t	324,296	514,527	391,930	247,930	379,470	227,805	24,690
	g/t	3.44	3.53	3.99	3.52	3.45	3.06	2.51
Shaft	t	1,136,946	609,051	465,999	513,554	769,117	457,916	5,138
	g/t	3.44	3.18	3.20	3.12	3.27	3.09	3.43
Mosquito	t	9,593	300,000	354,087	335,115	106,575	-	-
	g/t	3.47	4.30	3.69	3.86	4.06	-	-
Total	t	**1,793,375**	**1,783,128**	**1,788,480**	**1,788,572**	**1,793,387**	**1,272,706**	**71,515**
	g/t	**3.36**	**3.52**	**3.50**	**3.40**	**3.29**	**3.00**	**3.55**

1.9.12 Mine Equipment and Personnel

The selection of mining equipment was guided by key criteria to ensure equipment was suited to support a steady-state production rate of 4,900 tpd, with allowances for critical spares. All development activities will be carried out by contractors using their own equipment, except for the Roadheaders, which will be supplied by the Project. ODV will progressively take over the development with new equipment, aiming for full in-house development operations by early Year 1. Production is scheduled to begin in mid Year -1, with ODV gradually integrating its own equipment fleet based on operational requirements.

The selected equipment fleet includes six two-boom Jumbos, two Sandvik Roadheaders for decline development, 17 diesel 51 t trucks for ore and waste haulage (including two temporary rentals), and 10 t LHDs for mucking and backfilling. Stoping activities will be carried out using three top hammer drills and three down-the-hole drills.

The mine will operate continuously year-round with three roster systems in place for office and hourly workers. During full production, an average of up to 169 underground mining employees per rotation will be required to support operations and maintenance in Wells.

1.10 Underground Infrastructure

1.10.1 Underground Materials Handling System

A major piece of underground infrastructure of the Project is the underground crushing system. This crusher is located below in the Cow Zone in a location that has been identified as geotechnically favourable for long-term infrastructure. Ore will be brought to the crusher by underground trucks from all mining zones.

Ore will ultimately be brought to surface using an underground conveyor to be pre-concentrated by sorting and flotation. The material rejected by the sorter will be transferred back underground using a waste pass raise and then it will either be used as backfill material or hauled to the Bonanza Ledge WRSF using the underground trucks.

The mine will include haulage drifts connecting the five separate zones, an underground garage, mine water pumping stations and two paste pumping stations. The Valley portal will provide access for material and the labour force.

1.10.2 Paste Pumping Network

The mine will be equipped with a paste network in order to dispose of the flotation tailings and facilitate underground mining.

The network will originate on surface, inside the processing plant where paste pumps will initially send the paste underground through a borehole. From there paste will be redistributed through a vertical and horizontal pipe network spanning all levels and all zones. Two underground booster stations will be required, one in Shaft, to allow the paste to reach the higher level of the zones and the satellite Mosquito Zone. One in the ramp between Cow and Lowhee Zone, to allow the paste to reach the Lowhee Zone.

The network will be installed and maintained by a dedicated team, as the underground infrastructure is developed.

1.11 Mineral Processing and Metallurgical Testing

The test programs were carried out between 2018 and 2025 under the supervision of ODV and BBA, with contributions from multiple laboratories including Société Générale de Surveillance ("SGS"), Base Met Labs, AMTEL, and Metso.

The key findings include the following: Ore sorting technologies such as X-ray transmission ("XRT") and laser sensors achieved gold recoveries of 87–97% with mass pulls of 30–65%, and optimization through laser scavenging improved recovery but increased mass pull. Gravity concentration tests showed gravity recoveries ranging from 20% to 55% depending on the zone, with bulk composite gravity recovery averaging around 45%.

Comminution tests, including Bond Work Index ("BWi") and Abrasion Index ("Ai") tests, categorized the ore as medium-hard to moderately abrasive, with additional hardness profiling provided by SMC Test® and Hardness Index Test ("HIT") tests.

Flotation tests, including rougher and cleaner flotation, achieved gold recoveries greater than 98%, with cleaner flotation performance being sensitive to grind size and regrinding. Cyanide leach tests showed gold recoveries of 92–96%, while silver recoveries were more variable, ranging from 44–77%.

Thickening, filtration, and rheology tests identified multiple effective flocculants, with MF10 and SNF913-SH being the most effective, and belt vacuum and pressure filtration achieving cake moistures of 8–20%, supporting paste backfill design. Paste backfill feasibility was confirmed through multiple campaigns, with unconfined compressive strength ("UCS") tests showing strength increases with binder content and curing time, and optimal binder content estimated at 4% over the mine life.

Overall gold recovery over the LOM is expected to be 92.6%. The recovery modelling integrated ore sorting, gravity, and flotation.

1.12 Recovery Methods

The Project will ramp up to a processing capacity of 4,900 tpd. The process includes underground crushing and conveyance to surface for ore sorting, grinding, gravity concentration, flotation, and tailings dewatering, with all mill tailings returned underground as paste backfill. Gravity concentrate is refined on-site into doré bars, while flotation concentrate is shipped offsite.

The ore is crushed underground and conveyed to the surface, where it is screened. Approximately 30% of the material bypasses ore sorting and goes directly to the fine ore silo. The remaining 70% is sorted using two ore sorters. The concentrate from sorting is crushed further and combined with fines before being sent to the grinding circuit.

Grinding is performed in a ball mill, reducing the ore to a P_{80} of 190 microns ("µm"). The circuit includes primary gravity concentration, which recovers a portion of gold. The remaining material is processed through flotation, including rougher, regrind, and cleaner stages. The regrind mill reduces particle size to 25 µm to improve liberation. Secondary gravity concentration is also employed, and the combined gravity concentrates are refined into doré.

Flotation concentrate is thickened and filtered before shipment. Tailings undergo a similar dewatering process and are mixed with cement use as paste backfill underground.

The concentrator will employ 84 personnel across operations, maintenance, and technical roles. Estimated annual propane consumption is 1.2 million litres ("L"), and the plant's power demand is 8.2 megawatts ("MW"). Reagent and consumable usage is based on lab test data, with specific consumption rates provided for each material.

1.13 Project Infrastructure

1.13.1 Waste Management

A waste rock storage facility ("WRSF") with an elevation of 1,533 m and a capacity for approximately 7,940,000 cubic metres ("m^3") of waste rock storage will be built in the northern limits of the Bonanza Ledge property. The WRSF is designed to have slopes of 3H:1V with inclusion of working benches to manage erosion. This results in an overall slope of 3.3H:1V which will allow for lower bench slopes to be progressively reclaimed while upper lifts of the WRSF are being built. This will reduce the need for rehandling at closure to accommodate the closure design of the potentially acid generating ("PAG") WRSF. Prior to construction, removal of existing PAG waste rock and overburden stockpiled materials will be carried out.

1.13.2 Water Management

Overall, the water infrastructure at the MSC and Bonanza Ledge areas is designed to support the water management strategy and achieve the following objectives:

- Intercept and divert non-contact runoff: Wherever practical, non-contact water will be collected and conveyed for discharge downstream of the mining areas, to the receiving environment.
- Manage contact water: collect contact water through a system of channels, culverts, French drains and sumps, and convey it to Sediment Control Ponds ("SCP"). Contact water is conveyed to the MSC SCP where treated and then reused to supply freshwater at the mill, with the remaining unused treated effluent being discharged directly to the Jack of Clubs Lake via a diffuser.

Where possible, existing water management infrastructure will be reused and upgraded, as needed, to meet the Project design basis requirements.

At the Bonanza Ledge area, the water management system is designed to pump and temporarily store excess water from extreme flood events in the flood management reservoir ("FMR"), located underground. This system is intended to be used in emergency situations, when water accumulating at site exceeds Bonanza Ledge area water storage capacity. Water stored temporarily in the FMR is then pumped to the water treatment plant for treatment and discharge to the receiving environment.

1.13.3 Water Treatment Plant

Water treatment infrastructure is a foundational element of the Project's environmental and operational planning. Two facilities have been designed to manage contact water and mine dewatering flows throughout the life of the Project: a temporary plant at Bonanza Ledge and a permanent facility at the MSC. Each system aligns with the phased development approach and is tailored to the site's specific hydrological, climatic, and regulatory conditions.

The Bonanza Ledge WTP will support initial construction and early underground development activities during Stage 1 (construction). This interim system includes chemical precipitation using barium hydroxide, clarification, and multimedia filtration, followed by advanced membrane treatment. The membrane system features ultrafiltration ("UF") and nanofiltration ("NF") or reverse osmosis ("RO"), with NF currently favored to avoid the need for post-treatment remineralization. A separate, small-scale Moving Bed Biofilm Reactor ("MBBR") is also in operation at Bonanza Ledge to supplement nitrogen removal; however, it is not integrated into the main plant flow or design capacity. The Bonanza Ledge WTP is scheduled for decommissioning upon full commissioning of the MSC facility.

The MSC WTP, scheduled for activation in Stage 2 (operation), will serve as the primary long-term treatment system. With a design flow of up to 800 m^3/h, it incorporates High-Density Sludge ("HDS") precipitation for metals and solids removal, biological treatment using MBBRs for nitrogen species, and polishing filtration. Treated water will be reused within site operations where feasible, with surplus volumes discharged to Jack of Clubs Lake via a submerged diffuser system. The MSC WTP is designed to remain in operation through closure and into post-closure care, supporting ongoing compliance and water quality management.

Both treatment systems are engineered to accommodate extreme climatic conditions, including cold weather and seasonally variable flows. Design features such as redundant pumping capacity, heat tracing, and modular construction support resilience and reliability. The water treatment program is fully integrated within the Project's site-wide water management strategy and is critical to achieving environmental discharge objectives and sustaining mine operations.

1.13.4 Water Treatment Conveyance Infrastructure

The Project will utilize pump stations and pipe systems to meet the water treatment conveyance requirements. The pumping stations and pipeline systems are designed to transfer water directly or indirectly to the water treatment plants from water storage infrastructure. Pump stations will consist of a range of submersible and centrifugal pumps, varying in size and capacity. These pumps were sized to meet site-specific flow rate and pressure requirements. Larger pumps were utilized for high volume fluid transfer and dewatering operations, while smaller units provided precise control in lower-demand areas. This approach allowed for efficient, scalable pumping solutions adaptable to seasonal flow conditions forecasted. A wide range of High-Density Polyethylene ("HDPE") pipe diameters and pressure ratings were utilized to match the varying flow rate and pressure requirements across the different pipeline systems. Pipe sizes were selected based on hydraulic performance criteria, ensuring optimal flow velocity and minimal head loss, while pressure classes were chosen to withstand the specific operating conditions of each pipeline segment. This approach ensured reliability, efficiency, and long-term durability of the piping network under diverse service demands.

1.13.5 Substation and On-site Distribution

The transmission line and Mine Site substation will provide the required electrical power at 69 kV, based on what is available at the Barlow Substation. The Mine Site substation will be designed to 138 kV to accommodate future loads but will initially operate at 69 kV. The transmission line will require a step-up substation to meet the future case.

1.13.6 Mine Site Infrastructure

The MSC will include the following infrastructure:

- Access roads, bridge, parking lots, security gate;
- Mine surface infrastructure inclusive of portal, mine ventilation and heating infrastructure;
- Concentrator;
- Office complex including office space and mine dry facilities;
- Surface water management infrastructure;
- MSC WTP and treated effluent discharge through an effluent diffuser;
- 69 kV to 13.8 kV electrical substation;
- Fuel systems (diesel and gas storage and distribution);
- Raw water well and potable water treatment plant and distribution system;
- Sewage Treatment system;
- Bridge to allow access to the MSC area.

1.14 Environmental and Permitting

1.14.1 Regulatory Context and Environmental Studies

Environmental baseline studies and modelling for the Project have been undertaken in the following areas: air quality, terrain and soils, vegetation, wildlife and wildlife habitat, climate and physiography, fisheries and aquatic resources, surface water, and groundwater. In addition, ODV has established environmental monitoring plans for a suite of valued components to respond to regulatory requirements and best management practices for the Project.

The Project is composed of three main components:

- The Mine Site, including the Mine Site Complex, and the Bonanza Ledge Site (together referred to as the "Mine Site");
- The Transportation Route;
- The Transmission Line.

The Project received an Environmental Assessment Certificate ("EAC"), Certificate #M23-01, on October 10, 2023, and Schedule B of the certificate lays out the conditions of the approval under 22 separate sections. The *Mines Act* permit, M-247, was received on November 20, 2024 and the *Environmental Management Act* permits, PE-17876 for Bonanza Ledge and PE-111511 for the MSC, were received on December 11, 2024.

The permitting process for the Transmission Line is being overseen by the Ministry of Water, Land and Resource Stewardship who is running a coordinated process for all authorizations required for the Transmission Line. The permits required to authorize the construction of the Transmission Line are anticipated to be granted in 2025.

Amendments to the EAC and other permits will be required to authorize changes in the Project described in Chapter 1.

1.14.2 Considerations of Social and Community Impacts

Since 2016, ODV has been undertaking meaningful and transparent engagement with Indigenous nations, the public, local community members, provincial and local government agencies and other stakeholders, and this engagement is ongoing. Relationships have been developed and maintained with three Participating Indigenous nations, Lhtako Dené Nation, Xatśūll First Nation, Williams Lake First Nation, and ODV intends to continue building on these relationships through all phases of the Project.

1.14.3 Mine Reclamation and Closure Plan

ODV has prepared various Reclamation and Closure Plans ("RCP") for the Project to detail how the sites will be reclaimed to a safe, stable, and non-polluting condition. Detailed RCPs were provided in support of the *Mines Act* application which received approval in late 2024. RCPs will continue to be updated as mine plans evolve, regulatory guidelines change, and in accordance with permit requirements. The Project footprint has been divided into Master Areas to reflect disturbance type and proposed end land use. Detailed closure and reclamation prescriptions have been provided to the regulators for each Master Area.

1.15 Capital and Operating Costs Estimates

1.15.1 Capital Costs

The total initial capital costs for the Project are estimated to be $881M. The total sustaining capital cost is estimated to be $525M. These estimates include the addition of certain contingencies and indirect costs. The cumulative LOM capital expenditure ("CAPEX"), including initial and sustaining capital is estimated to be $1,406M. The Project's site reclamation and closure costs are estimated at about $135M and its salvage value is expected to be about $36M.

The overall capital cost estimate developed in this FS generally meets the American Association of Cost Engineers ("AACE") Class 3 requirements. The capital cost estimate was compiled using a mix of quotations and budgetary quotations, database costs, and database factors. Items such as sales taxes, land acquisition, permitting, licensing, feasibility studies, and financing costs are not included in the cost estimate.

Table 1-6: Capital cost summary[1]

Area	Cost area description	Initial Capital Cost ($M)	Sustaining Capital Cost ($M)	Total Cost ($M)
000	Surface Mobile Equipment	--	--	--
200	Underground Mine	313	397	710
300	Water and Waste Management	98	24	123
400	Electrical and Communication	19	0	19
500	Surface Infrastructure	42	1	43
600	Process Plant - Wells	180	0	180
700	Construction Indirect Costs	95	0	95
999	Contingency (16.5%)	72	4	76
	Total	819	426	1,246
-	Pre-production Revenue	-150	0	-150
-	Pre-production Operating Costs	212	0	212
-	Salvage Value	0	-36	-36
-	Site Reclamation and Closure	0	135	135
	Project Total	881	525	1,406

[1] Numbers may not add up due to rounding.

All capital costs for the Project have been distributed against the development schedule to support the economic cash flow model

Figure 1-2 presents the planned annual and cumulative LOM capital cost profile.

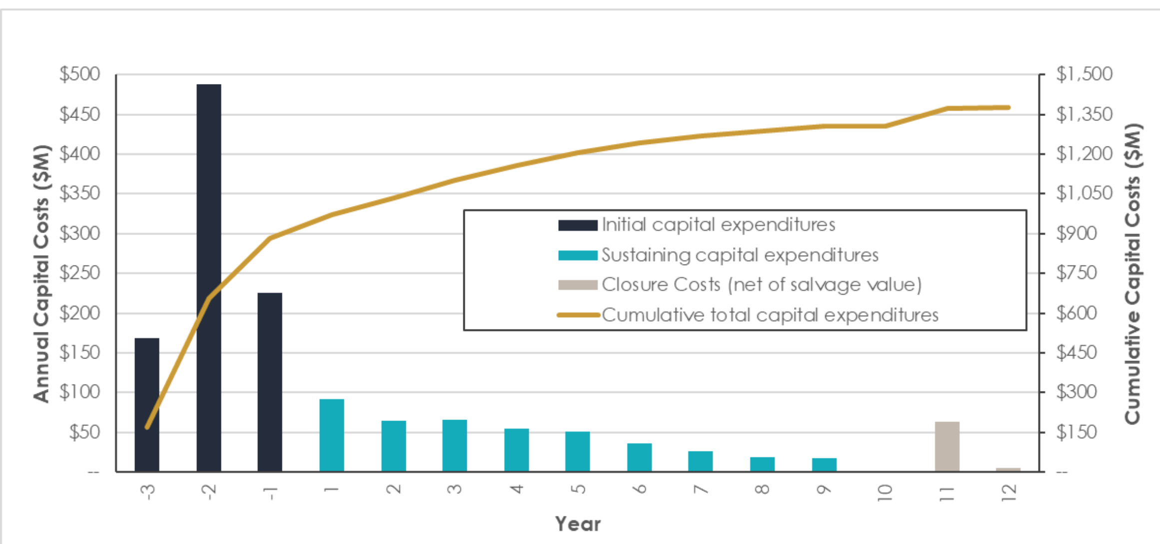


Figure 1-2: Capital cost distribution over LOM

1.15.2 Operating Costs

The operating cost estimate was based on multiple sources, such as budget quotations, in-house data, and ODV's projected salary chart. The operating cost expenditure ("OPEX") estimate is based on a combination of experience, reference projects, quotes, and budgetary quotes and factors appropriate for an FS study. The target accuracy of the operating costs is ±15%. No cost escalation or contingency has been included within the operating cost estimate.

The average operating cost over the 10-year mine life is estimated to be $110.7 per tonne mined. Total LOM and unit operating cost estimates are summarized and shown on a percentage basis in Table 1-7. Mining costs are presented inclusive of costs related to the paste fill binder costs (i.e., underground). Processing costs are presented inclusive of the surface paste fill plant operating costs (i.e., surface).

Table 1-7: Operating cost summary

Area	Cost Area Description[1]	LOM unit cost ($/t processed)	LOM ($M)	Annual average cost ($M/year)	Average LOM ($/oz)	OPEX (%)
200	Underground mining	62.3	1,080	98	570	56
300	Water and waste management	5.0	86	8	45	4
400	Electrical transmission line	4.9	86	8	45	4
600	Processing	23.2	403	37	213	21
800	General and administration	15.4	266	24	141	14
	Total	**110.7**	**1,921**	**175**	**1,014**	**100%**

(1) Underground mining, Water and Waste Management, Processing and G&A operating cost do not include a portion of the expenditures which have been capitalized – refer to Section 21.1.4.10.

It is anticipated that 525 employees (staff and labour) will be required during the peak of operations. See Section 21 for detailed peak labour list.

1.16 Project Economics

The economic assessment of the Project was carried out using a discounted cash flow approach on a pre-tax and after-tax basis, based on consensus equity research on long-term commodity price projections in United States dollars and cost estimates in the currency in which they are incurred. An exchange rate of USD 0.74 per CAD 1.00 was assumed to convert United States Dollar ("USD") projections and particular components of the capital cost estimates into Canadian Dollars ("CAD"). The base case gold price is USD 2,400 per ounce ("USD/oz"). No provision was made for the effects of inflation. Current Canadian tax regulations were applied to assess the corporate tax liabilities, while the most recent provincial regulations were applied to assess the British Columbia mining and carbon tax liabilities.

The economic analysis presented in this section contains forward-looking information with regards to the Mineral Resource Estimates, commodity prices, exchange rates, proposed mine production plan, projected recovery rates, operating costs, construction costs, and project schedule. The results of the economic analysis are subject to several known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here.

Osisko Gold Royalties retains a 5.0% net smelter return royalty on the Project.

The input parameters used, and results of the financial analysis are presented in Table 1-8, and the financial analysis summary is presented in Table 1-9.

The pre-tax base case financial model resulted in an IRR of 26.5% and a NPV of $1,371.4M using a 5% discount rate. The pre-tax payback period after start of operations is 2.6 years.

On an after-tax basis, the base case financial model resulted in an IRR of 22.1% and a NPV of $943.5M using a 5% discount rate. The after-tax payback period after start of operations is 2.8 years.

The AISC including royalties over the LOM are USD1,157/oz.

Table 1-8: Financial analysis assumptions

Description	Unit	Value
Long Term Gold Price	USD/oz	2,400
Exchange Rate	USD:CAD	0.74
Discount Rate	%	5.0
Mine Life	year	10
Total Ore Mined	Mt	17.8
Average Gold Grade	g/t	3.62
Overall Gold Metallurgical Recovery	%	92.6
Gold Recovered in Doré	koz	884.0
Gold Recovered in Flotation Concentrate	koz	1,033.5
Flotation Concentrate Produced	kt	240.8
Underground Mining Operating Cost	$/t	62.25
Processing Operating Cost	$/t	23.21

Description	Unit	Value
Waste and Water Management Operating Cost	$/t	4.97
Electrical Transmission Line Operating Cost	$/t	4.93
General and Administrative Operating Cost	$/t	15.36
Total Operating Cost	$/t	110.73
Royalties	% NSR	5.0
Initial Capital Cost	$M	880.8
Sustaining Capital Cost	$M	426.1
Reclamation Cost	$M	134.8
Salvage Value	$M	-36.0

Table 1-9: Financial analysis results

Description		Unit	Value
Pre-tax	Net Present Value (0% discount rate)	$M	2,216.1
	Net Present Value (5% discount rate)	$M	1,371.4
	Internal Rate of Return	%	26.5
	Simple Payback Period	year	5.6
	Payback Period (after start of operations)	year	2.6
After-tax	Net Present Value (0% discount rate)	$M	1,577.4
	Net Present Value (5% discount rate)	$M	943.5
	Internal Rate of Return	%	22.1
	Simple Payback Period	year	5.8
	Payback Period (after start of operations)	year	2.8

A financial sensitivity analysis was conducted on the Project's after tax NPV and IRR using the following variables: capital cost (pre-production and sustaining) operating costs, USD:CAD exchange rate, and the price of gold.

The graphical representations of the financial sensitivity analysis on NPV and IRR are depicted in Figure 1-3 and Figure 1-4. The sensitivity analysis reveals that the USD:CAD exchange rate and gold price have the most significant influence on both NPV and IRR compared to the other parameters, based on the range of values evaluated. After the USD:CAD exchange rates and gold price, NPV was most impacted by changes in operating costs and then, to a lesser extent, capital costs. After the USD:CAD exchange rate and gold price, the Project's IRR was most impacted by variations in capital costs and to a lesser extent, by the operating costs. Overall, the NPV of the Project is positive over the range of values used for the sensitivity analysis.

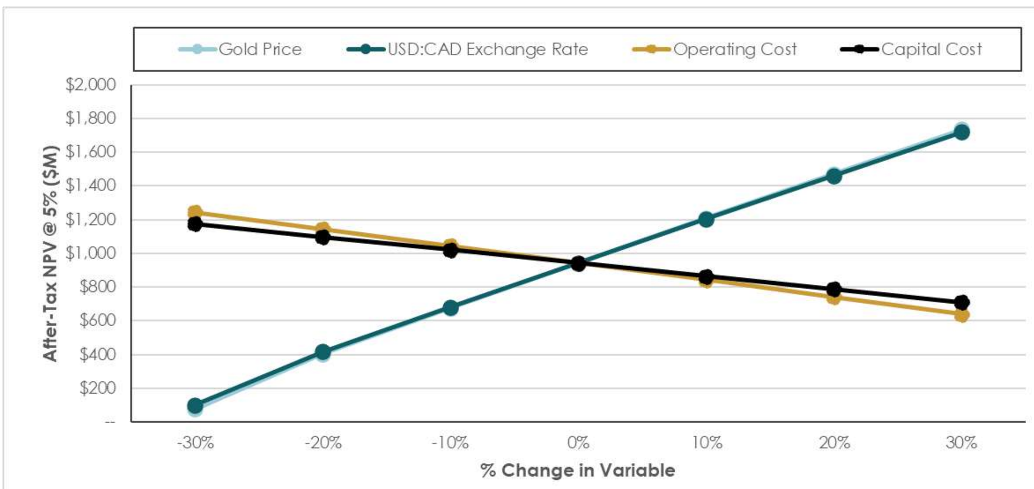


Figure 1-3: Sensitivity of the net present value (after-tax) to financial variables

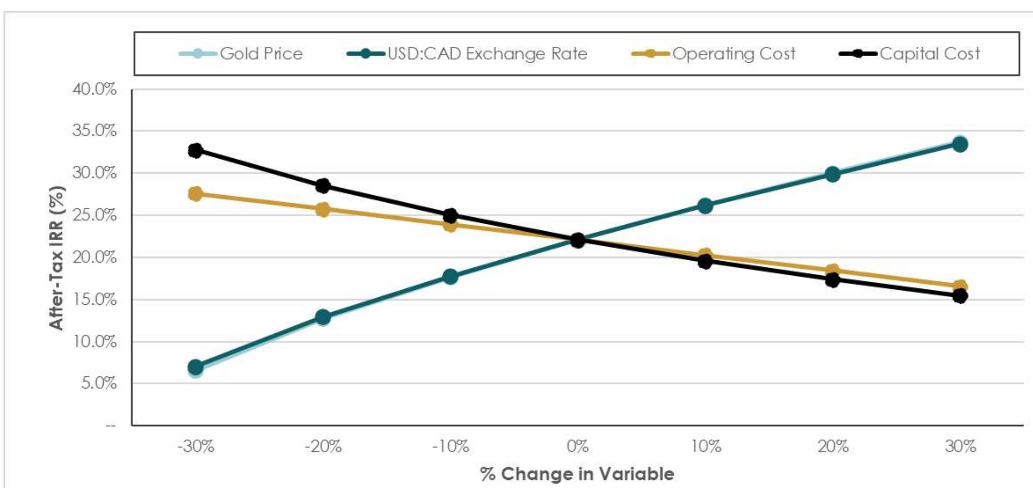


Figure 1-4: Sensitivity of the internal rate of return (after-tax) to financial variables

1.17 Project Schedule and Organization

The Project will be developed by ODV. Construction activities have been broken out to be carried out prior to construction to support infrastructure upgrades allowing for water treatment and conveyance. Construction and pre-production will occur over a total of 30-months, commencing Q3 Year -3 with completion expected to be achieved Q2 Year -1. Final product of construction will be a 4,900 tpd concentrator building with supporting infrastructures producing gold flotation concentrate and doré, which will be transported to port to ship.

The Project's organization and construction execution philosophy benefits from certain existing facilities, expansion of the Ballarat camp, and experience gained with the current operations at the Bonanza Ledge site.

The Integrated Owner's Team has the personnel and experience to bring the Project from exploration through production. All upcoming Project activities, including detailed engineering, procurement, pre-production, and construction will be under the direction of the Vice-President Project Development of ODV.

Preconstruction activities allow for early works to be completed while utilizing the existing Ballarat camp infrastructure with a current capacity of 76 beds. Before construction ramps up, the camp will be expanded with additional dorm units increasing capacity to 264 beds.

The major Project activity milestones are presented in Table 1-10.

Table 1-10: Key milestones

Activity	Months from start of construction
Main Construction Permits	COMPLETE
Construction Start – Surface & Underground	0 months
Earthworks Completed	10 months
Process Plant Mill Building	24 months
Underground Crushing Completed	24 months
First Ore & Process Plant C3	24 months
Full Production Reached	34 months
69 kV/138 kV Powerline	19 months
69 kV/138 kV Substation	19 months
Crusher Stations	24 months
First Production Stoping	24 months

1.18 Interpretations and Conclusions

This FS was prepared by BBA and other experienced consultants for ODV to demonstrate the economic viability of developing the Project resources as an underground mine, with a new processing plant facility at the MSC. This Report provides a summary of the results and findings from each major area of investigation. Standard industry practices, equipment, and processes were used. To date, the QPs are not aware of any unusual or significant risks or uncertainties that could materially affect the reliability or confidence in the Project based on the information available or as discussed in this Report.

The results of the Report indicate that the proposed Project has technical and financial merit using the base case assumptions. The QPs consider the FS results sufficiently reliable and recommend that the Project be advanced to next stage of development through the initiation of detailed engineering.

The following conclusions are based on the QPs detailed review of all pertinent information:

- The results demonstrate the geological and grade continuities for all eight gold deposits in the Cow-Island-Barkerville Mountain Corridor.
- In underground scenario, the Project contains an estimated Measured Mineral Resource of 8,000 oz of gold, an Indicated Mineral Resource of 1,604,000 ounces, and an Inferred Mineral Resource of 1,864,000 oz. These Mineral Resources are exclusive of the Reserves.
- The Mineral Resource Estimates have not been updated since the 2022 FS MRE as there has been no new drilling; however, there has been mining depletion for Lowhee and changes to the cut-off grade assumptions.
- The LOM has a 10-year mine life at maximum production rates of 4,900 tpd. Production ramps-up to steady state of 4,900 tpd is achieve by Q2 Year 1.
- The Project mine layout demonstrates a development intensive stope access requirement and therefore has a high development metre per tonne of mineralized material ratio. These factors may pose a challenge to successful implementation of the mine plan given the restrictive geotechnical parameters and intrinsically lower productivities of the mining method. However, through diligent planning and adherence to proper work procedures, sufficient active headings and stoping areas should meet daily production requirements.
- The Project process plant is designed with a comprehensive and integrated flowsheet that emphasizes efficiency, recovery, and environmental responsibility. From underground crushing to doré production, each stage of the process is engineered to maximize gold recovery while minimizing waste and environmental impact. The use of advanced ore sorting, gravity concentration, and flotation technologies ensures high recovery rates, while the paste backfill system supports sustainable tailings management. Based on the test work results and the proposed mining plan at the time, the overall projected Au recovery is 92.6%.

- Overall, the water infrastructure at the MSC and Bonanza Ledge areas supports the site's water management strategy and achieves the following objectives:
  - Intercept and divert non-contact runoff;
  - Collect and manage contact water through water treatment.
- WTP configurations account for highly variable seasonal flows, challenging influent chemistry (including metals and nitrogen species), and resilience to extreme cold and storm events. Features such as redundant pumping, heat tracing, storage capacity, and process flexibility are built into both facilities to ensure compliance and continuity of operations. The water treatment strategy is fully integrated with the broader site water management system, and key performance objectives include meeting provincial discharge limits, minimizing reagent usage, and ensuring long-term environmental protection during post-closure monitoring and care.
- The environmental baseline work completed to date, in addition to ongoing environmental monitoring requirements in the EAC, *Mines Act* Permit, and *Environmental Management Act* Permits, is sufficient to support this FS update.
- The information and assumptions used in the design of the MSC, and Bonanza Ledge are sufficient to support a FS. Further work is underway and recommended to support subsequent detailed engineering phase.
- The total capital costs (initial and sustaining) for the Project were estimated at $1,406M, and the average operating costs over the 10-year mine life is estimated to be $110.7/t mined. The AISC including royalties over the LOM are USD $1,157/oz.
- The financial analysis performed as part of this revised FS using the base case assumptions results in an after-tax NPV 5% of $943M and an internal rate of return of 22.1% (base case exchange rate of 0.74 CAD for 1.00 USD). The average base case LOM FCF of $158M and the payback period after start of commercial production is 2.8 years.

The QPs consider the FS to be reliable, thorough, based on quality data, reasonable hypotheses, and parameters compliant with NI 43-101 requirements and CIM Definition Standards.

1.18.1 Risks and Opportunities

An analysis of the results of the investigations has identified a series of risks and opportunities associated with each of the technical aspects considered for the development of the Project.

Potential Risks

The most significant potential risks associated with the Project are:

- The planned daily mining production rate may be difficult to achieve due to geological continuity issues, geotechnical issues, possible interaction of equipment, automation constraints, and other potential slowdowns resulting in a longer mining cycle time;
- Risks related to paste backfill, including:
  - Unrecorded historical workings may be encountered, leading to delays and higher paste fill costs;
  - Paste backfilling of old voids takes longer than planned, delaying development;
  - Insufficient void is available underground for paste backfill, risking use of contingency void storage, and at a worst case, plant shutdown until emergency storage plan takes effect.
- Ground conditions may be worse than anticipated, leading to dilution, lower grades, and delays;
- Greater water inflow than anticipated leading to an increase in water pumping and treatment capital and operational costs;
- The underground mine water quality is not represented by groundwater samples collected from deep mine workings, and then the influent predictions may not be representative, and the water treatment design may need to be re-evaluated;
- The ore sorter mass pull is lower than the design value. The amount of ore sorter waste sent to underground will then increase, requiring increased use of void space, leading to the requirement to drop the overall recovery;
- Ammonia and Nitrate concentration fluctuations for the WTP causing potential starvation of the biological community in the MBBR;
- The inability to locate an appropriate borrow source for aggregate material near the Mine Site could increase the construction cost and environmental impact of the Project due to transporting the material over a greater distance;
- Risk of load exceeding the allowance, mitigated by power factor correction and scalable distribution equipment;
- Schedule risk related to amended permit- changes proposed to the project will require amendments to existing certificates and permits. Timelines for regulatory processes may be lengthy and could impact construction and operational schedule targets. Several of the previous noted risks are common to most mining projects, many of which may be mitigated, at least to some degree, with adequate engineering, planning, and pro-active management.

Key Opportunities

There are several opportunities that could improve the economics, timing, and/or permitting potential of the Project. The key opportunities that have been identified at this time are as follows:

- Surface and underground definition diamond drilling resulting in potential to upgrade Inferred resources to the indicated category;
- The planned processing plant and surface infrastructure design have been strategically optimized to accommodate potential future expansion options.
- Assessing the economic viability of extracting ore from geotechnical Class 5 category using a selective mining method, such as cut-and-fill leading to increase in Project value;
- Dispose of rougher flotation tailings co-mingled with the ore sorter and development waste on surface increasing flexibility and recovery;
- Addition of a step-up substation to allow the transmission line to expand to 138 kV to access more load for potential expansion;
- Opportunity to blend contract for scopes of similar disciplines of work in the request for proposal ("RFP") process.

1.19 Recommendations

Based on the results of the 2025 FS, the QPs recommend that the Project move to an advanced phase of development, which would involve detailed engineering and that Project execution activities commence at ODV's discretion to ensure construction readiness.

It is also recommended that ODV do additional work on the regional and local exploration to define potential expansions to the project footprint, and covert internal inferred resources to extend LOM. The proposed work budget includes regional surface drilling and local infill drilling from underground. The budget amounts to approximately $55M.

2. Introduction

This NI 43-101 Technical Report (the "Report") Feasibility Study for the Cariboo Gold Project (the "Project") was prepared and compiled by BBA Engineering Ltd. at the request of Osisko Development Corp. ("ODV"). The purpose of this Report is to summarize the results of the 2025 Feasibility Study ("FS") for the Project in accordance with the guidelines of the Canadian Securities Administrators National Instrument 43-101 ("NI 43-101") and Form 43-101F1. BBA is an independent engineering consulting firm headquartered in Mont-Saint-Hilaire, Québec with mining groups based in Montréal, Vancouver, Toronto, and Sudbury. The Vancouver team led the overall integration of this Report. This Report was prepared under ODV's Manager – Technical Services, Victor Gauthier P.Eng., and the ODV team, based on contributions from several independent consulting firms, including BBA Engineering Ltd. ("BBA"), InnovExplo Inc. ("InnovExplo"), WSP Canada Inc. ("WSP"), JDS Energy & Mining Inc. ("JDS"), Falkirk Environmental Consultants Ltd. ("Falkirk"), Integrated Sustainability Consultants Ltd. ("IS"), M.A. O'Kane Consultants Inc. ("Okane"), Alius Mine Consulting Inc. ("Alius"), and Clean Energy Consulting Inc. ("CEC").

2.1 Barkerville Gold Mines Division

Barkerville Gold Mines Division ("BGM") is a 100%-owned subsidiary of ODV, focused on the development of over 2,000 square kilometres ("km^2") of mineral tenures in the Cariboo Mining District in British Columbia ("BC"), Canada. The land holdings consist of a 67 kilometre ("km") long and 25 km wide belt that contains historically-producing mines, including Mosquito Creek Mine, Aurum Mine, and Cariboo Gold Quartz Mine. The current resource development is focused on the Island Mountain, Cow Mountain, and Barkerville Mountain corridor (collectively, the "Cow-Island-Barkerville Mountain Corridor"), where gold had been extracted from both pyrite replacement and quartz vein ores.

2.2 Basis of Technical Report

The following Report presents the results of the FS for the development of the Project. As of the date of this Report, ODV is a North American mine development company with a focus towards becoming a mid-tier gold miner with opportunities for immediate production. ODV is listed on the TSX Venture Exchange ("TSXV") and the New York Stock Exchange ("NYSE") under the symbol "ODV" with its head office situated at:

1100, av des Canadiens-de-Montréal
Suite 300, P.O. Box 211
Montréal, QC H3B 2S2

This Report, titled, "NI 43-101 Technical Report Feasibility Study for the Cariboo Gold Project" and effective as of April 25, 2025, was prepared following the guidelines of NI 43-101 and in conformity with the guidelines of the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards on Mineral Resources and Reserves ("CIM Definition Standards").

2.3 Report Responsibility and Qualified Persons

The following individuals, by virtue of their education, experience, and professional association, are considered qualified persons ("QPs") as defined in the NI 43-101 and are members in good standing of appropriate professional institutions:

- Mathieu Bélisle, P.Eng. — BBA Engineering Ltd. (BBA)
- Amanda Fitch, P.Eng. — BBA Engineering Ltd. (BBA)
- Sebastien Guido, P.Eng. — Alius Mine Consulting Inc. (Alius)
- Philip Clark, P.Eng. — Clean Energy Consulting Inc. (CEC)
- Rob Griffith, P.Eng. — Falkirk Environmental Consultants Ltd. (Falkirk)
- Katherine Mueller, P.Eng. — Falkirk Environmental Consultants Ltd. (Falkirk)
- Nikolay Sidenko, P.Geo. — Falkirk Environmental Consultants Ltd. (Falkirk)
- Eric Lecomte, P.Eng. — InnovExplo Inc. (InnovExplo)
- Carl Pelletier, P.Geo. — InnovExplo Inc. (InnovExplo)
- Tessa Scott, P.Geo. — InnovExplo Inc. (InnovExplo))
- A.J. MacDonald, P.Eng. — Integrated Sustainability Consultants Ltd. (IS)
- Jean-François Maillé, P.Eng. — JDS Energy & Mining Inc. (JDS)
- Yapo Allé-Ando, P.Eng. — M.A. O'Kane Consultants Inc. (Okane)
- Rachel Sawyer, P.Eng. — M.A. O'Kane Consultants Inc. (Okane)
- Paul Gauthier, P.Eng. — WSP Canada Inc. (WSP)

The preceding QPs have contributed to the writing of this Report and have provided QP certificates, included at the beginning of this Report. The information contained in the certificates outlines the sections in this Report for which each QP is responsible. Each QP has also contributed figures, tables, and portions of Chapter 1 (Summary), Chapter 2 (Introduction), Chapter 25 (Interpretation and Conclusions), Chapter 26 (Recommendations), and Chapter 27 (References). Table 2-1 outlines the responsibilities for the various sections of the Report and the name of the corresponding qualified person.

Table 2-1: Qualified persons and areas of report responsibility

Chapter	Description	Qualified Person	Company	Comments and exceptions
1.	Summary	A. Fitch	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
2.	Introduction	A. Fitch	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
3.	Reliance on other Experts	A. Fitch	BBA	Section 3.2
		C. Pelletier	InnovExplo	Section 3.1
4.	Project Property Description and Location	C. Pelletier T. Scott	InnovExplo	Sections 4.1 to 4.5
		K. Mueller	Falkirk	Section 4.6 and 4.7
5.	Accessibility, Climate, Local Resource, Infrastructure and Physiography	C. Pelletier T. Scott	InnovExplo	All of Chapter 5
6.	History	C. Pelletier T. Scott	InnovExplo	All of Chapter 6
7.	Geological Setting and Mineralization	C. Pelletier T. Scott	InnovExplo	All of Chapter 7
8.	Deposit Types	C. Pelletier T. Scott	InnovExplo	All of Chapter 8
9.	Exploration	C. Pelletier T. Scott	InnovExplo	All of Chapter 9
10.	Drilling	C. Pelletier T. Scott	InnovExplo	All of Chapter 10
11.	Sample Preparation, Analyses and Security	C. Pelletier T. Scott	InnovExplo	All of Chapter 11
12.	Data Verification	C. Pelletier T. Scott	InnovExplo	All of Chapter 12
13.	Mineral Processing and Metallurgical Testing	M. Bélisle	BBA	All of Chapter 13
14.	Mineral Resource Estimate	C. Pelletier T. Scott	InnovExplo	All of Chapter 14, except for Section 14.12
		E. Lecomte	InnovExplo	Section 14.12
15.	Mineral Reserve Estimate	E. Lecomte	InnovExplo	All of Chapter 15
16.	Mining Methods	E. Lecomte	InnovExplo	Sections 16.1, 16.4, 16.5, 16.8, 16.9, and 16.10
		R. Griffith	Falkirk	Section 16.3
		S. Guido	Alius	Section 16.2
		P. Gauthier	WSP	Sections, 16.6, 16.7
17.	Recovery Methods	M. Bélisle	BBA	All of Chapter 17

Chapter	Description	Qualified Person	Company	Comments and exceptions
18.	Project Infrastructure	A. Fitch	BBA	Sections 18, 18.1, 18.2, 18.2.1, 18.2.1.1, 18.3, 18.3.5, 18.3.5.4, 18.3.6, 18.3.6.7, 18.3.6.9, 18.4
		P. Clark	CEC	Sections 18.3.6.6, 18.4.2
		R. Sawyer	Okane	Sections 18.2.2, 18.3.5.1
		Y. Allé-Ando	Okane	Sections 18.2.1.2, 18.3.3, 18.3.4
		A. MacDonald	IS	Sections 18.3.5.2, 18.3.6.4
		J.-F. Maillé	JDS	Sections 18.3.1, 18.3.5.3, 18.3.5.5, 18.3.6.1, 18.3.6.2, 18.3.6.3, 18.3.6.5, 18.3.6.8, 18.4.1
		R. Griffith	Falkirk	Section 18.3.2
19.	Market Studies and Contracts	A. Fitch	BBA	All of Chapter 19
20.	Environmental Studies, Permitting, and Social or Community Impact	K. Mueller	Falkirk	All of Chapter 20, except for 20.3.1 and 20.3.2
		R. Griffith	Falkirk	Section 20.3.3.1
		N. Sidenko	Falkirk	Sections 20.3.1, 20.3.2, 20.3.3.2
21.	Capital and Operating Costs	A. Fitch	BBA	Sections 21, 21.1, 21.1.1, 21.1.2, 21.1.2.1, 21.1.2.2, 21.1.3, 21.1.4, 21.1.4.6, 21.1.4.10, 21.1.4.11, 21.1.5, 21.1.5.6, 21.1.5.7, 21.2, 21.2.1, 21.2.2, 21.2.7, 21.2.8
		M. Bélisle	BBA	Sections 21.1.4.8, 21.1.5.9, 21.2.5
		P. Gauthier	WSP	Sections 21.1.4.2, 21.1.4.3, 21.1.5.2, 21.1.5.3, 21.2.3.10
		E. Lecomte	InnovExplo	Sections 21.1.4.1, 21.1.5.1, 21.1.5.8, 21.2.3 (except for 21.2.3.10)
		A.J. MacDonald	IS	Sections 21.1.4.5, 21.2.6
		J-F. Maillé	JDS	Sections 21.1.2.3, 21.1.4.4, 21.1.4.7, 21.1.4.9, 21.1.5.4, 21.1.5.5, 21.3
		P. Clark	CEC	Sections 21.2.4
22.	Economic Analysis	A. Fitch	BBA	All of Chapter 22
23.	Adjacent Properties	C. Pelletier	InnovExplo	All of Chapter 23
24.	Other Relevant Data and Information	J.-F. Maillé	JDS	All of Chapter 24
25.	Interpretation and Conclusions	A. Fitch	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
26.	Recommendations	A. Fitch	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
27.	References	A. Fitch	BBA	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.

2.4 Effective Dates and Declaration

The overall effective date of the Report is April 25, 2025.

The Report has several effective dates for information:

- Effective date of the Cariboo Gold Project Mineral Resource Estimate: April 22, 2025;
- Effective date of the Cariboo Gold Project Mineral Reserve Estimate has an effective date of April 10, 2025;
- Date of the financial analysis closure: April 25, 2025.

This Report was prepared as a National Instrument 43-101 Standards of Disclosure for Mineral Projects Technical Report for ODV by QPs, collectively the "Report Authors". The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in the Report Authors' services, based on i) information available at the time of preparation; ii) data supplied by outside sources; and iii) the assumptions, conditions, and qualifications set forth in this Report. This Report is intended for use by ODV, subject to the terms and conditions of its respective contracts with the Report Authors, and relevant securities legislation.

The contract allows ODV to file this Report as a Technical Report with Canadian Securities Regulatory Authorities pursuant to National Instrument 43-101. Except for the purposes legislated under provincial securities law, any other uses of this Report by any third party is at that party's sole risk. The responsibility for this disclosure remains with ODV. The user of this document should ensure that this is the most recent Technical Report for the property as it is not valid if a new Technical Report has been issued.

2.5 Sources of Information

2.5.1 General

This Report is based in part on internal company reports, maps, published government reports, company letters and memoranda, and public information, as listed in Chapter 27 (References) of this Report.

Sections from reports authored by other consultants may have been directly quoted or summarized in this Report and are so indicated, where appropriate.

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

- Technical discussions with ODV personnel;
- QPs' personal inspection of the Project site(s);
- Reports of mineralogical, metallurgical, and grindability characteristics of the Island Mountain, Cow Mountain, and Barkerville Mountain deposits, and Bonanza Ledge Site, conducted by industry recognized metallurgical testing laboratories on behalf of ODV;
- The Project resource block model and estimate provided by InnovExplo, which are effective as of April 22, 2025;
- The Project received an Environmental Assessment Certificate ("EAC"), Certificate #M23-01, on October 10, 2023, and Schedule B of the certificate lays out the conditions of the approval under 22 separate sections. The *Mines Act* permit, M-247, was received on November 12, 2024 and the *Environmental Management Act* permits, PE-17876 for Bonanza Ledge and PE-111511 for the Mine Site Complex, were received on December 12, 2024.
- Internal and commercially available databases and cost models;
- Various reports covering site hydrology, hydrogeology, geotechnical, and geochemistry;
- Various reports covering site physical and biological environment;
- Internal unpublished reports received from ODV;
- Additional information from public domain sources.

The QPs have no known reason to believe that any of the information used to prepare this Report and evaluate the Mineral Resources presented herein is invalid or contains misrepresentations.

The Report Authors have sourced the information for this Report from the collection of documents listed in Chapter 27 (References).

2.5.2 BBA Engineering Ltd.

The following individuals provided specialist input to Mathieu Belisle, QP:

- Helin Girgin (BBA), Denise Nunes (BBA) and Gabrielle Murphy (BBA) provided data analysis and interpretation of the metallurgical test work (Chapter 13), as well as inputs for the development of the process plant operating cost estimate in Chapter 21 (Capital and Operating Costs).
- Amaru Humala (BBA) provided capital estimation development.

The following individuals provided specialist input to Amanda Fitch, QP:

- Amaru Humala (BBA) provided capital estimation development;
- Claude Catudal (BBA) prepared the Monte Carlo contingency model and simulation for the Capital Direct costs (excluding the underground mine), and Capital Indirect costs;
- Colin Hardie (BBA) provided advisory services and review for the financial cash flow model;
- Alexandre Burelle (Evomine) provided the financial cash flow model, sensitivity analysis, and support in Chapter 22 content.

2.5.3 Alius Mine Consulting Inc.

The following individuals provided specialist input to Sebastien Guido, QP:

- Emmanuel Brouillard (Alius) and Guillaume Debellefeuille (Alius) conducted the back-analysis of the Bonanza Ledge Mine stopes, provided by Victor Gauthier (ODV) and Philippe MacKay (formerly ODV).
- Victor Gauthier (ODV) also supplied data for previously unclassified stopes, enabling their geotechnical classification.
- Sébastien Tanguay (InnovExplo) provided mine design (development and stopes) for review purposes.
- Emmanuel Brouillard (Alius) compiled and organized core box photographs near stopes historically classified by SRK, to support review and QA/QC efforts.

2.5.4 Clean Energy Consulting Inc.

The following individuals provided specialist input to Philip Clark, QP:

- Michael Atkinson (CEC) provided input on the design of the substation.
- Jiwoo Heo (CEC) provided input on the design of the transmission line, and visited the site July 19-21, 2023, to discuss and review proposed transmission line crossings and substation location.

2.5.5 Falkirk Environmental Consultants Ltd.

The following individuals provided input to Katherine Mueller, QP:

- Kelsey Dodd (ODV) provided information on indigenous and community engagement.

The following individuals provided input to Nikolay Sidenko, QP:

- Kelsey Dodd (ODV) provided water quality monitoring records.
- Victor Gauthier (ODV) provided mine plan inputs including volumes of mine workings and tonnages of mine waste.
- Rob Griffith (Falkirk) modelled and provided flows for different water quality streams

The following individuals provided input to Rob Griffith, QP:

- Victor Gauthier (ODV) provided mill water balance flow rates.
- Victor Gauthier (ODV) provided the Mine Site Complex ("MSC") Sediment Control Pond ("SCP") storage capacity.
- Knight Piésold designed the SCP at the Bonanza Ledge Site.
- M.A. Okane provided the waste rock storage facility ("WRSF") footprint and layout of water management infrastructure.
- Victor Gauthier (ODV) provided the drainage area divide under the proposed WRSF that will be defined by the slope of the underlying liner.
- Victor Gauthier (ODV) provided historical record of the water treatment plant ("WTP") and underground dewatering flow rates at Bonanza Ledge.
- Underground dewatering flow rates were adopted from the results of the 2023 hydrogeological modelling study by WSP.

2.5.6 InnovExplo Inc.

The following individuals provided specialist input to Eric Lecomte, QP:

- Sébastien Tanguay (InnovExplo), Yness El Rakka (InnovExplo) and Constant Noutchogwe (InnovExplo) provided the design for underground workings and scheduled mine plan.
- Laurent Tangni (Meglab) provided the underground electrical design and cost estimates for related materiel and electrical charge. She also provided electrical sections of Chapter 16.
- Arianne Couture (Technosub) provided the underground dewatering design, cost estimates for related materials, and the dewatering sections of Chapter 16.
- Robert Hamilton (Independent external consultant) provided the mobile equipment rebuild schedule and related personnel and material cost estimates for the major maintenance of mobile fleet. He also contributed to the yearly operating hours.
- Hugo Della Sbarba (Dello Ventilation) provided the ventilation design, underground heating demand, cost estimates, and hardware requirements. He also provided ventilation sections of Chapter 16.

2.5.7 Integrated Sustainability

The following individuals provided specialist input to A.J. MacDonald, QP:

- Nikolay Sidenko and Jacob Maclaine (Falkirk) provided Water Quality Model Data and design input for the MSC WTP.
- Rob Griffith (Falkirk) provided Water Balance Model Data and design input for the MSC WTP.
- Mohammed Awad (IS) directed the development of the preliminary process designs for the MSC WTP.
- Ingo Gloge (IS) directed the development of the cost estimates for the Bonanza Ledge and MSC WTP.

2.5.8 JDS Energy & Mining Inc.

The following individuals provided specialist input to Jean-François Maillé, QP:

- Alex Simister (JDS) provided first principle costing for bulk earthworks preparation for the Bonanza Ledge WRSF and SCP; MSC preparation/roads/berms; water management infrastructure; MSC WTP.
- Material take-off ("MTO") for the MSC water management infrastructure, Bonanza Ledge pit remediation, were provided by Yapo Allé-Ando (Okane)
- MTO for the Bonanza Ledge SCP and WRSF underdrain system were provided by Mark Alban (Knight Piésold).
- Samir Dekhili (JDS) provided cost estimates for the Construction Indirects.
- Ishan Fechter (JDS) provided costing for raw water wells, sewage treatment plant, camp fire protection, permanent offices and dry facility, Emergency Response Team ("ERT") garage upgrades, Ballarat camp upgrades, and gate houses.
- Kevin Kerr (JDS) provided costing for water treatment conveyance infrastructure from pump, and pipeline sizing basis were provided by Sébastien Provencher (Technosub).
- Alex Burkinshaw (Surespan) provided pricing for the Willow River bridge installation.
- Aleicia Sharpe (WSP) provided installation pricing for the effluent water discharge diffuser.
- MTOs used for the budgetary request for proposal ("RFP") process for the concentrator building were provided by Amaru Humala (BBA). Pricing was sourced through a formal budgetary RFP process with respective contractors specializing in the respective disciplines: architectural steel; structural steel; piping; concrete; and mechanical equipment.

2.5.9 M.A. O'Kane Consultants Inc.

The following individuals provided specialist input to Yapo Allé-Ando, QP:

- Ismail Ouchebri (Okane) provided design inputs for the Bonanza Ledge and MSC surface water management system.
- Hal Cooper (Okane) provided MTOs for the surface water management infrastructure for Bonanza Ledge and MSC.
- WSP provided the diffuser design for Okane to review.
- Knight Piésold designed the SCP at the Bonanza Ledge Site.

The following individuals provided specialist input to Rachel Sawyer, QP:

- Hal Cooper (Okane) provided MTOs and footprint for the WRSF design layout.
- Alex Nguyen (Okane) competed the stability analysis of the WRSF at Bonanza Ledge.

2.5.10 WSP Canada Inc.

The following individuals provided specialist input to Paul Gauthier, QP:

- Robert Bradley and Steven Wagstaff (WSP) provided the underground paste fill network distribution design and capital and operating costs.
- Razel Laspinas and Shota Nakaska (WSP) provided the underground material handling mechanical design and capital and operating costs.
- T Engineering provided technical data for the design of the underground paste fill distribution.

All of the individuals mentioned above who have provided input are not considered QPs for the purposes of this NI43-101.

2.6 Site Visits

The following bulleted list describes which QPs visited the Mine Site, the date of the visit, and the general objective of the visit:

- **Amanda Fitch (BBA)** visited the proposed MSC in Wells and the Bonanza Ledge site on November 8, 2024. The site visit was performed as an overall integrating QP to observe the existing infrastructure on site and the proposed site for development.
- **Katherine Mueller (Falkirk)** visited the site between June 15 and June 16, 2022, to discuss all the environmental management, compliance, and water management activities on site as it related to the current and future permitting requirements for the Project.

- **Eric Lecomte (InnovExplo)** visited the site on February 25, 2022. This first visit included a review of the proposed MSC location in the District of Wells and an inspection of the Bonanza Ledge Site. The primary objective was to evaluate surface and underground site conditions, including a visual assessment of ground conditions and excavation behaviour at Bonanza Ledge. A second visit was conducted on September 11, 2024, with a primary focus on the Cow portal ramp. The inspection aimed to assess current ground conditions and excavation behaviour specific to the ramp area. Discussions were held with site personnel regarding the operational performance of the Roadheader used for ramp development, including its productivity, ground response, and cycle time performance.
- **Carl Pelletier (InnovExplo)** conducted a site visit from February 1 to 4, 2016, and from May 3 to 12, 2016. The first visit included the Bonanza Ledge pit, the Cow Mountain area, and the Island Mountain area. The second involved a visit to the core logging facilities and several drill hole collars. While on site, selected core intervals from the Barkerville Mountain and Cow Mountain deposits were reviewed, an independent resampling program of said core was performed, and the Project databases were verified.
- **Jean-Francois Maillé (JDS)** visited the proposed MSC and Bonanza Ledge sites on October 21 and 22 2024. This site visit was intended as a refresher after having previously carried out field work at the Bonanza Ledge site from January to September 2021.
- **Yapo Allé-Ando (Okane)** visited the MSC and Bonanza Ledge site on October 2-3, 2024, to conduct a review of the site layout as it pertains to existing and planned surface water management infrastructure.
- **Sebastien Guido (Alius)** visited the Project on January 20–21, 2025. The first day included an underground tour of all developed workings, from the Cow portal to the Lowhee bulk sample area. Ground conditions were visually assessed throughout, including the location of the ramp crossing a local fault. Discussions were held with the engineering team regarding the bulk sample stope. A brief visit to the core logging facilities was also conducted, accompanied by an ODV geologist. The second day focused on a detailed review of the core logging facilities, including an in-depth assessment of the ODV geotechnical core logging procedure.

As of the effective date of this Report, the following QPs have not visited the Project Site as per justification:

- Mathieu Bélisle's (BBA) scope of work focused on the development of the process plant, which was based on test work data received from the metallurgical program and laboratories. There is no existing infrastructure at the MSC for the proposed process plant, therefore a site visit was not required for this Study.

- Paul Gauthier (WSP) did not visit the site; however, he relied upon a senior engineer from WSP, involved earlier in the Project, who visited the site and gathered information required to achieve the work for the underground material handling and paste fill underground network distribution.
- Tessa Scott (InnovExplo) did not visit the site for this Study. Tessa was the chief resource geologist from 2017 to the end of 2021. Tessa was involved in a prior site visit to gather information to verify the data supporting the resource estimation. An additional site visit was not necessary.
- Philip Clark (CEC) did not visit the site. The site and design team visited the site on Philip's behalf in the summer 2023 and obtained all necessary information for the design presented in this 2025 FS.
- Rachel Sawyer (Okane) did not visit the site; however, she relied upon a senior engineer from Okane who visited the Bonanza Ledge Site on October 2-3, 2024 to view existing conditions within the WRSF footprint under her direct supervision.
- A.J. MacDonald's (IS) scope of work focused on the development of the WTP design, which was based on water quality and balance Model data provided by the Project team. AJ is satisfied that the information made available to him was sufficient to fulfill his responsibilities and believes that a site visit would not have materially changed the conclusions or outcomes of his work.
- Rob Griffith's (Falkirk) scope of work was focused on the development of the water balance model, which was based on information and data provided by the Project team, including site characterization reports, topographic surveys, climate data, and engineering designs. Rob is satisfied that the information made available to him was sufficient to fulfill his responsibilities and believes that a site visit would not have materially changed the conclusions or outcomes of his work.
- Nikolay Sidenko's (Falkirk) scope of work was focused on the development of the water quality model, which was based on information and data provided by the Project team, including site characterization reports, water quality monitoring data, geochemical data, and engineering designs. Nikolay is satisfied that the information made available to him was sufficient to fulfill his responsibilities and believes that a site visit would not have materially changed the conclusions or outcomes of his work.

2.7 Currency, Units of Measurement, and Calculations

Unless otherwise specified or noted, the units used in this Report are metric. Every effort has been made to clearly display the appropriate units being used throughout this Report, which comprise:

- Currency is in Canadian dollars ("CAD" or "$");
- All ounce units are reported in troy ounces, unless otherwise stated:
  1 oz (troy) = 31.1 grams ("g") = 1.1 ounce ("oz") (Imperial);
- All metal prices are expressed in United States dollars ("USD");
- A CAD to USD exchange rate of 0.74 USD for 1.00 CAD was used;
- All cost estimates have a base date of the second quarter ("Q2") of 2025.

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

2.8 Acknowledgement

BBA and the other study contributors would like to acknowledge the general support provided by the following personnel during this assignment:

The Project benefitted from the specific input of Alexandre Burelle, Brandon Ott, Chris Martin, Dan Downton, Dave Rouleau, Eric Tremblay, Eryn Doyle, Frederic Doyon, Jessica Shaw, Jody Laing, Kate Sloan, Kelsey Dodd, Manon Dussault, Matt Carter, Mary Norman, Philippe Mackay, Stephen Quin.

3. Reliance on Other Experts

The QPs have relied on reports, information sources, and opinions provided by outside experts and Osisko Development Corp. related to the Cariboo Gold Project's mineral rights, surface rights, property agreements, royalties, and tax matters.

As of the date of this FS report, ODV indicates that there are no known or potential litigations that could affect the Project.

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

3.1. Mineral Tenure and Surface Rights

ODV supplied information about mining titles, option agreements, environmental liabilities, permits, and First Nations negotiations. Carl Pelletier and Tessa Scott, QPs, of InnovExplo consulted British Columbia's internet-based electronic mineral titles administration system (Mineral Titles Online) (https://www.mtonline.gov.bc.ca/mtov/home.do) for the latest status regarding ownership and mining titles. Although the QP has reviewed the option agreements and available claim status documents, the QP is not qualified to express any legal opinion with respect to the property titles, current ownership, or possible litigation. A description of such agreements, the property, and ownership thereof is provided for general information purposes only. In this regard, the QP has relied on information provided by ODV.

This information is used in Chapter 4 of the Report. The information is also used in support of the Mineral Resource Estimate in Chapter 14.

3.2. Taxation and Royalties

Amanda Fitch, QP, from BBA has relied on ODV for guidance on applicable taxes, royalty agreements, and other government levies or interests, applicable to potential revenue or income from the Project. This information is used in Chapter 19 (Market Studies and Contracts) and Chapter 22 (Economic Analysis) of the Report.

4. Property Description and Location

The Cariboo Gold Project is in the historic Wells-Barkerville mining camp of British Columbia and extends for approximately 60 kilometres ("km") from northwest to southeast.

The Project falls within the Cariboo Regional District ("CRD"), a division of the local government system in British Columbia ("BC"). The main towns in the Project area are the District of Wells ("Wells") and Barkerville Historic Town & Park. Wells is situated 74 km east of Quesnel, approximately 115 km southeast of Prince George, and approximately 500 km north of Vancouver (Figure 4-1).

The coordinates of the centre of the Project are 121°34'17"W and 53°03'42"N (UTM coordinates: 595745E and 5880080N, NAD 83, Zone 10). The Project lies on NTS maps sheets 93A/12/13/14, 93G/08 and 93H/03/04/05.

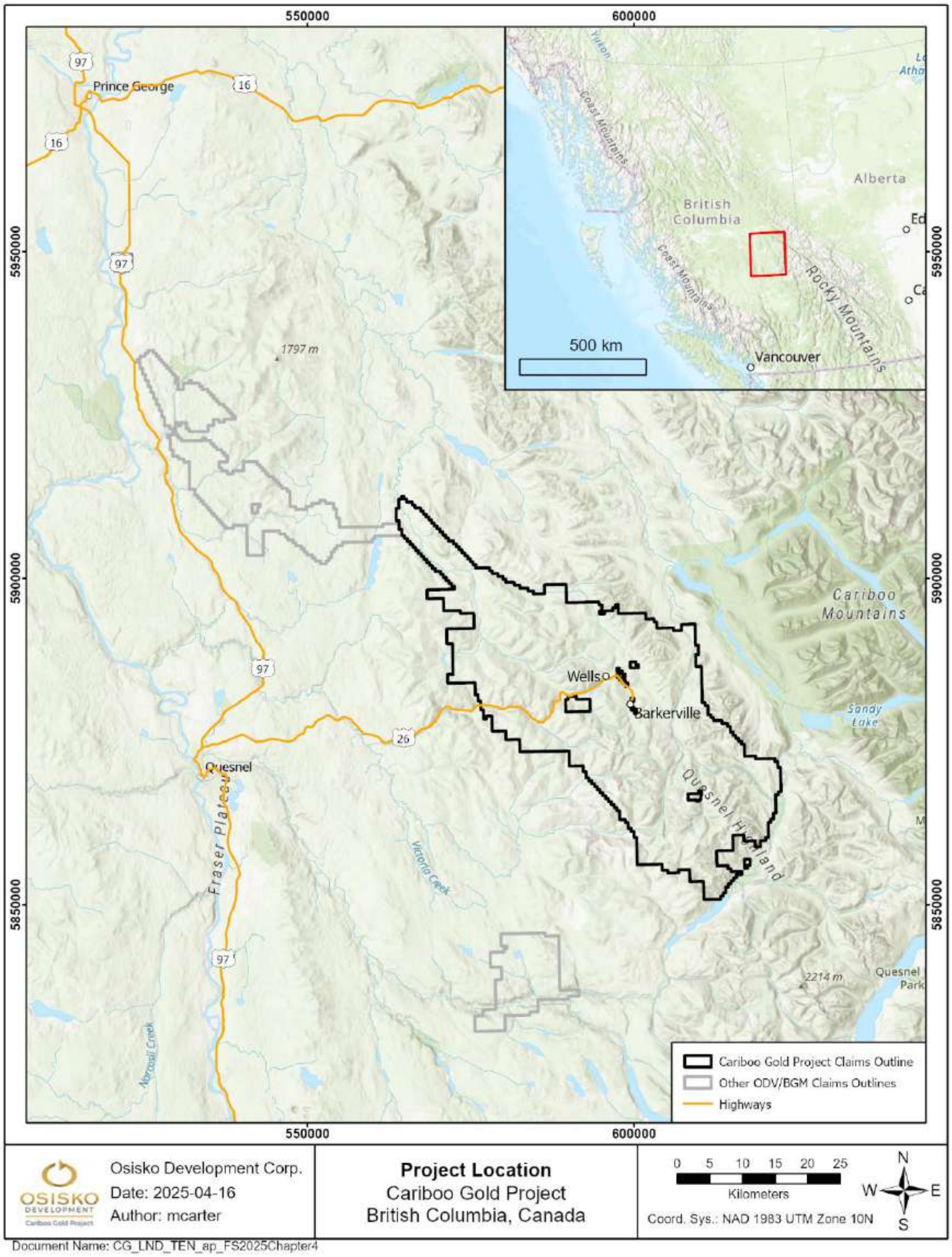


Figure 4-1: Location of the Cariboo Gold Project

4.1. Mineral Title Status

Osisko Development Corp. supplied all mineral title maps and tables. ODV's Barkerville Gold Mines Division Free Miner Certificate number is 110263668 and their Mineral Title Branch Client ID is 104256. The QPs verified the status of all mineral titles using Mineral Titles Online, BC's internet-based electronic mineral titles administration system.

ODV's land holdings consist of 384 mineral titles totalling 142,885.12 hectares ("ha") in one contiguous property block known as the Cariboo Main Block. The reader is reminded that the land holdings are registered in the names of Barkerville Gold Mines Ltd. ("BGM") and will be referred to as such in the following sections. These mineral titles include mineral claims, mineral leases, placer claims, and placer leases. Whereas BGM is a wholly owned subsidiary of ODV, these titles grant ODV the rights to explore for metal ores in bedrock or talus rock, including rock and other materials from mine tailings, dumps, and previously mined deposits of minerals, as set out in the Mineral Tenure Act. The breakdown according to type of mineral title is as follows:

Cariboo Main Block: 384 mineral titles (142,885.12 ha):

- 321 mineral claims totalling 135,731.20 ha (Figure 4-2);
- 49 placer claims totalling 4,602.98 ha (Figure 4-3);
- 13 placer leases totalling 2,395.74 ha (Figure 4-3);
- 1 mineral lease (#1105995) totalling 155.20 ha (Figure 4-2).

BGM holds 100% of interest in 62 Cariboo Main Block placer titles, and the mineral lease #1105995. BGM holds 100% of interest in 366 of the 384 Cariboo Main Block mineral and placer claims and placer leases. A total of 17 mineral claims are jointly owned with other companies and individuals: BGM holds 97.5% of interest in six mineral claims, 85% of interest in two mineral claims, and 50% interest in the other nine mineral claims.

A map showing mineral title distribution and ownership is presented in Figure 4-2.

The Project also contains 546 private land parcels from Crown-granted mineral claims (3,330.20 ha) that overlap many of the mineral titles, where BGM is the registered owner on title of the surface and/or undersurface rights to the parcels (Figure 4-4).

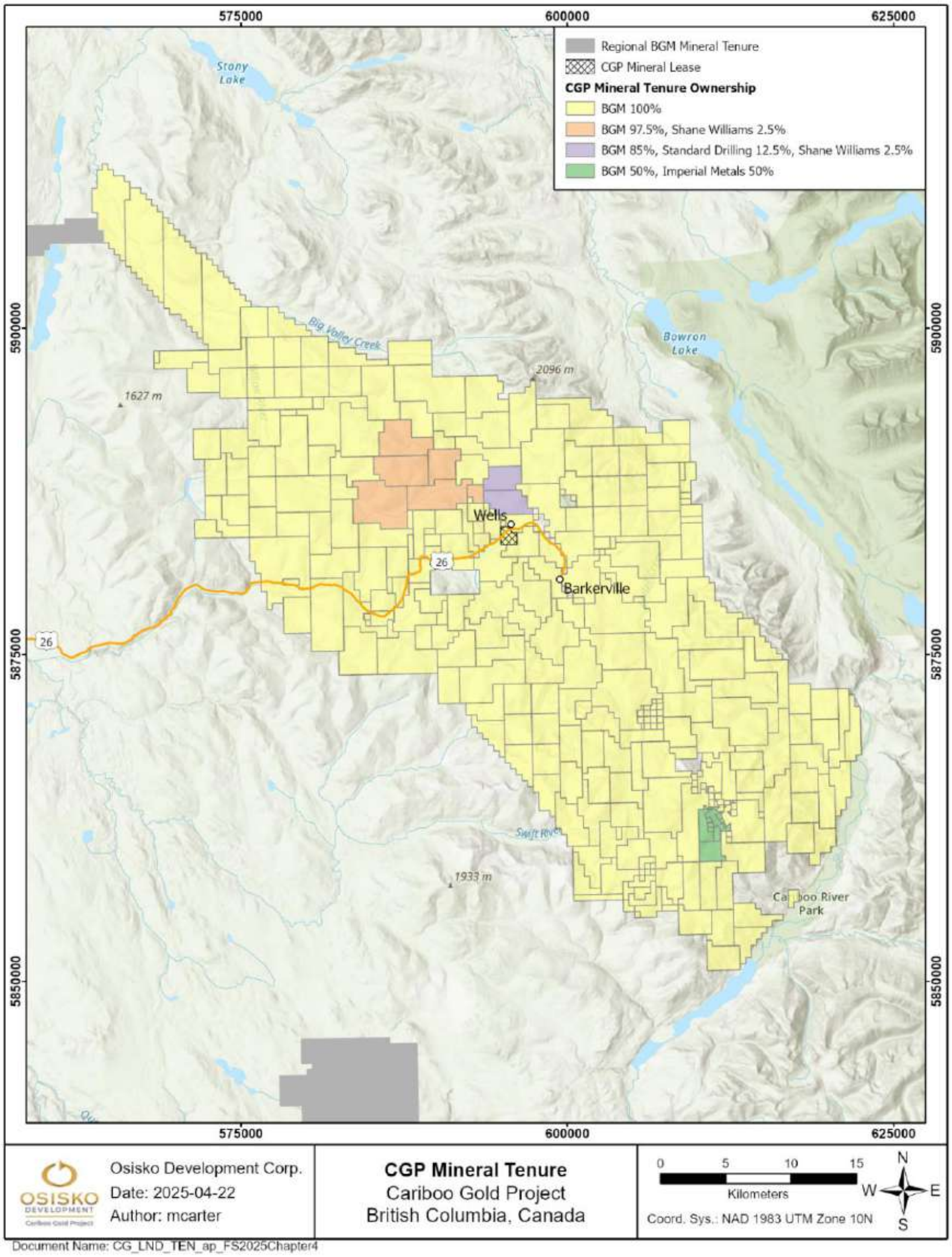


Figure 4-2: Mineral title and ownership map for the Cariboo Gold Project

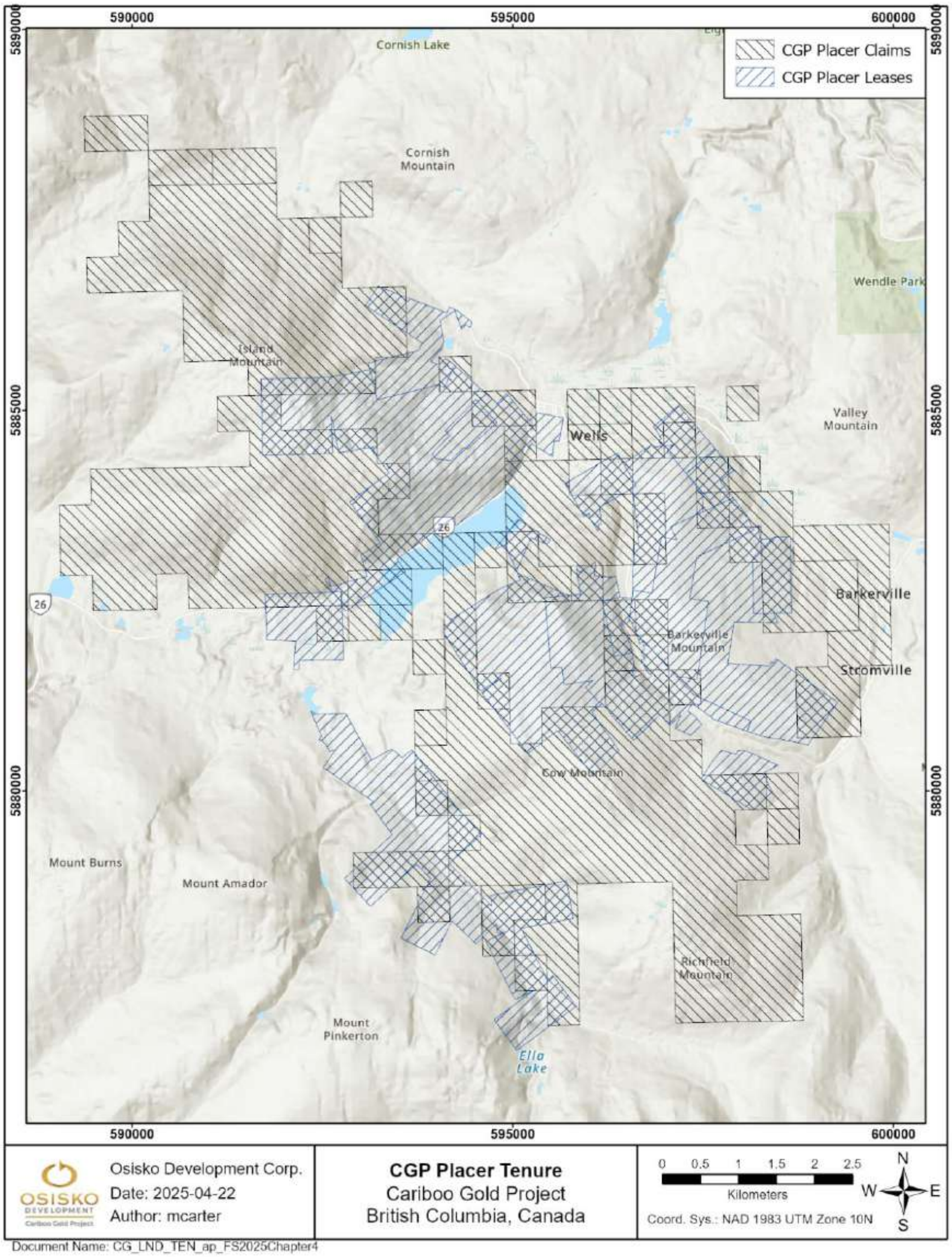


Figure 4-3: Placer tenure ownership map for the Cariboo Gold Project

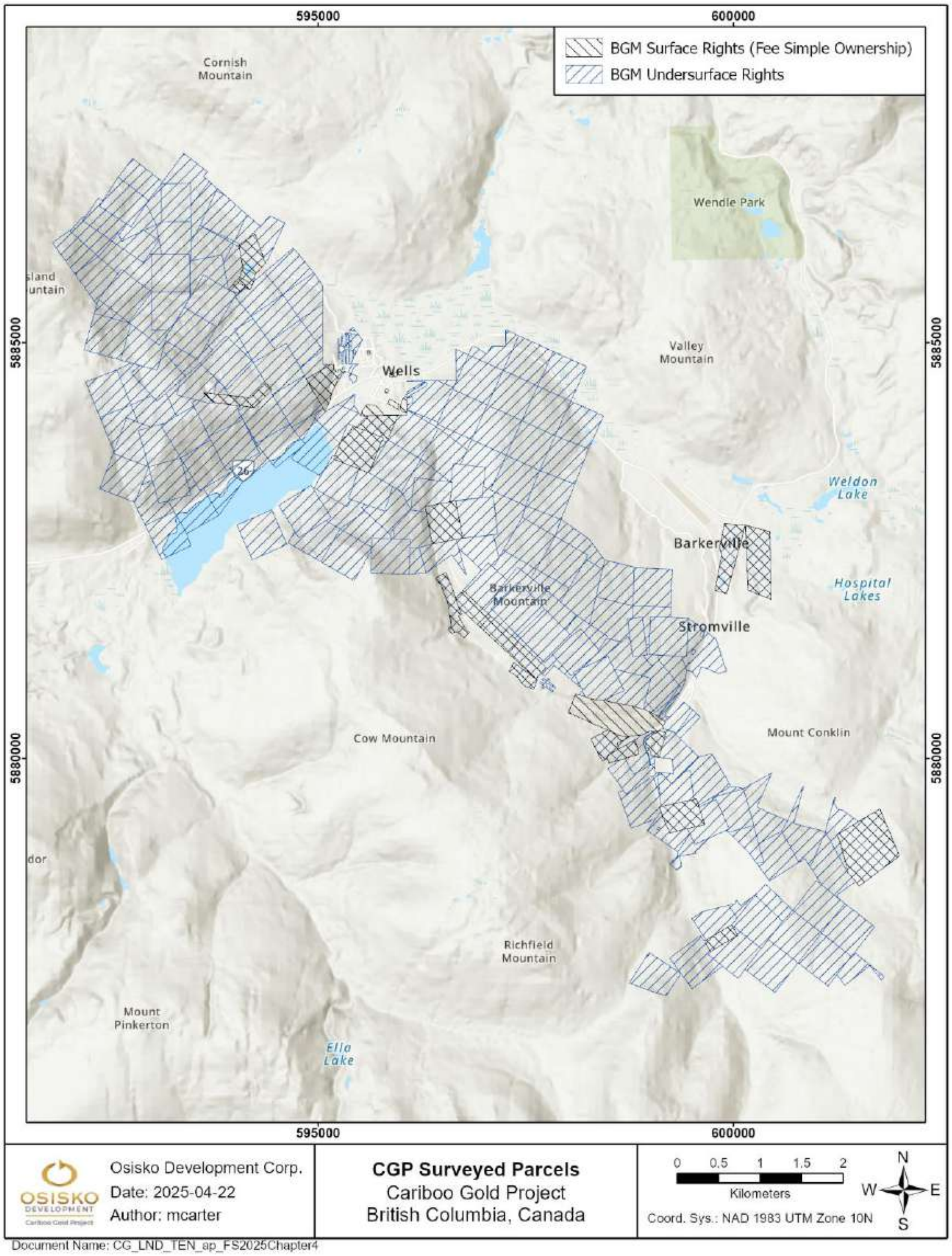


Figure 4-4: Map of Crown-granted mineral claims on the Cariboo Gold Project

All placer claims, leases, and 304 out of 321 mineral claims within the Cariboo Main Block are registered in the name of BGM. The remaining 17 mineral claims are registered jointly with various other companies and individuals. All mineral titles held entirely or partially by BGM are in good standing according to the Mineral Titles Online database as of April 30, 2025 (Mineral Titles Online, 2025).

There are no known significant factors or risks that may affect access, title, or the right or ability to perform work on the Project.

The Project is subject to various royalties, agreements, and encumbrances, as discussed below. A detailed list of mineral titles, ownership, royalties, and expiration dates is provided in Appendices 1, 2, and 3.

4.2. Acquisition of the Cariboo Gold Project

BGM began acquiring land in Wells, BC and surrounding areas in the Cariboo Regional District in 1994. Under an option agreement dated October 4, 1994 (the "Cariboo Option Agreement"), BGM was granted an option to acquire a 50% interest in the Cariboo Gold Quartz Property in the Cariboo Gold District. In 2009, BGM completed the consolidation of the land package by acquiring contiguous projects belonging to Island Mountain Gold Mines Ltd. ("IGM") and Golden Cariboo Resources Ltd. ("Golden Cariboo"), both related parties to BGM and listed on the TSX Venture Exchange.

On May 12, 1999, BGM optioned to IGM a 50% interest in the Island Mountain / Aurum Gold Mine and the properties belonging to Mosquito Creek Gold Mining Company Limited. That option was then renegotiated in October 2004. In January 2006, BGM agreed to buy back the 50% interest in the optioned lands and purchase all of IGM's land holdings northwest of Wells, BC. This was approved by the TSX Venture Exchange on May 2, 2006.

To finalize the consolidation of the major land holdings in the Cariboo Gold District, BGM acquired all of the lands controlled by Golden Cariboo that lay along strike of the known mineralized trend for some 25 km from Barkerville Historic Town and Park, southeast of the Cariboo Hudson Mine. The acquisition of Golden Cariboo's mineral tenure holdings was approved by the TSX Venture Exchange on April 9, 2009, resulting in BGM's land tenure extending 60 km and encompassing the majority of the known strike length of the Barkerville Gold Belt.

Since 1994, BGM has acquired many mineral titles by staking and through agreements with other owners of titles within the Cariboo Gold District. Several claim groups are subject to net smelter return ("NSR") royalties (see Appendices 1, 2, and 3 for details).

Surface and undersurface rights to Crown Granted surveyed land parcels within the Project have also been acquired by BGM as per Table 4-1.

4.3. Royalties and Ownership

On November 30, 2015, Barkerville entered into a letter agreement with Osisko Gold Royalties Ltd. ("OGR") whereby OGR agreed to purchase 32 million common shares of BGM (the "Private Placement") and a 1.5% NSR royalty on the Project (the "Royalty Financing"). Pursuant to the Private Placement, OGR agreed to acquire 32 million flow-through common shares of BGM at a price of $0.32 per share, for total proceeds to BGM of $10,240,000. Following the Private Placement, OGR expected to have ownership over 47,625,000 common shares of BGM, representing approximately 19.9% of the issued and outstanding BGM shares.

OGR also agreed to acquire a 1.5% NSR royalty on the Project for a cash consideration of $25M. As part of the Royalty Financing, OGR and BGM also agreed to negotiate a gold stream agreement ("Gold Stream Agreement") following the completion by BGM of a feasibility study on the Project. According to the terms, following a 60-day negotiation period, if OGR and BGM had not entered into a Gold Stream Agreement, BGM would either grant a right to OGR to purchase an additional 0.75% NSR royalty for consideration of $12.5M or make a payment of $12.5M to OGR.

On March 27, 2017, BGM announced it had entered into a letter agreement with OGR whereby OGR agreed to purchase an additional 0.75% NSR royalty on the Project for a cash consideration of $12.5M (paid). At the time, OGR owned a total NSR royalty of 2.25% on all mineral claims and leases, placer claims and leases and crown-granted mineral claims held by BGM. The grant of the additional royalty would cancel OGR's royalty right, which was granted pursuant to the investment agreement between OGR and BGM dated February 5, 2016; however, OGR would retain a right of first refusal relating to any gold stream offer received by BGM with respect to the Project.

On September 5, 2018, BGM entered into the Second Amended and Restated Royalty Purchase Agreement, whereby OGR purchased an additional 1.75% NSR royalty on the Cariboo Gold Project for a cash consideration of $20M (paid), with an option for OGR to purchase an additional 1.0% NSR royalty for $13M, to bring the Cariboo NSR to 5.0%.

On September 23, 2019, BGM and OGR entered into a definitive agreement, pursuant to which OGR acquired all of the issued and outstanding common shares of BGM that it did not already own by way of a plan of arrangement (the "Arrangement"). Under the terms of the Arrangement, each shareholder of BGM (excluding OGR) received 0.0357 (the "Exchange Ratio") of a common share of OGR for each share of BGM held. The Exchange Ratio implied a consideration of $0.58 per BGM share, based on the closing price of OGR shares on the Toronto Stock Exchange ("TSX") on September 20, 2019. The Exchange Ratio implied an equity value of approximately $338M on a fully diluted in-the-money basis, inclusive of BGM shares held by OGR.

On November 21, 2019, the Arrangement became effective at 12:01 a.m. (Pacific Standard Time), and resulted in BGM becoming a wholly owned subsidiary of OGR.

On October 5, 2020, OGR announced a spin out of mining assets, and the creation of ODV, and exercised the 1.0% NSR purchase option on the Project, bringing the total royalty held by OGR on the Project to 5.0%. The Project is now operated by ODV (formerly Barolo Ventures Corp.), with BGM now a wholly owned subsidiary of ODV. BGM no longer trades publicly on the TSX or any other stock exchange, pursuant to the earlier definitive agreement dated September 23, 2019, and the Arrangement whereby all of the issued and outstanding shares of BGM were acquired by OGR. ODV trades publicly under the symbol ODV on the TSX and the NYSE.

OGR's 5.0% NSR royalty is the only royalty that applies to the mineral resource area of the Project.

4.4. Surface Rights Option Agreements

Table 4-1 lists properties where BGM owns the surface rights as well as the underlying option agreements under which the properties were acquired.

Table 4-1: Barkerville surface rights option agreements

Pid	Cg #	District Lot	Fee Simple Owner	Title #	Agreement Name	Vendee	Vendor
008-218-803	5313/624 (U), 5763/628 (S)	10518	BARKERVILLE GOLD MINES LTD.	CA3393918	Island Mountain & Mosquito Creek Properties (MCG - IWG)	International Wayside Gold Mines Ltd.	Mosquito Consolidated Gold Mines
008-801-908	35/36 (B), 2672/597 (U)	93	BARKERVILLE GOLD MINES LTD.	CA3322180	Wells - Barkerville Cariboo Claims	Mosquito Creek Gold Mining Company Ltd.	Wharf Resources Ltd. / Peregrine Petroleum Ltd.
004-056-582	41F/34	41F	BARKERVILLE GOLD MINES LTD.	BB1960681	Myrtle-Proserpine Property (Newmont - GC)	Gold City Mining Corp.	Newmont Exploration Inc.
004-056-710	1F/34	1F	BARKERVILLE GOLD MINES LTD.	CA6623323	Williams Creek Crown Grants	Barkerville Gold Mines Ltd.	Williams Creek Gold
004-056-736	1B/35	1B	BARKERVILLE GOLD MINES LTD.	CA6623292	Derrien Road Access Agreement	Charls Derrien	Barkerville Gold Mines Ltd.
004-056-752	32F/34	32F	BARKERVILLE GOLD MINES LTD.	CA4347922	Williams Creek Crown Grants	Barkerville Gold Mines Ltd.	Williams Creek Gold
004-056-787	4B/35	4B	BARKERVILLE GOLD MINES LTD.	CA4347919	Derrien Road Access Agreement	Charls Derrien	Barkerville Gold Mines Ltd.
004-078-543	2F/34	2F	BARKERVILLE GOLD MINES LTD.	CA3322186	Blackbull & Camusa Crown Grants	International Wayside Gold Mines Ltd.	Grand Lowhee Mining Co. Ltd.
004-078-560	42F/34	42F	BARKERVILLE GOLD MINES LTD.	CA332187	Blackbull & Camusa Crown Grants	International Wayside Gold Mines Ltd.	Grand Lowhee Mining Co. Ltd.
004-078-578	17F/34	17F	BARKERVILLE GOLD MINES LTD. & GOLDEN CARIBOO RESOURCES LTD.	CA3322185	Xmas Crown Grants	International Wayside Gold Mines Ltd. and Golden Cariboo Resources Ltd.	P. Wright Contracting Ltd.
004-078-608	35F/34	35F	BARKERVILLE GOLD MINES LTD.	CA5682814	35F St George Crown Grant	Barkerville Gold Mines Ltd.	Prairie Flower Company Inc.
004-078-632	5F/34	5F	BARKERVILLE GOLD MINES LTD.	FB503371	Derrien Road Access Agreement	Charls Derrien	Barkerville Gold Mines Ltd.
004-086-627	2B/35	2B	BARKERVILLE GOLD MINES LTD.	CA3393199	Wells - Barkerville Cariboo Claims	Mosquito Creek Gold Mining Company Ltd.	Wharf Resources Ltd. / Peregrine Petroleum Ltd.
004-086-872	20F/34	20F	BARKERVILLE GOLD MINES LTD.	PT5233, PC16246	Island Mountain & Mosquito Creek Properties (MCG - IWG)	International Wayside Gold Mines Ltd.	Mosquito Consolidated Gold Mines
004-086-902	30F/34	30F	BARKERVILLE GOLD MINES LTD.	PT5234, PC16247	Island Mountain & Mosquito Creek Properties (MCG - IWG)	International Wayside Gold Mines Ltd.	Mosquito Consolidated Gold Mines
004-087-054	39F/34	39F	BARKERVILLE GOLD MINES LTD.	PT5232, PC16245	Island Mountain & Mosquito Creek Properties (MCG - IWG)	International Wayside Gold Mines Ltd.	Mosquito Consolidated Gold Mines
004-087-097	38F/34	38F	BARKERVILLE GOLD MINES LTD.	PT5235, PC16248	Island Mountain & Mosquito Creek Properties (IWG - IMG)	Island Mountain Gold Mines Ltd.	International Wayside Gold Mines Ltd.
014-385-643	5436/625	7795	BARKERVILLE GOLD MINES LTD.	CA3322188	P Wright Mosquito Crown Grants	International Wayside Gold Mines Ltd.	P. Wright Contracting Ltd.
014-385-686	5439/625	7798	BARKERVILLE GOLD MINES LTD.	CA3322189	Wells - Barkerville Cariboo Claims	Mosquito Creek Gold Mining Company Ltd.	Wharf Resources Ltd. / Peregrine Petroleum Ltd.
014-385-741	535/92	318	BARKERVILLE GOLD MINES LTD.	CA3322182	Wells - Barkerville Cariboo Claims	Mosquito Creek Gold Mining Company Ltd.	Wharf Resources Ltd. / Peregrine Petroleum Ltd.
014-385-759	4614/617 (S), 35/36 (B)	92	BARKERVILLE GOLD MINES LTD.	CA3322179	Cariboo Gold Quartz Property	International Wayside Gold Mines Ltd.	Mosquito Consolidated Gold Mines Ltd.
014-982-013	35/36	94	BARKERVILLE GOLD MINES LTD.	CA3322181	Cariboo Gold Quartz Property	International Wayside Gold Mines Ltd.	Mosquito Consolidated Gold Mines Ltd.
015-289-681	385/674	10467	BARKERVILLE GOLD MINES LTD.	CA4347921	Williams Creek Crown Grants	Barkerville Gold Mines Ltd.	Williams Creek Gold
014-385-732	2517/101	391	BARKERVILLE GOLD MINES LTD.	CA3322183	P Wright Mosquito Crown Grants	International Wayside Gold Mines Ltd.	P. Wright Contracting Ltd.
006-787-592	4215/55	131	BARKERVILLE GOLD MINES LTD.	CA3322184	12422 Barkerville Hwy (Parcel B Block 7 DL 131)	International Wayside Gold Mines Ltd.	Kenneth James Pollock and Dianne Lee Verne Pollock
026-025-906	2517/101	391	BARKERVILLE GOLD MINES LTD.	BB1991819	Barkerville Apartments (Lot 1 DL 391)	Barkerville Gold Mines Ltd.	Standard Drilling & Engineering Ltd.
017-589-517	2517/101	391	BARKERVILLE GOLD MINES LTD.	CA4545743	LV Fuel Tank Lot (Lot 1 DL 391) & Lot 2 DL 391	Barkerville Gold Mines Ltd.	Pete Wright (017-589-517)
018-685-056	1036/97	289	BARKERVILLE GOLD MINES LTD.	CA6190280	4270 Sanders Ave (Community Relations Office)	Barkerville Gold Mines Ltd.	Dennis Wayne Manuel
005-537-541	5313/624 (U), 5763/628 (S)	10518	BARKERVILLE GOLD MINES LTD.	CA8578737	4192 Davies Rd. (House Purchase)	Barkerville Gold Mines Ltd.	Robin Sharpe

Pid	Cg #	District Lot	Fee Simple Owner	Title #	Agreement Name	Vendee	Vendor
006-773-931	1036/97	289	BARKERVILLE GOLD MINES LTD.	CA9231853	4206 & 4215 Margaret Ave	Barkerville Gold Mines Ltd.	Kelsey Dodd
009-497-463	2517/101	391	BARKERVILLE GOLD MINES LTD.	CA6851547	Merrick Wells Lots	Barkerville Gold Mines Ltd.	Estate of Douglas Warren Merrick
018-847-340	1036/97	289	BARKERVILLE GOLD MINES LTD.	BX36213	Merrick Wells Lots	Barkerville Gold Mines Ltd.	Estate of Douglas Warren Merrick
013-100-572	2517/101	391	BARKERVILLE GOLD MINES LTD.	CA6670546	Merrick Wells Lots	Barkerville Gold Mines Ltd.	Estate of Douglas Warren Merrick
013-778-366	1036/97	289	BARKERVILLE GOLD MINES LTD.	CA9229300	4206 & 4215 Margaret Ave	Barkerville Gold Mines Ltd.	Kelsey Dodd
018-328-288	1036/97	289	BARKERVILLE GOLD MINES LTD.	CA8802577	Blair Ave Subdivided Lots (House Purchase)	Barkerville Gold Mines Ltd.	Sharon Brown
019-113-854	2517/101	391	BARKERVILLE GOLD MINES LTD.	CA6881775	Merrick Wells Lots	Barkerville Gold Mines Ltd.	Estate of Douglas Warren Merrick
023-677-007	4215/55	131	BARKERVILLE GOLD MINES LTD.	PM47667	Cariboo RV Park	Barkerville Gold Mines Ltd.	Joy Stepan
018-856-870	4215/55	131	BARKERVILLE GOLD MINES LTD.	CA801713	12438 Barkerville Hwy (Hubs Motel Purchase)	Barkerville Gold Mines Ltd.	Harald Dietrich Andreesen and Dianne Elaine Andreesen
015-300-226	2099/1091	12634	BARKERVILLE GOLD MINES LTD.	CA2741385	Lightning Hotel / Stanley Road	Barkerville Gold Mines Ltd.	Karen Olsen
024-954-527	3417/306	363	BARKERVILLE GOLD MINES LTD.	FB488576	Bowron Lake Cabin	Barkerville Gold Mines Ltd.	Pete Wright
031-410-821	1036/97	289	BARKERVILLE GOLD MINES LTD.	CA9059927	Blair Ave Subdivided Lots (House Purchase)	Barkerville Gold Mines Ltd.	Sharon Brown
031-410-812	1036/97	289	BARKERVILLE GOLD MINES LTD.	CA9505757	Blair Ave Subdivided Lots (House Purchase)	Barkerville Gold Mines Ltd.	Sharon Brown

4.5. Statutory Obligations

Environmental reclamation security or bonds are required to be posted for all areas where mining or exploration disturbance has been approved. The permittee also maintains regular water, environmental, and wildlife monitoring activities as part of their permitting requirements within the Project area.

4.5.1. Environmental Liabilities

Environmental liabilities associated with the development and operation of the Project must be addressed for all activities and disturbances associated with the proposed operations through active management and reclamation/closure of the Project sites as the operation winds down. The permittee is also required to provide reclamation liability security bonds that are set at a level that reflect outstanding reclamation, environmental and closure obligations associated with the site. The amount of security may be increased or decreased based on the mine's actual reclamation liability at any point in time, including decreases as progressive reclamation is completed.

A site-specific Closure and Reclamation Plan ("RCP") for the Mine Site Complex, located at Wells, was submitted to the BC Ministry of Mining and Critical Minerals ("MCM"), in accordance with the application requirements for a *Mines Act* permit pursuant to the *Mines Act* (Government of BC, 1996), and Parts 10.6 and 10.7 of the revised Health, Safety, and Reclamation Code ("HSRC") for Mines in British Columbia (EMLI, 2021).

The *Mines Act* Permit M-247 required an initial reclamation security bond of $32,500,000 be posted to the BC Ministry of Finance by February 28, 2025. Additional incremental reclamation security bonding of up to $157,900,000 is also required, as per the schedule and triggers defined in the Permit. Incremental bonding is only to be paid in the event a triggering activity occurs. It is anticipated that some of the incremental bonding triggers may be amended through future permit amendment processes to align with the updated project. This bond can be progressively recovered pending satisfactory completion of reclamation and closure objectives.

4.5.2. Required Permits and Status

The Project was subject to a provincial environmental assessment ("EA") as it exceeded the following threshold under the Reviewable Projects Regulation (Government of BC, 2019b, BC Reg. 243/2019): "*A new mine facility that, during operations, will have a production capacity of >75,000 tonnes/year of mineral ore*". The Environmental Assessment Certificate ("EAC") for the Project was received on October 10, 2023. It is expected that an amendment to the certificate will be required for the changes discussed in this study update. Consultation with the BC Environmental Assessment Office will confirm the requirements and process for the amendment.

ODV filed a Joint Permit Application ("JPA") for the Project in 2023, which was reviewed through a coordinated process under the *Mines Act* and *Environmental Management Act*. *Mines Act* Permit M-247, encompassing the Mine Site (Mine Site Complex, and Bonanza Ledge) was issued November 20, 2024, and the *Environmental Management Act* ("EMA") permits PE-17876 for discharge to Lowhee Creek and PE-111511 for discharge to Jack of Clubs Lake were issued on December 11, 2024. The Licence of Occupation to facilitate the construction of the Transmission Line is expected to be issued in 2025.

In BC, changes to mining operations that are a substantial departure from the approved activities require an amendment to the associated *Mines Act* permit. For example, changes to the Permitted Mine Area, substantial changes to waste management, or an increase to the production rate. Changes to the EMA effluent discharge permit will be required if there are changes to the discharge quality, quantity, or location. Discussions with provincial regulators will provide clarity whether the changes proposed in this study update will require amendments, and the process and timelines to consider. Activities that have been approved can still proceed during the amendment process.

A comprehensive list of the permits required or in place for the Project is included in Table 4-2.

Table 4-2: Provincial permits and approvals potentially applicable to the Project

Permit / Approval	Responsible Agencies	Provincial Statute
Mines Act Permit	BC Ministry of Mining and Critical Minerals ("MCM")	*Mines Act*
Effluent Discharge Permit	BC Ministry of Environment and Parks ("ENV")	*Environmental Management Act*
Mineral Lease	BC MCM, Mineral Titles Branch	*Mineral Tenure Act*
Emissions Discharge Permit	ENV	*Environmental Management Act*
Refuse Permit and Waste Storage Approval	ENV	*Environmental Management Act*
Heritage Conservation Act Permit	Ministry of Forests ("MOF"), Archaeology Branch	*Heritage Conservation Act*
Heritage Conservation Act Concurrence letters	MOF, Archaeology Branch	*Heritage Conservation Act*
License of Occupation	Ministry of Water, Land, and Resource Stewardship ("WLRS")	*Land Act*
Statutory Right of Way	WLRS	*Land Act*
Wildlife Act Permit	WLRS, Resource Stewardship Division	*Wildlife Act*
Sewer System Regulation Approval	BC Ministry of Health, Interior Health Authority ("IHA"), Northern Health Authority ("NHA")	*Public Health Act*

Permit / Approval	Responsible Agencies	Provincial Statute
Construction Permit for a Potable Water Well	BC Ministry of Health, NHA	*Drinking Water Protection Act*
Water System Construction Permit	BC Ministry of Health, NHA	*Drinking Water Protection Act*
Drinking Water System Operations Permit	BC Ministry of Health, NHA	*Drinking Water Protection Act*
Short Term Use of Water Permit *Water Sustainability Act* Section 10	WLRS, Water Stewardship Branch	*Water Sustainability Act*
Change Approval (for changes in and about a stream), *Water Sustainability Act* Section 11	WLRS, Water Stewardship Branch	*Water Sustainability Act*
Water Licence (diversion, storage, and use of water) *Water Sustainability Act* Sections 7 and 9 (Government of BC, 2014)	WLRS, Water Stewardship Branch	*Water Sustainability Act*
Licences to Cut and Special Use Permit	MOF, Forest Tenures Branch	*Forest Act*
Industrial Access Permit	BC Ministry of Transportation and Infrastructure ("MOTI")	*Transportation Act*
Permit for regulated activities	Ministry of Health	*Public Health Act*
Explosives Magazine Storage and Use Permit	MCM	*Mines Act*

In addition to provincial permitting and licence requirements, several federal authorizations are required related to specific activities in support of the Project.

Table 4-3: Federal permits and approvals potentially applicable to the Project

Permit / Approval	Responsible Agencies	Federal Statute	Project Activity / Regulatory Context
Fisheries Act Authorization	Fisheries and Oceans Canada ("DFO")	*Fisheries Act*	No person shall carry on any work, undertaking, or activity other than fishing that results in the death of fish. No person shall carry on any work, undertaking, or activity that results in the harmful alteration, disruption, or destruction ("HADD") of fish habitat. If the death of fish or a HADD cannot be avoided during any part of the Project, an Authorization under Section 35 may be required.
Migratory Birds Convention Act Authorization	Environment and Climate Change Canada ("ECCC")	*Migratory Birds Convention Act*	Deposit of substances harmful to migratory birds or vegetation clearing for the Project during the migratory bird nesting season as outlined by ECCC (May 1 to July 15, Zone A4) Permits may be issued to eliminate dangerous conditions or damage to property caused by migratory birds or their nests.

Permit / Approval	Responsible Agencies	Federal Statute	Project Activity / Regulatory Context
Navigation Protection Program Notification and/or Approval	Transport Canada	*Canadian Navigable Waters Act*	Notification and information to the Minister for works that are in, on, over, under, through or across any navigable water. Application for approval from the Minister is required for works (other than minor works) that are in, on, over, under, through or across any navigable water and that may interfere with navigation.
Species at Risk Act Authorizations (if required	ECCC, DFO, and Parks Canada	*Species at Risk Act* (“SARA”)	The Competent Minister may issue a *SARA* permit authorizing activity that will affect a listed wildlife species, any part of its critical habitat, or the residences of its individuals.
Explosive Licences and Permits	Natural Resources Canada	*Explosives Act*	Explosive Licence required for factories and magazines. Explosive Permit required for vehicles used for the transportation of explosives.
Transportation of Dangerous Goods Permits	Transport Canada	*Transportation of Dangerous Goods Act*	Addresses the classification, documentation, marking, means of containment, required training, emergency response, accidental release, protective measures, and permits required for the transportation of dangerous goods by road, rail, or air.

The Project facilities include areas within the jurisdictions of the CRD and the District of Wells, for the Mine Site specifically. Both jurisdictions have passed bylaws that may pertain to Project activities/operations and property ownership or business operations, including:

- CRD Invasive Plant Management Regulation Bylaw, No. 4949, 2015, regarding the management of invasive plants;
- CRD Untidy and Unsightly Premises Regulatory Bylaw, No. 4628, regarding the management of untidy/unsightly properties;
- District of Wells Noise Control Bylaw, No. 93, 2018 limiting hours of noise during operations/construction;
- District of Wells Traffic and Streets Bylaw, No. 68, addressing traffic, and providing load and size restrictions.

Other Wells bylaws are applicable to utility connections and municipal service fees related to property development (water, sewer, garbage). These bylaws would be addressed through direct applications with the District of Wells.

4.6. Communication and Consultation with the Community

4.6.1. Indigenous Nations

ODV is committed to ongoing engagement and consultation with Indigenous nations that may have an interest in the Project. ODV initiated discussions in 2016, and engagement and consultation activities are ongoing and will continue through the life of the Project. Engagement activities have included meetings, presentations, site tours, written correspondence, emails, and telephone conversations with leaders and representatives of Indigenous nations. ODV will continue to consult Indigenous nations to better understand how the Project may affect past or current Indigenous practices, traditions, and customs, and how measures may be incorporated into the Project to avoid, mitigate or otherwise address potential effects.

Provincial regulators stipulated the level of engagement for each Indigenous nation in the Project area. Based on strength of claim, proximity to Project components, and nation-specific requests to participate, the following three nations were confirmed as Participating Indigenous nations:

- Lhtako Dené Nation;
- Xatśūll First Nation;
- Williams Lake First Nation (T'exelc).

The Tŝilhqot'in National Government and Nazko First Nation continue to be at the notification level of engagement and are sent Project updates and documents as relevant.

The EAC mandates the development of several management plans to address the management of Project effects, including an Indigenous Partnership Plan. The Indigenous Partnership Plan is intended to address the ongoing involvement of the Participating Indigenous nations in activities related to the Project and operations.

4.6.2. Stakeholders

ODV is dedicated to open communication and meaningful consultation with a range of stakeholders. This includes members of the general public, local, regional, provincial, and federal government elected officials and staff, community organizations, recreational groups, authorization holders, landowners, resource users, permanent and temporary residents of the District of Wells, and others.

Stakeholder engagement began in 2016 and will continue through the life of the Project. Engagement initially focused on the District of Wells and introducing the Project to the residents of Wells. Engagement with stakeholders to date has primarily been via public meetings, community workshops, one-on-one meetings, and small group tours. Additionally, engagement has included meetings with the Cariboo Regional District, the Fraser-Fort George Regional District, Quesnel, Williams Lake, and Prince George mayors and councils, and chambers of commerce.

The EAC requires the development of several management plans, including a Community Involvement Plan, to assist with managing Project effects. This plan is intended to address the mechanisms of ongoing community engagement related to the Project and operations.

5. Accessibility, Climate, Local Resources, Infrastructure and Physiography

Wells is a mining town with a rich history of mineral exploration and production and is also a regional centre and tourist attraction for artists and outdoor enthusiasts. ODV maintains and fosters relationships with the community through public and stakeholder meetings (see Section 4.7), and through recruiting employees and sponsoring community events. The city of Quesnel, with a population of 23,000, is located 74 km to the east of Wells. It has an airport and can provide the goods and services that ODV requires. Williams Lake and Prince George are the nearest other major transportation and logistical hubs in the federal electoral district of Cariboo–Prince George, located 193 km and 115 km from Wells, respectively.

The following descriptions of the accessibility, climate, local resources, infrastructure, and physiography for the Cariboo Gold Project and the Cariboo Gold District are taken and modified from Georges et al. (2013) and Dzick (2015).

5.1 Accessibility

The Project is located in Wells, BC, approximately 74 km east of the City of Quesnel and 120 km southeast of the City of Prince George. The Project is accessible via paved Highway 26, which branches off Provincial Highway 97 at Quesnel (Figure 5-1). An extensive network of gravel roads provides access throughout the area of the Project, including roads maintained by the BC Forest Service and old mine exploration roads and trails. These roads are also used as part of an extensive winter snowmobile trail system. ODV's Project offices and related facilities are in the town of Wells.

5.2 Infrastructure and Local Resources

The Project is located within the Cariboo Regional District of British Columbia, with the closest major city being Quesnel acting as the primary supply and service centre for natural resource industries and has the closest regional hospital. Within 120 km are located the main regional cities of Williams Lake and Prince George, which together have a population of over 100,000, including skilled mining and industrial workers. Figure 5-1 shows an overview of the region and the Project.

The Project has access to sufficient power and water to support a mining operation. Canadian National Railway provides rail access from Quesnel to the Port of Vancouver.

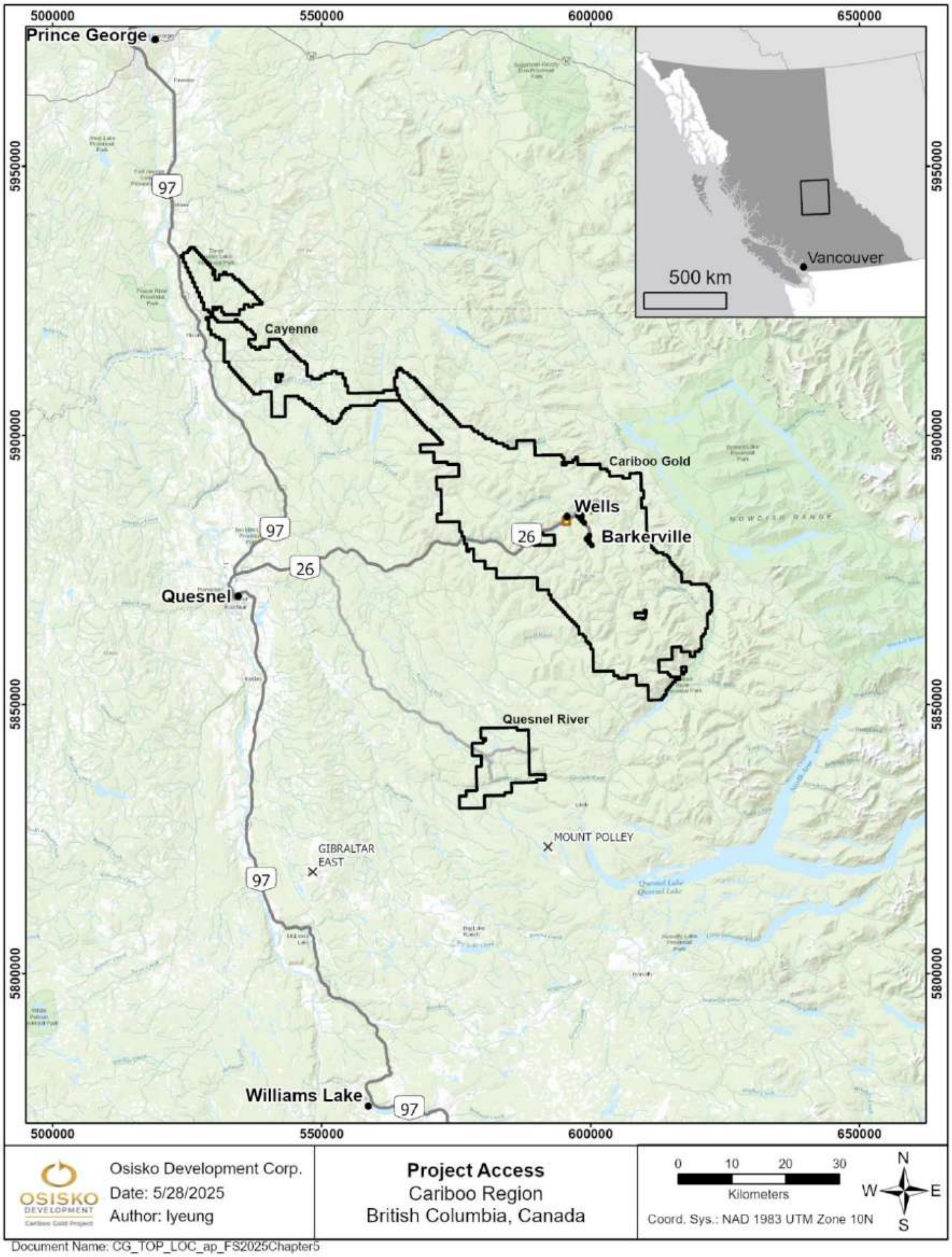


Figure 5-1: Access to the Cariboo Gold Project

ODV has sufficient surface rights in the Project area for mineral exploration and development operations. These rights are generally conveyed by ODV's Crown-granted mineral claims or by specific permits, such as those related to tailings and waste disposal areas, or water and timber use, and the mineral lease that was applied for November 29, 2021 and was granted on July 13, 2023.

Currently, local resources include single-phase 7.2 kilovolt ("kV") power, potable water from the District of Wells public works (supplying roughly 985,000 litres ("L") per day to the town), local sewage treatment, waste disposal sites, and high-speed internet and telecommunication services, including a communication tower maintained by Telus and radio repeater stations maintained by ODV for use by company personnel and site contractors. The Project infrastructure includes a planned upgrade to the potable water supply and the construction of a Transmission Line, connecting to the Barlow Creek Substation and terminating at the Mine Site Complex in Wells.

ODV completed an assessment of the Project areas and have determined availability for waste disposal at Bonanza Ledge and a location for the processing plant at the Mine Site Complex. Further information on this infrastructure can be found in Chapter 18 (Project Infrastructure).

ODV holds seven water licences: one for Willow River, three at the QR Mill, one at the Ballarat temporary work camp, one unused licence on Island Mountain, and one for a well at the geological compound and field offices at Lowhee Creek. The climate allows for year-round mining operations, and there is enough readily available water to conduct diamond drilling.

5.3 Climate

The Cariboo Region experiences a dry continental climate due to the coastal mountains influencing the westerly flow of winds and moisture coming from the Pacific Ocean. The climate at the site is characterized by relatively cold winters and mild summers. The annual precipitation is moderate and there is comparatively little variation over the year in monthly precipitation. The Project can operate 365 days a year. The mean 24-hour temperature at Wells-Barkerville at an elevation of approximately 1,256 m (4,121 ft) is -9.2 °C in January and 12.3 °C in July.

5.4 Physiography

The topography in the Project area is mountainous (Figure 5-2), rising from a low point of approximately 1,190 metres above sea level ("masl") in the incised river valleys around Wells and Barkerville Historic Town and Park, to a peak of 2,060 masl at Roundtop Mountain, located 25 km south of Wells. Mount Proserpine, 11 km south of the town, summits at 1,830 masl.

Mountain summits are generally rounded, reflecting the passage of continental ice sheets during the Pleistocene Epoch. Pleistocene glacial till and clay are widespread. Moderately drained and well-drained morainal and colluvial materials dominate at higher elevations. Valley bottoms are overlain by very poorly drained organic deposits or moderately drained fluvial sands adjacent to Willow River, downstream of Jack of Clubs Lake, lower Lowhee Creek and Willow River. Ice direction is generally to the northwest near Wells, and glacial till is the most widespread surficial deposit in the area.

The relatively small drainage basins of Jack of Clubs Lake and Williams Creek converge at Wells and together compose the upper headwaters of Willow River. They represent a combined catchment area of approximately 100 km^2 at the southern extremity of the Willow River Basin and together embody roughly 3% of the total area of the basin. Willow River flows into Fraser River east of Prince George.

The area is well forested, and the mountains are typically covered with subalpine forests, except near their peaks. Vegetation is dominated by Engelmann Spruce (Picea engelmann), Lodgepole Pine (Pinus contorta var. latifolia) and Subalpine Fir (Abies lasiocarpa), accompanied by alders and other deciduous varieties on lower wetter slopes flanking river valleys. Prominent in the subalpine flora is the shrub Rhododendron albiflorum. Bedrock exposure is poor, except along creeks, ridgelines, and logging roads.

Figure 5-2: Aerial view of the town of Wells looking east
Photograph looking east from above Island Mountain. Mount Murray (left) and Mt. Waverly (right) are the highest peaks in the distance, with the Cariboo Mountains beyond. Island Mountain forms the foreground with Valley Mountain to the left and Cow Mountain to the right, on the south side of the town of Wells (centre). Barkerville Mountain is located beyond Cow Mountain to the right of the photo. The southeastern part of Wells is built on a fan of placer tailings that issued from Lowhee Creek (right) into Jack of Clubs Lake (bottom right). (Photo from Google Earth, 2025).

6. History

The Cariboo Gold Project is situated within the Cariboo Gold Belt, a producer of gold that has had a history of mining dating from the Cariboo gold rush in the 1860's. The Project area contains several historical mines, including the Cariboo Gold Quartz Mine, Aurum Mine/Island Mountain Mine, and Mosquito Creek Mine.

The extensive history of the district's placer gold deposits will not be discussed as it is not relevant to this Report other than to comment that the gold rush was the largest in Canadian history, drew a large number of people to the area, which eventually led to the discovery of hard rock gold deposits in the area.

Historical mineral resource estimates from this section are superseded by those reported in Chapter 14 of this Report.

6.1. Historical Mines

6.1.1. Cariboo Gold Quartz Mine

Fred Wells purchased the Rainbow claim group from A.W. Sanders and formed Cariboo Gold Quartz Mining Company Ltd. ("Cariboo Gold Quartz Mining") in 1927. The Cariboo Gold Quartz Mine operated from 1927 to 1959 at Cow Mountain.

In October 1942, gold mining was classified as a non-war industry by the federal government and received no priority for labour or supplies. As a result, gold mines in British Columbia were unable to hire replacement labour for the duration of the war. The mining operation never recovered from the loss of revenue caused by a 50% reduction in production and the depletion of reserves in the absence of exploration drilling and only minor development during this period.

Following the purchase of the Island Mountain Mine in 1954, Cariboo Gold Quartz Mining focused on developing higher grade pyrite-type replacement mineralization.

The Cariboo Gold Quartz Mine closed on August 31, 1959.

In 1959, in its 33rd Annual Report, Cariboo Gold Quartz Mining reported historical reserves scattered in 51 remnants through 13 levels and across a distance of 10,500 feet ("ft") (3,200 m).

These "reserves" are historical in nature and should not be relied upon. It is unlikely that they comply with current NI 43-101 requirements or follow Canadian Institute of Mining ("CIM") Definition Standards, and their relevance and reliability have not been verified. They are included in this section for illustrative purposes only and should not be disclosed out of context.

The Cariboo Gold Quartz Mill continued processing mineralized material from the Aurum Mine on Island Mountain until March 1967. During the period between 1933 and 1967, a total of 1,951,944 metric tonnes ("t") of mineralized material was mined, yielding 863,307 ounces ("oz") of gold and 91,652 oz of silver (MINFILE number 093H 019). The average recovery during that period was 95.3%.

6.1.2. Island Mountain Mine (Aurum Mine)

In 1925, C.J. Seymour Baker acquired the original five Crown-granted mineral claims (later known as the Aurum Group), which was worked until 1932.

In 1932, Newmont Mining Corporation ("Newmont") acquired the Aurum Group and eight adjacent claims to form Island Mountain Mines Company Ltd.

Milling commenced in 1934 at a rate of 50 short tons ("st") per day and reached a peak of 149 st/d in 1941. Quartz-type mineralization in diagonal vein structures and pyrite-type mineralization in the Aurum limestone unit were both extracted. The mine was developed over a strike length of 4,500 ft (1,371.6 m). After 1945, no further exploration or development was carried out west of the Aurum Fault, and in 1952 the mine suspended active exploration and development.

Under Newmont's ownership, production from the mine was 770,093 st (699,536 t), from which 333,705 oz of gold and 48,130 oz of silver were recovered (MINFILE number 093H 006). The mill also recovered 531 lb of zinc and 134 lb of lead.

Cariboo Gold Quartz Mining purchased the mine and equipment from Newmont in 1954 for a sum of $305,000. Underground workings extending northwest from the Island Mountain Mine into the Mosquito Group are formally known as the Aurum Mine. The Cariboo Gold Quartz Mine and Island Mountain Mine do not connect below Jack of Clubs Lake.

6.1.3. Mosquito Creek Mine

Andrew H. Jukes, of Calgary, acquired the Mosquito Creek claim group and formed Mosquito Creek Gold Mining Company Ltd. ("Mosquito Creek Gold") in 1971 to explore the ground above the Aurum Mine. Surface exploration drilling and underground development from 1971 to 1975 were financed by a joint venture agreement with the Home Oil Company Ltd. of Calgary. They conducted an extensive surface and underground exploration and development program on the property. In 1975, Mosquito Creek Gold purchased all of Home Oil Company's interests in the property. Subsequently, Peregrine Petroleum Ltd. ("Peregrine") entered into a joint venture agreement with Mosquito Creek Gold, whereby it ultimately earned a 50% working interest in the property.

A total of 27,384 oz of gold were recovered from 86,248 t of mostly pyrite-type mineralization milled during the main production period (1980 to 1983). The operation failed due to low initial reserves and a low discovery rate of new resources. The latter was the result of insufficient development at depth and northwest of the Mosquito Fault.

In 1984, Hudson Bay Mining and Smelting Co. Ltd. ("Hudson Bay") optioned the property but dropped it after earning a 10% interest. Hudson Bay sold its interest back to Mosquito Creek Gold, and Peregrine sold its 50% interest to Mosquito Creek Gold.

In 1986, the property was optioned by Hecla Mining Company of Canada Ltd. who conducted underground exploration work and then dropped their interest in the company.

Mining operations were intermittent until 1987 when Mosquito Creek Gold became Mosquito Creek Consolidated Gold Mines Ltd. After the gold prices dropped, and new ore became hard to find, the mine closed in 1987. During the period between 1980 and 1987, a total of 92,826 t of mineralized material were mined from which 35,054 oz of gold and 9,750 oz of silver were recovered (MINFILE number 093H 010).

In 1988, Lyon Lake Mines Ltd. optioned the property and earned a 50% interest after performing underground exploration.

6.2. Surface Work Programs

6.2.1. Cariboo Gold Quartz Mining Company Ltd. (1968)

In 1968, Dolmage Campbell and Associates Ltd. carried out 5 km of bulldozer trenching on behalf of Cariboo Gold Quartz Mining.

A total of 17 trenches, approximately 2 m to 2.5 m deep, were excavated across the Baker-Rainbow contact over a strike length of 1.6 km on Island Mountain. Pyritic mineralization, 6 m long by 1 m wide, was discovered in Trench J (Campbell 1969).

6.2.2. Wharf Resources Ltd. (1980–1981)

In 1972, Cariboo Gold Quartz Mining amalgamated with Coseka Resources Ltd. to form a company with the name of the latter. In April 1973, Wharf Resources Ltd. (formerly Plateau Metals and Industries) amalgamated with French Exploration Ltd. (a wholly owned subsidiary of Coseka Resources).

Wharf Resources carried out surface drilling programs in 1980 and 1981 to search for near-surface mineralization on the Cariboo and Island Mountain claim groups. A total of 7,010 m of percussion drilling and 1,219 m of diamond drilling were completed in 1980 and 1981 (Bolin, 1984).

6.2.3. Blackberry Gold Resources Inc. (1988)

In 1987, Blackberry Gold Resources Inc. completed several work programs on the ARCH 1-4 claim group located on Cow Mountain and Richfield Mountain. The objective of the work was to discover gold mineralization associated with the system of north-striking fault structures. Very-low-frequency electromagnetic ("VLF-EM") geophysical surveys were used to define conductors inferred to be the strike extension of major faults on the Cariboo Group of Crown-granted mineral claims. Four strong conductive trends were tested along six fences of percussion drill holes for a total of 2,424 m of drilled in 79 holes. This was followed by 2,465 m of diamond drilling in 19 holes.

6.2.4. Pan Orvana Resources Inc. (1989–1991)

On July 12, 1985, Mosquito Creek Gold purchased the Cariboo and Island Mountain claim groups from Wharf Resources Ltd. Pan Orvana Resources Inc. ("Pan Orvana") signed the Cariboo Gold Option Agreement on May 20, 1988, obtaining the right to earn a 50% interest in the Cariboo Group, but terminated the agreement in 1991 without exercising the option.

Pan Orvana excavated 20 surface trenches, drilled four holes, and conducted ground geophysical surveys, geochemical sampling programs, and geological mapping.

6.2.5. Gold City Mining Corp. (1994–1995)

In 1994 and 1995, Gold City Mining Corp. ("Gold City Mining") assembled a large land position consisting of 13,000 ha of mineral titles between Mount Tom and the Cariboo Hudson Mine to form the Welbar Gold Project.

Doing so involved seven option agreements, including one that covered the Mosquito Creek, Island Mountain, and Cariboo claim groups. The latter was subject to the Cariboo Option Agreement between Mosquito Creek Consolidated Gold Mines Ltd. and International Wayside Gold Mines Ltd.

Intera Information Technologies Corp. flew a synthetic aperture radar survey in July 1995. DIGHEM I Power completed a regional airborne radiometric-Mag-EM survey of 1,280 line-km, as well as trenching and diamond drilling on some of their properties, including one drill hole on the Mosquito Creek Group.

From October 1 to November 30, 1995, Gold City Mining conducted a 13-hole (1,865 m) diamond drilling program on the Cariboo-Hudson Property (Chapman, 1996a).

Gold City Mining optioned the Cariboo-Hudson Property from Cathedral Gold Corp. in 1994.

In November 1995, Gold City Mining sunk four diamond drill holes (560 m) on the Williams Creek Property (Chapman, 1996b). That same month, Gold City Mining drilled two holes (390 m) on the Island Mountain Property (Chapman, 1997).

6.3. International Wayside Gold Mines Ltd. (1999–2014)

Table 6-1 summarizes the work conducted by International Wayside Gold Mines Ltd. ("IWGM") on the Island Mountain Project between 1999 and 2014, as documented in Pickett (2000; 2001; 2002; 2003), Pautler (2003; 2004), Johnson (2005), Moore (2006), Yin and Daignault (2007) and Yin (2011), as well as Management Discussion and Analysis reports ("MD&A") from Island Mountain Gold Mines Ltd. ("IGM"), IWGM, and Barkerville Gold Mines Ltd. ("BGM").

Table 6-1: Summary of diamond drilling on the Island Mountain Project from 1999 to 2014

Year	Zone/Area	Surface Diamond Drilling	
		(drill hole)	(m)
1999	Footwall of the West Fault	10	902.2
2000	Northwest of the Mosquito Creek Mine	10	1,750.5
2001	Gold-in-soil Anomaly	2	367.3
	Favourable Stratigraphy	1	183.8
	Kutney Zone	4	672.7
2002	Gold-in-soil Anomaly and IP Anomaly	2	191.7
	Gold-in-soil Anomaly	2	210.3
2003	2003 Trenching Program	13	1,397.5
2004	Snapjack Zone	3	303.9
	Teapot Vein	3	555.0
2005	Snapjack Zone	9	906.1
	Southern Soil Anomaly	4	780.3
	Channel Sample Anomaly	2	202.1
2006–2009	No Drilling	0	0.0
2010	Reconnaissance Exploration	1	178.6
2011–2014	No Drilling	0	0.0
	Total	**66**	**8,602.0**

6.4. International Wayside Gold Mines Ltd. (1995–2009)

The following descriptions cover the history of exploration work conducted by IWGM on the Cariboo Gold Quartz Project between 1995 and 2009 and are taken from Lord and Reid (1997), Reid (1999), Hall (1999), Lord and Hall (2001), Walton (2002a; 2002b; 2003a; 2003b), Gates et al. (2005), Duba (2005), Daignault and Moore (2006), Sandefur and Stone (2006), Yin and Daignault, (2007; 2008), Brown (2009), Fier et al. (2009), and Yin (2010a; 2010b). The text retains the references therein.

6.4.1. 1995–1999 Work Programs

During that 1995 to 1999 period, IWGM worked the Project area continuously starting May 1, 1995. Most of the work was carried out on the main mine trend, either from the surface or underground from the 1200 level adit.

In 1998 and 1999, a secondary target, the BC Vein, was explored over a strike length of 384 m by 31 surface drill holes totalling 2,245.2 m. The goal of this program was to find high-grade shoots of the kind located by Cariboo Gold Quartz Mining in the 1940s. Table 6-2 summarizes IWGM's drilling on the Project between 1995 and 1999.

In the summer of 1997, IWGM carried out a geochemical and prospecting program to find new mineralized showings and generate targets for further exploration. The geochemical surveys yielded 1,079 soil samples, 59 stream sediment samples, and 121 rock samples.

Table 6-2: Summary of diamond drilling on the Cariboo Gold Project from 1995 to 1999

Year	Zone	Surface Diamond Drilling		Underground Diamond Drilling		Underground Percussion Drilling	
		(drill hole)	(m)	(drill hole)	(m)	(drill hole)	(m)
1995	Rainbow	17	844.0	12	496.5	6	96.9
1996	Rainbow	8	424.0	5	157.6	38	867.8
	Pinkerton	5	385.3	-	-	25	998.5
1997	Rainbow	20	1,617.6	-	-	-	-
	Pinkerton	17	1,359.4	-	-	9	481.5
	Sanders	2	170.1	-	-	33	2,023.6
1998	Pinkerton	-	-	-	-	5	307.2
	Sanders	2	157.9	-	-	19	964.4
	Butts	2	146.0	-	-	-	-
	BC Vein	13	846.7	-	-	-	-
1999	BC Vein	18	1,398.4	-	-	-	-
Total		**104**	**7,349.4**	**17**	**654.1**	**135**	**5,739.9**

6.4.2. 2000–2009 Work Programs

IWGM carried out extensive work from 2000 to 2009. Table 6-3 summarizes the drilling by year and area of interest.

Table 6-3: Summary of diamond drilling on the Cariboo Gold Project from 2000 to 2009

Year	Zone/Area	Surface Diamond Drilling		Underground Diamond Drilling	
		(drill hole)	(m)	(drill hole)	(m)
2000	BC Vein	48	6,227.4	-	-
	Bonanza Ledge				
2001	BC Vein	22	5,145.9	-	-
	Bonanza Ledge				
	Cow Mountain	3	653.8	-	-
2002	BC Vein	18	3,394.0	-	-
	Bonanza Ledge				
	Myrtle Property	5	1,206.1	-	-
2003	Bonanza Ledge	26	3,037.3	3	203.3
	Myrtle Property	4	781.5	-	-
2004	Bonanza Ledge	60	7,788.6	73	5,974.1
	Bonanza Ledge – engineering	17	1,899.5	-	-
	Myrtle Property	5	861.4	-	-
	Goldfinch Target	6	826.6	-	-
	Groundwater monitoring well holes	2	120.1	-	-
2005	Lowhee Creek	23	4,422.4	-	-
	Black Bull	3	474.9	-	-
2006	Mucho Oro	31	4,682.1	-	-
2007	Cow Mountain	15	1,463.6	-	-
2008	Goldfinch and Bonanza Ledge	10	1,762.1	-	-
2009	Cow Mountain	11	1,900.2	-	-
	Lowhee Creek	2	329.8	-	-
	Bonanza Ledge	18	1,781.5	-	-
	Groundwater monitoring well holes	7	362.7	-	-
Total		**336**	**49,121.5**	**76**	**6,177.4**

6.4.2.1. 2000 Work Program

On March 23, 2000, IWGM announced the discovery of a new mineralized zone while drilling the BC Vein. The type of mineralization encountered had not previously been identified in the region. The new zone was named the Bonanza Ledge Zone.

Subsequent geochemical, geophysical, and diamond drilling programs explored the Bonanza Ledge and BC Vein zones to look for new Bonanza Ledge-type targets away from the initial discovery. The work program consisted of 48 drill holes for 6,227.4 m and focused on area adjacent to the BC Vein. Surface exploration, completed mainly between August and October 2000, included geological mapping, prospecting, 44.2 line-km of soil sampling (2,400 samples on cut grid lines, spacing of 61 m by 15.2 m), and 32.9 line-km of ground geophysical surveys, including self-potential ("SP"), Induced Polarization ("IP"), VLF-EM, and ground Mag surveys. To provide an accurate topographic base map for IWGM's claims, an aerial photographic survey was flown in August and September 2000, covering its full extent. Historical mineral resource estimates from this period are superseded by those reported herein. They are described in detail in a previous technical report (Beausoleil and Pelletier, 2018) available on SEDAR+.

In 2000, IWGM hired an independent consultant, R.G. Simpson (P.Geo.), to review the Cow Mountain data and the 1999 Resource (Dykes, 1999). Simpson estimated an Inferred resource (see IWGM's 2000 AIF) for Cow Mountain and following the recommendations from Simpson, another MRE was completed by G.H. Giroux in 2000 (Giroux, 2000).

6.4.2.2. 2001 Work Program

The program in 2001 included diamond drilling, 20 line-km IP survey along 22 lines on Cow Mountain, 24.3 line-km of SP surveying, and 7.2 line-km of brushing out of lines for the IP survey on 11 lines.

6.4.2.3. 2002 Work Program

Diamond drilling was carried out in 2002, along with a mineral resource estimate by Giroux Consulting (the "2002 Estimate"; Giroux, 2002).

6.4.2.4. 2003 Work Program

The 2003 work program involved 70 m of trenching in six trenches. The work concentrated on the Bonanza Ledge Zone, the adjacent Myrtle Group, and the Sanders Zone. The program also included surface and underground drilling. Historical mineral resource estimates from this period are superseded by those reported herein. They are described in detail in a previous technical report (Beausoleil and Pelletier, 2018) available on SEDAR+.

In 2003, an independent preliminary economic assessment ("PEA") completed by DJP Consultants Ltd. (Pow, 2003) concluded that there were sufficient reserves to supply an on-site processing plant using open pit mining methods.

This "PEA" is historical in nature and should not be relied upon. In 2003, it was compliant with NI 43101 requirements. Since 2003, more drilling has been added, and more geological information has become available. Additionally, the assumptions for the cut-off grade calculations, as well as the estimated capital and operating costs, are likely to have changed since 2003. Consequently, the DJP Consultants Ltd. PEA cannot be considered as current. It is included in this section for illustrative purposes only and should not be disclosed out of context.

6.4.2.5. 2004 Work Program

The work program in 2004 focused mainly on the Bonanza Ledge Zone. The Bonanza Ledge Zone was drilled from the surface and underground.

Underground development at Bonanza Ledge started in late 2003 and continued into 2004.

Exploration activities also included underground and surface drilling, geological mapping, trenching, a soil grid extension, and channel sampling along road exposures.

6.4.2.6. 2005 Work Program

In March 2005, 10,000 dry tonnes of concentrate from Bonanza Ledge were shipped via CN Rail to Noranda Inc.'s smelter in Rouyn-Noranda, Québec, for refining into gold bullion. IWGM received net proceeds before royalties of $1,505,720 for 5,200 oz recovered post-milling from the Bonanza Ledge bulk sample collected in 2004.

The exploration program included surface drilling, surface mapping, and sampling.

A gravity geophysical survey was planned to cover the Bonanza Ledge and Lowhee Creek areas. The survey was initiated in November 2005 but only covered the grid on the Bonanza Ledge deposit.

6.4.2.7. 2006 Work Program

The work program in 2006 consisted of surface drilling, prospecting, surface mapping, and sampling.

IWGM retained Chlumsky, Armbrust and Meyer LLC ("CAM") of Lakewood, Colorado to prepare a public PEA (the "2006 PEA"). Prior to the 2006 PEA, CAM and Minefill Services Inc. had completed an internal "scoping study" for IWGM on the Bonanza Ledge Zone. CAM advanced this internal study to comply with NI 43-101 standards. The study used the 2002 Estimate of Giroux (2002).

IWGM intended to process the material mined from Bonanza Ledge at a nearby facility, in particular, the Quesnel River Mill ("QR Mill") facility belonging to Cross Lake Minerals. Testing showed good amenability to cyanidation with recoveries ranging from 93% to 97%. These recoveries were attained rapidly, with 98% of the recovery occurring in the first six hours of the 72-hour leach.

6.4.2.8. 2007–2008 Work Programs

The work programs in 2007 and 2008 consisted of surface drilling. In 2007, 1,463.54 m were drilled on Cow Mountain in 15 holes to test the Rainbow and Sanders zones. In 2008, 1,762.07 m were drilled in 10 holes to further define the Bonanza Ledge Zone and test the adjacent Goldfinch Target.

6.4.2.9. 2009 Work Program

Surface drilling was conducted during the 2009 work program.

In 2009, an NI 43-101 technical report was prepared (Brown, 2009). It addressed the geology and exploration history for gold on properties in the IWGM land package comprising the Project. The scope of the technical report included an update and compilation of recent exploration activities completed by IWGM on the land tenure of the Project from 2006 to 2008. This Report built on previous technical reports that outlined gold mineral resources contained in the Project area, with mineral resource calculations specific to the Cow Mountain area (Giroux, 2006) and the Bonanza Ledge Zone area (Sandefur and Stone, 2006).

A pre-feasibility study ("PFS") was prepared for the Bonanza Ledge Project by EBA Engineering Consultants Ltd. ("EBA") of Vancouver, British Columbia, and several independent professionals and consultants. The study used the mineral resource and mineral reserve evaluation (the "2009 Estimate") of Mintec Inc. of Tucson, Arizona, as the basis of its economic analysis. The PFS was an update of the previously disclosed mineral resource (Sandefur and Stone, 2006). An NI 43-101 technical report was prepared by EBA.

6.5. Barkerville Gold Mines Ltd. (2010-2014)

The following description of work conducted by BGM on the Project between 2010 and 2014 is taken from Yin (2011; 2013), Georges (2012), Georges et al. (2013), Dzick (2015), Layman (2015), and BGM's MD&A reports. The text retains the references therein.

Table 6-4 outlines the drilling on the Project from 2010 to 2014.

Table 6-4: Summary of diamond drilling on the Cariboo Gold Project from 2010 to 2014

Year	Zone/Area	Surface Diamond Drilling	
		(drill hole)	(m)
2010	Bonanza Ledge	17	2,918.2
	Cow Mountain	45	5,792.3
	Island Mountain	1	178.6
2011	Pit Vein Zone	10	1,045.2
	BC Vein	30	9,284.6
	Bonanza Ledge (ARD samples)	5	943.1
	Cow Mountain	163	43,410.6
	Stouts Gulch and Myrtle Property	2	212.2
	Groundwater monitoring well holes	21	3,019.9
2012	Cow Mountain	14	2,753.2
2013	No drilling	0	0
2014	Cow Mountain	10	4,142.2
	Total	**318**	**73,700.1**

6.5.1. 2010–2011 Work Programs

Surface trenching and sampling work were completed in 2010. A total of 175 samples were collected from 18 channels. The channels were spaced approximately 6 m apart along a 125 m long trench.

The work program in 2011 included surface drilling and trenching. A total of 66 channel samples were collected from the trenches.

6.5.2. 2012 Work Program

All historical estimates are superseded by the current MRE reported in Chapter 14 of this Report.

On June 28, 2012, BGM announced a public MRE for the Gold Quartz open pit model on Cow Mountain (the "Gold Quartz Estimate") and the geological potential of the 6.4 km Cow–Island–Barkerville Mountain Corridor (BGM news release of June 28, 2012). Geoex Ltd. ("Geoex") prepared the independent estimate. The announcement of the estimate led to a request for a supporting technical report within 45 days from the BC Securities Commission ("BCSC") and initiated a request for further information from the Geoex QP (Peter T. George). The BCSC was provided with a draft technical report. Upon review of the draft technical report, the BCSC expressed concerns about certain methods, parameters, and assumptions used to estimate the mineral resources and potential exploration targets at Cow Mountain, as well as the estimates themselves. The final version of the NI 43-101 technical report was filed on SEDAR+ on August 13, 2012 (Georges, 2012).

On August 14, 2012, the BCSC issued a cease trade order ("CTO") against BGM, stating that the report was not in the required form under NI 43-101 (BGM press release of August 15, 2012). BGM was advised that the CTO would remain in place until BGM filed an NI 43-101 report acceptable to the BCSC, addressing all technical disclosure concerns.

On October 19, 2012, BGM retained Snowden Mining Industry Consultants Pty ("Snowden") to review the report in question and help satisfy the CTO conditions. On November 5, 2012, BGM provided an additional update on its technical review. As requested by Snowden, 14 twin holes had been drilled on Cow Mountain between September 22, 2012 and October 14, 2012 (drill holes CM12-01A to CM12-09C), for a total of 2,759.4 m. The total meterage included five drill holes that had to be abandoned after hitting shafts and/or underground workings before reaching their target. Channel samples were also collected from the 2012 trenches on Cow Mountain. This data was used to verify the results of the report in question.

During its review of the NI 43-101 report, Snowden examined historical samples not included in the original Gold Quartz Estimate. Snowden recommended that these samples be included in the ongoing MRE for Cow Mountain after being validated. The Gold Quartz Estimate was based on a database containing 619 drill holes. About 2,142 holes had been drilled on the property of which more than 1,464 had been verified by Mintec.

In July 2012, BGM received an amendment to *Mines Act* Permit M-198 for the QR Mill to allow the custom milling of up to 300,000 t of mineralized material from the Bonanza Ledge Mine, as well as the disposal of associated mine tailings in the QR Main Zone Pit. In December 2012, BGM received an amended *Environmental Management Act* Permit, PE-17876, to allow effluent discharge associated with active mining at Bonanza Ledge.

6.5.3. 2013 Work Program

In June 2013, BGM filed an NI 43-101 technical report to present and support the updated MRE for Cow Mountain (the "2013 Estimate"; Georges et al., 2013). As part of the mandate, Snowden assisted Geoex and BGM in the review and audit of the data validation and verification aspects of the Cow Mountain data, the determination of the most appropriate estimation method for Cow Mountain, and the preparation of the independent MRE for the Cow Mountain area.

The 2013 estimate was reported at a range of cut-off grades for the Indicated and Inferred categories (Georges et al., 2013). No Measured mineral resources were estimated.

On July 15, 2013, the BCSC Rescinded the CTO issued on August 14, 2012. On October 9, 2013, common shares of BGM resumed trading on the Toronto Stock Exchange ("TSX:V").

To satisfy some of the recommendations of the last technical report (Georges et al., 2013), BGM reviewed core sampling records for all drill holes in the Cow Mountain mineral resource model. A core sampling and assaying program was conducted to provide assays for any previously unsampled drill core intervals. The infill sampling program (55,698.6 m) was conducted on 250 holes drilled in 2007, 2009, 2010, and 2011 on Cow Mountain (BGM press release of January 20, 2014). The program was completed in January 2014. Available reject samples for all the Cow Mountain drill holes were shipped to Acme Labs for fire assay–metallic screen analysis. In total, 25,280 samples were sent to Acme Labs.

6.5.4. 2014 Work Program

BGM conducted surface drilling in 2014.

In March 2014, BGM announced the commencement of operations at the Bonanza Ledge Mine under *Mines Act* permit M-238. The first production blast was on March 12, 2014. Over the course of the year, BGM milled 53,090 t of mineralized material at an average head grade of 6.23 g/t Au and a recovery rate of 90%. The average net operating cost was $1,669 per ounce.

6.6. Barkerville Gold Mines Ltd. (2015–2022)

All exploration and drilling results from 2015–2022 are summarized in Chapters 9 and 10. Production and historical mineral resource estimates are summarized below.

For the purposes of this Report, Barkerville Gold Mines Ltd., as it operated from 2015–2021, will be referred to as Osisko Development Corp. ("ODV"). Current ODV management has been in place since 2015 and on November 21, 2019, Osisko Gold Royalties acquired the Cariboo Gold Project through the acquisition of BGM. The Project was part of the asset that Osisko Gold Royalties contributed that created the Osisko Development Corp. on November 25, 2020.

During 2015, ODV milled 11,275 t of Bonanza Ledge mineralized material at an average head grade of 10.14 g/t Au, a recovery rate of 94%, and an average net operating cost of $877/oz. Based on the results as of February 28, 2015, management decided to cease production and place Bonanza Ledge under care and maintenance.

In 2016, ODV mandated InnovExplo (Brousseau et al., 2017) to complete an NI 43-101 technical report and the 2017 MRE for the Barkerville Mountain deposit. GEOVIA GEMS™ was used for modelling purposes and the estimation approach, which consisted of 3D block modelling and the ordinary kriging interpolation method. The close-out date of the database was July 18, 2016, and the effective date of the 2017 MRE was March 21, 2017 (Brousseau et al., 2017).

In 2017, ODV mandated InnovExplo to update the 2017 MRE and perform a review and validation of the maiden MRE for the Cow Mountain and Island Mountain deposits combined. The close-out date of the database was December 31, 2017, and the effective date for the 2018 MRE was May 2, 2018 (Beausoleil and Pelletier, 2018). Test Mining at Bonanza Ledge was completed in December 2018. The objective was to gain technical information and train personnel to aid in future studies, permitting, and future mining. A total of 1,900 m of development took place at the Bonanza Ledge Mine in 2018. Approximately 120,000 t of mineralized material was extracted and processed at an average grade of 5.94 g/t Au. Bonanza Ledge Mine was placed on care and maintenance in December 2018.

In 2019, ODV mandated InnovExplo to review, validate, and update the 2018 MRE (Beausoleil and Pelletier, 2019). Based on the results of the MRE completed in 2019 (2019 MRE), ODV mandated BBA to prepare a technical report and PEA for the Project (Morgan et al., 2019). A number of specialized consultants assisted BBA with the PEA: Allnorth Consultants Ltd., Golder Associates Ltd., InnovExplo, Mining Plus Canada Consulting Ltd., SRK, and WSP Canada Inc. ("WSP") The effective date of the PEA was August 18, 2019. The purpose was to complete a review and compilation of the mineral resources, mining designs, processing options, and preliminary economics of the Project, and to support the results disclosed in ODV's press release entitled "Barkerville Gold Mines Delivers Positive PEA for Cariboo Gold Project" dated August 19, 2019. The PEA provided a base case assessment for developing the Project as a 4,000 tonnes per day ("tpd") underground mine, with a concentrator located at the Mine Site at Wells and further processing at the QR Mill. The mine life was estimated to be 11 years. These results are described in detail in the PEA (Morgan et al., 2019) available on SEDAR+.

In 2020, ODV mandated InnovExplo (Beausoleil and Pelletier, 2020) to complete an NI 43-101 technical report to present an updated MRE and geological model ("2020 MRE") for the Project. The close-out date of the database was January 29, 2020, and the effective date of the 2020 MRE was April 28, 2020 (Beausoleil and Pelletier, 2020). In 2022, a PEA was completed for the Project; ODV mandated BBA to prepare a technical report and updated PEA for the Project (Hardie et al., 2022). This report was prepared based on contributions from several independent consulting firms, including InnovExplo, SRK, WSP, BBA, Falkirk, and Klohn Crippen Berger Ltd. It encompassed updated resources for the deposits of Cow Mountain (Cow Zone and Valley Zone), Island Mountain (Shaft Zone and Mosquito Zone), and Barkerville Mountain (Lowhee Zone). The updates were prepared by Leonardo de Souza, MAusIMM (CP), of Talisker Exploration Services Inc. ("Talisker"), and reviewed and validated by Carl Pelletier, P.Geo., and Vincent Nadeau-Benoit, P.Geo., both of InnovExplo, using all available information. The effective date of the 2022 MRE update was May 17, 2022 (Hardie et al., 2022).

In 2023, a FS was completed for the Project; ODV mandated BBA to prepare a technical report and FS for the Cariboo Gold Project (Hardie et al., 2023). This report was prepared based on contributions from several independent consulting firms, including BBA, Falkirk, Golder Associates Ltd. (amalgamated with WSP Canada Inc. on January 1, 2023 to form WSP Canada Inc.) ("Golder"), InnovExplo, JDS, KCC Geoconsulting Inc. ("KCC"), Klohn Crippen Berger Ltd.("KCB"), SRK, and WSP USA Inc.

It encompassed updated resources for the deposits of Cow Mountain (Cow Zone and Valley Zone), Island Mountain (Shaft Zone and Mosquito Zone), and Barkerville Mountain (Lowhee Zone). The updates were prepared by Leonardo de Souza, MAusIMM (CP), of Talisker, and reviewed and validated by Carl Pelletier, P.Geo., and Vincent Nadeau-Benoit, P.Geo., both of InnovExplo, using all available information. The effective date of the 2022 MRE update was May 17, 2022 (Hardie et al., 2022).

The Bonanza Ledge Mine resumed development in mid–2019 and in 2020, 3,268 t of mineralized material was extracted at an average grade of 2.58 g/t Au. In 2020, the underground focus was the development of drifts to access the BC Vein. In 2021, 98,786 t of mineralized material was extracted at an average grade of 4.48 g/t Au (as of December 31, 2021). In 2022, 170,652 t of mineralized material was extracted at an average grade of 5.16 g/t Au. Development of a new portal to access and develop a bulk sample at the Cow Mountain portion of the mineral resource was completed in December 2021. The Bonanza Ledge Mine was placed on care and maintenance in June 2022.

6.7. Regional Mineral Claims of the Cariboo Gold Project

Parts of the regional mineral claims of the Project have a very long history of exploration and development dating back to the late 1800's. It is beyond the scope and technical requirements of the Report to review all the historical information. Work History (InnovExplo, 2025a) provides a complete list of references for all available records relating to historic work on the regional mineral claims of the Project by previous owners for the period 1949 to 2024.

The documents used to compile the information were obtained from the database assessment files of the British Columbia Ministry of Energy and Mines (ARIS (gov.bc.ca)).

7. Geological Setting and Mineralization

7.1 Introduction and Clarification

For the purposes of this Report, Barkerville Gold Mines Ltd., as it operated from 2015 to 2021, will be referred to as Osisko Development Corp. ("ODV"). The current ODV management has been in place since 2015 and on November 21, 2019, Osisko Gold Royalties acquired the Cariboo Gold Project through the acquisition of Barkerville Gold Mines Ltd. The Project was part of the assets contributed by OGR that created ODV on November 25, 2020.

In addition, the Cariboo Gold Project as described geologically refers to the entirety of the ODV land package in British Columbia.

Information presented in this section was taken and modified from Hardie et al. (2023). Other references in the section are duly indicated where applicable.

7.2 Regional Geological Setting

The principal vein style deposits of the Cariboo Discovery Property are hosted within Neoproterozoic to Paleozoic off-shelf siliciclastic and lesser carbonate facies rocks belonging to the Snowshoe Group of the peri-cratonic Barkerville terrane (e.g., Monger and Berg, 1984; Struik, 1986;1988; Schiarizza and Ferri, 2003; Ferri and Schiarizza, 2006). Within central BC, the Barkerville terrane represents the westernmost component within the Omineca morphogeological belt of the Canadian Cordillera (Figure 7-1).

The Omineca Belt is characterized by elevated metamorphic grades, Paleozoic through early Tertiary granitoid intrusions, and protracted polyphase deformation beginning by the Middle Jurassic (e.g., Monger and Price, 2002) (Figure 7-2). Across the Cariboo Mountains, the Omineca Belt can be described as consisting of the following tectonostratigraphic elements:

1. Neoproterozoic rift-related clastic and minor volcanic rocks deposited on continental basement attenuated during break-up of the supercontinent Rodinia (e.g., Monger and Price, 2002; Hoffman, 1991) (basal Barkerville and Cariboo terrane sequences);
2. Paleozoic peri-cratonic off-shelf siliciclastic rocks, with lesser volcanic, volcaniclastic, and carbonate facies rocks (characteristic Barkerville terrane sequences) (e.g., Struik 1988; Schiarizza and Ferri, 2003);
3. More proximal Paleozoic platformal carbonate facies and siliciclastic rocks (characteristic Cariboo terrane sequences) (e.g., Schiarizza and Ferri, 2003);

4. Large-scale klippe including Late Paleozoic mafic volcanic rocks, ultramafic to mafic intrusive rocks, and deep sea pelagic sedimentary rocks often interpreted as representing a partial ophiolite sequence (Slide Mountain terrane) (e.g., Struik, 1988; Nelson, 1993).

Proximal and off-shelf sequences of the Cariboo and Barkerville terranes are interpreted to have been deposited on and adjacent to the continental margin of ancestral North America (Laurentia). This idea is supported by deep-crustal geophysical data collected through the National Lithoprobe Geoscience Project (Monger and Price, 2002; Cook, 1995) (Figure 7-3), and by locally exhumed windows of Paleoproterozoic continental basement of North American affinity occurring within the Omineca Belt of south-central BC (e.g., the Monashee core complex) (Monger and Price, 2002).

The metamorphism and magmatism that characterize the Omineca Belt are superimposed across the interface between peri-autochthonous terranes (e.g., Barkerville, Kootenay) and allochthonous terranes of the more westerly Intermontane Belt. The boundary between the two belts can thus be placed somewhat arbitrarily, unless coincident with a major fault (Monger and Price, 2003). Within the Cariboo terrane, the Omineca-Intermontane Belt boundary is coincident with the Barkerville-Quesnellia terrane boundary along the Jurassic aged Eureka thrust (e.g., Struik, 1988; Schiarizza and Ferri, 2003; Ferri and Schiarizza, 2006). Figure 7-4, modified from Struik (1988), details the inferred tectonic architecture across the Omineca Belt in the Cariboo Gold District.

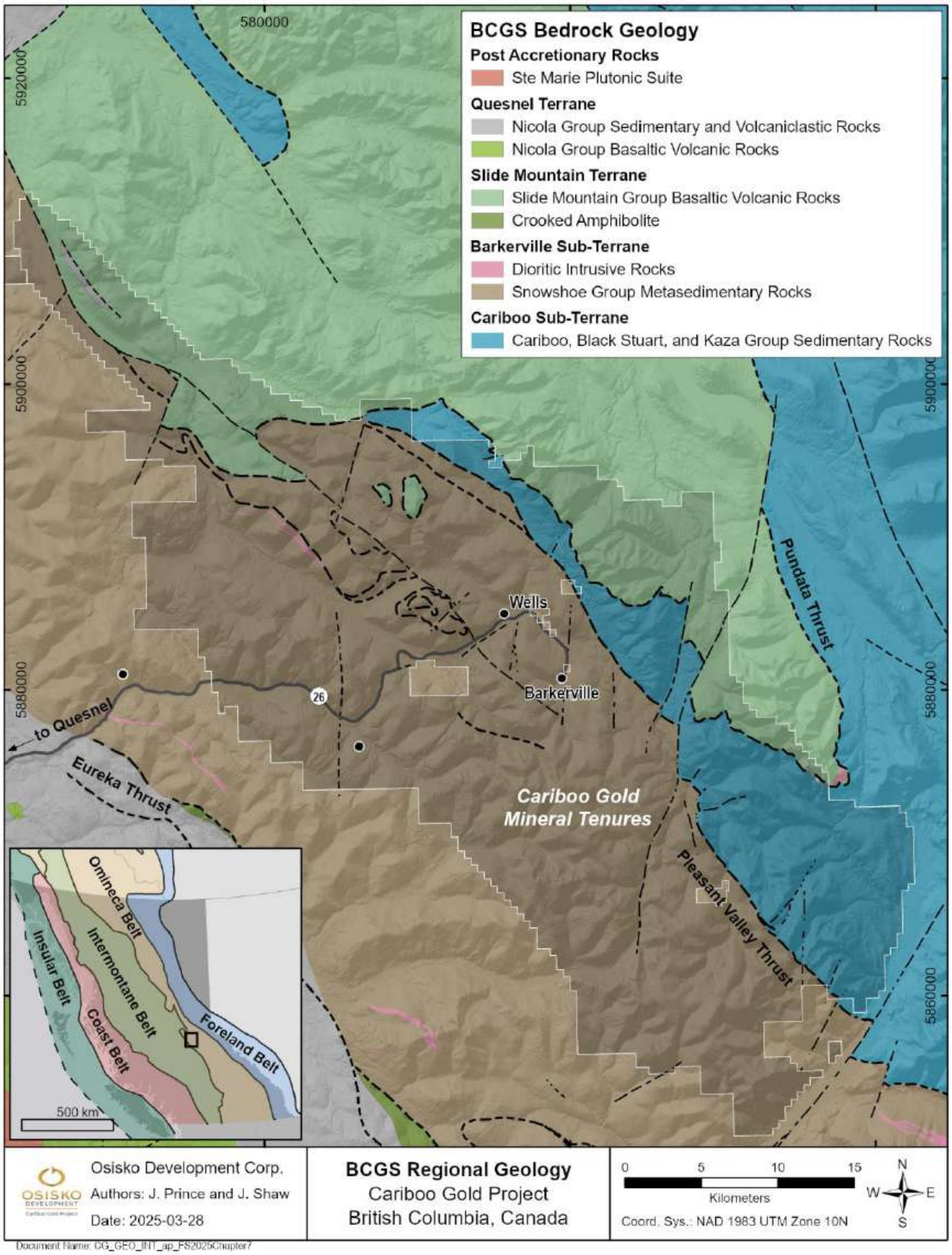
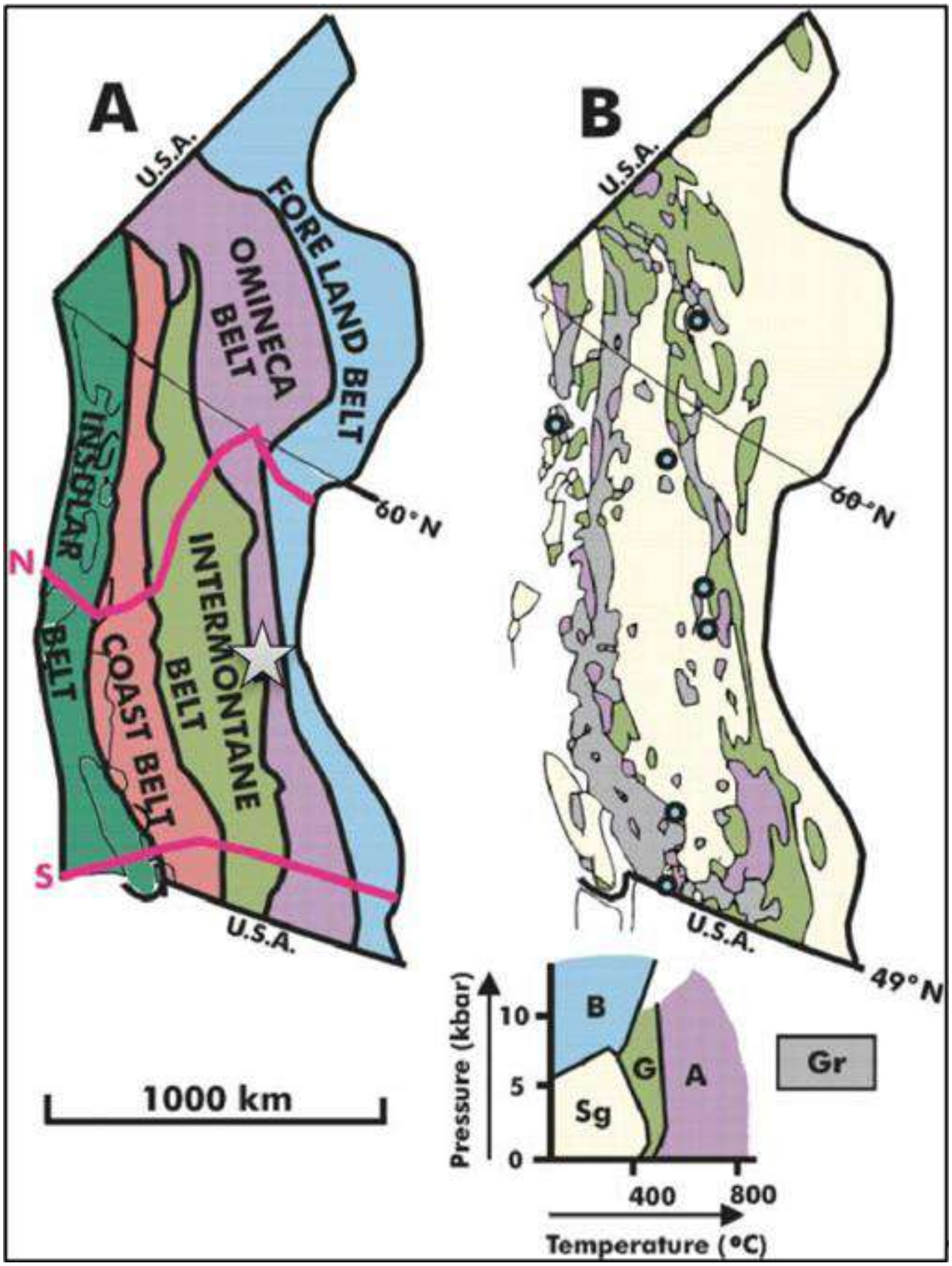


Figure 7-1: BCGS bedrock geology of the Cariboo Gold Project area



A) Approximate location of the Project indicated by the star.
B) Sg – sub-greenschist facies; G – greenschist facies; A – amphibolite facies; B – Blueschist facies (dots); Gr – granitic rocks.

Figure 7-2: A) Morphogeological belts of the Canadian Cordillera with the northern (N) and southern (S) Lithoprobe transects; B) Simplified map of the distribution of granitic rocks and regional metamorphic grade (Monger and Price, 2002)

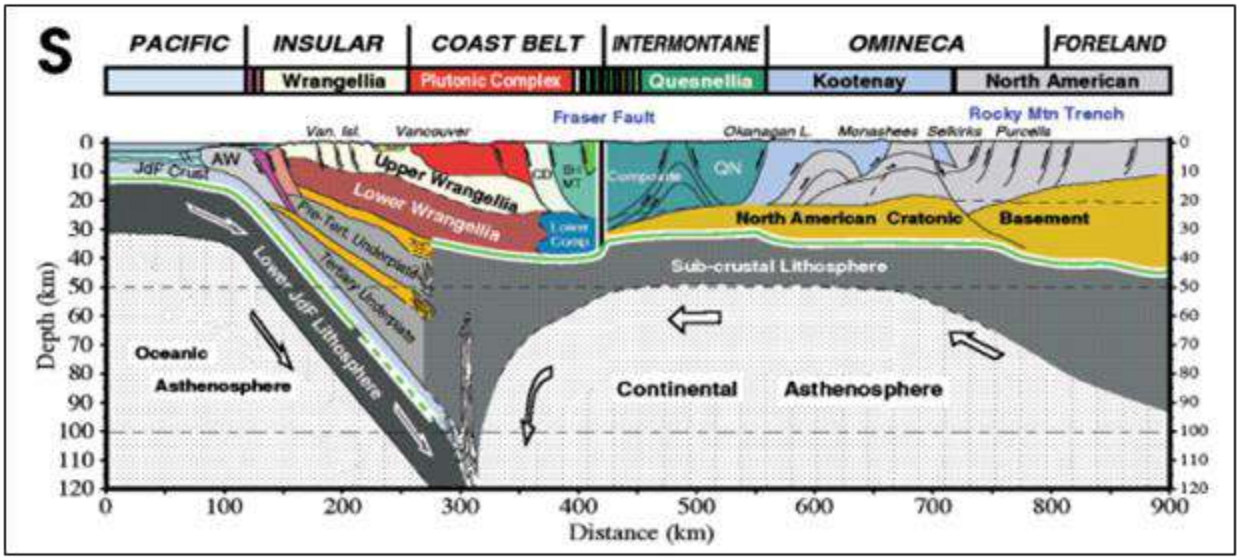


Figure 7-3: Lithospheric-scale cross-section of the southern Cordilleran Lithoprobe transect (Monger and Price, 2002)

The Cariboo terrane represents the easternmost component of the Omineca Belt within the Cariboo district; its boundary with the Foreland Belt coincides with the eastern limit of the Cariboo Mountains at the Rocky Mountain Trench. The Cariboo terrane is juxtaposed atop the Barkerville terrane along the E-dipping Pleasant Valley Thrust. The age of formation of the thrust must post-date the youngest rocks within the Barkerville and Cariboo terranes, which fossil age constraints place within the Lower Permian (Struik, 1986; 1988). While stratigraphic similarities certainly exist between sections of the Barkerville and Cariboo terranes (e.g., Monger and Berg, 1984; Struik, 1986) the more carbonate-rich stratigraphy of the Cariboo suggests a setting proximal to the Laurentian margin, and it is commonly classified as a sub-terrane of the more northerly Cassiar (Struik, 1986; Ferri and Schiarizza, 2006). Significant (≥500 km) relative-northward Cretaceous through Eocene translation of the Cassiar terrane along the Northern Rocky Mountain – Tintina fault system is believed to disperse and step westward at the northern limits of the Cariboo mountains. The more southerly accommodation of this translation is believed to have occurred along the intra-Omineca Matthew and McLeod Lake faults, with comparatively minor displacements experienced along the Rocky Mountain Trench (Gabrielse et al., 2006).

The allochthonous Quesnel terrane, or Quesnellia, consists primarily of Middle Triassic to Lower Jurassic sedimentary, volcanic, and intrusive rocks formed in an island arc – arc-marginal basin setting (Struik, 1988; Panteleyev et al., 1996). These rocks represent the easternmost component of the Intermontane Belt and were emplaced above the Barkerville terrane along the east-vergent Eureka Thrust during the Early to Middle Jurassic (e.g., Schiarizza and Ferri, 2003). The thrust itself was folded not long after its formation (Struik, 1988; Schiarizza and Ferri, 2003), and it is marked by lenses of variably sheared mafic and serpentinized ultramafic rocks collectively described as the Crooked Amphibolite (Struik, 1988; Schiarizza and Ferri, 2003; Ferri and Schiarizza, 2006). The Crooked Amphibolite represents an ophiolitic sliver (e.g., Pantaleyev et al., 1996), and it is commonly viewed as a correlative of a potential root to the shallowly emplaced Slide Mountain terrane (Pantaleyev et al., 1996, Struik, 1986; Ash, 2001; Ray et al., 2001; Ferri and Schiarizza, 2006). Quesnel terrane accretion, perhaps co-eval with the emplacement of the Slide Mountain terrane, has been linked with the development of the earliest recognizable phases of deformation and accompanying regional metamorphism within the Cariboo and Barkerville terranes (Schiarizza and Ferri, 2003). Metamorphic cooling ages of 174+\- 4 mega annum (million years) ("Ma") obtained from uranium-lead ("U-Pb") dating of metamorphic sphene from the Quesnel Lake area (Mortensen et al., 1987) constrain peak metamorphism to the Middle Jurassic.

The Slide Mountain terrane structurally overlies both the Cariboo and Barkerville terranes along the sub-horizontal, broadly warped and locally folded Pundata Thrust (Struik, 1986). In the Wells-Barkerville area, the Slide Mountain klippe consists of Lower-Mississippian to Lower Permian meta-basalt and chert of the Antler Formation (e.g., Schiarizza and Ferri, 2003). The structural relationship between the Pleasant Valley and Pundata thrusts seems to suggest that the latter post-dates the former and that, therefore, Slide Mountain emplacement post-dates Cariboo-Barkerville terrane amalgamation (Struik 1986, 1988). However, Schiarizza and Ferri (2003) note that it is in fact unclear whether the Pleasant Valley thrust cuts up-section through the Pundata to affect Antler Formation rocks of the Slide Mountain terrane.

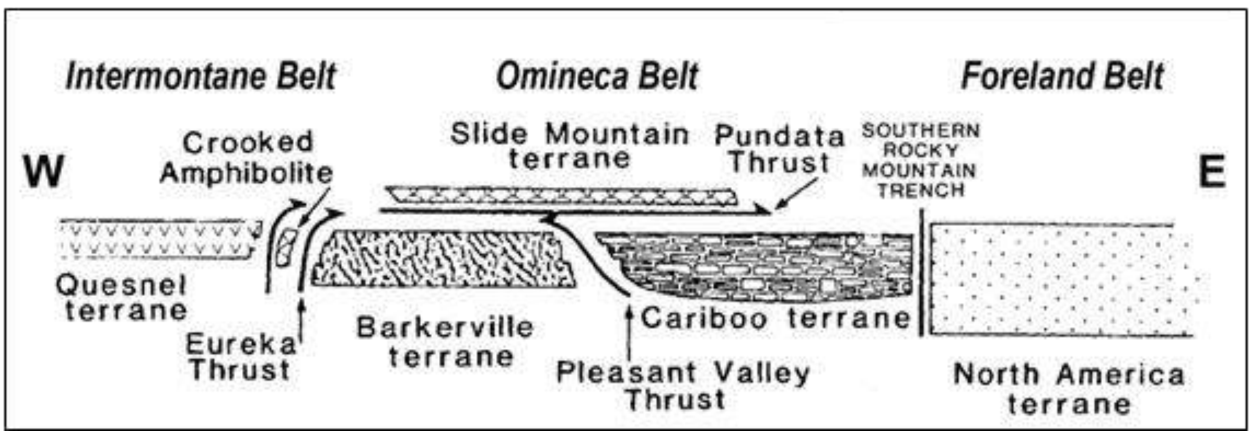


Figure 7-4: Tectonic architecture of the Cariboo Gold District (Modified from Struik, 1986)

7.2.1 Snowshoe Group Stratigraphy

Siliciclastic and carbonate sequences, volcanic and volcaniclastic rocks of the Barkerville terrane collectively comprise the Snowshoe Group, a singular formal unit proposed by Struik (1986). Stratigraphic subdivisions of the Snowshoe Group proposed by Struik (1986) were qualified as "informal", given uncertainties regarding relative stratigraphic order. A final re-interpretation, as presented in Ferri and Schiarizza (2006), goes hand in hand with a new model for the fundamental structural architecture within the Barkerville terrane allowing for large-scale structural repetitions of a simplified stratigraphic sequence. See Struik (1988) for further discussion of earlier stratigraphic interpretations across the Barkerville and Cariboo terranes. The simplified stratigraphy of Ferri and Schiarizza (2006) divides the Snowshoe Group into three major successions, from oldest to youngest: the Downey, Harveys Ridge and Goose Peak successions (Figure 7-5).

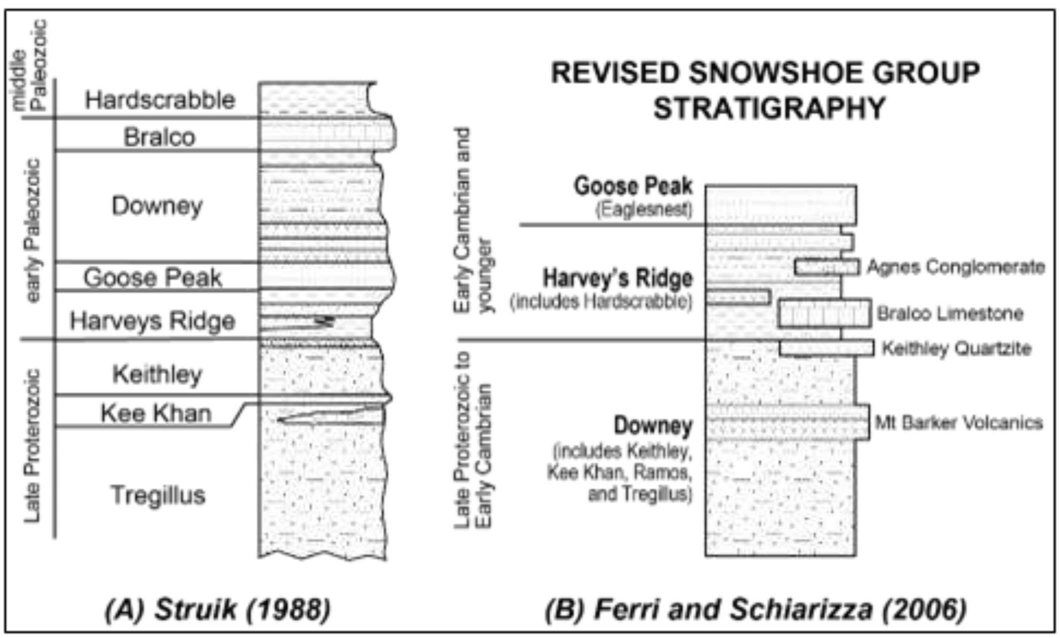


Figure 7-5: Stratigraphic interpretations of the Snowshoe Group (Modified from Ferri and Scharizza, 2006)

The revised Downey succession of Ferri and Schiarizza (2006) outcrops within two separate belts in the Barkerville terrane. An eastern belt corresponds to the original Downy succession of Struik (1988); a western belt corresponds to and includes the Tregillus clastic rocks, Kee Khan marble, Keithley, and Ramos successions as defined by Struik (1988). Siliciclastic rocks within the Downey succession of Ferri and Schiarizza (2006) consist of green-grey micaceous to feldspathic quartzite and phyllite or schist, depending on metamorphic grade. Ferri and Schiarizza retain the name "Keithley Quartzite" to describe a localized marker orthoquartzite occurring near the top of the sequence. The Downey succession commonly includes relatively thick and discontinuous carbonate units, including the Kee Khan marble of Struik (1988), which are found most often in association with alkali mafic metavolcanic and volcaniclastic rocks (e.g., Mt. Barker Volcanics). Metavolcanic rocks range from thin horizons of chloritic phyllite in the Wells-Barkerville area, to thick, regional-scale exposures of chlorite±actinolite phyllite and schist north of Cariboo Lake (Allan et. al., 2017). Ferri and Schiarizza (2006) constrain the depositional age range for the Downey succession to Late Proterozoic through Early Cambrian. The geochemical nature of Downey volcanic rocks and the immature nature of its siliciclastic sequences are consistent with deposition in a continental rift environment (Ferri and Schiarizza, 2006). Depositional onset is consistent with the timing of Rodinia break-up (e.g., Hoffman, 1991).

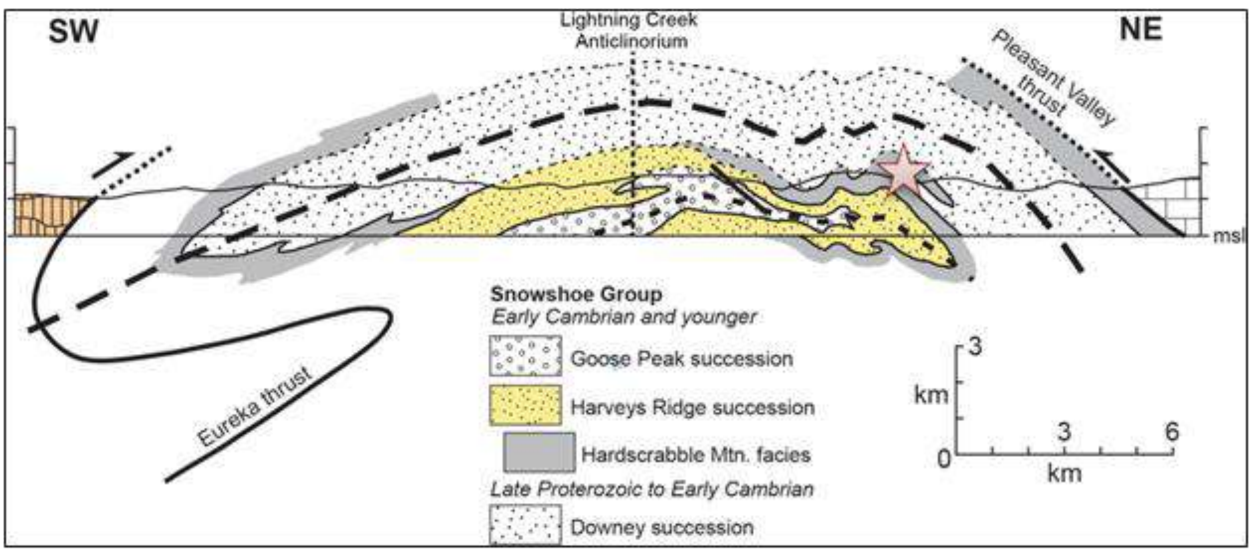
The revised Harveys Ridge succession of Ferri and Schiarizza (2006) includes rocks grouped by Struik (1988) into the separate Harveys Ridge and Hardscrabble Mountain successions. The sequence consists predominantly of dark grey to black carbonaceous and locally pyritic siltstone to phyllite and variably carbonaceous dark to pale grey quartzite. The term 'Hardscrabble facies' is still employed to describe the finer grained rocks in the succession, though facies changes between carbonaceous siltstones and quartzites occur both in section and laterally. The Harveys ridge succession also includes intervals of dark grey to black (carbonaceous) limestone and minor mafic metavolcanic rocks. The Agnes Conglomerate of Struik (1988) forms discontinuous lenses at the uppermost levels of the succession. The Bralco Limestone of Struik (1988) is found at the base of the succession but is believed to occur only within its eastern exposures. Rocks of the Harveys Ridge succession are believed to be in sharp contact with rocks of the underlying Downey, though Harveys Ridge is transitional into the overlying Goose Peak succession, grading from carbonaceous to clean quartzites in its upper reaches.

The Goose Peak succession of Ferri and Schiarizza (2006) consists predominantly of light grey to grey-green quartzite to feldspathic quartzite with lesser interbedded dark grey phyllite and siltstone. The redefined sequence includes both the Goose Peak and Eaglesnest successions of Struik (1988).

Ferri and Schiarizza (2006) constrain the Harveys Ridge and Goose Peak successions as Early Cambrian or younger, based on correlations with similar units within the Cariboo terrane to the east. Lower Permian conodont ages are determined for the Sugar Limestone, which unconformably overlies Hardscrabble facies rocks at Sugar Creek on Hardscrabble Mountain (Struik, 1988). While the upper age limits of the Harvey's Ridge and Goose Peak successions are otherwise poorly constrained, the age gap represented by the unconformity at the base of the Sugar Limestone may be quite profound (Ferri and O'Brein, 2002).

Snowshoe group rocks are locally intruded by dikes and sills of varying composition and relative timing of emplacement (e.g., Struik 1988).

In tandem with the revised Snowshoe Group stratigraphy, Ferri and Schiarizza (2006) present a model within which Snowshoe Group rocks, along with the overriding Eureka Thrust, are folded into a terrane-scale SW-vergent nappe (Figure 7-6). The nappe is overridden in the northeast ("NE") by the Cariboo terrane along the Pleasant Valley Thrust, beneath which Downey succession rocks are interpreted to represent the core of an early recumbent anticline. The nappe itself is then subjected to another phase of upright folding about a horizontal axis to produce a broad antiform with the youngest Snowshoe group rocks of the Goose Peak succession exposed at its core. The broad antiform, known as the Lightning Creek Anticlinorium, was recognized by Struik (1988) as a domain across which orogenic vergence transitions from NE to SW. In a transect along the Barkerville Highway (BC 26) the domain is characterized by predominantly subhorizontal regional foliation. Further south, i.e., in the Yanks Peak area north of Cariboo Lake, the domain is characterized by tight upright folds.



Note: Section line approximately equivalent to a transect along the Barkerville Highway (BC 26). The approximate location of Wells is indicated by the star.

Figure 7-6: Barkerville terrane nappe model
(Modified from Ferri and Schiarizza, 2006)

7.2.2 Metamorphism

All known gold and silver mineralization within the Barkerville trend is hosted in rocks metamorphosed to lower-greenschist facies (sub-biotite isograd). The principal metamorphic minerals largely depend on the protolith but generally include sericite, chlorite, quartz, and iron-carbonate. A regional S1 foliation is defined by the alignment of metamorphic micas, suggesting that peak metamorphic temperature coincided with the D1 deformation with possible overprinting during D2 (Struik, 1988). Peak metamorphism is thought to have occurred at approximately 174±4 Ma, based on a U-Pb age for metamorphic titanite (sphene) collected near Quesnel Lake (Mortensen et al., 1987). Andrew et al. (1983) reported a similar K-Ar whole-rock age of 179±8 Ma for phyllite at the Cariboo Gold Quartz Mine. However, more recent dating by Rhys et al. (2009) constrained the age of the metamorphism at Cariboo Gold Quartz and Bonanza Ledge Mines between 146.6±1.1 and 151.5±0.8 Ma, which is significantly closer to the age of mineralization.

Amphibolite-facies rocks are found within a klippe atop Island Mountain but are not associated with any significant mineralization and their origin is not well understood. Rocks within the klippe at Island Mountain include both amphibolite and garnet-mica (white mica ± biotite) schist. They have been postulated as correlative with the Slide Mountain terrane and/or Crooked Amphibolite but may alternatively represent more deeply rooted rocks of Barkerville terrane affinity (e.g., Schiarizza and Ferri, 2003). Amphibolite-facies rocks are also found at the western margin of the Barkerville terrane, where Snowshoe Group rocks consist of garnet-biotite schists and micaceous quartzites (Moynihan & Logan, 2009; Struik et al., 1992).

7.3 Property Geology

Detailed surface mapping conducted at a 1:2,000 scale and the collection of high-density structural data was completed within the core of the Project area covering the Island Mountain, Cow Mountain, Barkerville Mountain, and Mount Proserpine prospect areas during the 2018-2019 field seasons and during the 2018 to 2022 field seasons at the following four Cariboo Gold Project regional prospect areas: Proserpine, Cunningham, Burns, and Yanks Peak. The goal was to develop a geologic understanding of each location as well as generating drill targets and/or additional research objectives.

The following synthesis is based largely on that work. Culminating map and cross-section products are presented in Figure 7-11 and Figure 7-12 at the end of Section 7.3.1.

7.3.1 Cariboo Gold Project's Core Area

Snowshoe Group rocks within the Project consists of an internally deformed sequence of siliciclastic, carbonate, and lesser volcaniclastic rocks that correspond with both the Downey and Harveys Ridge (including Hardscrabble facies) successions of Ferri and Schiarizza (2006). Historical workings in the Cariboo Gold District along with active brownfields exploration of approximately 13 km in strike length define a strike-parallel belt of lode gold deposits hereafter and historically referred to as the Barkerville trend. Within the Barkerville trend, Snowshoe Group rocks are deformed within a close to tightly folded northwest-southeast striking and northeast-dipping tectonostratigraphic sequence regionally metamorphosed to greenschist facies and locally disrupted by strike-parallel shear structures of varying thickness and undetermined offset (e.g., BC Vein). Given the consistency of low metamorphic grades within deposit hosting rocks of the Project, all Snowshoe Group lithologies are referenced using protolith terminology in both core logging and surface mapping. These pre-established protocols will be followed herein.

Each of the vein-related deposits within the Project (Mosquito Creek, Shaft, Valley, Cow Mountain, Lowhee, and KL) are hosted in Snowshoe Group rocks within the hanging-wall to the BC Vein shear structure. A large-scale (ca. 300 m wavelength) D2 fold pair, consisting of the Mosquito Creek antiform and Barkerville synform, is exposed at different structural levels across Island Mountain, Cow Mountain, and Barkerville Mountain drill areas. Most of the diamond drilling at the Project takes place within the shared overturned limb of the Mosquito Creek-Barkerville antiform-synform pair. Despite complexities of finer-scale structural repetition and lateral facies changes, the tectonostratigraphy in this shared overturned limb can be described in terms of a simplified five-member sequence (Figure 7-7) that can be applied across the Island Mountain, Cow Mountain, and Barkerville Mountain drill areas. From top to bottom (oldest to youngest) this sequence includes:

1. Calcareous facies rocks including limestone ("LST"), characteristically chloritic and effervescent volcaniclastic rocks with varying degrees of intermixed carbonates classified within the Project as calcareous mafic volcaniclastic rocks ("CLMV"), and lesser occurrences of dominantly sericitic to weakly chloritic calcareous siltstones ("CLSI").
2. Transitional calcareous siliciclastic facies rocks including dominantly sericitic to locally chloritic and less commonly fuchsite-bearing calcareous sandstone ("CLSS") and sericitic siltstone ("SI").
3. A sandstone dominant facies characterized by generally weakly carbonaceous pale to medium-grey, fine to locally coarse-grained, quartz-dominant to sub-arkosic sandstone ("SS") with varying scales of intercalated carbonaceous siltstone ("CSI") horizons (interlaminations to map-scale interbeds) and less common discontinuous lenses of quartz to locally polymictic quartz-plagioclase-lithic pebble conglomerate ("CGL").
4. A laterally extensive siltstone facies generally characterized by iron-carbonate porphyroblastic sericitic to locally weakly chloritic SI.
5. A carbonaceous siltstone facies correlative to the Hardscrabble facies of Ferri and Schiarizza (2006) and characterized by moderate to strongly CSI with locally characteristic euhedral diagenetic pyrite and variable intercalations of very fine to fine-grained carbonaceous sandstone.

The highest density and largest scale veins at the Project are hosted within the rheologically favourable central sandstone facies, sometimes referred to as the "*Target Sandstone*". It should be noted that rocks of both the sericitic siltstone and carbonaceous siltstone facies gradually coarsen moving laterally to the southeast, respectively correlating with micaceous sandstone and carbonaceous sandstone dominant facies in the Mount Proserpine area.

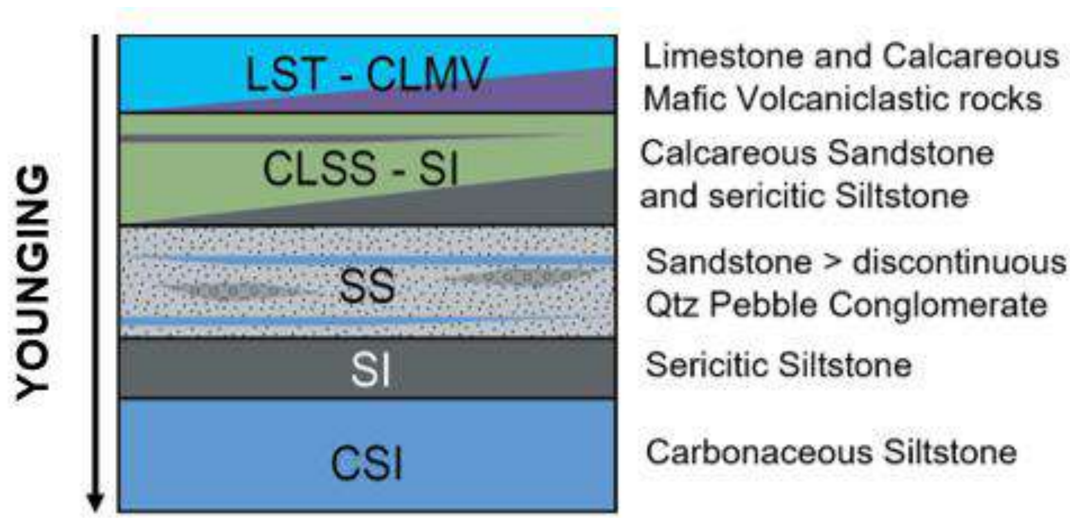
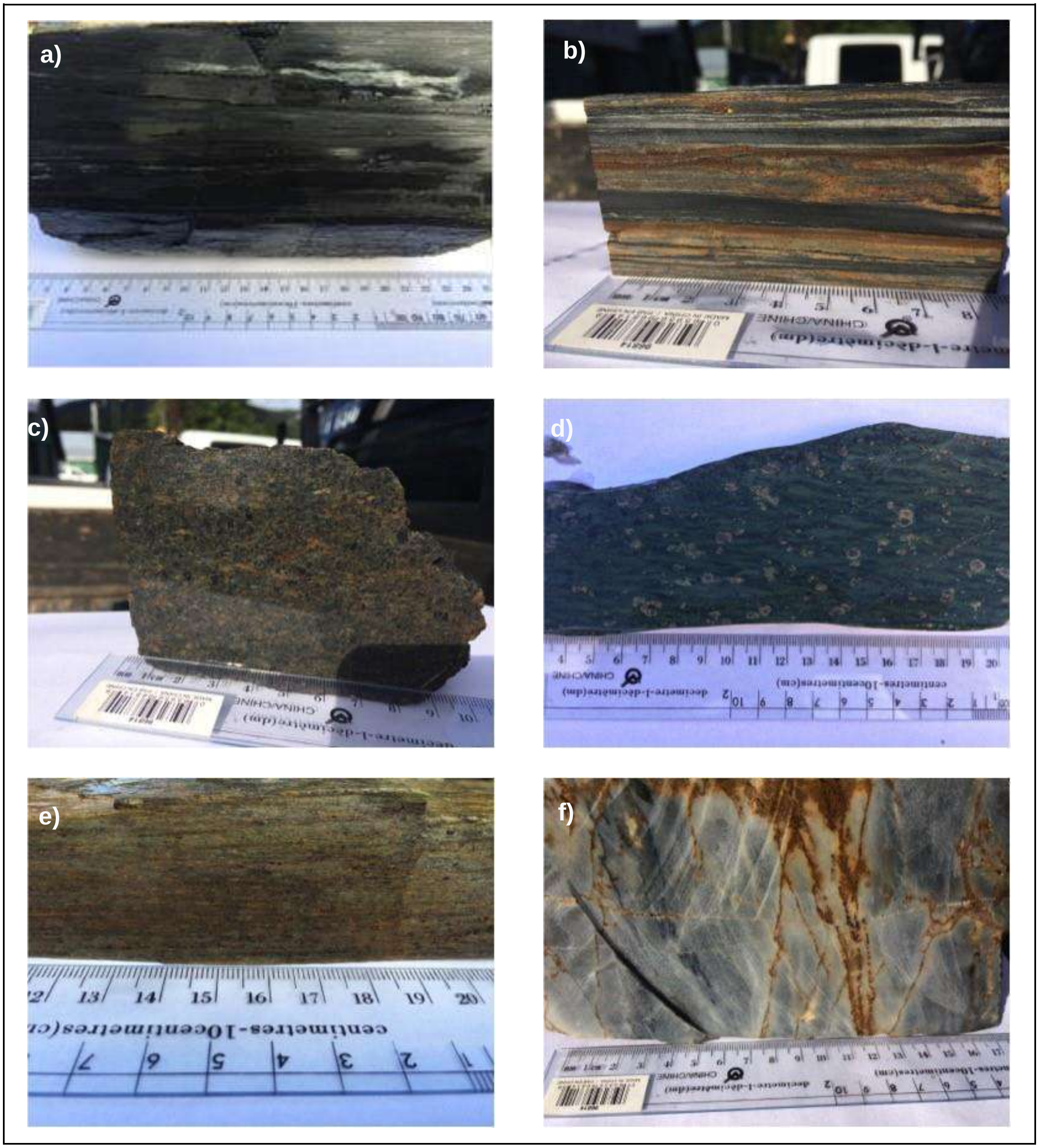


Figure 7-7: Simplified BC Hanging-wall tectonostratigraphy for the Island, Cow, and Barkerville Mountain drill areas

Photographic examples of select lithologies encountered at the Project are presented in Figure 7-8. More detailed tectonostratigraphic facies models prepared by Harbort (2017) for Island Mountain – Cow Mountain and Barkerville Mountain sequences are presented (likewise overturned) in Figure 7-9 and Figure 7-10, respectively. Specific details of these models will not be discussed herein.



a) carbonaceous siltstone; **b)** interlaminated carbonaceous siltstone and fine-grained sandstone; **c)** coarse-grained sandstone; **d)** calcareous mafic volcaniclastic; **e)** calcareous siltstone; **f)** micritic limestone.

Figure 7-8: Select rock-types observed on the Cariboo Gold Project (Barkerville Gold Mines, 2018)

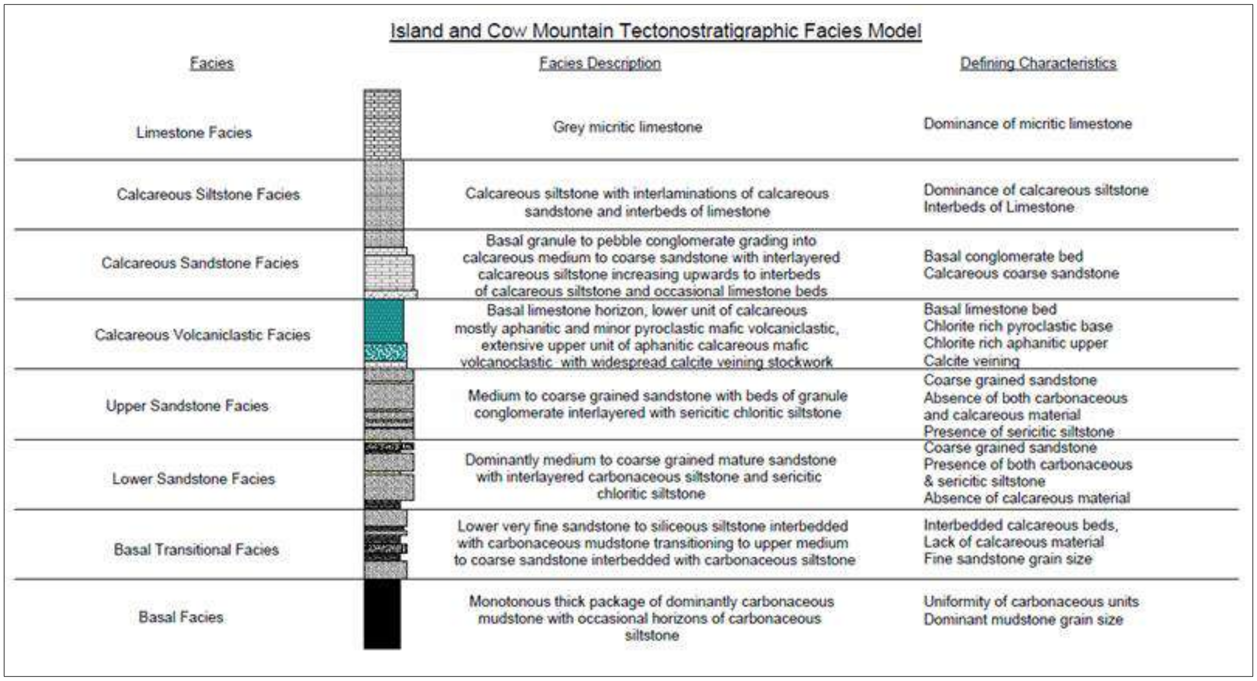


Figure 7-9: Detailed tectonostratigraphic facies model for Island and Cow Mountains (Harbort, 2017)

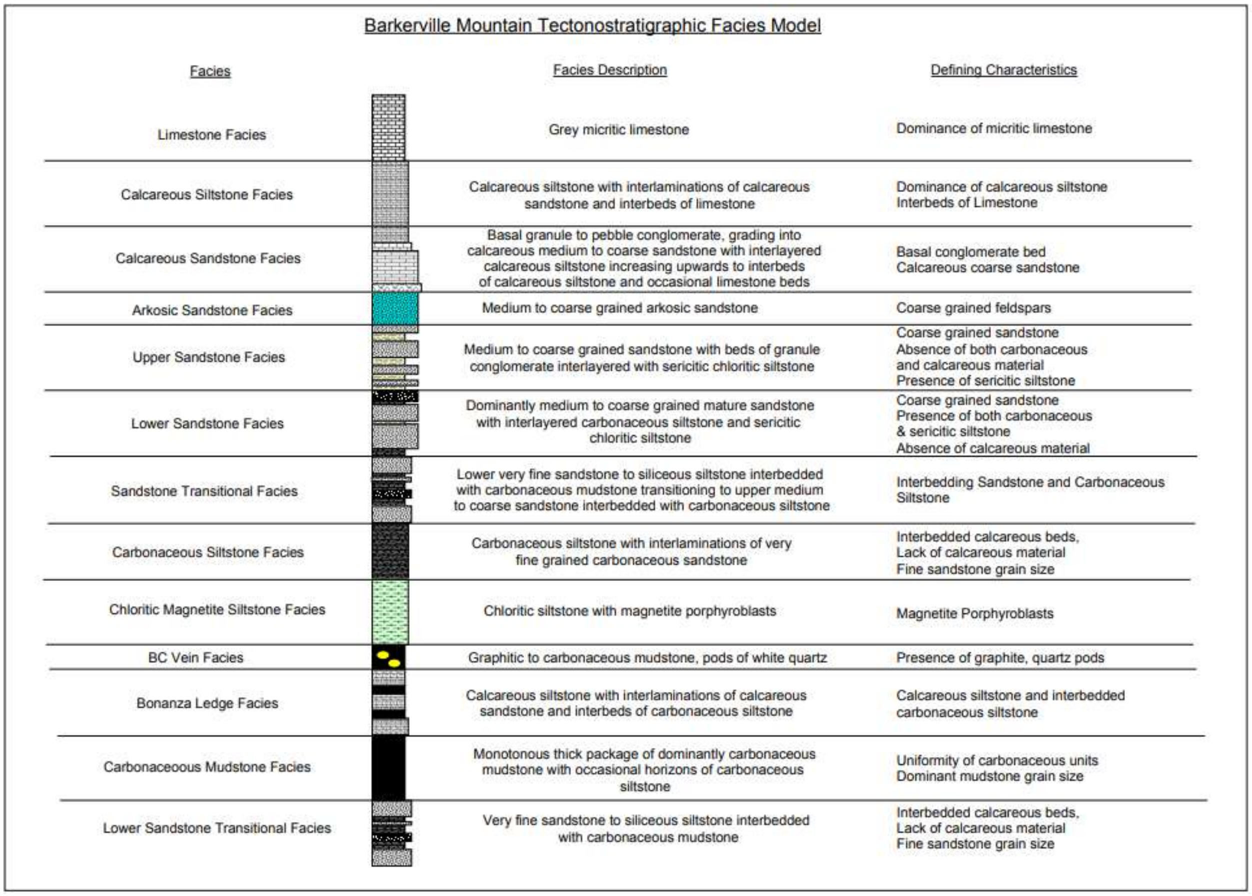


Figure 7-10: Detailed tectonostratigraphic facies model for Barkerville Mountain (Harbort, 2017)

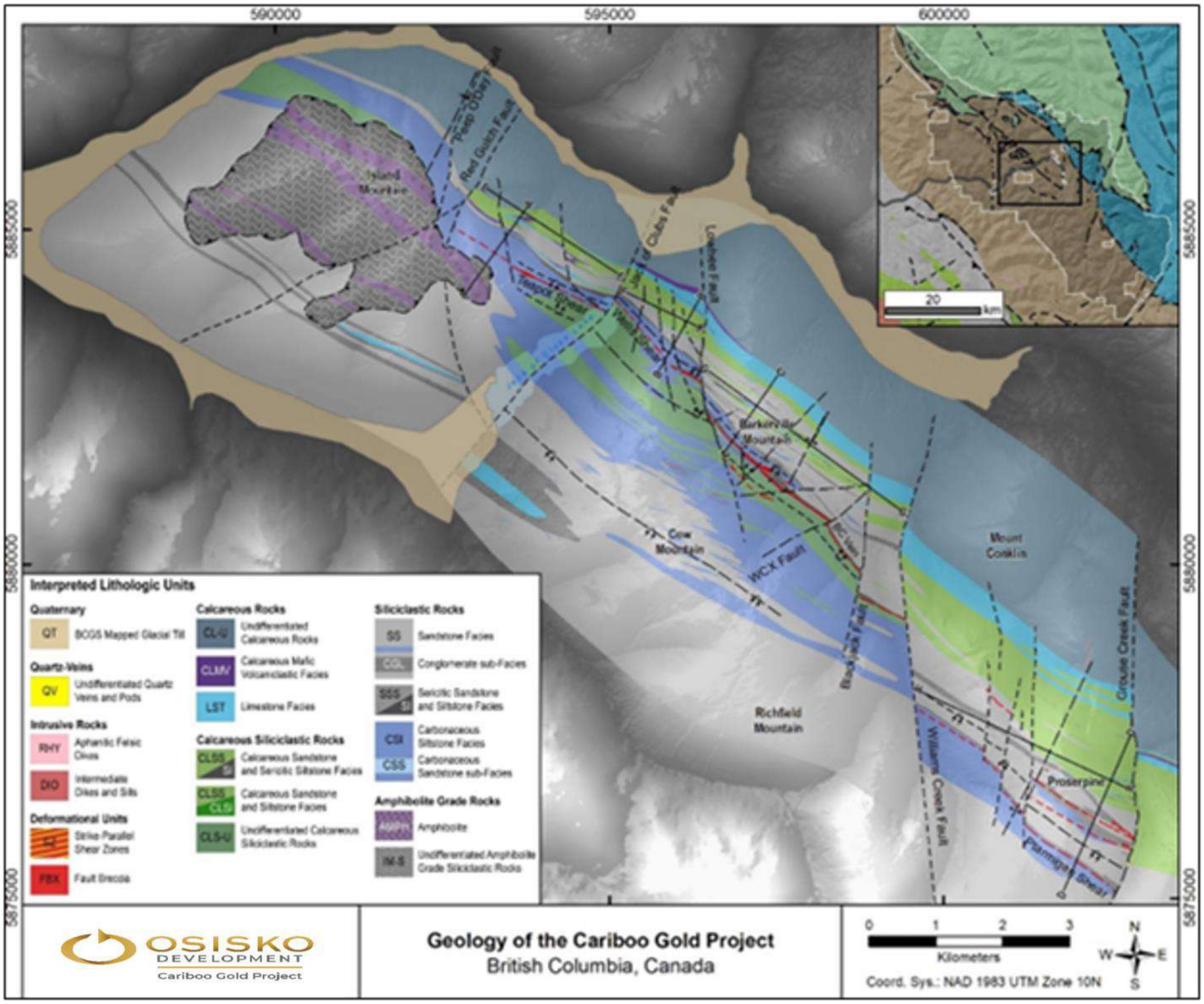
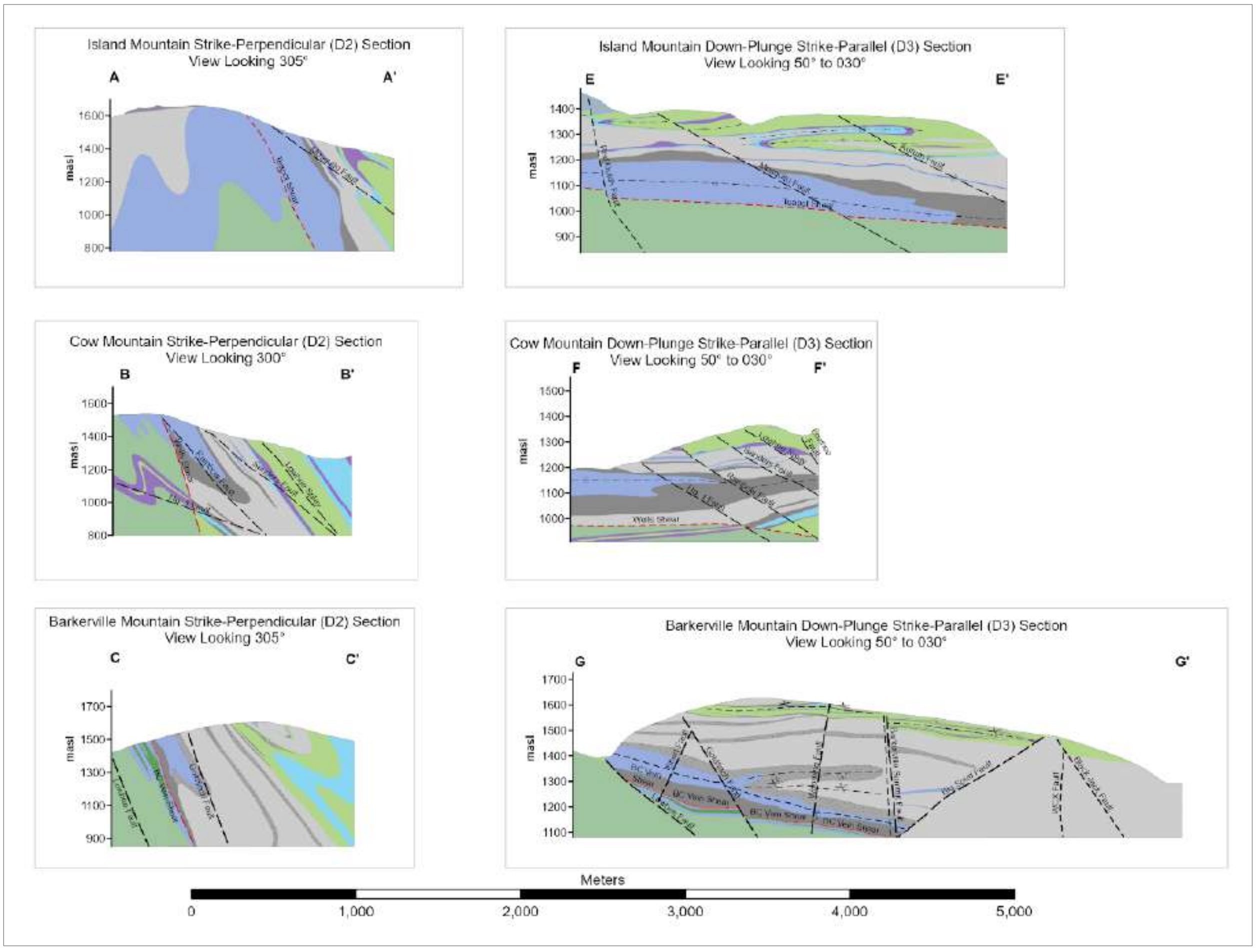


Figure 7-11: Geologic map of the core Cariboo Gold Project area Corresponding sections presented in Figure 7-12 (Shaw and Prince, 2019)


Island Mountain Strike-Perpendicular (D2) Section
View Looking 305°
A
A'
masl
1600
1400
1200
1000
800
Island Mountain Down-Plunge Strike-Parallel (D3) Section
View Looking 50° to 030°
E
E'
masl
1400
1300
1200
1100
1000
900
Cow Mountain Strike-Perpendicular (D2) Section
View Looking 300°
B
B'
masl
1600
1400
1200
1000
800
Cow Mountain Down-Plunge Strike-Parallel (D3) Section
View Looking 50° to 030°
F
F'
masl
1500
1400
1300
1200
1100
1000
Barkerville Mountain Strike-Perpendicular (D2) Section
View Looking 305°
C
C'
masl
1700
1500
1300
1100
900
Barkerville Mountain Down-Plunge Strike-Parallel (D3) Section
View Looking 50° to 030°
G
G'
masl
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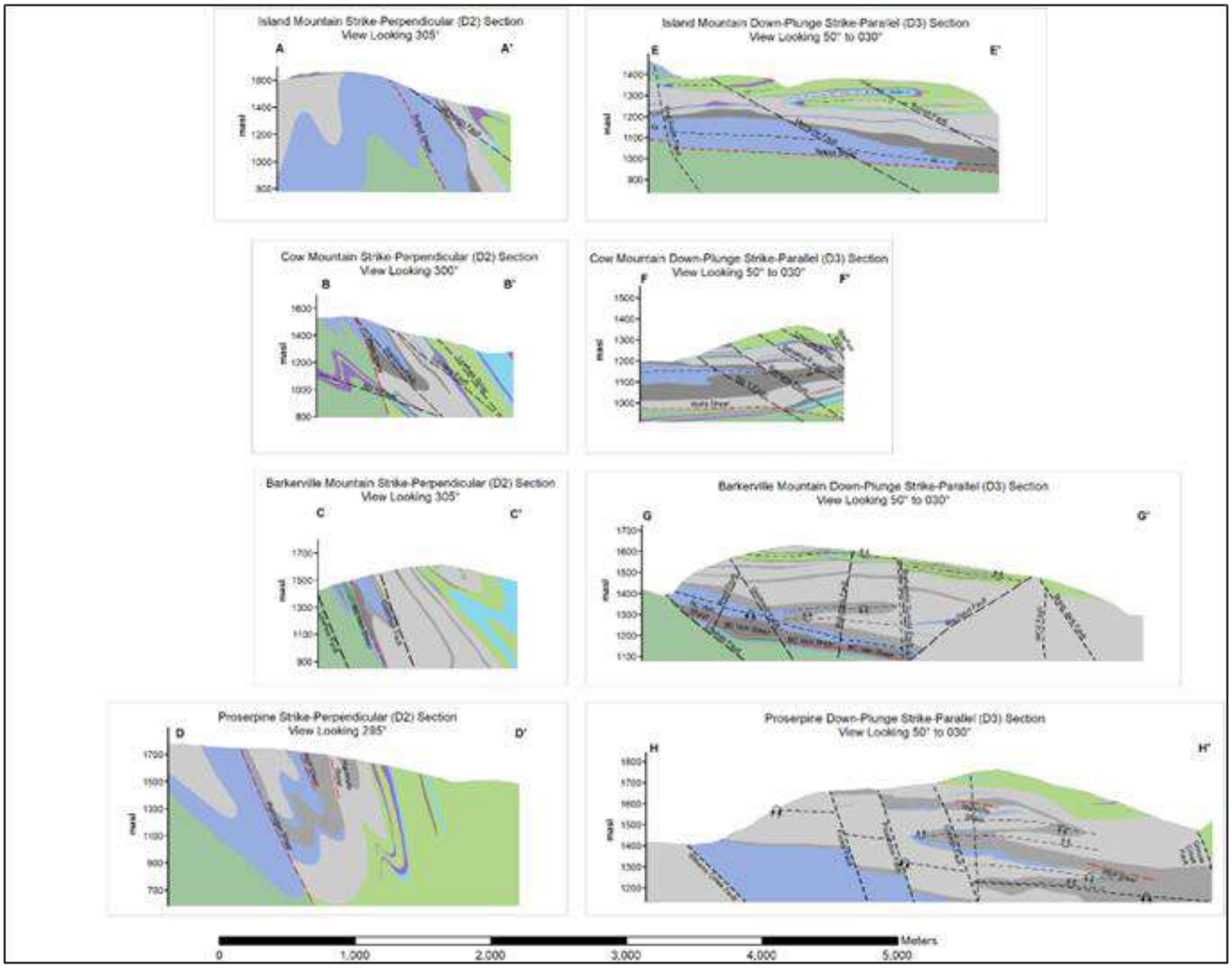


a) Island Mountain sections; **b)** Cow Mountain sections; **c)** Barkerville Mountain sections, **d)** Mount Proserpine sections

Figure 7-12: Vertical strike-perpendicular (left) and down-plunge strike-parallel (right) cross-sections for the core Cariboo Gold Project area (Shaw and Prince, 2019)

7.3.2 Proserpine Region

In the Proserpine region, we observe host rocks like those of the deposits in the Project. Snowshoe Group rocks host mineralized veining within the hanging wall of a carbonaceous shear structure, which itself is locally well mineralized. Figure 7-13 shows the interpreted geologic units based on mapping completed in 2018 and 2019 (Shaw and Prince, 2018, 2019). Most of the veining occurs within sandstone dominant facies of the generalized tectonostratigraphic sequence presented in Figure 7-13.

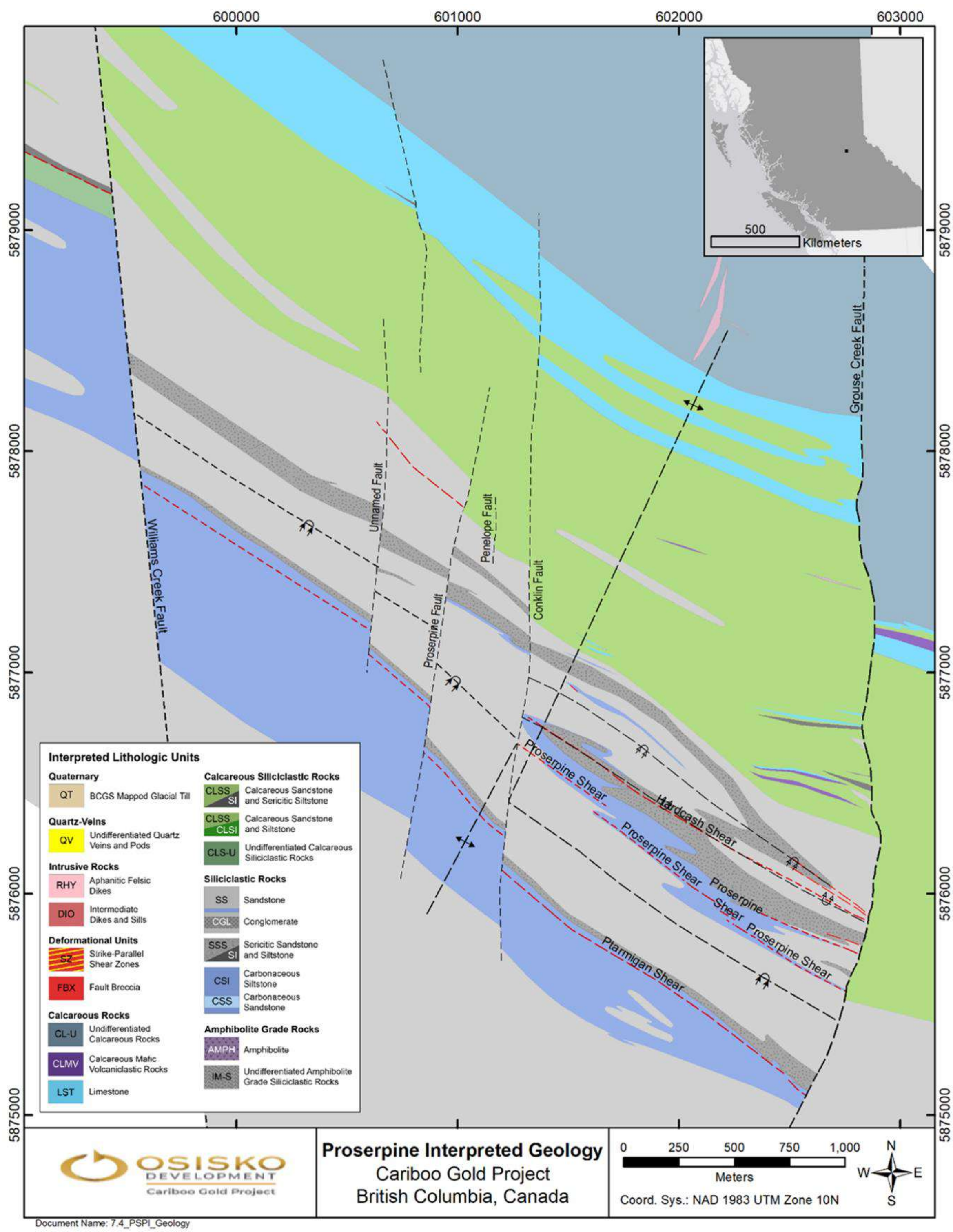


Figure 7-13: Proserpine interpreted geology map

7.3.3 Cunningham Region

Detailed mapping and analysis in the Cunningham region have been focused on the Cariboo-Hudson prospect. The lithologic units observed here are like what is observed in the Project with vein-hosted mineralization focused within the sandstone dominant units.

The vein system at Cariboo-Hudson consists of a series of strike parallel or strike oblique shear veins. These veins were modelled in 2021 using the surface mapping observations, underground level plans from the historic Cariboo-Hudson mine, and DDH intercepts from historic drilling.

The following is a geologic plan map, cross-section, and lithologic stratigraphy model for the Cariboo-Hudson prospect area (Figure 7-14, Figure 7-15 and Figure 7-16).

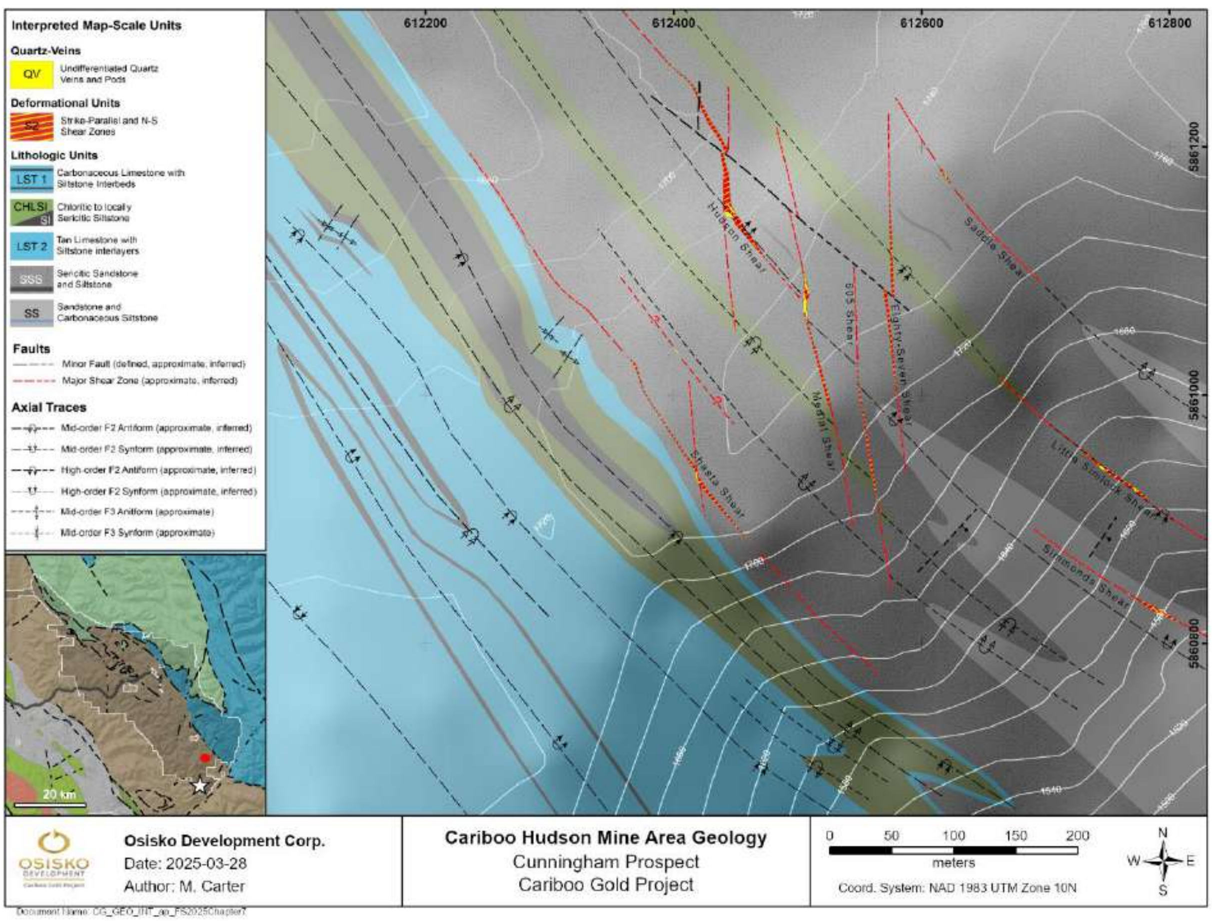


Figure 7-14: Cariboo-Hudson Mine Area geology within the Cunningham Region

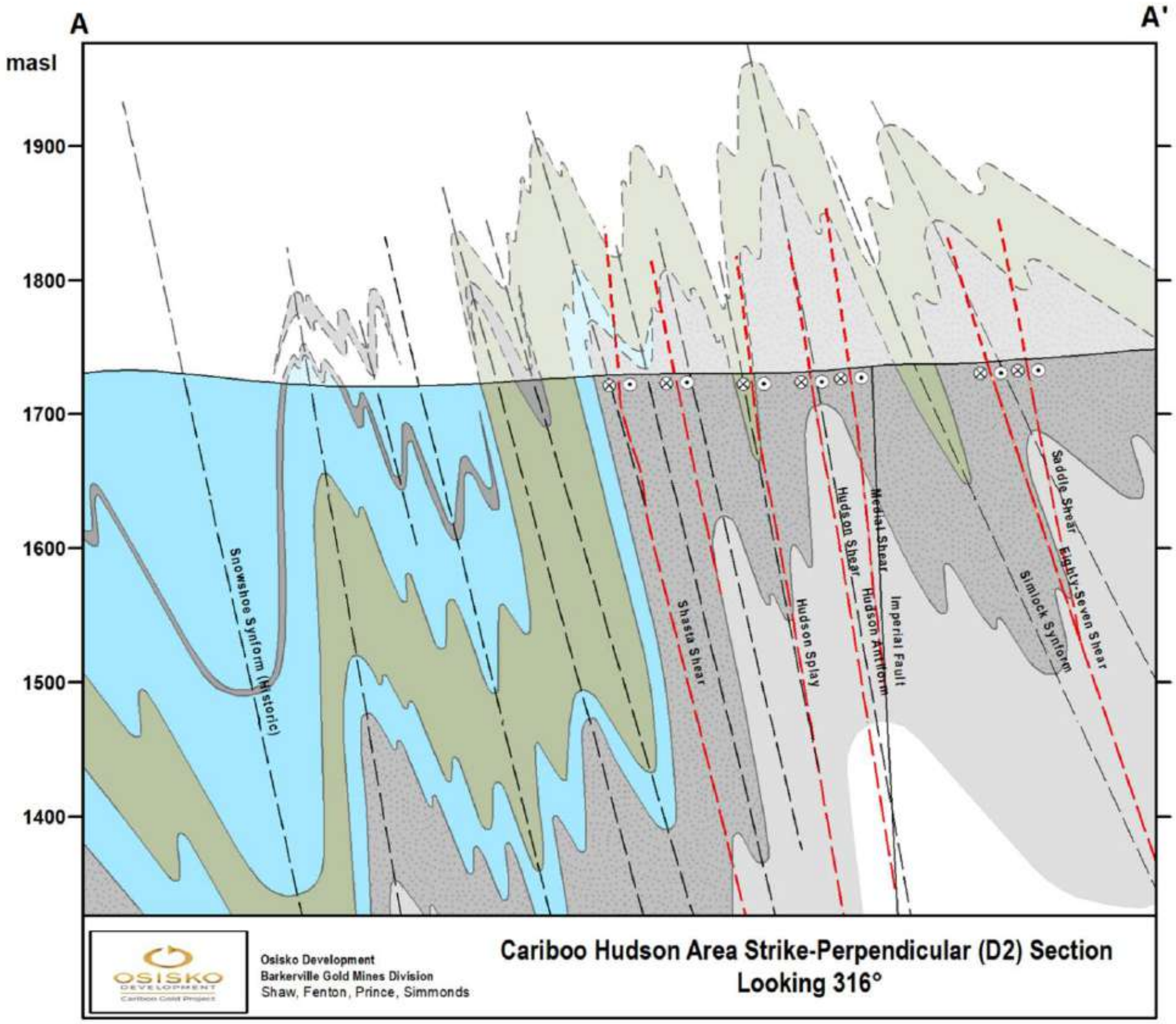


Figure 7-15: Cariboo-Hudson Mine Area cross-section

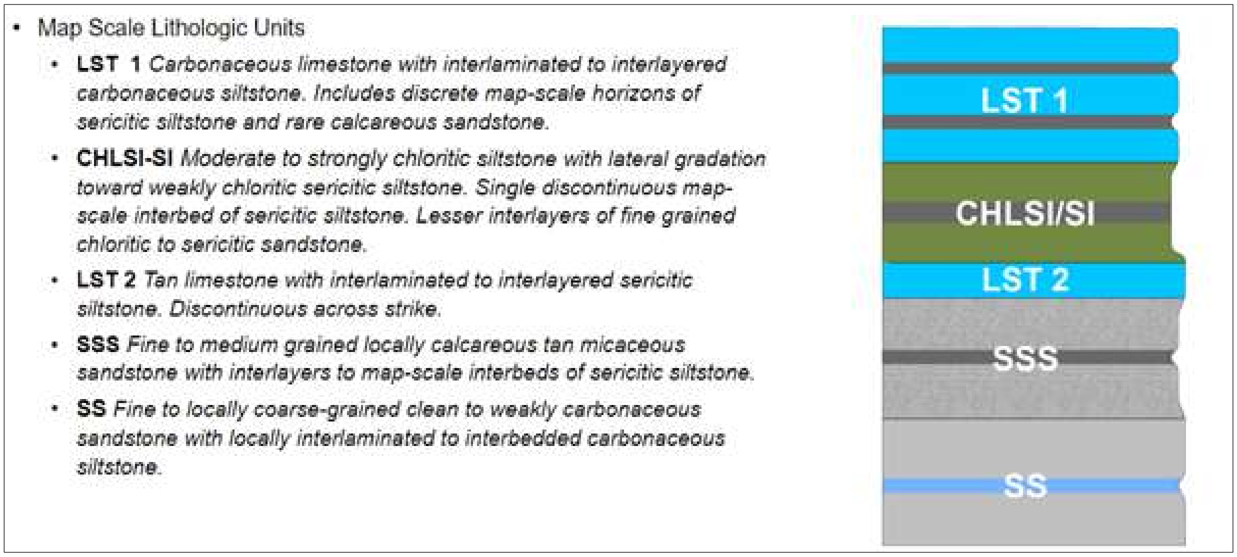


Figure 7-16: Simplified tectonostratigraphy for the Cunningham region

7.3.4 Burns Region

At Burns Mountain, the lithologic succession comprises predominantly medium-grained sandstones and carbonaceous siltstones with minor calcareous and locally chloritic sandstones as well as granule to pebble quartz grain conglomerate. There is an overall gently east dipping succession, which has been subjected to at least two episodes of SW-NE oriented shortening followed by NW-SE oriented compression and finally NW-SE oriented extension (Figure 7-17 and Figure 7-18).

The dominant type of veins in the Burns region are AXPL veins that are steeply dipping and strike NNE.

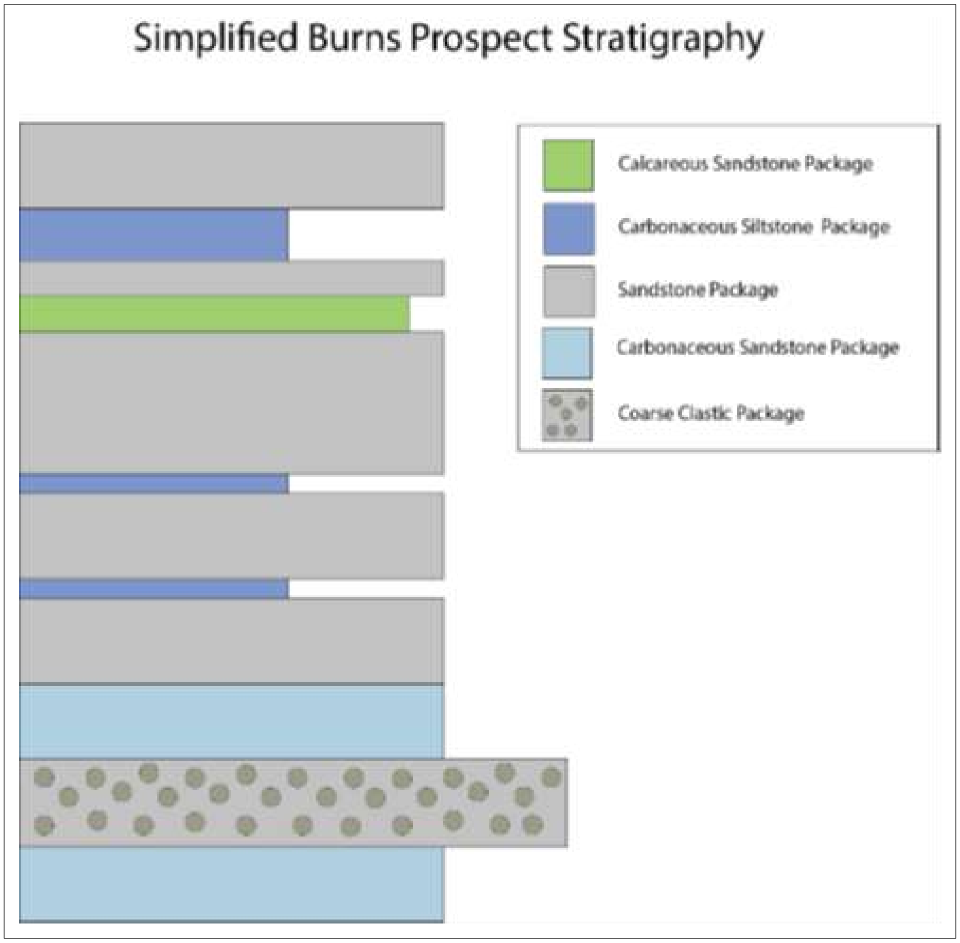


Figure 7-17: Simplified Burns prospect stratigraphy
(Friesen et al., 2022)

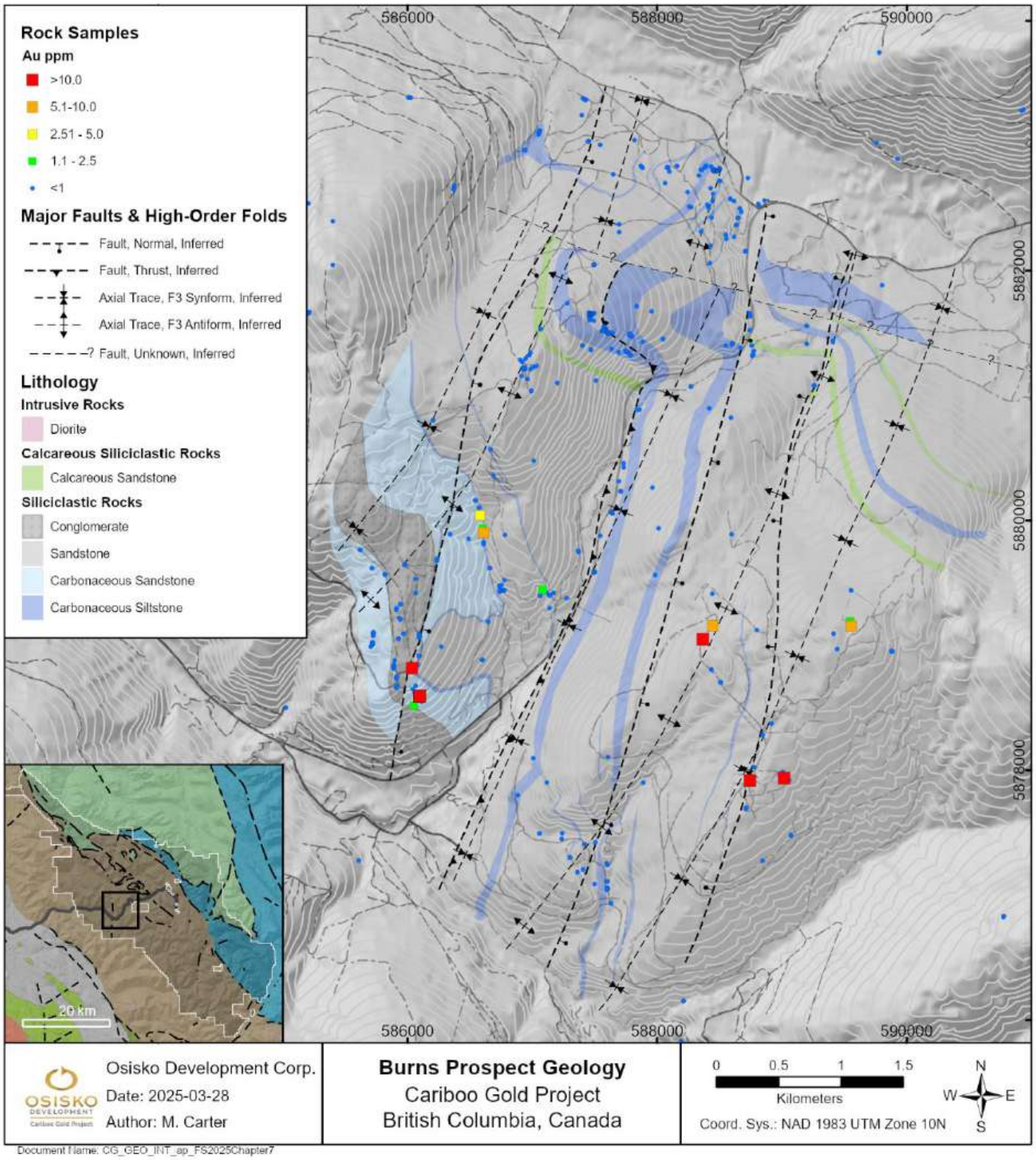


Figure 7-18: Burns Region geologic interpretation map (Friesen et al., 2022)

7.3.5 Yanks Peak Region

Rocks underlying mapped areas at the Yanks Peak property include fine to locally coarse-grained generally clean quartz sandstone with interbeds of carbonaceous siltstone. A package of transitional carbonaceous sandstones and carbonaceous siltstones appears to separate sandstones exposed along the crest of the Yanks Peak plateau from a tectonostratigraphical higher and characteristically non-carbonaceous sandstone package with lesser inliers of sericitic siltstone exposed on the flanks of the plateau and at the Yanks Peak summit. Calcareous siliciclastic rocks are also observed in rare outcrop occurrences; all rocks are metamorphosed to lower greenschist facies. Polyphase deformation in the Yanks Peak area is recognized by the re-folding of a penetrative NW-SE-striking bedding-parallel S1 slaty to phyllitic cleavage best expressed in more silt-rich facies. F2 folding in the Yanks peak area is tight, and generally upright to gently inclined. Though often cryptic at the outcrop-scale, F2 folding is recognizable by the development of a penetrative to locally disjunctive S2 cleavage, and by the localized development of L and L-S-tectonites elongate parallel to the F2 axis. Field observations generally support a model consistent with previous interpretations that the axial trace of the regional-scale Lightning Creek Anticlinorium, representing a domain of reversal from SW to NE orogenic vergence, lies along the crest of the Yanks Peak plateau (Munnich. 2021) (Figure 7-19).

Lithological units mapped at Yanks Peak include the following:

1. Clean to locally carbonaceous sandstone exposed along crest of plateau at core of Lightning Creek Anticlinorium.
2. Carbonaceous Siltstone and Carbonaceous Sandstone.
3. Clean to locally sericitic sandstone with lesser siltstone and rare calcareous inliers.

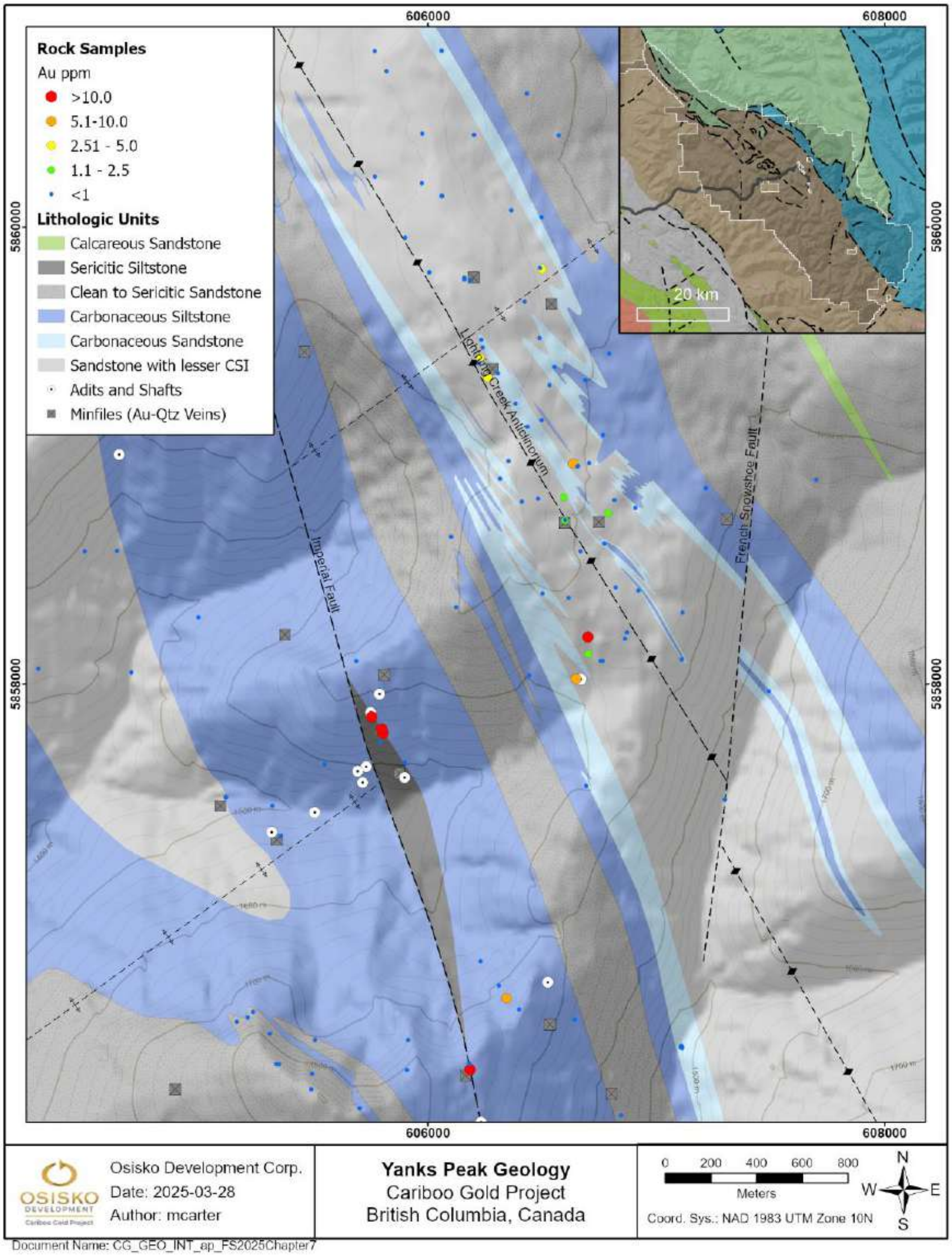


Figure 7-19: Yanks Peak geologic interpretation map

7.4 Structural Geology

A minimum of four phases of deformation are recognized within the Project area, resulting in a complex array of intersecting and cross-cutting deformational fabrics (Figure 7-20).

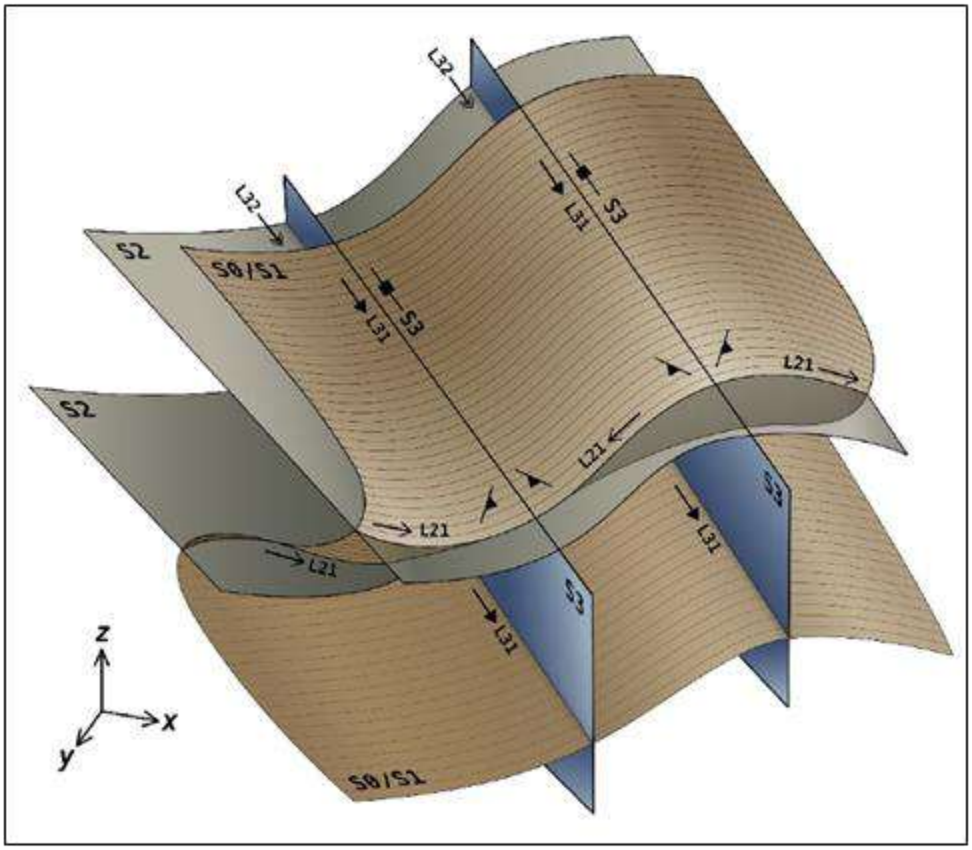


Figure 7-20: Relative orientation of variable structures arising from polyphase deformation within the Wells-Barkerville area (Shaw and Prince, 2019)

7.4.1 Deformation 1

The earliest recognizable phase of deformation (D1) in the Cariboo Gold District is best evidenced by the presence of a penetrative slaty to phyllitic cleavage (S1) developed axial planar to rarely observed transpositional folds (F1). The S1 foliation is the generally the dominant fabric throughout the area and is predominantly defined by phyllosilicate minerals (sericite and chlorite). F1 folds are rarely observed, expressed as highly asymmetric and isoclinal isolated hinges of rootless folds (Figure 7-21). The D1 event is commonly attributed to emplacement of the Slide Mountain allochthon and is believed to be transitional into D2.

7.4.2 Deformation 2

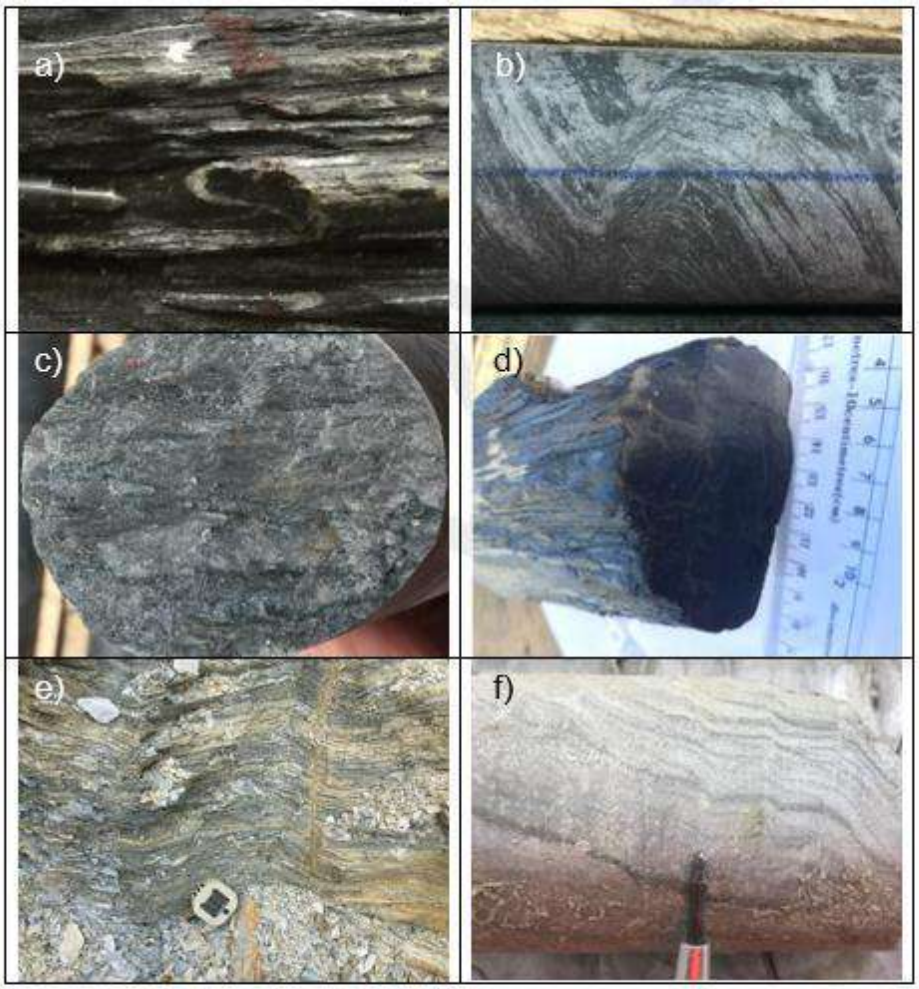
A secondary phase of deformation (D2) accommodated northeast-southwest shortening with the development of close to locally isoclinal F2 folds moderately inclined with vergence toward the SW in the Barkerville trend. Folding was accompanied by the development of a disjunctive to locally phyllitic axial planar crenulation cleavage (S2) (Figure 7-21) striking west-northwest with an average dip ~50° to the northeast within the Barkerville trend. A well-developed S1-S2 intersection lineation (Figure 7-21) approximates the F2 axis. The S2 foliation becomes more penetrative where proximal to F2 hinge zones, making it difficult to discern between S1 and S2 foliations locally. Rod-shaped L-tectonites developed under uniaxial strain (Figure 7-21) are also observed within F2 hinge zones and are particularly well-formed within the carbonaceous siltstone facies. The long axes of replacement mineralization at Mosquito Creek and Island Mountain are parallel to these lineations, within the hinge zones and parallel to the axes of F2 folds.

This second phase of deformation is likely related to the progressive collision of the Quesnel terrane. The final phase of northeast-southwest shortening (D3 of Ferri and Schiarizza, 2003) is characterized by the local development of a steeply dipping S2-strike parallel, disjunctive fracture set within the Barkerville trend and is grouped within the D2 event at the Cariboo Gold Project.

7.4.3 Deformation 3

A tertiary phase of deformation (D3) accommodated strike-parallel (northwest-southeast) shortening with the development of gentle F3 folds with a generally disjunctive sub-vertical axial planar cleavage (S3). The geometry, scale, and deformation mechanics involved with the formation of F3 folds are significant contributors to structural control and distribution of vein-hosted Au-mineralization within the Barkerville trend. With continued shortening under more brittle crustal conditions, local extension in the hinge zones of F3 antiforms resulted in the opening of S3-parallel Mode 1 fractures. The primary Au-bearing vein systems in the region are classified as axial planar because they parallel the S3 disjunctive cleavage and are believed to have exploited and/or contributed to the progressive opening of these fracture systems.

F3 folds are observable at the hand sample and outcrop scale but can also reach wavelengths exceeding 1 km (Figure 7-21 and Figure 7-22). The geometry of the larger-scale F3 folding is best recognized by changing dip angles through S3 cleavage fanning, folding of the L21 intersection lineation, and by deflections in S1 strike (Shaw and Prince, 2019).



a) F1 isoclinal fold hinges attributed to remnant transposed layering during D1; **b)** F2 folds with weakly developed S2 foliations AXPL to folds; **c)** L21 intersection lineation; **d)** Rod-shaped L-tectonite fold hinge structure of F2 fold axis; **e)** Open gentle F3 folds with weakly developed spaced AXPL cleavage; **f)** Weakly developed F3 crenulation cleavage.

Figure 7-21: Deformation phases and associated fabrics on the Cariboo Gold Project (Barkerville Gold Mines, 2018)

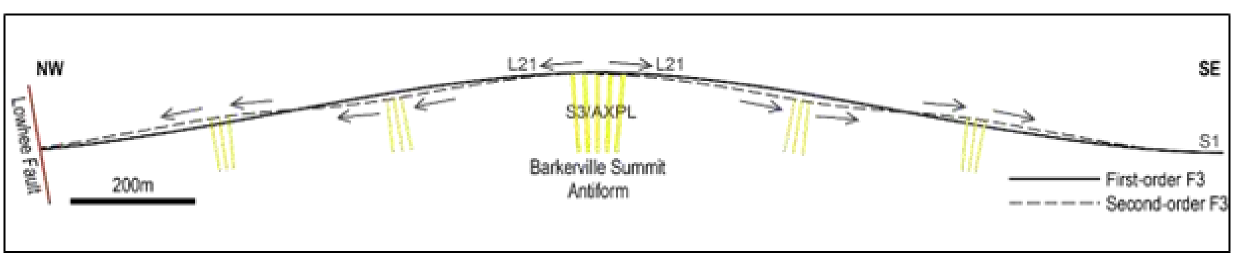


Figure 7-22: To scale schematic strike parallel Barkerville Mountain section illustrating the geometries of first and second order F3 folds (Shaw and Prince, 2019)

7.4.4 Deformation 4

A final brittle phase of deformation (D4) is recognized by the development of both S3-parallel and N-S trending faults with constrained relative surface offsets (most commonly dextral) locally exceeding 1,000 m (e.g., Grouse Creek and Williams Creek faults). The S3-parallel D4 faults may be post-orogenic relaxation structures reactivating and inverting D3 reverse faults, or simply normal faults exploiting zones of high density S3 fractures. The N-S striking D4 faults may likewise form as normal structures linking pre-existing fracture systems but are locally characterized by dominant components of dextral strike-slip. This latter observation suggests either a syn-relaxation component of dextral transtension, or an independent, post-relaxation phase of dextral transpression.

The presence of brecciated mineralized quartz vein material within D4 structures has been observed in drill core (Figure 7-22) and was reported by Skerl (1948), indicating that at least some of the movement on D4 faults must postdate mineralization. D4 structures (e.g., Lowhee fault) are also observed to cross-cut and offset mineralized corridors. Many of the best-mineralized prospects within the Barkerville Trend are formed adjacent to the D4 faults, e.g., Shaft Zone, Valley Zone, Lowhee Zone. The observed spatial association between vein zones and major D4 structures may simply reflect the preferential formation of each within zones of high S3 fracture density.

7.5 Mineralization and Alteration

Gold +/- silver-bearing veins and replacement-style mineral deposits in the Project are inter-related but can be subdivided into five principal types:

1. Fault-fill shear veins in fractured early-phase quartz lenses within carbonaceous mud and silt-rich, foliation sub-parallel (northwest-southeast trending) shear zones (BC Vein-style).
2. Sub-vertical, foliation-perpendicular (northeast-southwest trending) so-called AXPL veins structurally controlled by late-stage extensional fractures preferentially formed in rheologically brittle sandstone units.
3. Foliation-oblique so-called extensional ("EXT") veins characterized by greatest mineral potential where in association with AXPL vein systems.
4. Sulphide-replacement bodies structurally controlled by and elongate parallel to the hinges of F2 folds within calcareous sandstones and limestones (Mosquito Creek-style).
5. Fault bound sulphide-replacement bodies within calcareous siltstones (Bonanza Ledge-style).

Photographic examples of varying mineralization styles are presented in Figure 7-23 and Figure 7-24.

7.5.1 Vein-related Mineralization

Axial planar quartz veins are the primary source of vein hosted Au +/- Ag within the Barkerville trend, defining the fundamental architecture of the Mosquito Creek, Shaft, Valley, Cow Mountain, Lowhee, and KL deposits. Individual veins range in width from millimetres to several metres. Where density is high, AXPL veins form mineralized corridors extending for up to a few hundred metres along strike and down-dip within rheologically prospective units. Though often advantageous to model and describe AXPL veins as tabular bodies, their morphologies are generally more complex. They are often observed to pinch and swell in thickness with undulatory margins, and commonly network with (and/or refracture and cross-cut) earlier EXT vein systems. Au-Ag-bearing EXT veins and Au-rich (+/- Ag) sulphide replacement bodies are intimately related to AXPL vein systems, both spatially and presumably in terms of mineralizing fluid dynamics.

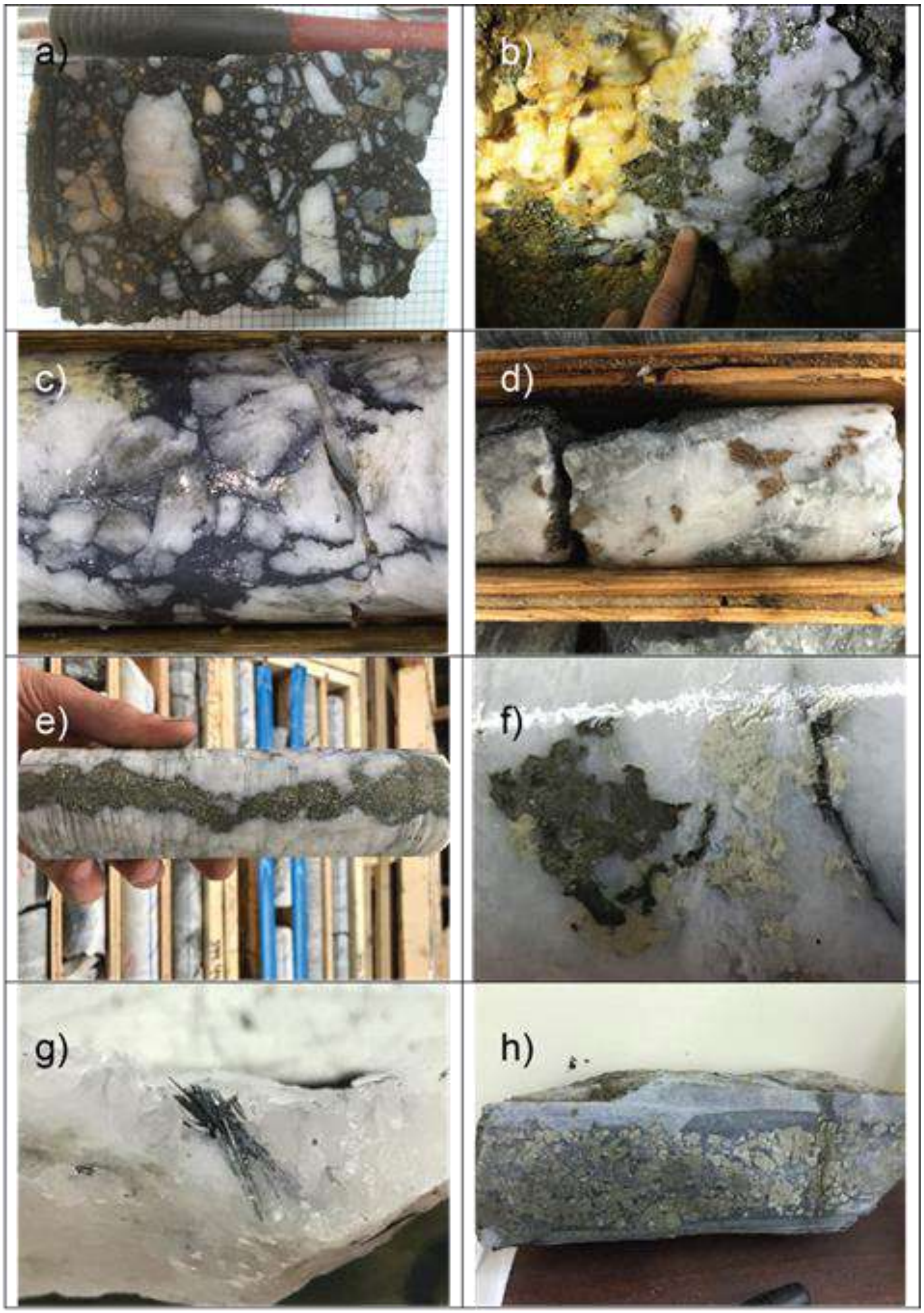
The composition of both the AXPL and EXT veins is quartz dominant. Lesser iron carbonate usually occurs as vein-marginal or clustered intergrowths and vein-hosted sericite is also common. Pyrite is the most prevalent sulphide mineral across all deposits, with vein content ranging from trace amounts to tens of percent (Figure 7-23). Pyrite content appears to have a direct association with gold and silver content within veins. Galena (Figure 7-23) and arsenopyrite are also common vein-hosted sulphides, occurring in individual veins in amounts up to several percent and locally exceeding pyrite content. Additional sulphide minerals generally occurring in trace amounts include pyrrhotite, sphalerite (Figure 7-23), chalcopyrite and (rarely) argentite. Pb-Ag-Bi sulphosalts including cosalite are found in trace amounts within veins and generally have a close association with elevated Au grades (Figure 7-23). Elevated silver grades are typically accompanied by vein hosted pyrite, galena, or cosalite mineralization. Scheelite is also locally observed, generally as secondary fill within quartz vein vugs.

Veining can be subdivided into at least two temporally separate events. Both events are characterized by a quartz - iron carbonate ± sericite hydrothermal fluid, but they differ greatly in their Au potential. Early veins may host sulphides (mostly Py, Po, Gal, Sph ± Cpy) but tend to be barren of Au and Ag except where mineralized by later fluids. The later, Au +/- Ag bearing veins tend to be more sulphide-rich (mostly Py, Aspy, Gal, Sph ± Arg ± Cos) and cross-cut earlier veining (Figure 7-23). In these cases, sulphides may be observed filling void space or occasionally replacing the iron-carbonate within the early veins (Figure 7-23), a reaction which is known to precipitate Au from solution:

$$FeCO_3 + Au(HS)_2^- = FeS_2 + CO_2 + H_2O + Au$$ (Zhu et al., 2011)

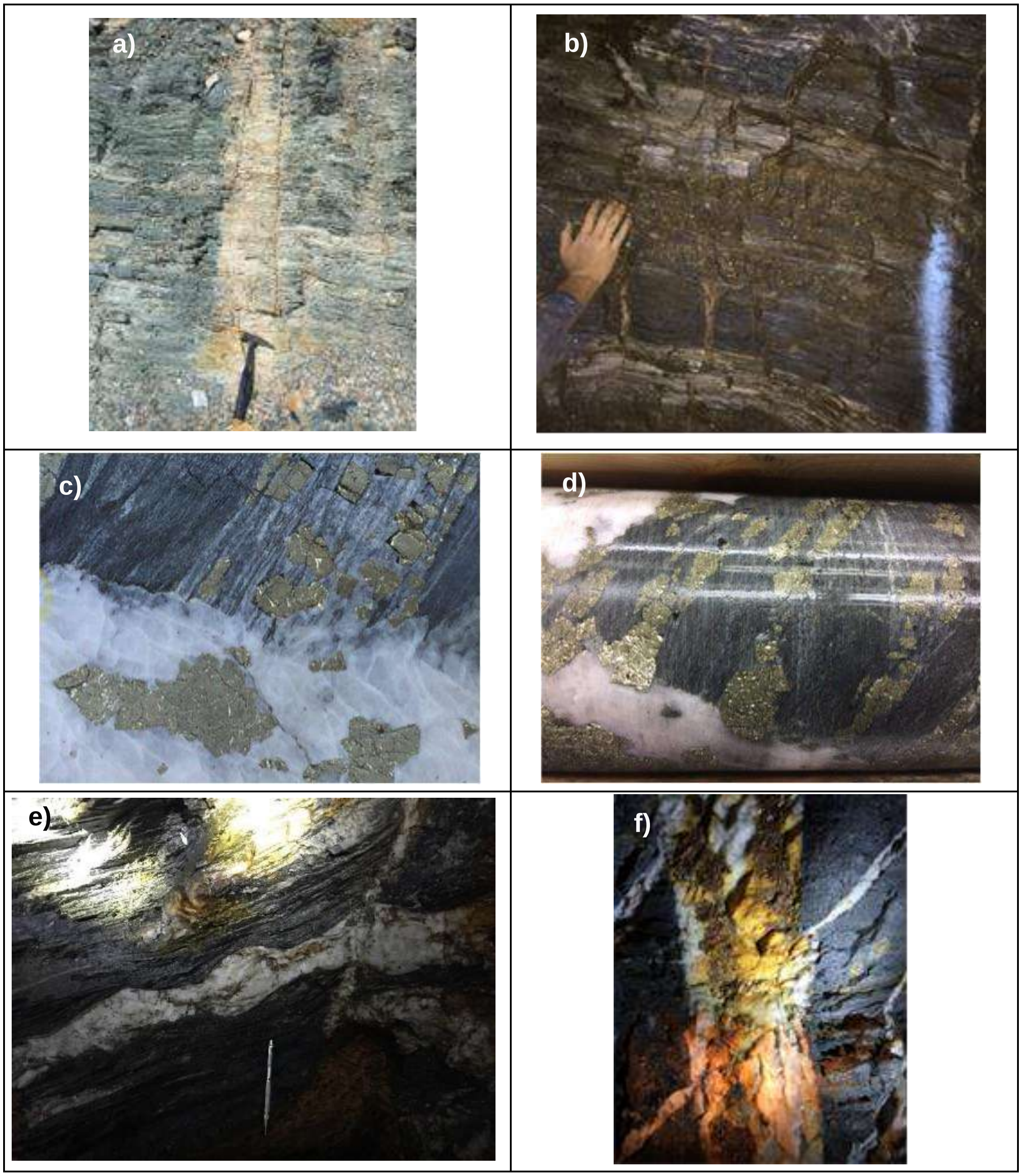
7.5.2 Replacement-style Mineralization

Replacement mineralization (Figure 7-24) in calcareous siliciclastic and carbonate facies rocks varies from fine to coarsely crystalline pyrite with rare arsenopyrite. This style of mineralization is thought to be the result of a reaction between the slightly acidic, Au-Ag bearing hydrothermal fluid and carbonate minerals within the host rocks which results in the simultaneous dissolution of carbonate and precipitation of gold-rich sulphide. Bonanza Ledge-style replacement mineralization is hosted in calcareous siltstone and consists entirely of fine-grained pyrite ore. Sulphide content in replacement ore types is generally high, ranging from 10% (replacing thin calcareous bands) to massive (replacing entire beds). Mosquito Creek-style replacement bodies in limestones and calcareous sands contain the most consistently high Au grades in the Cariboo Gold Project. These replacement bodies are thought to be both spatially and temporally related to the mineralized AXPL vein systems (Figure 7-24).



a) BC Vein-style fault-fill (breccia annealing) mineralization; **b)** Pyrite in quartz vein; **c)** Galena in quartz vein; **d)** Sphalerite in quartz vein; **e)** Pyrite deposition along the centerline of veins in pre-existing inter-crystal void space; **f)** Pyrite replacement of iron-carbonate; **g)** Cosalite in quartz vein; **h)** Sulphide replacement mineralization.

Figure 7-23: Mineralization styles observed on the Cariboo Gold Project (Barkerville Gold Mines, 2018)



a) Vertical S3 structures bounding sericite-Fe-carbonate alteration; **b)** Vertical AXPL veins acting as multiple feeders to sulphide replacement body; **c)** Diffuse AXPL vein boundary with silica bleeding into replacement band; **d)** Outgrowths of pyrite from vein into carbonate replacement bands; **e)** Semi-vertical AXPL vein cutting across boudinaged layer-parallel vein; **f)** Vertical AXPL vein cross-cutting oblique-dipping shear veins.

Figure 7-24: Mineralization styles observed on the Cariboo Gold Project

7.5.3 Vein-related Alteration

A schematic illustrating the relationships between mineralized quartz veins and their associated alteration halos as observed within the Project is presented in Figure 7-25. Large veins tend to exhibit a strong silica alteration halo with associated vein halo pyrite (Figure 7-26). Stepping outward, moderate silicification persists, accompanied by moderate sericite, with pyrite present only in trace amounts (Figure 7-26). A widespread moderate silica envelope with patchy but intense silica closer to the veins is observed within high density vein corridors. Moving further from the fluid source, silicification becomes weak and sericite is present as the dominant alteration mineral (Figure 7-26). The distal-most alteration halo is characterized by iron carbonate and lesser sericite (Figure 7-26). Clay minerals (e.g., illite, smectite) and chlorite may be presented as vein forming minerals outside of mineralized corridors (Figure 7-26).

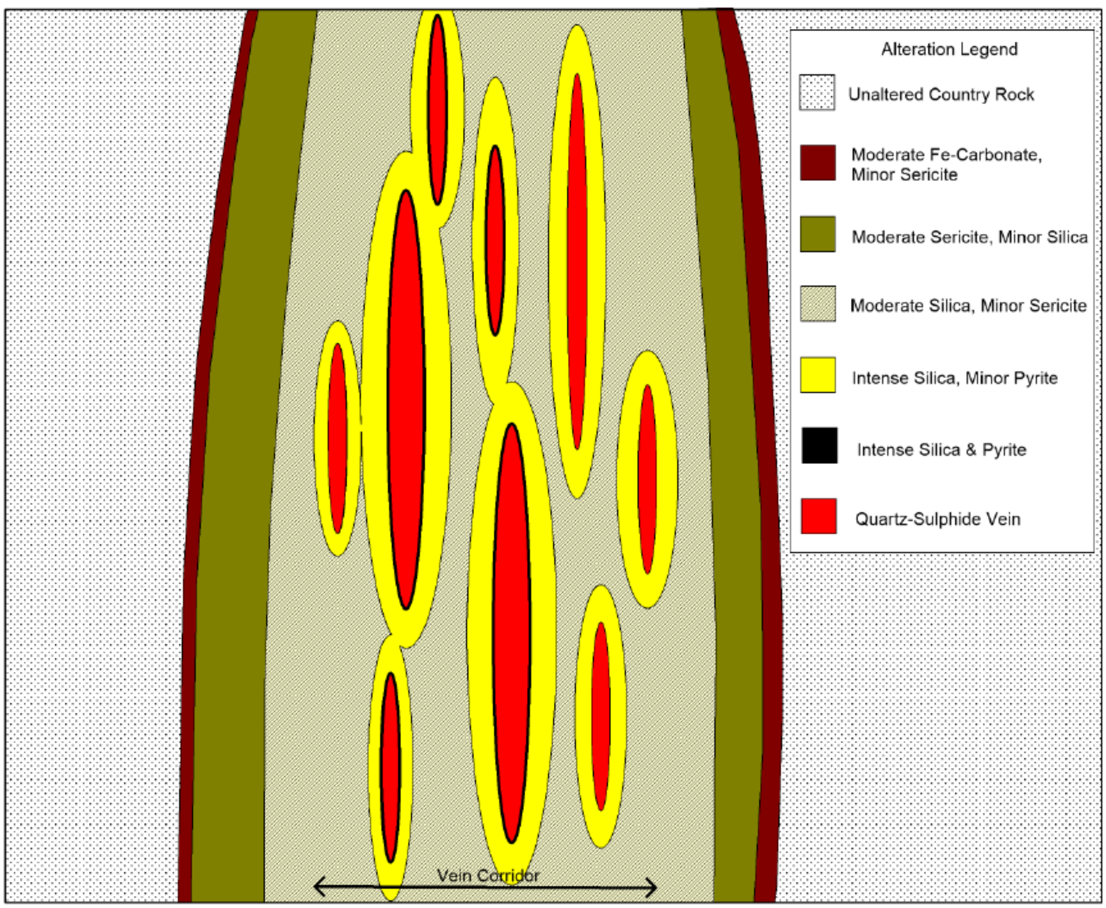
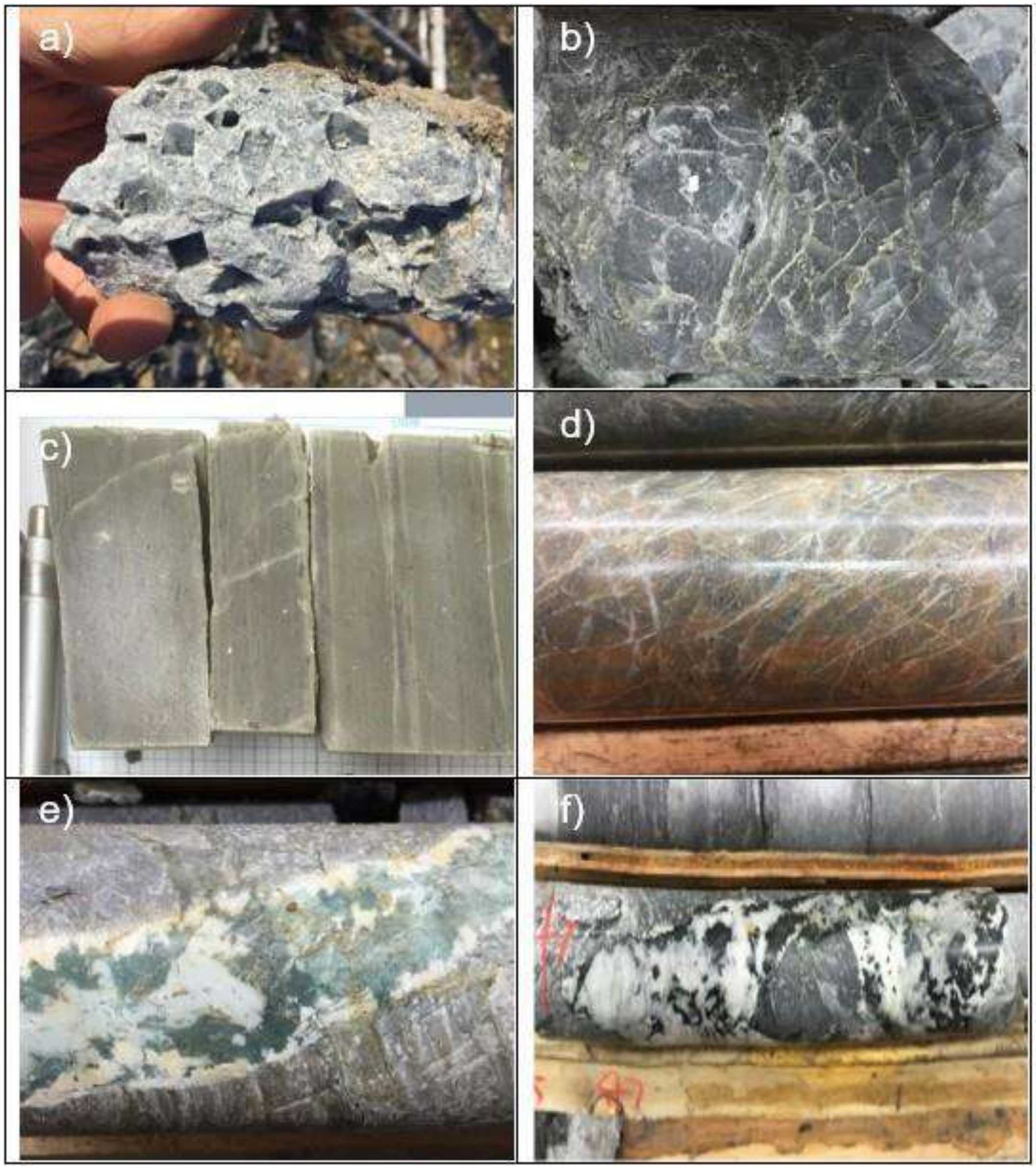


Figure 7-25: Schematic vertical section (looking NE) of vein alteration observed at the Project (Barkerville Gold Mines, 2018)



a) Intense silica alteration with boxwork textures after pyrite in vein margin; **b)** Intense silica alteration with trace pyrite adjacent to vein margin; **c)** Moderate sericite alteration distal from vein array; **d)** Iron carbonate alteration distal from vein array; **e)** Late argillic alteration in vertical AXPL vein; **f)** Late chlorite alteration in vertical AXPL vein.

Figure 7-26: Vein-related alteration styles at the Cariboo Gold Project (Barkerville Gold Mines, 2018)

7.6 Age of Mineralization

Age of mineralization in the Cariboo Gold District is currently constrained to an approximate 20 Ma window straddling the Jurassic-Cretaceous boundary. ^{40}Ar-^{39}Ar dates obtained from white mica in Au-bearing veins and replacement bodies by Rhys et al. (2009), Mortensen et. al. (2011) and Allan et al. (2017) are presented in Figure 7-27).

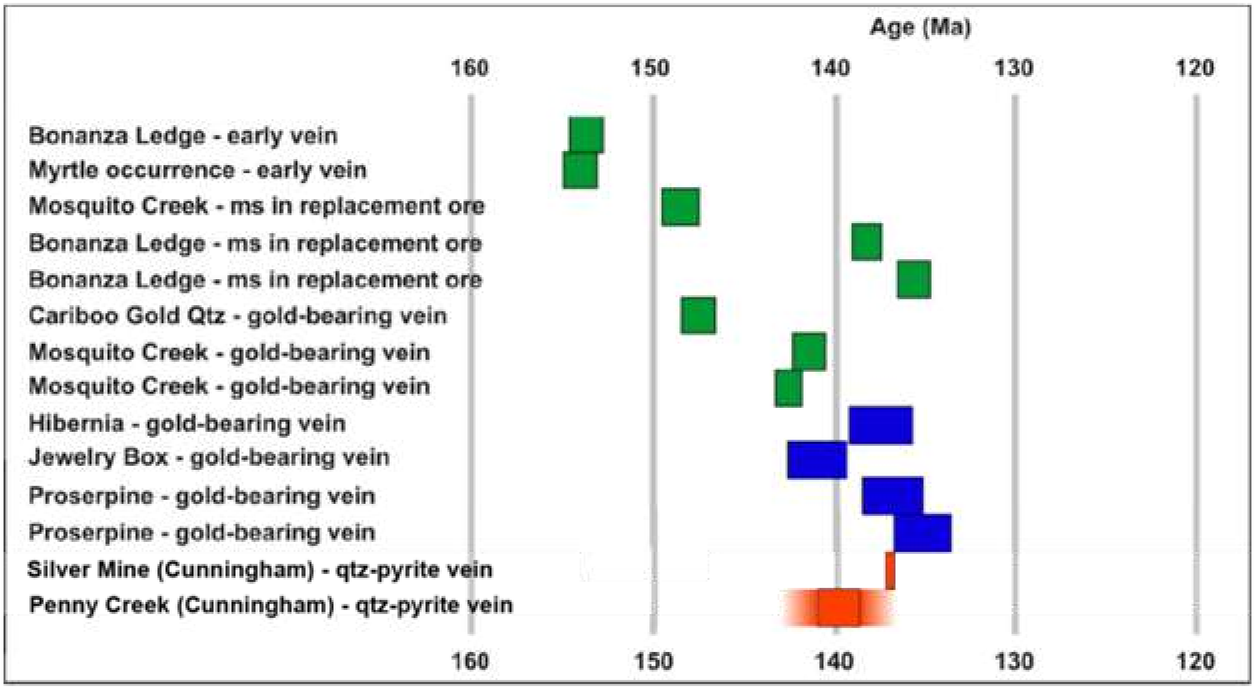


Figure 7-27: Compilation plot of 39Ar/40Ar age data from white mica in veins and replacement bodies in the Cariboo Gold District
Green blocks: Rhys et al. (2009); Blue blocks: Mortenson et al. (2011); Red blocks: Allan et al. (2017)
(Modified from Mortensen et. al., 2011)

7.7 Summary of Mineralized Occurrences (MINFILEs)

MINFILE contains geological, location and economic information on more than 14,750 metallic, industrial mineral and coal mines, deposits and occurrences in British Columbia. This data has been compiled and filtered geographically to form a table of all the showings, deposits, and past producers present within the Cariboo Gold mineral tenure. The MINFILEs pertinent to the Cariboo Gold land package have been sorted by region then summarized focusing on the physical aspects of the deposit or showing. It is beyond the scope and technical requirements of the Report to review all of this information. The summary table of mineralized occurrences is presented in MINFILEs (InnovExplo, 2025b).

8. Deposit Types

For the purposes of this Report, Barkerville Gold Mines Ltd., as it operated from 2015 to 2021, will be referred to as Osisko Development Corp ("ODV."). The current management of ODV has been in place since 2015 and on November 21, 2019, Osisko Gold Royalties acquired the Cariboo Gold Project through the acquisition of BGM. The Project was part of the assets contributed by OGR that created ODV on November 25, 2020.

In addition, the Project, as described herein, refers to the entirety of ODV's land package in British Columbia. The information presented in this section was taken and modified from Hardie et al. (2023). Other references are duly indicated where applicable.

8.1. Orogenic Gold Deposits

The Project shares many characteristics with an orogenic gold deposit model (Chapman and Mortensen, 2016). This class of deposit is typified by deformed and metamorphosed mid-crustal blocks and major structures, inherent products of orogenesis (Figure 8-1). Orogenic gold deposits span the entire breadth of the province of British Columbia, occurring predominantly within two main trends. The westerly trend is associated with accreted pericratonic terranes linked to Late Cretaceous to Paleocene movement on crustal-scale dextral strike-slip fault systems along the western margin of the Stikine terrane, and eastern Coast Belt (e.g., Bralorne-Pioneer, Atlin, Cassiar). The easterly trend is crudely cospatial with the Jurassic to Cretaceous accretion of the Intermontane terranes and autochthonous strata of the ancestral North American (e.g., Cariboo, Sheep Creek) (Allan, 2017). Orogenic deposits have significant economic importance, as they are known to host auriferous mineralization as high-grade vein deposits and low-grade bulk-tonnage lode deposits, and are intimately linked with substantial placer accumulations (Goldfarb et al., 2001; 2005).

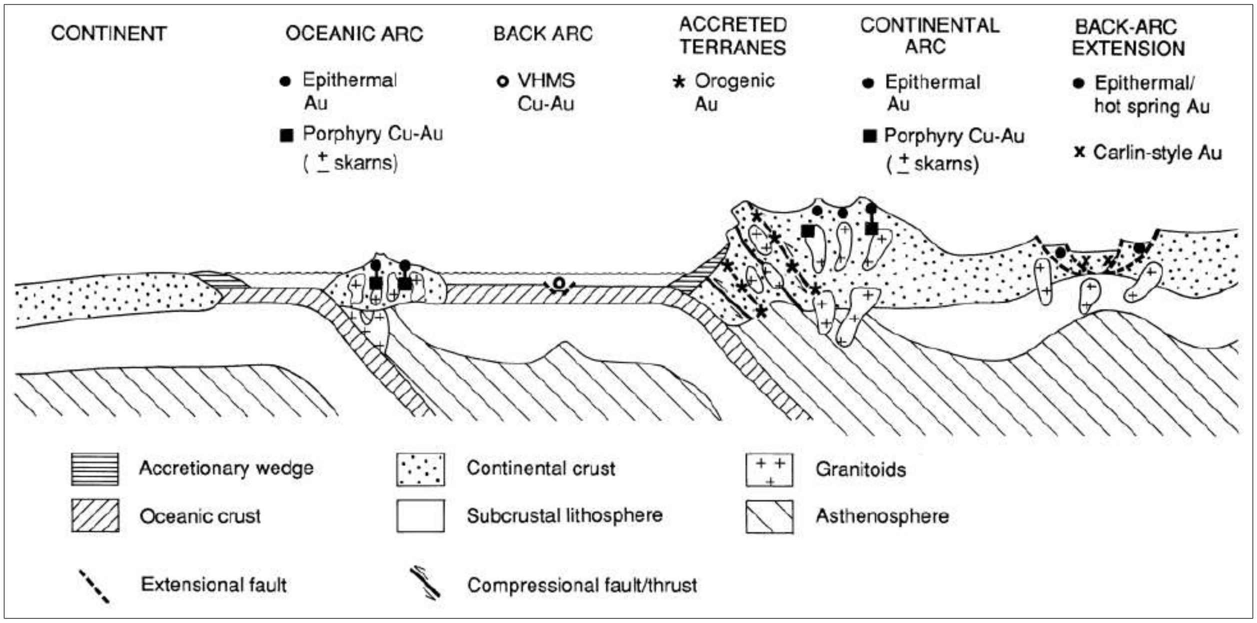


Figure 8-1: Tectonic settings of gold-rich epigenetic mineral deposits
Orogenic gold deposits are emplaced during compressional to transpressional regimes and throughout much of the upper crust, in deformed accretionary belts adjacent to continental magmatic arcs.
(Modified after Groves et al. 1998)

Most orogenic gold deposits in metamorphic terranes, such as the Barkerville terrane, are found adjacent to first-order, deep-crustal fault zones, which show complex structural histories and may extend along strike for hundreds of kilometres with widths of as much as a few thousand metres (Goldfarb et al., 2005). Most orogenic gold deposits occur in greenschist facies rocks, but significant orebodies can be present in both lower and higher-grade rocks (Phillips and Powell, 2010). Hydrothermal fluids are generated from metamorphic dehydration reactions along deep-crustal fault zones, driven by episodes of major pressure fluctuations during seismic events (Cox, 2005). Gold mineralization is associated with orogenic silica-carbonate-sericite-pyrite stable fluids moving along secondary permeability controlled by metamorphic fabrics, vein arrays, faults, lithologic contacts, and rheological contrasts (Groves et al., 2003). Gold deposits form as simple to complex networks of gold-bearing, laminated quartz-carbonate shear veins along second- and third-order faults, particularly at jogs or changes in strike along major deformation zones. Mineralization styles vary from stockworks and breccias in shallow, brittle regimes, through laminated crack-seal veins and sigmoidal vein arrays in brittle-ductile crustal regions, to replacement- and disseminated-type orebodies in deeper, ductile environments (Groves et al., 2003).

Mineralization styles vary from stockworks and breccias in shallow, brittle regimes, through laminated crack-seal veins and sigmoidal vein arrays in brittle-ductile crustal regions, to replacement - and disseminated -type orebodies in deeper, ductile environments (Groves et al., 2003). Mineralization is syn- to late-deformation and typically post-peak metamorphism, and commonly associated with silica-carbonate-sericite-pyrite alteration. Gold is largely confined to the quartz-carbonate vein network but may also be present in significant amounts within iron-rich sulphidized wall-rock selvages, or within silicified and sulphide-rich replacement zones (Dubé and Gosselin, 2007). One of the key structural factors for gold mineralization emplacement is often a late strike-slip movement event that reactivates earlier-formed structures within the developing orogen (Goldfarb et al., 2001). The following aims to highlight economically significant deposit types within the Project.

8.1.1. Vein Deposits

Inter-related vein systems are the principal source of gold and silver within the Barkerville trend and are a key fluid pathway for sulphide mineralization. Axial planar quartz veins represent the dominant vein system hosting gold-and-silver-rich sulphide mineralization in the Project’s most well-developed deposits and regional prospects, namely the Mosquito Creek, Shaft, Valley, Cow Mountain, Lowhee, and KL Zone deposits. AXPL veins are classified as such because they are believed to have exploited and/or contributed to the progressive opening of axial planar fracture systems in the hinge zones of F3 folds. AXPL veins parallel the sub-vertical F3 axial planar disjunctive cleavage (S3) and are classifiable by a perpendicular relationship with S1 foliation (Figure 8-2). See Section 7.4.3 for more information on F3 fractures and foliation.

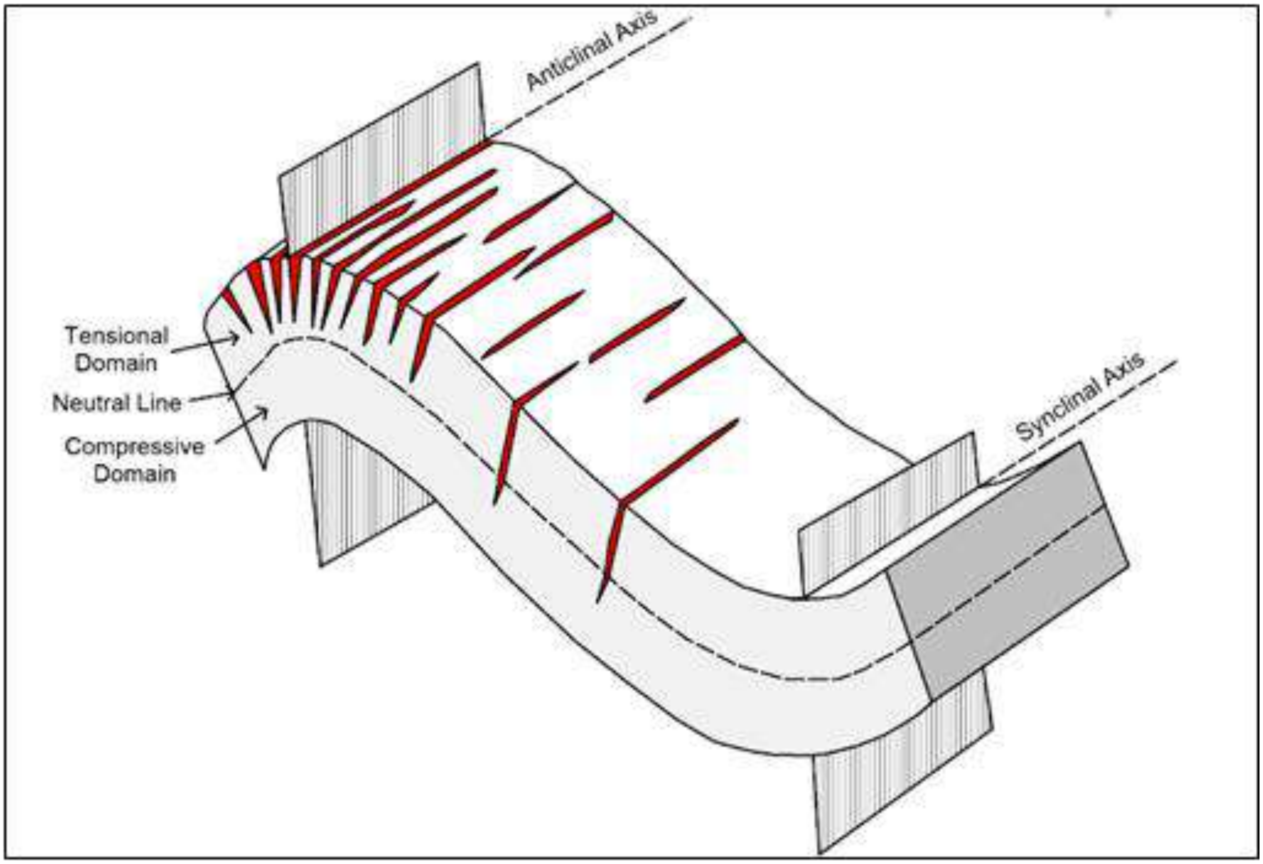


Figure 8-2: Model for the formation of vertical AXPL veins in the hinges of F3 folds on the Cariboo Gold Project (Harbort, 2017)

Extensional veins are classified by an orientation oblique to S1-foliation (Figure 8-3). Significant scatter in both drill hole and surface datasets suggests that veins classified as EXT may represent multiple variably oriented S1-oblique sub-populations. At least one population of EXT veins is parallel to the S2 cleavage and suggests veins classified as EXT may have exploited S2 surfaces.

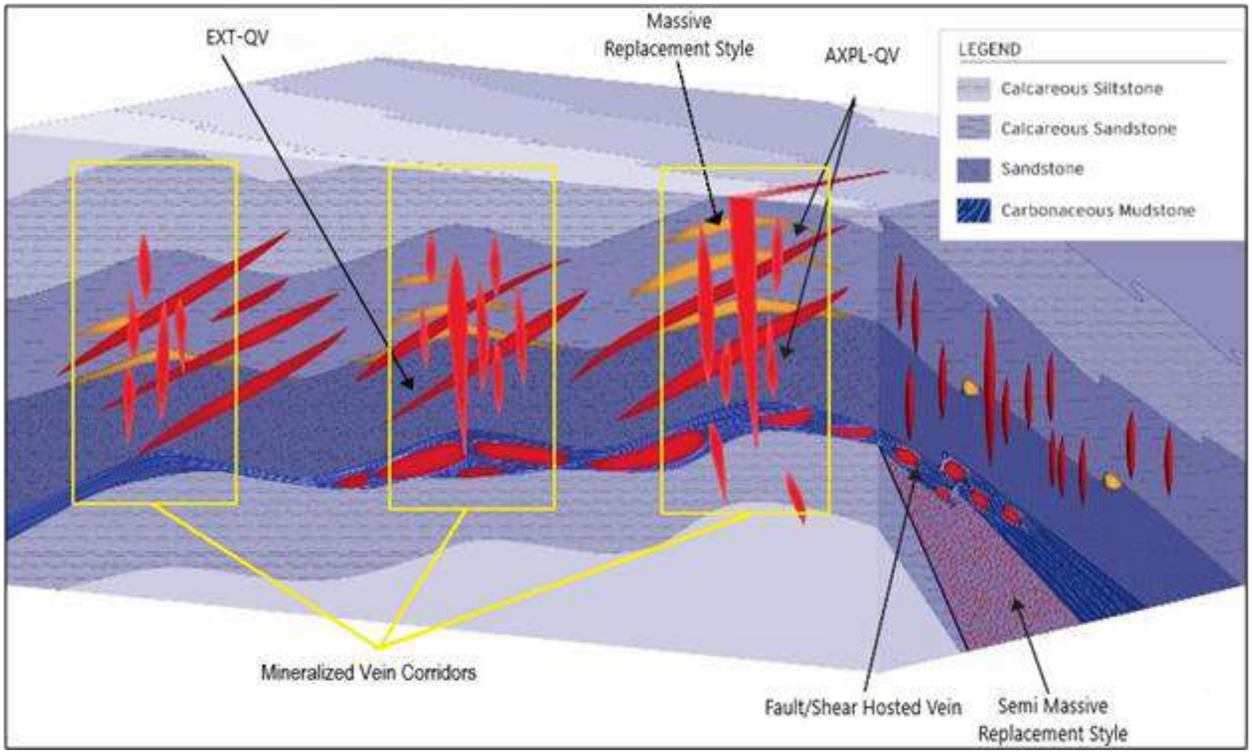


Figure 8-3: Composite model of the mineralization styles on the Cariboo Gold Project
Illustrating oblique EXT quartz veins (dark red), massive replacement style in the hinges of F2 folds (orange), sub-vertical AXPL quartz veins along S3 surfaces (light red), D2 related fault, shear-hosted vein (BC Vein), and semi massive replacement (Bonanza Ledge). (Modified after Harbort, 2017).

Veins range in width from millimetres to several metres and are termed vein corridors when concentrated in zones that are 2 m or greater in thickness. Vein corridors are planar structures, typified as steeply dipping, striking N020-N050, extending 100-700 m downdip, and extending 100-300 m along strike. The principal aims of exploration and infill drilling programs involve testing the extent and concentrations of AXPL vein corridor deposits, with targeting based in part on proximity to identifiable large-scale F3 hinge zones (Shaw and Prince, 2019).

8.1.2. Replacement Deposits

Replacement-style gold mineralization contains the highest and most consistent gold grades at the Project and was the main target for the historic underground of Mosquito Creek Mine on Island Mountain. Occasional elevated silver grades are also observed within replacement sulphide bodies at Cariboo. Semi-massive replacement style mineralization observed at the historically mined Bonanza Ledge is fault-bounded in the footwall of the BC Vein shear. The replacement deposits at Island Mountain and Mosquito Creek are thought to be structurally controlled in the hinges of F2 folds (Figure 8-4). These rod-like structures, parallel to the axes of the F2 fold, act as conduits for hydrothermal fluids that react with the pH buffered calcareous sediments. This reaction simultaneously creates pore space and precipitates gold-rich sulphides.

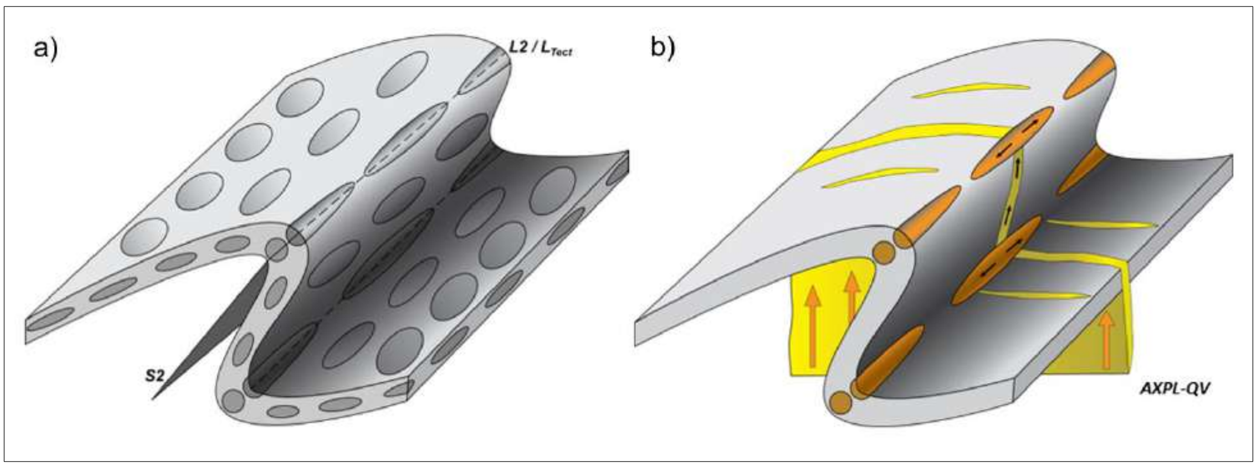


**Figure 8-4: a) Formation of structural traps in F2 hinges as L-Tectonites;
b) Replacement style mineralization (orange) fed by AXPL quartz veins (yellow)**

8.1.3. Shear Zone Deposits

Shear zone deposits are typified by the BC Vein deposit that was mined on Barkerville Mountain from 2019 to 2022. These shear zones are commonly found within the Barkerville Trend and can be spatially associated with vein deposits. These steep, orogen-parallel faults and damage zones can act as fluid pathways for crustal fluids. The BC Vein is a poly-deformed, steeply-dipping, and S1 strike-parallel shear zone of unknown relative offset. The structure is internally characterized by strongly carbonaceous to graphitic siltstone fault breccia, discontinuous pods of brecciated milky white quartz and later stage grey quartz that has, in places, annealed the breccia matrix. Fine-grained pyrite and gold are associated with the annealing late-stage grey quartz.

The Wells Shear is interpreted as the offset Cow Mountain equivalent of BC Vein owing to its similar strike, deformational style, and position within tectonostratigraphic sequence. The BC Vein-Wells Shear structure is highly variable in thickness both along strike and down dip. The close geographic association between this structure and the locations of highest density axial planar veining as well as the highest gold grades in both soil and rock geochemical assays is taken to reflect its importance as a fluid pathway at the time of mineralization.

The Proserpine Shear (Figure 7-13) is a poly-deformed, steeply-dipping, and S1 strike-parallel shear zone. The Proserpine Shear structure is internally characterized by strongly carbonaceous to graphitic siltstone fault breccia, discontinuous pods of brecciated milky white quartz and later stage grey quartz that has, in places, annealed the breccia matrix. Fine-grained pyrite and gold are associated with the annealing late-stage grey quartz.

9. Exploration

For the purposes of this Report, Barkerville Gold Mines Ltd., as it operated from 2015 to 2021, will be referred to as Osisko Development Corp ("ODV"). The current ODV management has been in place since 2015 and on November 21, 2019, Osisko Gold Royalties acquired the Cariboo Gold Project through the acquisition of BGM. The Project was part of the OGR contributed assets that created ODV on November 25, 2020.

ODV carried out work on the Project yearly from 2015 to 2021 and recommenced in 2024. These programs consisted of geologic mapping, surface rock sampling, soil sampling, and underground development. The field programs typically ran from April to October, depending on the weather, with the soil programs occurring towards the middle of that period. Mapping and sampling efforts targeted the northwest and southeast extensions of the known mineralized corridor in the Wells area, the Barkerville Trend, as well as a parallel trend, at Mount Burns (Lightning Creek Trend). The prospective regions are displayed in Figure 9-1.

Proserpine, Cariboo Hudson Mine, Burns, and Yanks are currently the most promising regional prospects within the Project claims (Figure 9-2).

Barkerville Trend Prospect

At 4.4-km strike length, the current MRE area covers less than 10% of the Barkerville Trend (Figure 9-2). Fire assay and multielement data from surface geochemical sampling programs (soils and rocks) conducted by ODV between 2016 and 2018 highlight anomalous gold and a favourable multi-element suite established through baseline analyses of local ore geochemistry for an approximate 47 km-long strike length extending from NW Island Mountain (~3 km northeast of Mosquito Creek) SE to the area of the historic Cariboo Hudson Mine, approaching the SE extents of the CGP Mineral Tenure (Shaw and Prince, 2019, Internal Report).

Proserpine

Geochemical data from 2016-2019 rock and soil surface samples highlighted a 4-km (strike length) zone within the Barkerville Trend sandstone in the Proserpine prospect area. As a general observation, mineralized veins within the Proserpine area are more commonly polymetallic than elsewhere along the Barkerville Trend. From northwest to southeast, noteworthy surface assay hotspots coincide with several historic mining camps and claims; Victory, Wilkinson, Warspite, and Bell-Independence.

Cariboo Hudson Mine Prospect

The Cariboo Hudson Mine area is located on Cunningham Mountain. Mapping conducted in 2021 was coupled with available historic data from the Cariboo Hudson mine to define a series of gold-bearing strike-parallel and strike-oblique shear veins that are priority drill targets.

Lightning Creek Trend

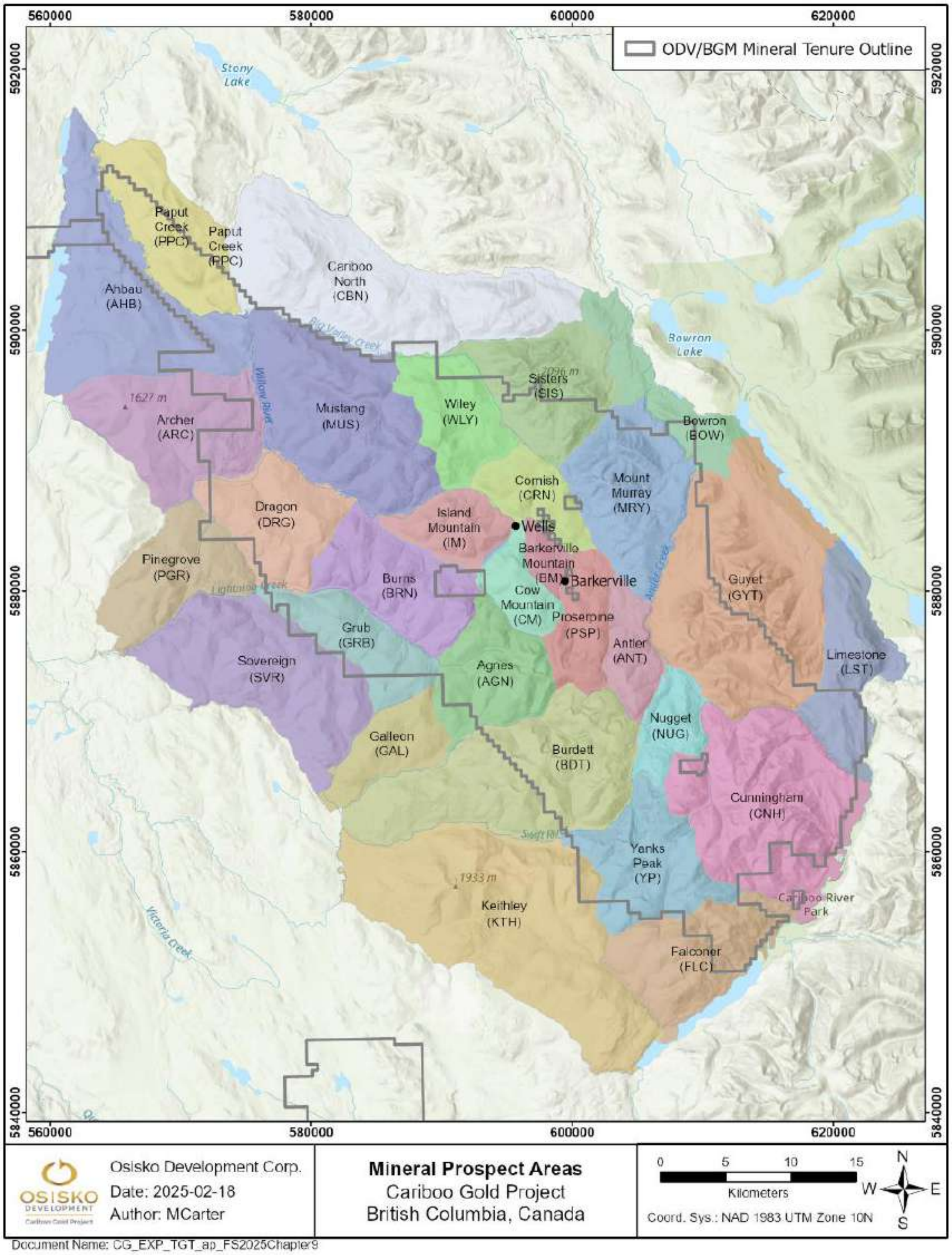
Historical workings (BC Minfile Database) and anomalous gold in soil likewise define a 35 km-long prospective trend SE of and parallel to the Barkerville trend stretching from the Mt. Nelson – Mt. Burns area along BC 26 in the NW to Yanks Peak in the SE. The Yanks Peak and Nelson-Burns prospect areas were covered by several coupled geochemical (soil and rock) sampling and mapping campaigns conducted by ODV from 2018 to 2021. (Shaw and Prince, 2022 Internal Report.)

Mount Burns Prospect

Major geological mapping and geochemical samples programs targeted Mount Burns from 2018 to 2021. The programs at Mount Burns Prospect were prioritized to cover areas surrounding historically productive mine workings of particularly high concentration near its summit. Primary goals were to establish structural controls on mineralization and follow up on gold anomalies identified within geochemical data collected over the course of the 2018 Regional soil sampling program. High-grade vein samples overlap with strong gold soil anomalies around the historic Textbook and Lucky Cap showings.

Yanks Prospect

Major geological mapping and geochemical samples programs targeted Yanks Peak in 2020 and 2021. The objective at Yanks Peak prospect was designed to expand upon the results derived from the 2017 and 2018 geochemical survey completed by ODV.



Note: The grey colour delineates the boundary of the Cariboo claims. Prospective Regions are broken down with the associated name and acronym.

Figure 9-1: Barkerville's mineral prospects of the Cariboo Region

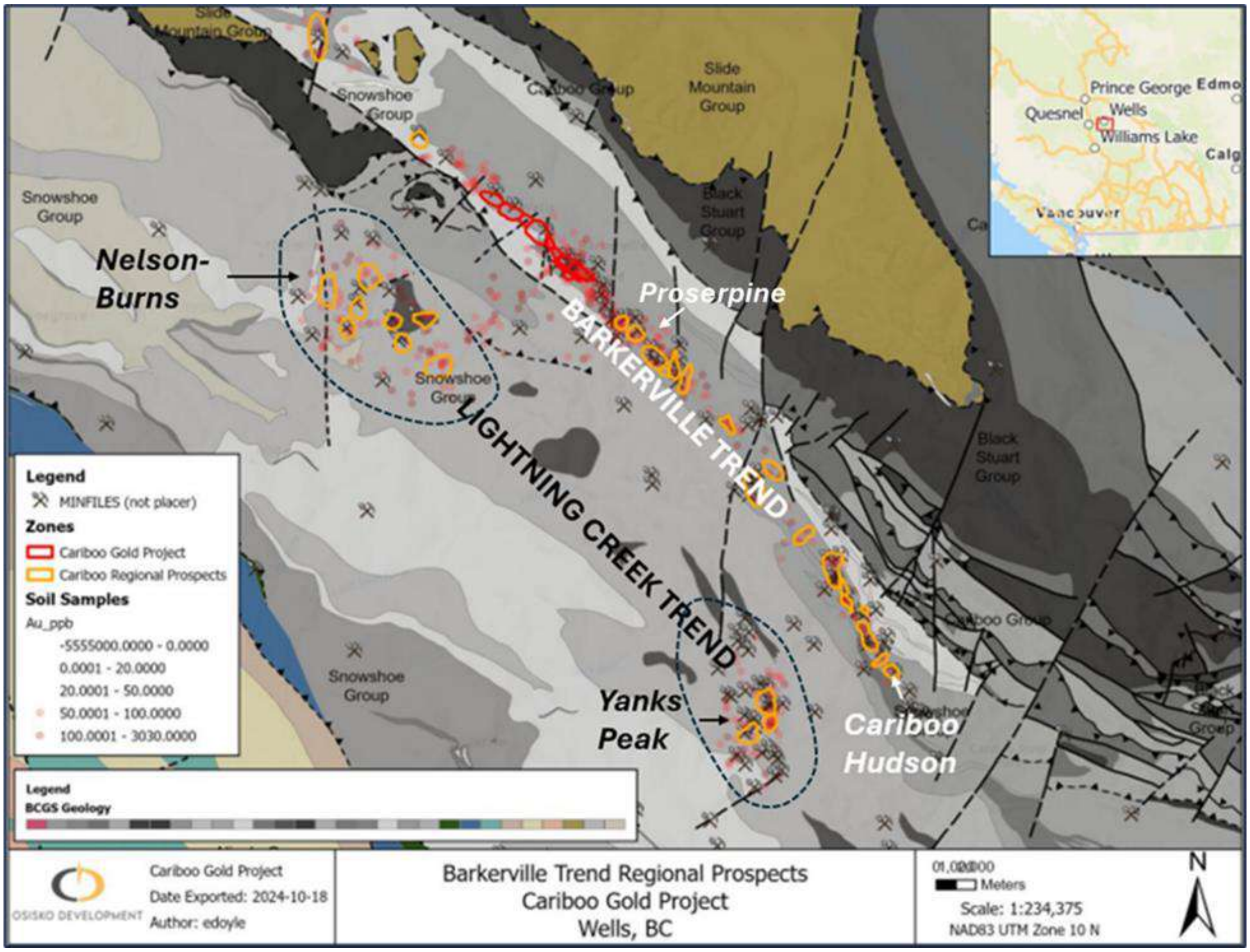


Figure 9-2: Barkerville and Lightning Creek Trend showing BC Minfile prospects

9.1 Program Purpose and Methodology

9.1.1 Geologic Mapping

Geological mapping, from 2015 to 2021, was conducted to identify lithologic contacts, define alteration and geochemical signatures, record structural data and collect select rock samples. The overall goal of these mapping programs was to define drill-ready regional targets by determining where drill holes should be placed and the best direction to drill to target mineralized structures.

The scale of mapping was conducted at 1:2,000. Mapping of an area was classified as complete when all roads, trails, and stream valleys were traversed. Rock samples were taken when significant veining and/or sulphide mineralization occurred. These samples were sent to be fire assayed to provide gold-grade and multi-element data to aid in future exploration programs.

Figure 9-3 shows the geological mapping and rock sampling coverage across the property.

9.1.2 Soil Sampling

Soil sampling, from 2016 to 2021, was conducted to identify gold-in-soil anomalies, which were then used to target prospective bedrock. Dutch augers were used to taking 500-g soil sample from the B soil horizon. If the B horizon was not present, a C horizon sample was taken. If insufficient sample material was available, a no sample ("NS") point was marked and noted. Soil samples were collected every 50 m along north-south oriented lines spaced 200 m apart. The sample lines were oriented to best test for gold mineralization hosted in quartz lenses oriented parallel to stratigraphy and northeast-southwest trending quartz veins noted throughout the Cariboo Gold prospect. At any outcrop or historical working site observed in the field, geologic information was collected, and a rock sample was taken if the material yielded possible mineralization. Soil samples returned with gold ("Au") values in the 90th percentile and above were considered anomalous. Anomalous samples were used to guide further exploration.

Figure 9-4 shows the soil sampling coverage across the property.

9.1.3 Underground Development

The Cow portal was completed in October 2021. Official development started in January 2024 to reach the Lowhee Zone and extract a 10,000-t bulk sample of mineralized material. A roadheader was used in conjunction with drilling and blasting techniques to excavate the ramp access at a profile of approximately 5.4 m wide by 5.8 m high. Geological information observed during the development of the ramp will aid in future development and exploration activities.

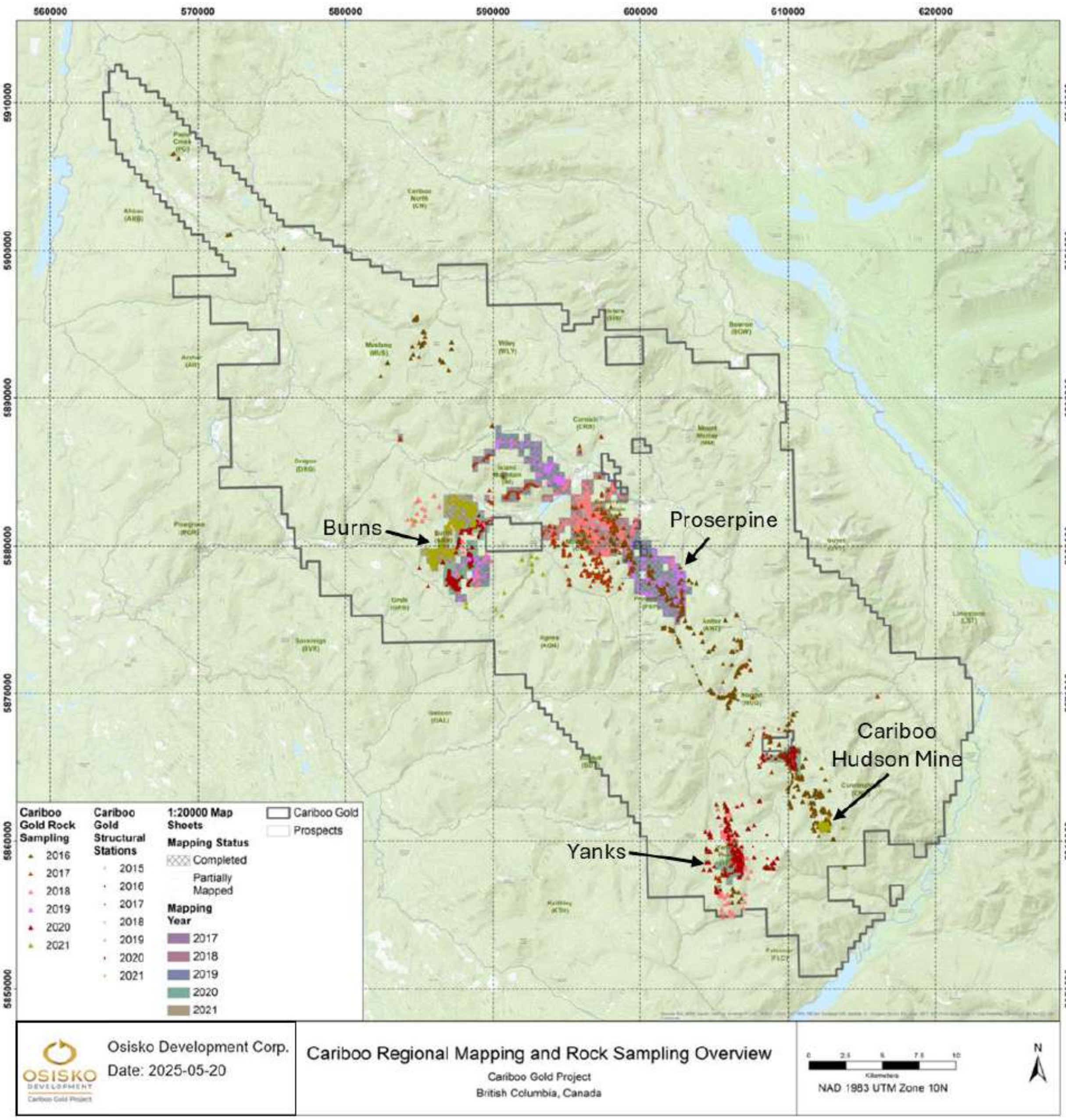


Figure 9-3: Cariboo Regional mapping and rock sampling overview from 2015 to 2021

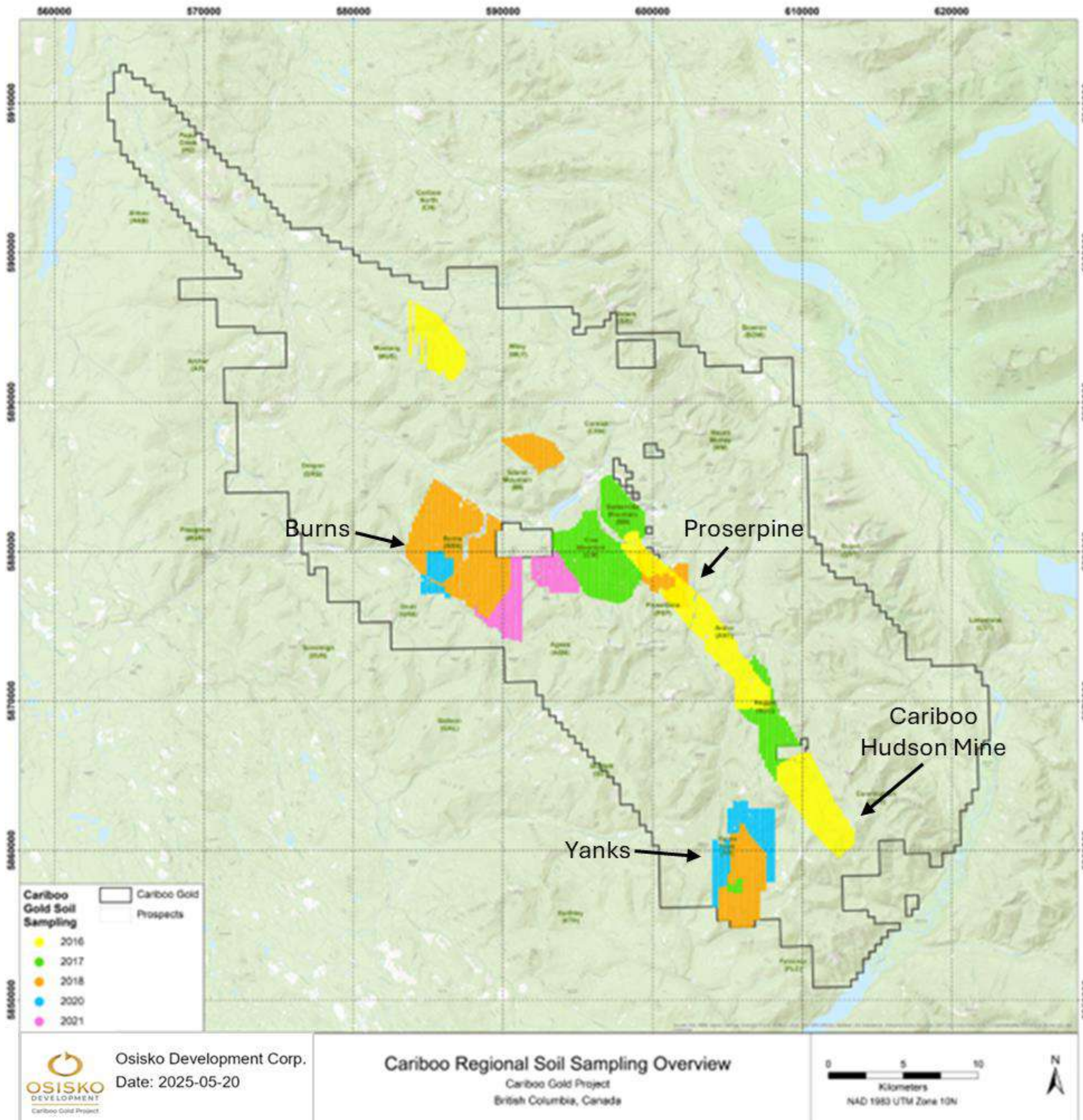


Figure 9-4: Cariboo Regional soil sampling overview from 2016 to 2021

9.2 Program Objectives and Results

For BGM and previous operators' works prior to 2015, refer to Chapter 6.

9.2.1 2015–2019 Geochemical and Mapping Programs

From 2015 to 2019, ODV executed a systematic approach with surface mapping and geochemical sampling. From 2015 to 2017, sampling efforts specifically targeted the Barkerville Trend, a major deep-seated shear that trends 60 km northwest-southeast through the centre of the Project area. In 2018 and 2019, the focus shifted to the northwest and southeast extensions of known mineralization around the Wells area within the Barkerville Trend. Further exploration was conducted along the parallel Lightning Creek Trend. A summary of the samples collected from mapping and geochemical sampling is summarized in Table 9-1. Results from these programs generated drill targets for past and current drilling.

Table 9-1: Surface geochemical samples collected on the Cariboo Gold Project 2015-2019

Year	Rock Samples (qty)						Structural Stations (qty)	Soil Samples (qty)
	Grab	Select	Float	Linear	Channel	Panel		
2015	-	25	-	-	-	111	1,875	-
2016	81	75	1	17	341	50	704	4,928
2017	121	42	-	10	11	-	439	3,775
2018	108	182	25	8	26	4	4,961	6,307
2019	52	139	-	1	-	8	1,291	-
Total	**362**	**463**	**26**	**36**	**378**	**173**	**9,270**	**15,010**

9.2.2 2016 Magnetic and VTEM Survey Program

In 2016, a helicopter-borne Magnetic and VTEM Survey was conducted by Geotech Ltd. over ODV's Cariboo Gold Project. The principle geophysical sensors used were a VTEM Plus system and a horizontal magnetic gradiometer with two caesium sensors. The sensors were tested daily to verify data integrity. The survey was flown in southwest to northeast lines, spaced 200 m apart. A total of 7,024 line-km of data was acquired. The data was corrected against a base station. The program resulted in 1,308 km^2 of geophysical data that confirmed a northwest-southeast VTEM anomaly associated with magnetic anomalies.

9.2.3 2020 Geochemical and Mapping Programs

Geological surface mapping took place on the Burns Mountain prospect from June 22 to August 4, 2020. Geochemical surveying coincided with mapping on the Yanks Peak prospect from August 18 to September 10, 2020. The geochemical survey then moved to Burns Mountain from September 10 to 29, 2020. The objective at Yanks Peak prospect was designed to expand upon the results derived from the 2017 and 2018 geochemical survey completed by ODV. The grid at the Burns Mountain prospect was designed to infill a gap in the geochemical grid and expand to the south of Lightning Creek to Chisholm Creek.

The 2020 geochemical sampling program was designed to primarily test for soil geochemical signatures in an area known to host several mineral occurrences which lay within a quartzite dominant lithology. A secondary objective was to collect stratigraphic and structural geologic information with emphasis on structural control and the structural relation to mineralization on the properties. A total of 429 soil samples and seven rock samples were collected on the Burns Mountain prospect; 1,187 soil samples and 56 rock samples were collected on the Yanks Peak prospect in 2020. These results are summarized in Table 9-2.

The principal objectives of the 2020 mapping program were to refine the understanding of local stratigraphy and structure, with emphasis on the structural controls on mineralization. Additionally, another goal of the program was to delineate highly prospective target areas for future brownfields exploration and provide recommendations for targeting methodology. The program consisted of detailed geologic mapping at a 1:2000 scale at the Burns Mountain, Yanks Peak and Cunningham Creek prospects. A total of 43 rock samples were collected at the Burns Mountain prospect, 12 rock samples at the Cunningham Creek prospect and 42 rock samples at the Yanks Peak prospect. The 2020 program collected an additional 3,060 structural measurements at 905-point locations on the Burns Mountain prospect, 1,036 structural measurements at 341-point locations on the Cunningham Creek prospect, and 2,318 structural measurements at 706-point locations on Yanks Peak prospect. The results from the mapping program are summarized in Table 9-2. The anomalous gold-in-soil values, along with the data gleaned from the geologic mapping program on these prospects, indicated stratigraphy and veining similar to those that are gold-bearing in the Wells-Barkerville area. Exploratory drilling in this area is recommended in the future to test the area’s viability.

Table 9-2: 2020 Soil, rock samples and structural station by prospect

Prospect	Soil Samples	Grab Samples	Select Mineralized Samples	Panel Samples	Linear Samples	Channel Samples	Structural Stations
Burns	429	15	32	2	1	-	905
Cunningham	-	-	12	-	-	-	341
Yanks Peak	1,187	34	63	-	-	1	706
Total	**1,616**	**49**	**107**	**2**	**1**	**1**	**1,952**

9.2.4 2021 Geochemical and Mapping Programs

Geological surface mapping took place on the Burns Mountain prospect from June 1 to July 25, 2021, and September 18 to October 3, 2021, and on the Cunningham Creek prospect from August 12 to October 21, 2021. The geochemical survey took place on the Burns Mountain, Cow Mountain, and Mount Agnes prospects from June 26 to July 21, 2021, and July 25 to August 31, 2021.

The primary objective of the 2021 Soil program was to connect the Burns Mountain and Yanks Peak soil sampling grids along the Lightning Creek Trend. A secondary objective was to begin closing the gap in the soil data between Cow Mountain and Burns Prospects, following up on anomalies seen in the eastern portion of Burns Mountain and western portion of Cow Mountain. In total, 651 soil samples were collected on the Burns Mountain prospect, 682 on the Mount Agnes prospect and 20 on the Cow Mountain prospect areas. In addition, in 2021, the geochemical sampling team collected a total of eight rock samples on the Mount Agnes prospect and eight on the Burns Mountain prospect. These results are summarized in Table 9-3. The 2021 Geologic mapping programs principal aims were to delineate and provide detailed exploration strategies for greenfield-brownfield exploration targets within both Burns Mountain and Cunningham Creek prospects. The focus of the mapping efforts in the Burns Mountain area was on Mount Nelson and Oregon Gulch. The efforts on Mount Nelson were in following up on geochemical anomalies found in previous years' soil programs. Oregon Gulch has many historic showings that suggest mineralization in a style comparable to what ODV is targeting. On the Cunningham Creek prospect mapping was focused on the historic Cariboo-Hudson Mine and along the trend of it. Detailed geologic mapping was conducted at a 1:2000 scale. A total of 244 rock samples were collected on Burns Mountain, eight rock samples on Mount Agnes, and 97 rock samples on the Cunningham Creek prospects. The 2021 mapping team collected an additional 3,509 structural measurements at 844-point locations on the Burns Mountain prospect, and 1,390 structural measurements at 407-point locations on the Cunningham Creek prospect. These results are summarized in Table 9-3. The anomalous gold-in-soil values along with the data collected from the geologic mapping program on both prospects indicated stratigraphy and veining similar to those which are gold-bearing in the Wells-Barkerville area. Exploratory drilling in this area is recommended in the future to test the area's viability.

Table 9-3: 2021 Soil, rock samples and structural station by prospect

Prospect	Soil Samples	Grab Samples	Select Mineralized Samples	Panel Samples	Linear Samples	Channel Samples	Structural Stations
Agnes	682	1	7	-	-	-	-
Burns	651	105	127	10	1	1	844
Cunningham	-	41	51	1	1	3	407
Cow Mountain	20	-	-	-	-	-	-
Total	**1,353**	**147**	**185**	**11**	**2**	**1**	**1,251**

9.2.5 2024 Underground Development Program

The objective of the 2024 underground development program was to access the mineralization at the Lowhee deposit for the eventual extraction and analysis of a 10,000-t bulk sample, which was permitted in 2021 under a mineral exploration ("MX") permit MX-4-561.

The Cow portal construction was completed in Q4 2021. During Q1 2024, the Company commenced development of the underground ramp from the existing Cow portal into the Project's mineral deposit at the Lowhee Zone. JDS Energy and Mining Inc. were contracted for the construction of the Cow portal and the subsequent development of the ramp access and the Lowhee bulk sample.

All 1,172 m of linear development to reach the target bulk sample area has been completed and the bulk sample stope of ~7,482 t was extracted, providing supporting information for geotechnical, dilution, and potential stope sizes. A further ~150 m of development has advanced on the 1,260 elevation level, cross-cutting the geological model with the objective of facilitating the collection of one or two additional bulk samples. Mapping and structural analysis of the development has confirmed the local geological model. Data collection, analysis and interpretation from the bulk sample are pending as of the effective date of the Report.

10. Drilling

This chapter focuses mainly on ODV's 2020, 2021 and 2022 diamond drilling programs (the "2020 Program", "2021 Program", "2022 Program" and "2023 Program") and BGM's 2015 to 2019 diamond drilling programs. Drilling prior to 2015 is summarized in Chapter 6. Meterage summaries by prospect may differ from those reported in previous NI 43-101 reports, as drill holes have been re-assigned to prospects based on the target deposit rather than their collar location.

The objectives for the 2020 and 2021 programs were to test new brownfields targets adjacent to known deposits, infill high-grade vein corridors modelled from the 2019 PEA that were classified as Inferred and explore the depth potential of known deposits. The primary focus of the 2022 Program was the infill of a proposed underground bulk-sampling area, the continued category conversion from Inferred to Indicated status of modelled vein corridors, and the delineation of additional vein corridors. The objective of the 2023 Programs was to provide geotechnical information along the proposed underground development towards a bulk sample area to aid with safe and productive extraction methods. Figure 10-1 shows an overview map of the 2015 through 2022 Programs.

From 2015 to 2022, BGM/ODV drilled a total of 2,280 diamond drill holes ("DDH"), totalling 695.08 km of drill core. While surface data continues to inform the geologic model, diamond drill core is the primary source of geological information for the Cariboo Gold Project.

The current Mineral Resource Estimate update (the "2025 FS MRE") presented in Chapter 14, with an effective date of April 22, 2025, includes assay results from up to April 6, 2022. The potential impact on the 2025 FS MRE of the assay results received after this date is also commented below.

10.1 Drilling Methodology

Drills are aligned using a Suunto compass. Drill alignments are confirmed using Minnovare's Azimuth Aligner (it was used for a part of the 2021 drilling campaign and all of the 2022 drilling campaign). For the 2023 Program, the drill rig was aligned by a geologist using a robotic total station. The downhole dip and azimuth are surveyed using a REFLEX EZ-TRAC too. Collar locations are determined using a Trimble DGPS. The first survey was usually measured 9 m below the casing, and readings were then taken every 30 m downhole. A survey was also taken at the bottom of the hole if the end of hole ("EOH") depth was 15 m or more from the previous test. The instrument was handled by the drilling contractors, and survey information was digitally recorded using IMDEX's IMDEXHUB-IQ, as well as transcribed and provided in paper format to ODV geologists.

At the drill rig, the drill helpers placed the core into core boxes and marked off every 3-m drill run using a labelled wooden block. The drill helpers were also responsible for marking orientation information on the core using either the REFLEX ACT III™ tool or the Devico DeviHead orientation tool. All holes were drilled in NQ diameter unless noted otherwise in this Report.

All drill hole casings collared at an elevation similar to Jack of Clubs Lake were cemented into bedrock. Special consideration was given to the Valley Zone due to the local groundwater conditions, whereby a cementing procedure was deployed to ensure no groundwater would escape the drill hole once plugged: A first hole was drilled through the overburden and cased (HWT size) 6 m to 9 m into competent bedrock. HQ drill rods were then drilled 1 m beyond casing. Once the geologist and drill foreman inspected the rock to ensure the rock was competent bedrock, casing was reamed to the bottom of the hole and cemented with the drill foreman present. A PQ displacement plug was then pushed downhole until cement came up around the casing, leaving it to set. After at least 24 hours, 250 pounds per square inch ("psi") of water pressure was applied to the drill hole. If, during the pressure test, the pressure decreased and water was able to escape the cement, the drill hole was either abandoned or recemented. If no issues were experienced during the pressure test, drilling would then commence, and this process was repeated for any additional holes. Upon completion of the drill hole, a safety plug was placed 24 m past the shoe and the hole cemented. The HQ drill rods were then removed, and a displacement plug was pumped down the hole. One additional batch of cement was then pumped downhole, and a wait time of 45 minutes was observed, ensuring that no water was seen exiting the hole.

10.2 Core Logging Procedures

The drill core was transported to ODV's facility in Wells, BC where it was cleaned of drilling additives and mud, and the metres were marked before collecting data. Recovery for each 3 m drill run was noted. When recovery was less than 2.5 m (>0.5 m of loss), loss was recorded on a separate block as a "lost core interval".

Geotechnical data collection included Rock Quality Designation ("RQD"), Intact Rock Strength ("IRS"), and fracture counts at 1–3 m intervals. Magnetic susceptibility data were not collected because it was concluded that such data are not relevant to the deposit. Downhole orientation lines were connected where possible, and orientation off-set measurements were recorded.

All data (lithology, alteration, mineralization, structures, interval structures, and veins less and greater than 5 cm) were recorded using Datamine DHLogger software. Sample intervals and pertinent information regarding lithology, mineralization and alteration were marked on the core.

After recording the sampling information, drill core samples were cut in half using a diamond-blade table mounted rock saw. Half the sample was bagged and labelled, then packaged for shipment to an assay lab. Numbered security tags were applied to lab shipments for chain of custody requirements. Samples were then shipped to the laboratory of ALS Minerals in North Vancouver, BC, for analysis. The remaining half-core samples are stored on-site in a secured location for future reference.

The qualified persons have not identified drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results. In the opinion of the QPs, the core logging and sampling procedures used by ODV are consistent with generally accepted industry best practices and are, therefore, adequate for an advanced exploration project and use in this Feasibility Study.

10.3 2015 to 2019 Drilling

2015 Drilling

In 2015, drilling was focused on Barkerville Mountain (Figure 10-6) with 180 holes drilled on the BC Vein and Bonanza Ledge deposit, totalling 35,848.5 m; eight drill holes on the KL Zone totalling 1,675 m, and 12 dill holes on the Barkerville Mountain deposit totalling 3,626.7 m. The 2015 diamond drill program was designed to drill the BC Vein structure at a spacing of 25 m to 50 m to a depth of 250 m from surface, and a spacing of 100 m down to a depth of 450 m below surface (Brousseau et al., 2017).

2016 Drilling

In 2016, drilling on Barkerville Mountain (Figure 10-6) consisted of 53 holes on the BC Vein and Bonanza Ledge deposit, totalling 8,605.5 m, and 10 holes on the KL Zone deposit, totalling 2,621.18 m. The BC Vein area was drilled to infill high-grade areas at 12.5 m to 25 m spacing (Brousseau et al., 2017) while the KL Zone was drilled to test an 800 m-long gold-in-soil ("Au-in soil") anomaly (Beausoleil and Pelletier, 2018). Cow Mountain drilling produced 233 drill holes on the Cow prospect, and drill holes on the Valley Zone prospect, totalling 31,157.07 m and 1,023.5 m, respectively. The Cow Mountain drilling program (Figure 10-4) was designed to upgrade areas of geological uncertainty as well as constrain the geological model in areas devoid of historical drilling on Cow Mountain. It also focused on confirming historical gold intersections using modern drilling techniques. The 2016 campaign tested depths of approximately 300 m. Drill holes were completed on approximately 50 m centres in selected areas (Beausoleil and Pelletier, 2018). Drilling in the Valley Zone tested the lateral extents of AP veins and refined the stratigraphic model. Results showed denser than expected vein occurrences. As a result, three more rigs were added to the program and collar locations were stepped out to expand the intersected vein corridors (Beausoleil and Pelletier, 2018). On Island Mountain, 33 holes were drilled on the Shaft Zone prospect, and 50 holes on the Mosquito Creek prospect, totalling 11,289.5 m and 16,026.75 m, respectively. Drilling on Island Mountain (Figure 10-2) was conducted in order to understand the structural and lithological controls on gold mineralization, as well as to test the down-plunge extent of sulphide replacement zones.

2017 Drilling

In 2017, drilling was again conducted on Barkerville Mountain (BC Vein and Bonanza Ledge, KL Zone, and Barkerville Mountain deposits), Cow Mountain (Cow and Valley Zone deposits), and Island Mountain (Shaft Zone and Mosquito Creek deposits) (Figure 10-6, Figure 10-4, and Figure 10-2, respectively). Barkerville Mountain drilling produced 25 holes at BC Vein, seven at Bonanza Ledge, and one drill hole at KL Zone, totalling 4,412.7 m, 3,388 m, and 530.15 m, respectively. It should be noted that the diamond drill holes on the BC Vein of Barkerville Mountain were drilled for geotechnical purposes only and were therefore not assayed or included in the resource estimate database (Beausoleil and Pelletier, 2018). The 2017 drilling program on Barkerville Mountain explored the Au-in-soil anomaly adjacent to the KL Zone, investigating the 2016 identified targets. Cow Mountain had a total of 17 drill holes at the Cow prospect, and 80 drill holes at the Valley Zone prospect, totalling 6,034.7 m, and 38,872.96 m, respectively. Cow Mountain drilling continued the goals of the 2016 drilling program. Island Mountain had a total of 211 holes at the Shaft Zone prospect, and 44 dill holes at the Mosquito Creek prospect, totalling 93,733.12 m and 13,455.7 m, respectively. Drilling on Island Mountain during 2017 was primarily designed to define the extent of recently discovered vein systems and to discover new vein corridors and sulphide replacement. Early in the program, holes were drilled on 100 m drill centres with dice-five infill patterns concentrated in the Shaft Zone. As the geologic understanding of the controls on mineralization improved, a tighter infill of approximately 25 m spacing began in August to expand known corridors (Beausoleil and Pelletier, 2018).

2018 Drilling

In 2018, drilling was conducted on Barkerville Mountain (BC Vein and Bonanza Ledge deposits), Cow Mountain (Cow and Valley Zone deposits), and Island Mountain (Shaft Zone and Mosquito Creek deposits) (Figure 10-6, Figure 10-4, and Figure 10-2, respectively). Barkerville Mountain had a total of ten drill holes on the BC Vein and Bonanza Ledge deposits totalling 1,683.8 m. The aim of the 2018 Program at Barkerville Mountain was to provide infill data on the BC Vein. In addition, the program expanded upon data collected in 2017 and also targeted vein mineralization concentrated within the hanging wall of the BC Vein.

Cow Mountain had a total of 246 drill holes on the Cow prospect, and two drill holes on the Valley Zone prospect, totalling 67,715.05 m and 401.9 m, respectively. The aim of the 2018 Program at Cow Mountain was to infill and expand the high-grade gold-bearing vein corridors (Beausoleil and Pelletier, 2018). Drilling on Island Mountain produced 168 drill holes on the Shaft Zone prospect, and 20 drill holes on the Mosquito Creek prospect, totalling 53,731.29 m and 4,597 m, respectively. The 2018 Program at Island Mountain focused on targets generated by underground mapping and sampling data, as well as historical data compiled from smaller scale mapping, trenching, soil sampling and drilling programs. The program aimed to demonstrate continuity and expand on known mineralized vein corridors. Infill drilling was designed to intercept modelled vein corridors with a 25 m spacing at depth in order to convert Inferred resources to the Indicated category (Beausoleil et al., 2019).

Also, in 2018, in addition to the main Project claim group detailed above, Grouse Creek had a total of 14 drill holes, totalling 4,903.2 m (Figure 10-8). The aim of the drilling program was to identify the potential source of an Au-in-soil anomaly and subsequent gold rich placer deposits in the Discovery Claim and Shy Robin Gulch. (Filgate, 2018).

2019 Drilling

In 2019, drilling was conducted on Barkerville Mountain (BC Vein and Bonanza Ledge, KL Zone, Williams Creek, and Lowhee Zone deposits), Cow Mountain (Cow prospect), and Island Mountain (Shaft Zone, Mosquito Creek, and Willow prospects) (Figure 10-6, Figure 10-4, and Figure 10-2, respectively). Barkerville Mountain had a total of 36 drill holes on the BC Vein and Bonanza Ledge deposit, 73 on the KL Zone, four on Williams Creek, and 24 holes on the Lowhee Zone, totalling 7,974.2 m, 31,974.62 m, 1,572 m, and 8,422 m, respectively. The 2019 Program on Barkerville Mountain focused on exploration for mineralized vein corridors analogous to those on Cow Mountain and Island Mountain within the prospective sandstone unit, with drilling on BC Vein to increase confidence in the block model (Beausoleil et al., 2019). Cow Mountain had a total of 72 drill holes on the Cow prospect, totalling 16,136.6 m and was primarily focused on infill drilling and testing down dip extents of mineralized vein corridors. Island Mountain had a total of 26 drill holes on the Shaft Zone prospect, 15 on the Mosquito Creek prospect, and six on the Willow prospect, totalling 12,032.45 m, 8,258.89 m, and 3,078.9 m, respectively. The objective of the 2019 Program on Island Mountain was to infill high-grade areas currently classified as Inferred on the Mosquito and Shaft Zones and to test the strike and depth extent of the mineralized vein corridors. Exploration to the northwest of Mosquito Creek also occurred on what is known as the Willow Target, an Au-in-soil geochemical anomaly identified from 2018 soil sampling (Beausoleil et al., 2019). Additionally, the Proserpine property had a total of six holes drilled, totalling 2,676.25 m (Figure 10-8 and Figure 10-9). This program was aimed at testing Au-in-soil anomalies and historical gold occurrences, as well as historical underground workings.

10.4 2020 Drilling Program

The 2020 drilling program (the "2020 Program") was conducted between January 16, 2020, and December 14, 2020, by Smithers, B.C. based Hy-Tech Drilling Ltd. ("Hy-Tech") and its primary focus was delineating the Cow-Island-Barkerville corridor. A total of 57,078.8 m was drilled in 196 surface holes, as summarized in Table 10-1. The objective of this program was to delineate mineralized vein corridors further within all deposits and intercept veins with a 25 m spacing from previously drilled holes to support conversion of Inferred resources to the Indicated category.

Table 10-1: Summary of BGM's 2020 Drilling Program

Deposit	Number of Drill Holes	Metres Drilled
BC Vein and Bonanza Ledge	3	560.60
Lowhee Zone	24	10,144.50
Cow Mountain	48	12,596.05
Valley Zone	56	17,558.85
Shaft Zone	15	3,909.00
Mosquito Creek	50	9,392.40
Proserpine	5	2,917.40
Total	**201**	**57,078.80**

The 2020 Program at Island Mountain focused on Shaft Zone with 3,909 m drilled in 15 holes and Mosquito Creek, totalling 9,392.4 m drilled in 50 holes (Figure 10-2), further supporting the category conversion work from Inferred to Indicated status within known vein corridors.

The 2020 Program at Cow Mountain (Figure 10-4) was primarily focused in the Valley Zone to continue support category conversion work and expand known mineralized vein corridors, with a total of 12,596.05 m drilled in 56 holes. Target vein corridors are being drilled from surface to a maximum vertical depth of 600 m. Additional infill drilling on Cow Mountain was conducted (Figure 10-4), furthering supporting category conversion on known vein corridors (Inferred to Indicated) and exploring the down-dip extent of selected targets. The targeted vein corridors were drilled from surface to a maximum vertical depth of 350 m with a 25 m intercept spacing at depth. A total of 12,596.05 m was drilled in 48 holes.

A bulk core sampling program to test the feasibility of the mineral sorter was conducted during the 2020 and 2021 drill program on both Cow Mountain and Island Mountain, totalling 168 m and 513 m, respectively. A total of 2,000 kg of material was collected. Samples were selected based on modelled vein corridors hosting grades inferred to be representative of the overall deposit.

Selected samples were then shipped to Société Générale de Surveillance ("SGS") for metallurgical analysis.

The aim of the 2020 Program at Barkerville Mountain (Figure 10-6) was to provide infill data on the BC Vein and to further define the Lowhee Zone prospect.

BC Vein drilling, totalling 560.6 m in three holes, improved block model confidence and further delineated the deposit. Drilling at the Lowhee Zone targeted mineralized vein corridors within the prospective sandstone unit analogous to those on Cow Mountain and Island Mountain. The targeted vein corridors were drilled from surface to a maximum vertical depth of 370 m with a 25 m intercept spacing at depth. A total of 10,144.5 m was drilled in 24 holes.

The intersections were visually compared in 3D to the mineralized zones 3D solids and interpolated block grades of the 2020 MRE.

Overall, visual inspection of the 2020 drilling results demonstrated that the thickness and the grade of the mineralized zones were in the same order of magnitude as the 2020 MRE. The 2020 drilling continued to confirm the geological and grade continuities that were demonstrated in the 2020 MRE (Beausoleil et al., 2019).

In addition, 2020 also saw drilling on the Proserpine prospect (Figure 10-8 and Figure 10-9), with five drill holes totalling 2,917.4 m. The program consisted of one stratigraphic drill hole and four holes drilled orthogonal to known surface mineralization within the Proserpine prospect from September 13, 2020, to November 16, 2020. The objective of the stratigraphic hole was to constrain stratigraphy, understand F2 relationships, and target strike parallel shear structures, while the objective of the remaining holes was to explore for northeast-southwest-striking, axial planar oriented vein structures, and to support estimation of an Inferred resource by stepping out from 2019 drilling (Yao and Doyle, 2020).

10.5 2021 Drilling Program

Table 10-2: Summary of BGM's 2021 Drilling Program

Deposit	Number of Drill Holes	Metres Drilled
Lowhee Zone	95	29,860.9
Cow Zone	6	1,988.5
Valley Zone	108	47,484.92
Shaft Zone	162	60,990.8
Mosquito Creek	42	10,710.65
Total	**413**	**151,035.77**

The 2021 drilling program (the "2021 Program") was conducted by Hy-Tech between January 4, 2021, and October 20, 2021. The 2021 Program also saw the addition of Paycore Drilling ("Paycore"), based in Valemount, British Columbia, between August 18, 2021, and October 16, 2021.

The 2021 Program at Island Mountain focused on Shaft Zone with 60,990.8 m drilled in 162 holes, and Mosquito Creek totalling 10,710.65 m drilled in 42 holes (Figure 10-2 and Figure 10-3), further continuing the category conversion work from Inferred to Indicated status within known vein corridors.

The 2021 Program at Cow Mountain (Figure 10-4 and Figure 10-5) was primarily focused in the Valley Zone to continue category conversion work and expand known mineralized vein corridors with a total of 47,484.92 m drilled in 108 holes. Minor drilling on Cow Mountain was conducted, totalling 1,988.5 m drilled in six holes (Figure 10-4). The purpose of this drilling was to conduct metallurgical testing of modelled vein corridors.

The 2021 Program at Lowhee Zone (Figure 10-6 and Figure 10-7) continued to define the prospect, targeting mineralized vein corridors within the prospective sandstone unit analogous to those on Cow Mountain and Island Mountain. A total of 29,860.9 m was drilled in 95 holes. Drill hole spacing along the modelled vein corridors was kept to a distance of 25 m.

10.6 2022 Drilling Program

Table 10-3: Summary of BGM's 2022 Drilling Program

Deposit	Number of Drill Holes	Metres Drilled
Lowhee Zone	27	6,563.9
Total	**27**	**6,563.9**

The 2022 drilling program (the "2022 Program") was conducted by Hy-Tech at the Lowhee Zone on Barkerville Mountain (Figure 10-6 and Figure 10-7). The 2022 Program started on March 25, 2022, and was completed on of July 6, 2022.

The focus of the 2022 Program at the Lowhee Zone was the infill of a proposed underground bulk-sampling area, continued support for category conversion from Inferred to Indicated status of modelled vein corridors, and the delineation of additional vein corridors.

10.7 2023 Drilling Program

Table 10-4: Summary of BGM's 2022 Drilling Program

Deposit	Number of Drill Holes	Metres Drilled
Lowhee Zone	2	640.05
Total	**2**	**640.05**

The 2023 geotechnical drilling program (the "2023 Program") was conducted by Hy-Tech at the Cow portal on Barkerville Mountain (Figure 10-6 and Figure 10-10). The 2023 Program started on October 7, 2023, and was completed on October 20, 2023.

The focus of the 2023 Program at the Lowhee Zone consisted of geotechnical drilling parallel to planned underground development that would lead towards a planned bulk sample location in the Lowhee Zone Deposit. The core was logged for lithology, alteration, mineralization, oriented structures, and geotechnical logging to calculate RQD and RMR89. LECO analysis was completed at the Quesnel River ("QR") Mine assay lab.

The Cow portal geotechnical drill holes enabled the identification of faults, rock mass designation testing, lithologic contacts, rock mass abrasiveness, and metal leaching and acid rock drainage ("MLARD") hazards, to aid in the planning for underground development towards the Lowhee Zone bulk sample.

10.8 QP Comments on 2015-2022 Drilling

The QPs have reviewed the 2015-2022 drill data and are of the opinion that the drilling and data was collected using best practices for use in the Mineral Resource Estimate.

10.9 QP Comments on Post-2022 Drilling

Assay results from 27 drill holes were received after April 6, 2022, representing 6,563.9 m of assays, and, as such, are excluded from the 2025 FS MRE. Overall, the visual inspection of the 2022 drilling results demonstrated that the thickness and the grade of the mineralized zones are in the same order of magnitude as the 2025 FS MRE. The 2022 drilling continued to confirm the geological and grade continuities that were demonstrated in the 2025 FS MRE.

For the purpose of this Report, the QP is of the opinion that the gains and the losses would balance each other, and the resulting difference would not be material to the overall MRE. According to the drilling results in the extension of the known mineralized zones and with the discovery of new zones, there is a potential to increase the mineral resources.

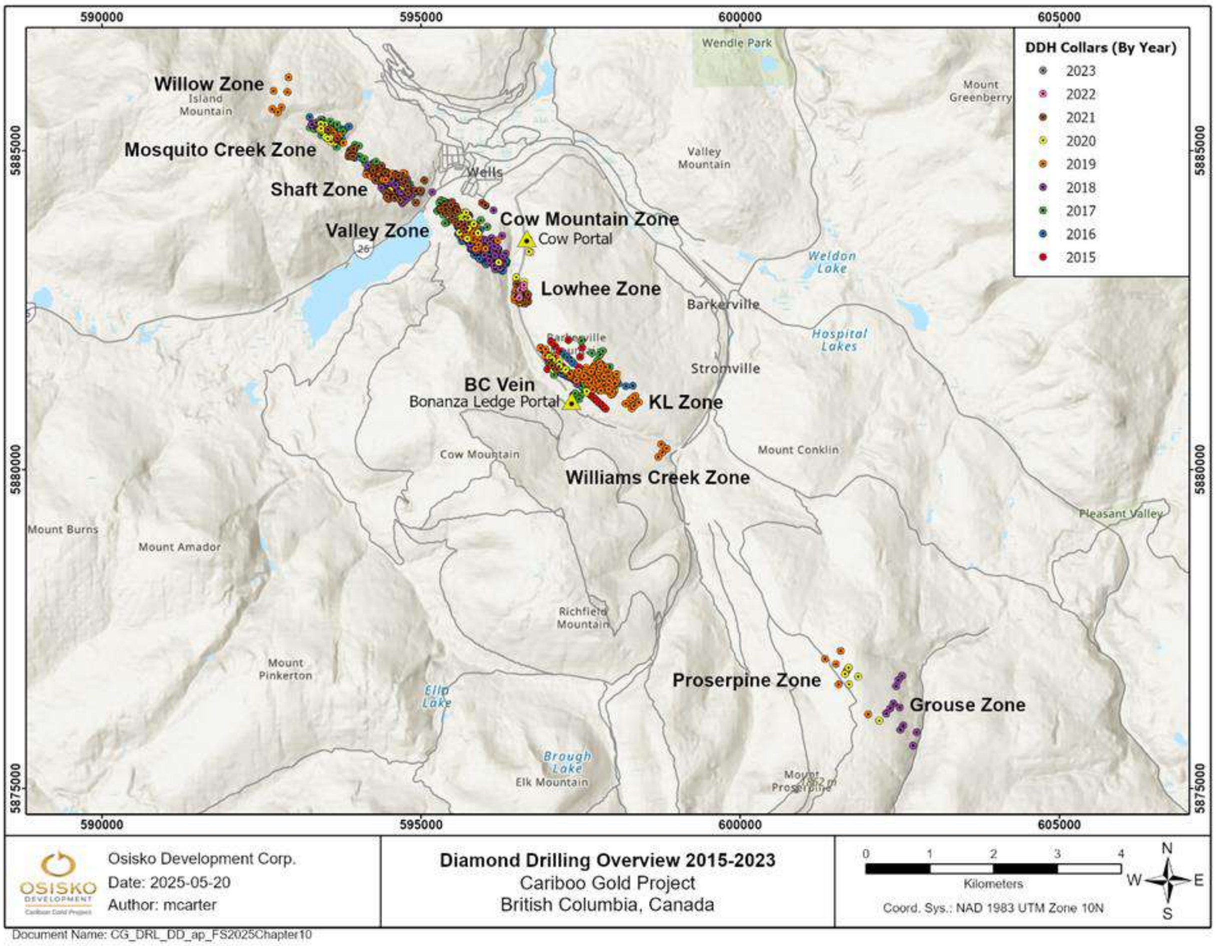


Figure 10-1: Cariboo Gold Project Diamond Drilling Program Overview

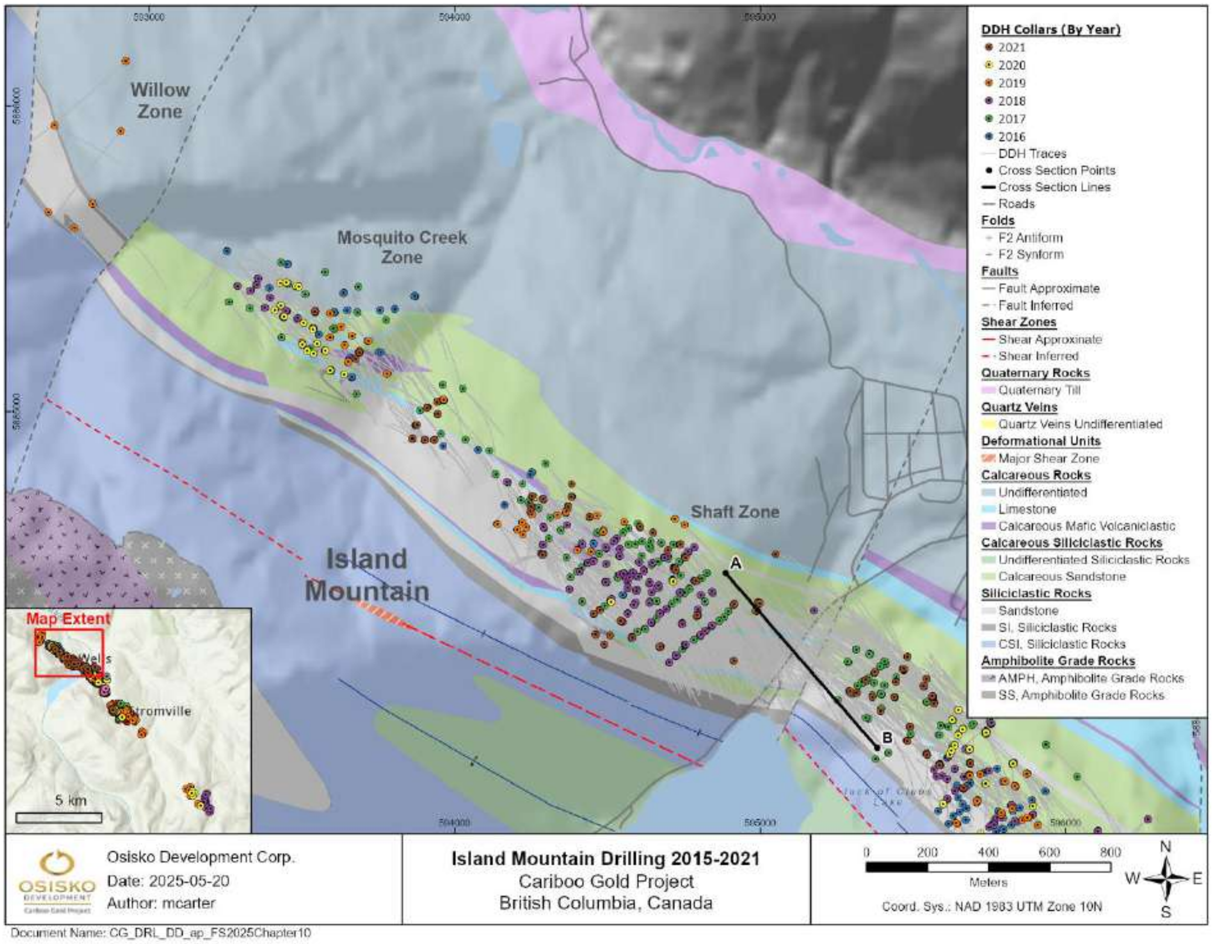


Figure 10-2: Island Mountain Drilling Program 2015–2021

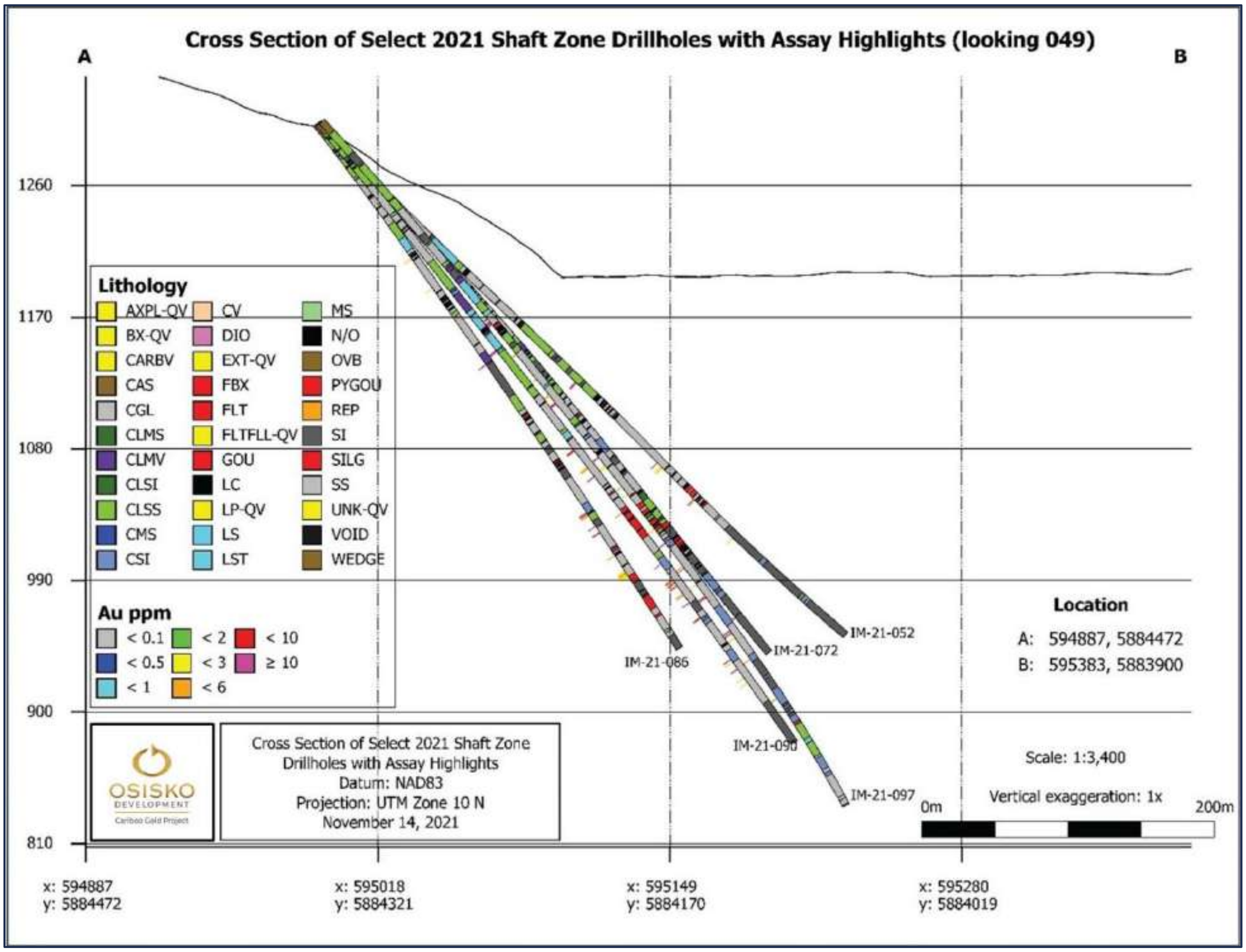


Figure 10-3: Cross-section of Shaft Zone diamond drill holes with gold assay highlights

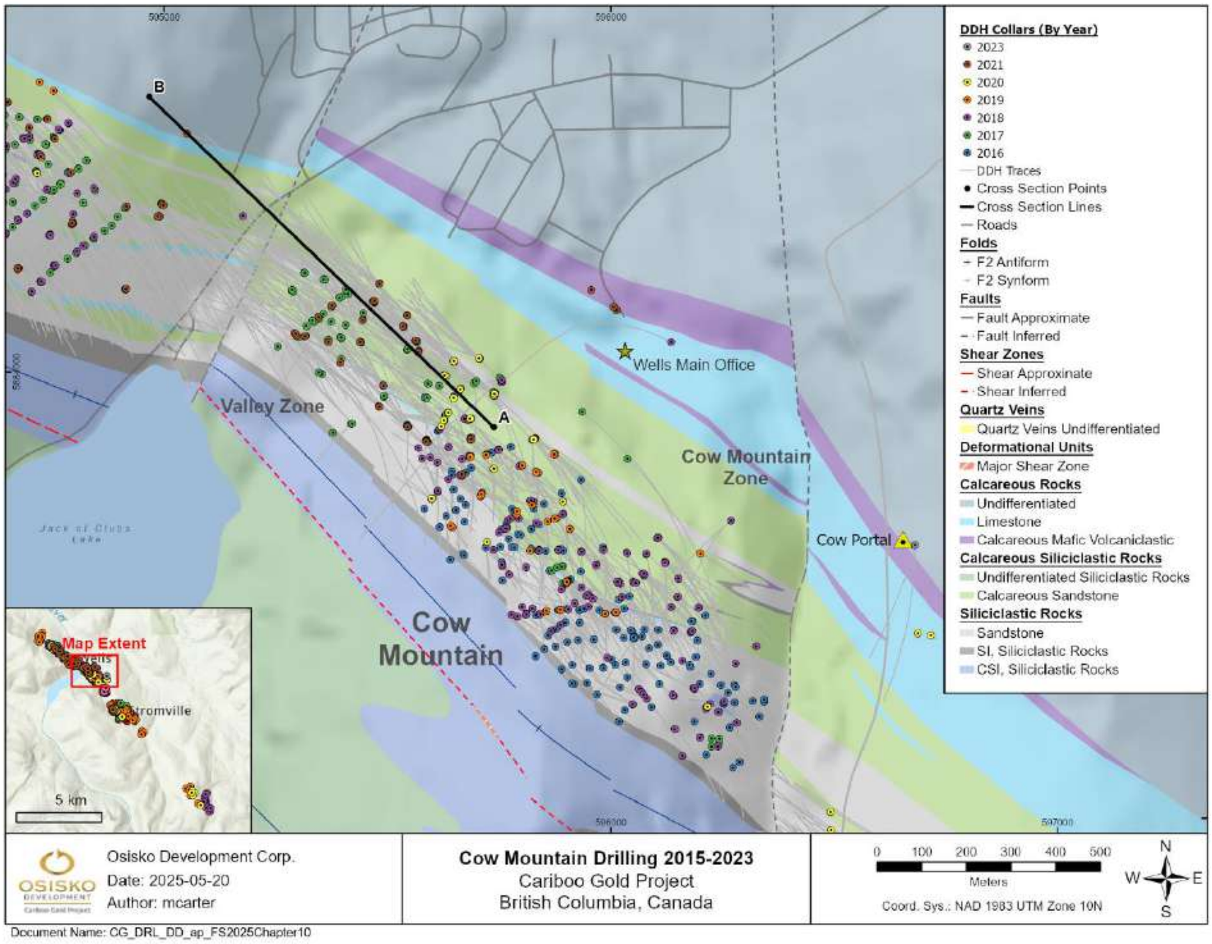


Figure 10-4: Cow Mountain Drilling Program 2015–2021

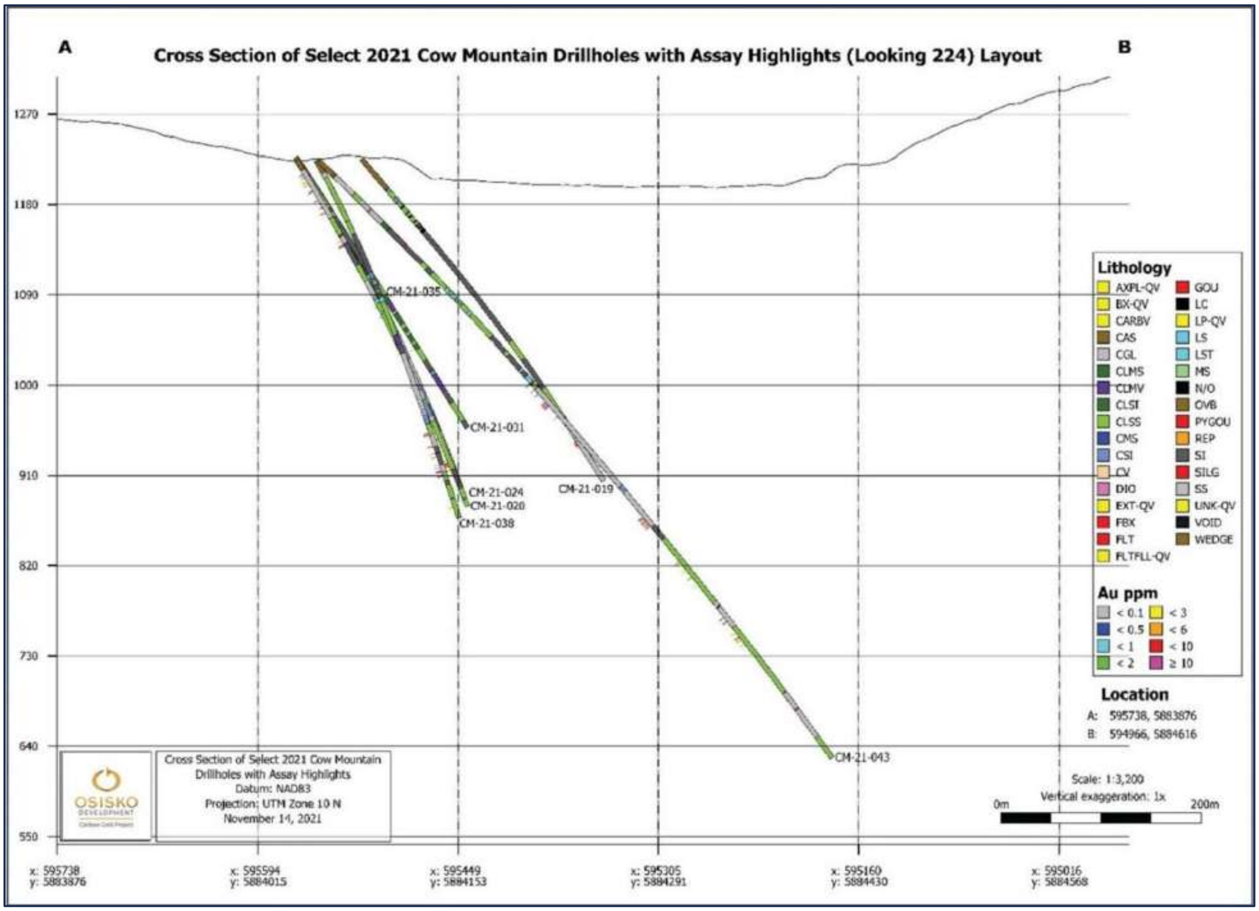


Figure 10-5: Cross-section of Cow Mountain diamond drill holes with gold assay highlights

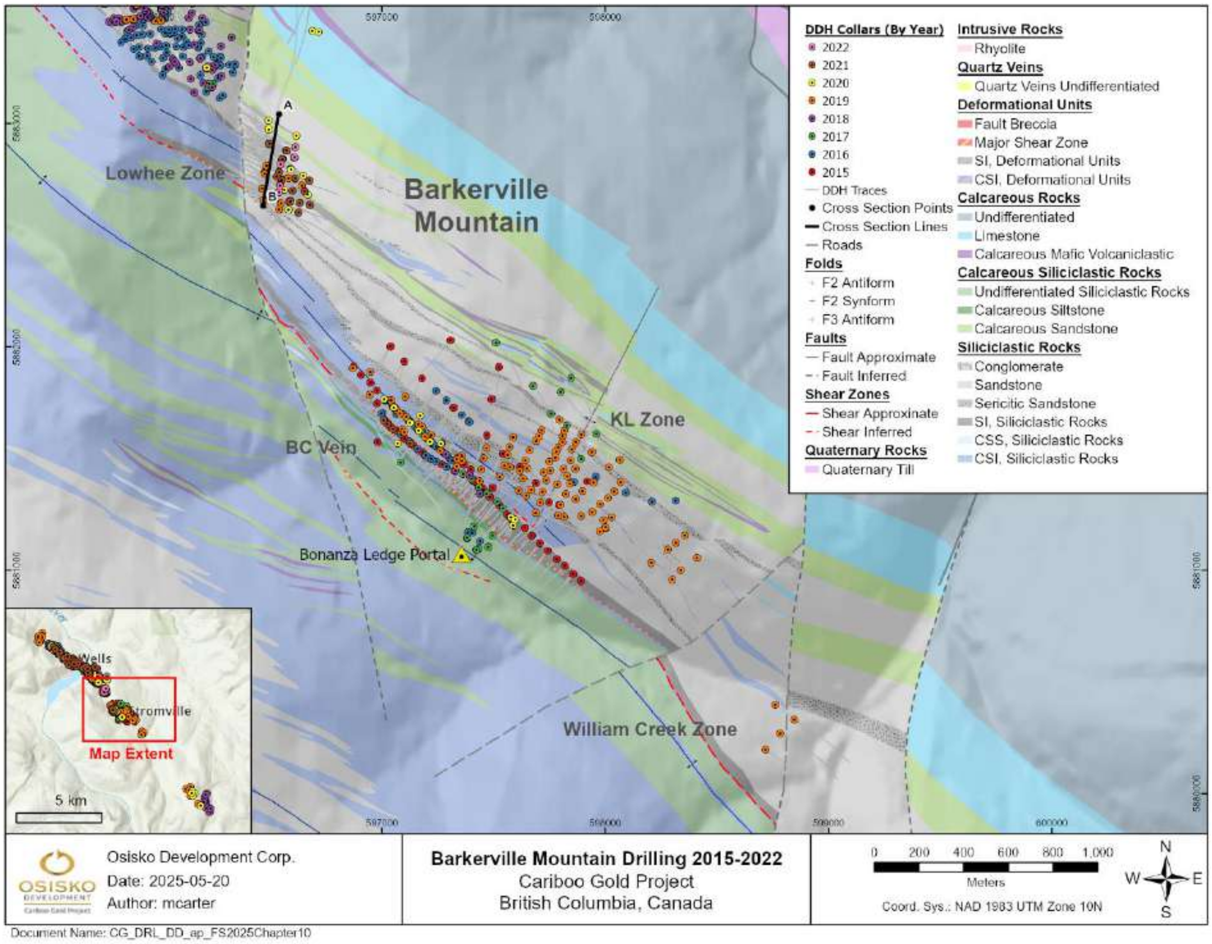


Figure 10-6: Barkerville Mountain Drilling Program 2015–2022

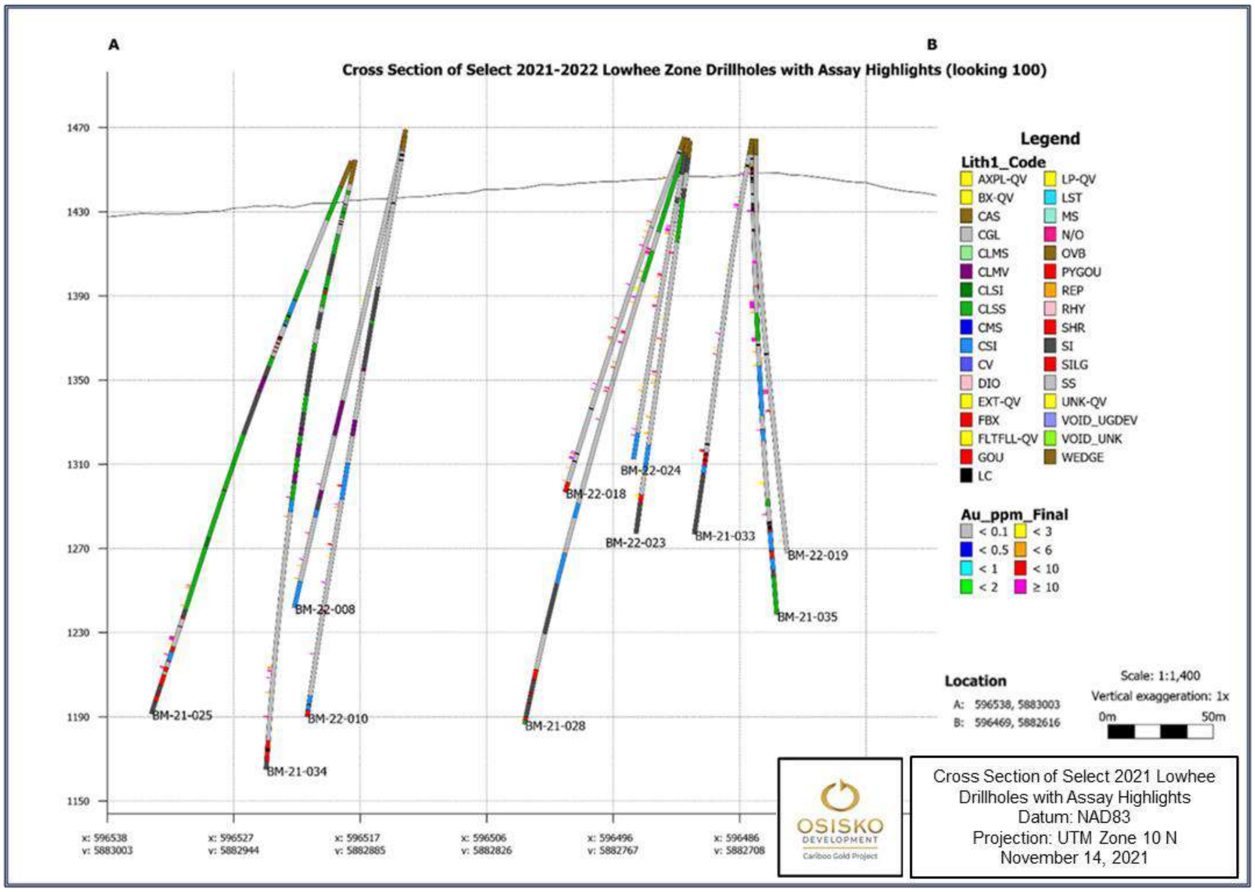


Figure 10-7: Cross-section of Barkerville Mountain diamond drill holes with gold assay highlights

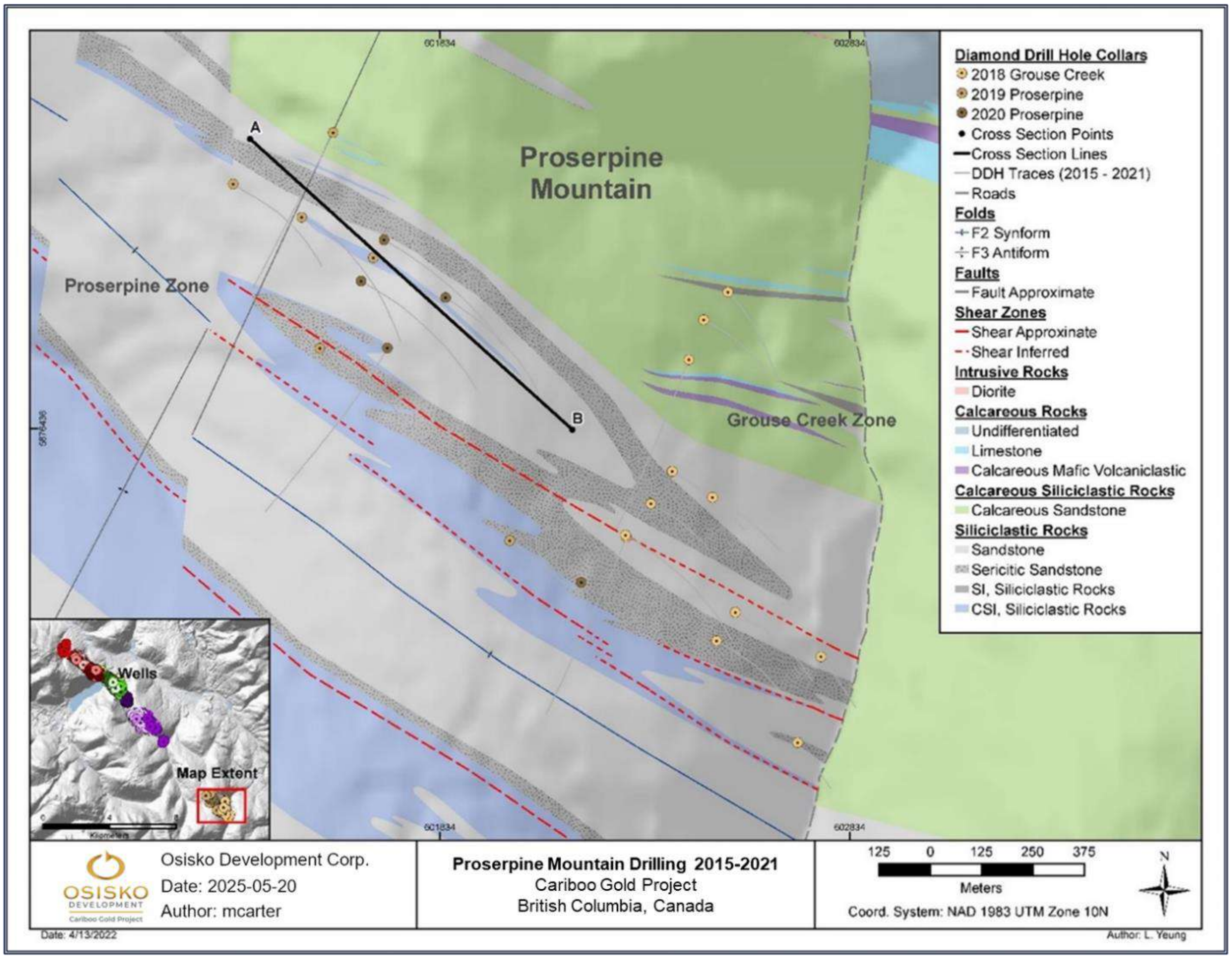


Figure 10-8: Proserpine Mountain Drill Program 2015–2021

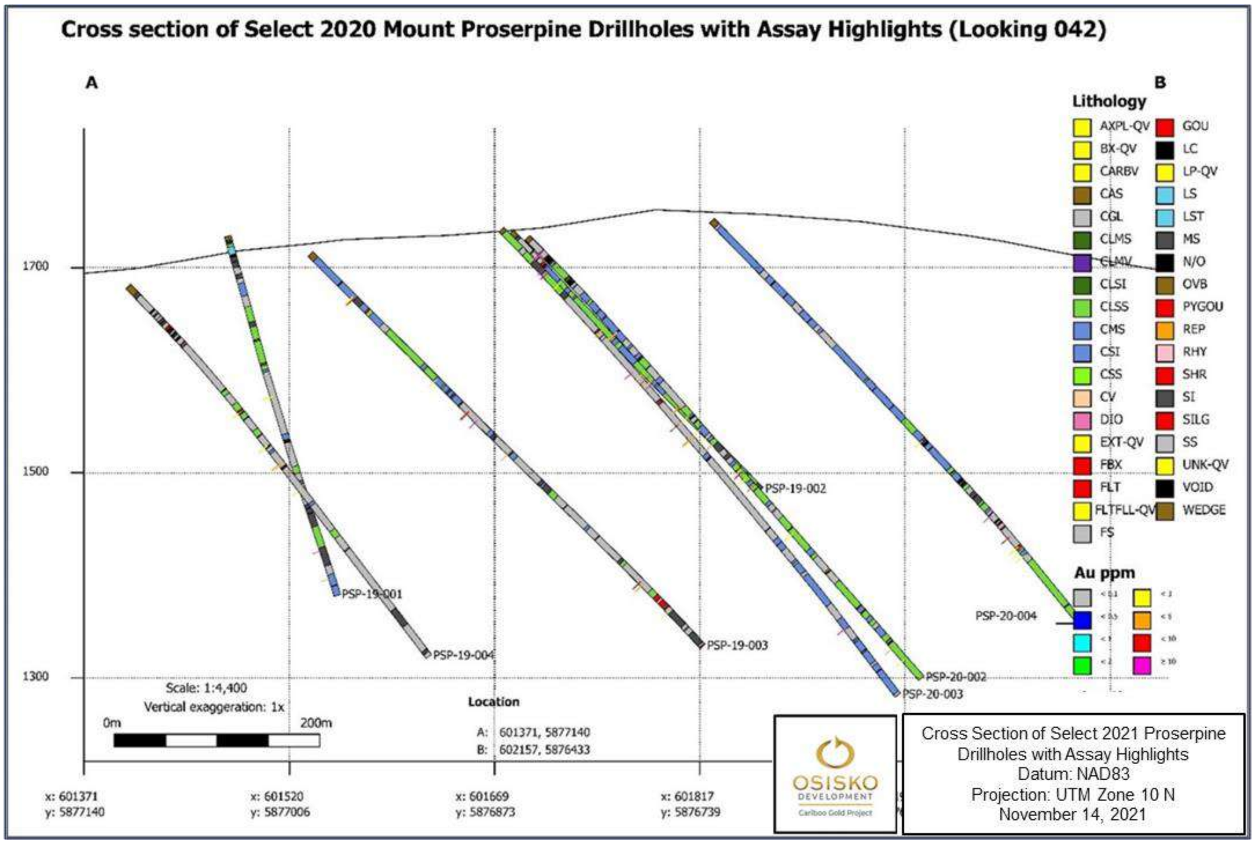


Figure 10-9: Cross-section of Proserpine Mountain diamond drill holes with gold assay highlights

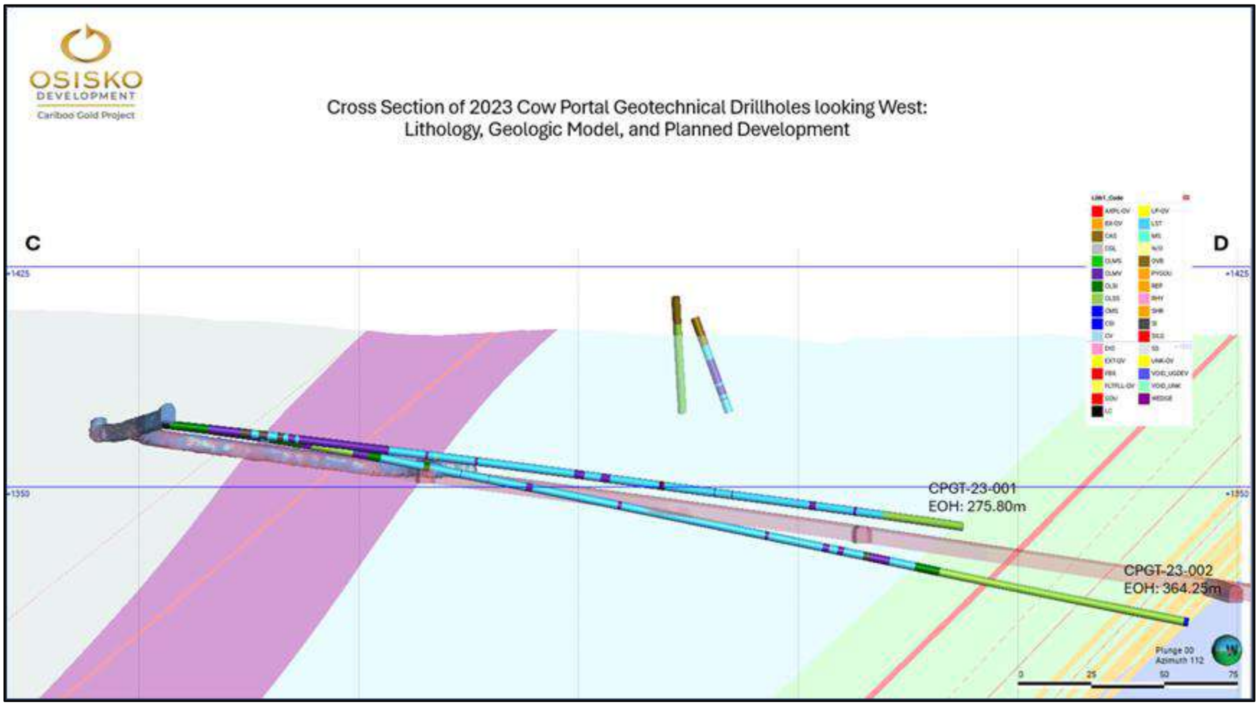


Figure 10-10: Cross-section of Cow portal geotechnical drill holes with lithology

11. Sample Preparation, Analyses, and Security

This chapter describes the sample preparation, analysis, and security procedures for the 2020 and 2021 diamond drill holes programs ("2020 and 2021 Programs") included in the current resource estimate. The QP reviewed the quality assurance/quality control ("QA/QC") procedures and results completed only for gold assay results. The reader is referred to Beausoleil and Pelletier (2020) for details of the 2019 drilling program, to Beausoleil and Pelletier (2019) for details of the 2018 drilling program, and to Beausoleil and Pelletier (2018) for the 2016 and 2017 programs.

11.1 Core Handling, Sampling, and Security

Core handling, sampling, and security procedures are managed by ODV personnel. The procedures are described in detail below.

The drill core is placed into wooden core boxes at the drill site with the end of each drill run marked with a small wooden block displaying the depth of the hole. Box labels indicate the hole and box numbers. The boxes are racked and covered at the drill, secured with ratchet straps, and then transported daily from the drill site to ODV's core storage and logging facility in the District of Wells, British Columbia. The boxes are labelled in permanent marker with the hole and box number (e.g., GR-15-01 Bx 1). The core is transported by truck during the drilling programs. There are two secure core storage areas, one in Wells near the core logging facility and a second is located near the Ballarat Camp, approximately 5 km east of Wells.

Upon receiving a load of core from the drill crew, the core is brought into the logging room. Meterage blocks are checked for errors, the core is oriented in the box and cleaned, and the metre marks are drawn on the core before logging begins. The geological and geotechnical core logging data is collected with Datamine's DHLogger software.

The sample intervals are between 0.5 m and 1.5 m in length and do not cross geological contacts. A line is drawn with a pencil along the length of the core to indicate where the core will be sawed. Each sampling ticket is divided into three tags. One tag is stapled to the core box at the beginning of the interval to record the drill hole number and sample interval recorded. The second tag is placed in the sample bag, which is sent to the laboratory; this tag does not reference the drill hole or meterage. The last tag remains in the sample ticket book with the hole number and recorded intervals. All samples are assigned a unique sample number.

After the core boxes with tags are photographed, the core boxes are moved to the cutting station. The core is cut lengthwise by diamond saw, with half the core submitted as the primary sample and the remaining half core retained in the core box for future reference.

The samples are individually bagged with the corresponding tag. The tag number is written on the bag and each bag is sealed. The bags are then placed in rice bags and the rice bags are sealed with numbered security tags for the chain of custody requirements. If any tampering with security tags is suspected, the laboratory will communicate with ODV. Samples are transported to the ALS Minerals ("ALS") laboratory in Vancouver, BC and the remaining drill core is subsequently stored on site at ODV's secure facilities in Wells and at a second location near the Ballarat Camp.

11.2 Laboratories 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 set out the criteria for laboratories wishing to demonstrate that they are technically competent, operating an effective quality system, and able to generate technically valid calibration and test results. The standard forms the basis for the accreditation of competence of laboratories 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.

All the samples of the 2020 and 2021 Programs were submitted to the ALS laboratory in BC. The ALS laboratory is ISO 9001 certified and accredited (ISO/IEC 17025) for the analytical methods used routinely on the samples from Cow Mountain, Island Mountain, and Barkerville Mountain. The ALS facility is a commercial laboratory independent of ODV and has no interest in the Cariboo Gold Project.

11.3 Sample Preparation and Assay

11.3.1 Sample Preparation

- Samples are sorted and logged into the ALS LIMS program;
- Samples are dried and weighed;
- Samples are crushed to +70% passing 2 millimetres ("mm") (CRU-31);
- The crushed sample split of up to 500 g is pulverized to +85% passing 75 microns ("µm") screen (PUL 32 m);
- Samples containing visible gold or cosalite mineralization are assayed by metallic screen method; a crushed sample split of 1,000 g is pulverized (method PUL-32) to pass 100 µm (Tyler 150 mesh) stainless steel screen to separate the oversize fractions (method SCR-21).

11.3.2 Gold Assaying

- A 50 g pulp aliquot is analyzed by Au-AA26: fire assay followed by aqua regia digestion (HNO_3-HCl) with an atomic absorption spectroscopy finish ("AAS");
- When assay results are higher than 100 g/t Au, a second 50 g pulp aliquot is analyzed by Au-GRA22: fire assay, parting with nitric acid (HNO_3) with a gravimetric finish;
- All samples containing visible gold or cosalite mineralization are assayed by the metallic screen method (method Au-SCR21). At the request of ODV, any sample exceeding 100 g/t Au (Au-AA26) is rerun with the screen method following the procedure below;
- For visible gold assays or cosalite mineralization, the +100 µm fraction (Au+) is analyzed in its entirety by fire assay ("FA") with gravimetric finish. The 100 µm fraction (minus) is homogenized and two subsamples are analyzed by FA with AAS (Au-AA25) or gravimetric finish (AuGRA21). The average of the two minus fraction subsamples are taken and reported as the Au-fraction result. The gold content is then determined by the weighted average of the Au+ and Au- fractions.

11.3.3 Multi-element Assaying

- Some samples are analyzed by trace-level multi-element method ME-MS61: a 0.25 g aliquot is digested by four-acid digestion (HNO_3-$HClO_4$-HF-HCl) and HCl leach (method GEO-4A01) and analyzed by ICP-AES;
- Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, silver, and tungsten and diluted accordingly. Samples meeting these criteria are then analyzed by ICP-MS. Results are corrected for spectral interelement interferences.

11.3.4 Specific Gravity Measurements

- Before crushing and pulverizing, the specific gravity of selected samples is determined by the bulk sample method (water displacement, OA GRA08).

11.4 Quality Assurance and Quality Control

This section summarizes the reviews of ODV's 2020 and 2021 assay QA/QC programs.

A total of 49,243 and 111,361 samples (including QA/QC samples) were assayed during 2020 and 2021, respectively. The 2020 and 2021 QA/QC programs included a routine insertion of standards and blanks to monitor gold assay results. ODV included one standard in every 20 samples and one blank in every 40 samples. The 2020 and 2021 QA/QC programs did not include field or coarse reject duplicates.

11.4.1 Certified Reference Materials (Standards)

Accuracy is monitored by adding standards at the rate of one certified reference material ("CRM") for every 20 samples. Standards are used to detect assay problems with specific sample batches and any possible long-term biases in the overall dataset. ODV's definition of a quality control failure is when:

- Assays for a CRM are outside plus or minus three standard deviations (±3SD) or ±10%; or
- Assays for two consecutive CRMs are outside ±2SD, if one of them is outside ±3SD.

11.4.2 2020 Certified Reference Materials (Standards) Performance

A total of 2,458 standards were analyzed during the 2020 Program, for an insertion rate of 5.0%. Five different CRMs from Ore Research and Exploration Pty Ltd. ("OREAS") were used.

In 2020, a total of 22 QC failures were recognized, and reruns were requested in 17 cases. Reruns were not requested for the other five cases, as per ODV's protocol, because the surrounding samples were assayed at or below the lower detection limit (0.01 g/t Au). A total of 18 corrected certificates were issued, and the corrected assays were loaded into the database.

The 2020 average CRM results are all within ±0.4% of the expected values (Table 11-1). Most assays were within ±3SD of the accepted value (Figure 11-1).

Table 11-1: Results of standards used by ODV for the 2020 Program

CRM	Count	Expected Au (g/t)		Observed Au (g/t)		Percent of expected (%)
		Average	SD	Average	SD	
OREAS 218	113	0.531	0.017	0.533	0.013	100.3
OREAS 219	506	0.76	0.024	0.760	0.019	100.0
OREAS 226	609	5.45	0.126	5.448	0.083	100.0
OREAS 228b	612	8.57	0.199	8.583	0.134	100.2
OREAS 237	618	2.21	0.054	2.219	0.044	100.4
Total	**2,458**	**Weighted Average**				**100.15**

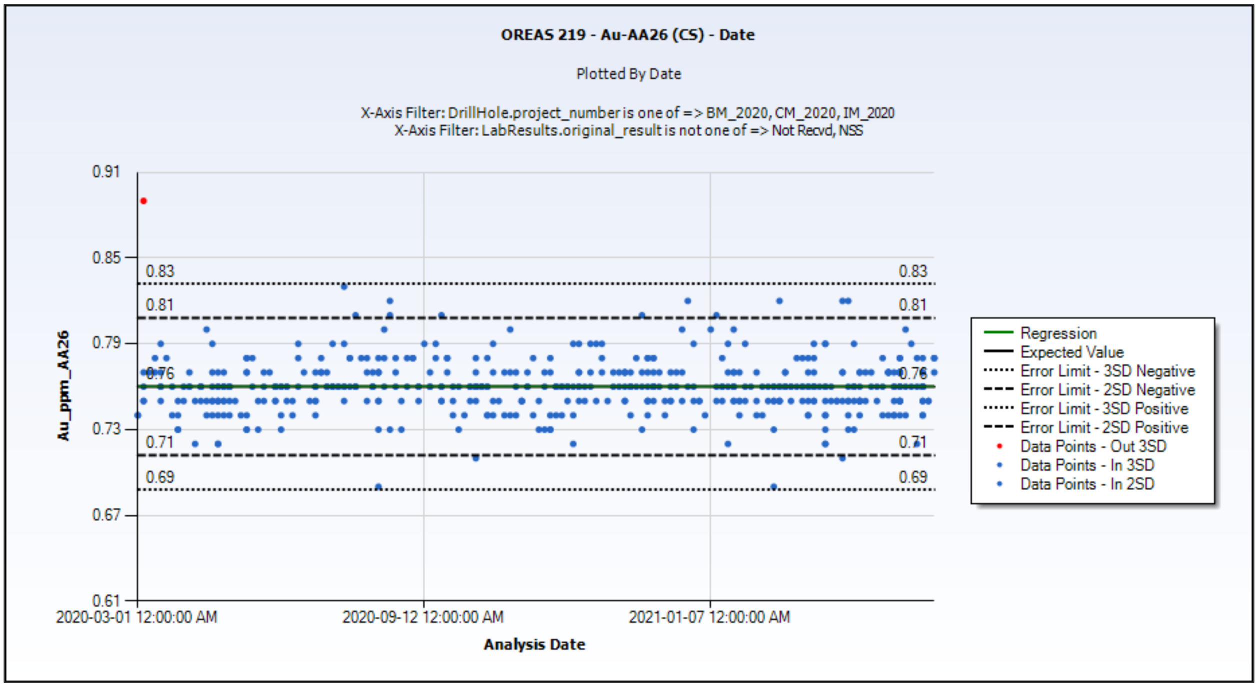


Figure 11-1: Example of results for standard OREAS 219 for the 2020 Program

11.4.3 2021 Certified Reference Materials (Standards) Performance

A total of 5,571 standards were analyzed during the 2021 Program, for an insertion rate of 5.0%. Eight different CRMs from OREAS were used.

In 2021, a total of 75 QC failures were recognized, and reruns were requested in 63 cases. Reruns were not requested for the other 12 cases, as per ODV's protocol, because the surrounding samples were assayed at or below the lower detection limit (0.01 g/t Au). A total of 50 corrected certificates were issued, and the corrected assays were loaded into the database. Two standards failed again on the rerun, but the samples that were rerun along with the standards were within 10% of the original values.

The 2021 average CRM results are all within ±1.8% of the expected values, except for OREAS 217 which had a small sample size (Table 11-2). Most assays were within ±3SD of the accepted value (Figure 11-2).

Table 11-2: Results of standards used by ODV for the 2021 Program

CRM	Count	Expected Au (g/t)		Observed Au (g/t)		Percent of expected (%)
		Average	SD	Average	SD	
OREAS 217	2	0.338	0.010	0.345	0.007	102.1
OREAS 219	1,207	0.76	0.024	0.758	0.019	99.7
OREAS 226	1,083	5.45	0.126	5.417	0.101	99.4
OREAS 228b	640	8.57	0.199	8.553	0.159	99.8
OREAS 232	267	0.902	0.023	0.901	0.020	99.9
OREAS 237	1,477	2.21	0.054	2.216	0.047	100.3
OREAS 240	353	5.51	0.139	5.427	0.104	98.5
OREAS 242	542	8.67	0.215	8.516	0.171	98.2
Total	**5,571**	**Weighted Average**				**99.60**

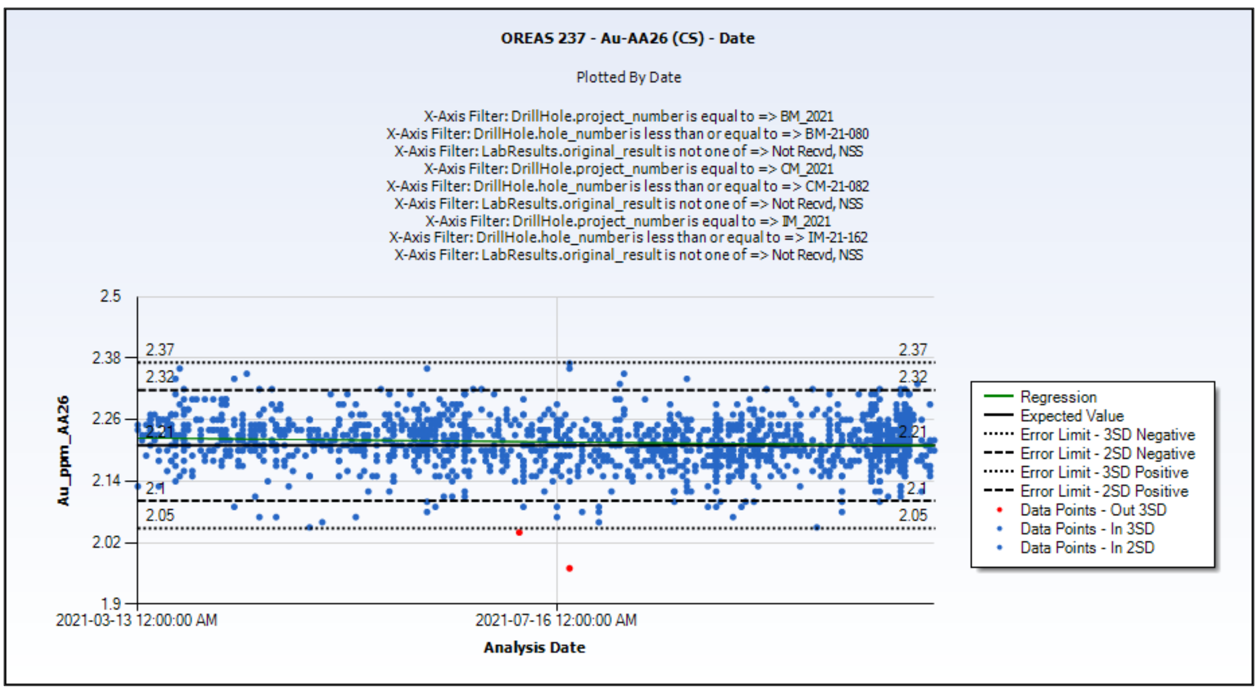


Figure 11-2: Example of results for standard OREAS 237 for the 2021 Program

11.4.3.1 Comment for Monitoring Accuracy

The QP is of the opinion that ODV's QC program for monitoring accuracy using standards is reliable and valid based on the results presented by ODV personnel.

11.4.4 Blank Samples

Contamination during preparation is monitored by the routine insertion of coarse barren material (a "blank") that goes through the same sample preparation and analytical procedures as the core samples. Elevated values for blanks may indicate sources of contamination in the fire assay procedure (contaminated reagents or crucibles) or sample solution carry-over during instrumental finish.

11.4.5 2020 Blank Samples Performance

In 2020, 1,235 blanks were submitted to ALS with the core samples. ODV personnel identified two cases of contamination for gold in coarse blank material, and both cases were sent for repeat assaying. Both cases passed on the rerun. The corrected assay certificates were loaded into the database.

All the blanks analyzed at ALS assayed less than or equal to 0.1 g/t Au, which is 10 times the detection limit of 0.01 g/t Au and are thus considered acceptable. Table 11-3 summarizes the performance of the blanks. Figure 11-3 shows the results over the year.

Table 11-3: Results of blanks used by ODV for the 2020 Program

Total Blanks	1,235
Minimum Au g/t	<0.01
Maximum Au g/t	0.09
Below Detection Limit (# and %)	1,073 (86.9%)
QC Failures (# and %)	2 (0.16%)

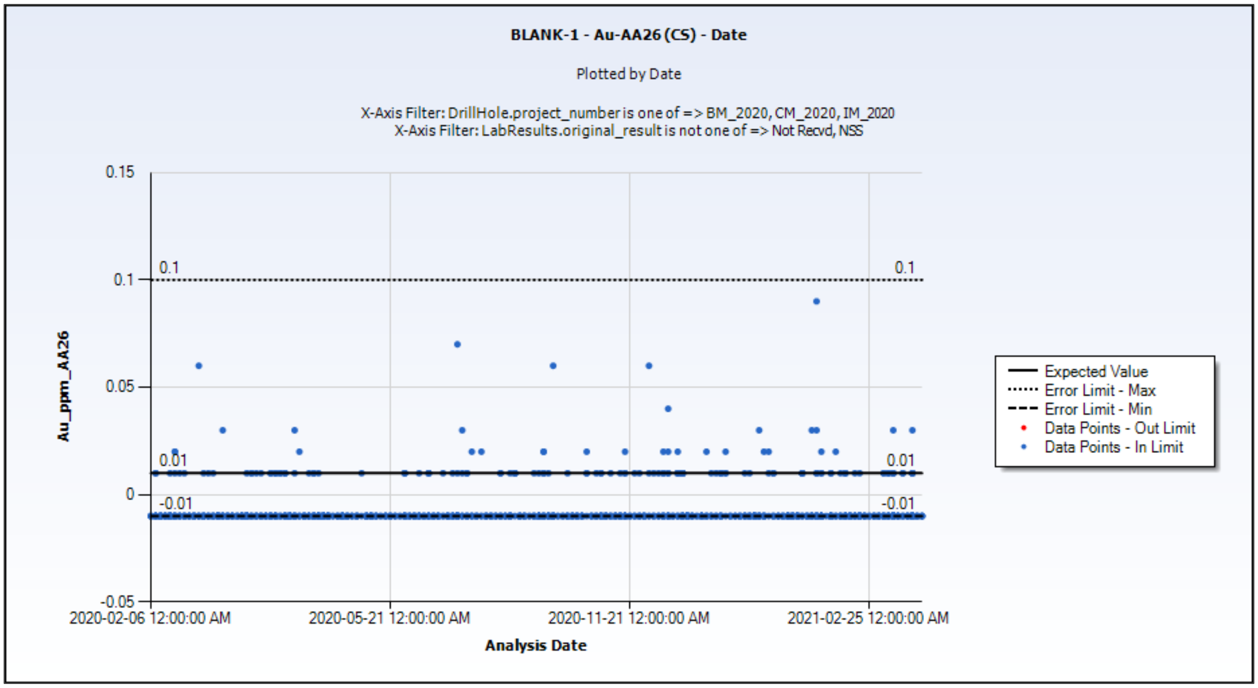


Figure 11-3: Results of blanks for the 2020 Program

11.4.6 2021 Blank Samples Performance

In 2021, 2,789 blanks were submitted to ALS with the core samples. ODV personnel identified two cases of contamination for gold in coarse blank material, and both cases were sent for repeat assaying. Both cases passed on the rerun. The corrected assay certificates were loaded into the database.

All the blanks analyzed at ALS, assayed less than or equal to 0.1 g/t Au, which is 10 times the detection limit of 0.01 g/t Au, and are thus considered acceptable. Table 11-4 summarizes the performance of the blanks. Figure 11-4 shows the results over the year.

Table 11-4: Results of blanks used by ODV for the 2021 Program

Total Blanks	2,789
Minimum Au g/t	<0.01
Maximum Au g/t	0.09
Below Detection Limit (# and %)	2,315 (83.0%)
QC Failures (# and %)	2 (0.07%)

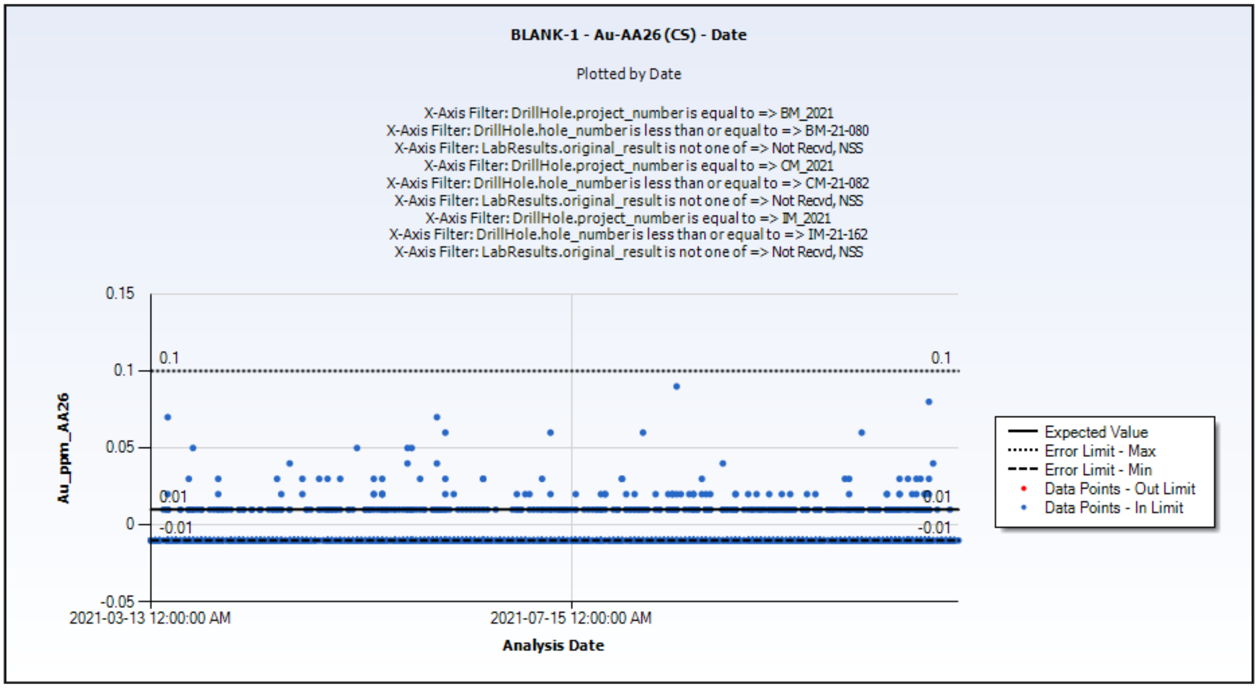


Figure 11-4: Results of blanks for the 2021 Program

11.4.6.1 Comment on Monitoring Contamination

The QP is of the opinion that ODV's QC program for monitoring contamination using blanks is reliable and valid based on the results presented by ODV personnel.

11.5 Conclusions

A total of 564 holes from the 2020 and 2021 Programs were included in the current resource. The QP is of the opinion that the sample preparation, analysis, QA/QC, and security protocols used for the Project follow generally accepted industry standards, and that the data is valid. The QP recommends the implementation of QA/QC on the silver assay results for future programs.

12. Data Verification

This chapter covers the data verification of ODV's diamond drill hole databases used for the resource estimates previously reported in the 2022 FS MRE (the "ODV Databases"), as well as the review and validation of the geological models of each deposit. It also includes the review of information on mined-out areas and the data for selected drill holes, including assays, QA/QC programs, downhole surveys, lithologies, alteration, and structures.

No changes have been made to the resource estimation as previously reported in the 2022 FS MRE; however, there has been mining depletion for the Lowhee Zone and changes to the cut-off grade assumptions as well as elimination of silver in the model

The ODV Databases contain 4,064 completed and validated DDH used for the 2025 FS MRE for the Cariboo Gold Project. These are divided among four databases covering the eight deposits, as follows:

- Cow Mountain database: Cow and Valley deposits (1,473 holes);
- Island Mountain database: Shaft and Mosquito deposits (1,851 holes);
- Barkerville Mountain database: BC Vein and Splays, KL, and Lowhee deposits (578 holes);
- Bonanza Ledge database: Bonanza Ledge deposit (162 holes).

Carl Pelletier, QP, previously conducted site visits from February 1 to 4, 2016, and from May 3 to 12, 2016. The first included visits to the Bonanza Ledge pit, the Cow Mountain area, and the Island Mountain area, while the second focused on core logging facilities, several drill hole collars, drill pads, and mineralized outcrops. Core logging and sampling procedures were discussed with ODV's geologists, covering collar locations, drilling protocols, downhole surveys, logging protocols, oriented core, structural measurements, sampling protocols, and QA/QC protocols.

Eric Lecomte, QP, has also visited the property on February 25, 2022. The visit included a review of the proposed MSC location in Wells and an inspection of the Bonanza Ledge site. The primary objective was to evaluate surface and underground site conditions, including a visual assessment of ground conditions and excavation behaviour at Bonanza Ledge. A second visit was conducted on September 11, 2024, with a primary focus on the Cow portal ramp. The inspection aimed to assess current ground conditions and excavation behaviour specific to the ramp area. Discussions were held with site personnel regarding the operational performance of the Roadheader used for ramp development, including its productivity, ground response, and cycle time performance.

12.1. Historical Work

Historical work subject to verification consisted of the holes used for the 2020 MRE (Beausoleil and Pelletier, 2020). Basic cross-check routines were performed between the current ODV Databases and the previously validated database for the 2020 MRE; i.e., collars, downhole surveys, assay fields. No discrepancies with the current database were found.

12.2. ODV Databases

The ODV Databases were verified for consistency against the Datamine DHLogger export.

The final databases are considered to be of good overall quality. The QPs consider the ODV Databases to be valid, reliable and suitable for the use in the 2025 FS MRE.

12.2.1. ODV Drill Hole Collar and Downhole

The 2020 and 2021 surface drill hole collars were surveyed using a Trimble DGPS unit.

The collar survey information was verified for 5% of the holes from the latest drilling programs, using the raw survey files. The QP verifications also included numerous field checks on collar location (using a handheld GPS). No discrepancies were found.

Downhole surveys (single shot and multi-shots) were conducted on the majority of surface holes. The Reflex survey information was verified for 5% of the holes from the latest drilling programs. No discrepancies were found.

12.2.2. Assays

The QPs had access to the assay certificates for all historical and current holes in the ODV Databases. All assays were verified for selected drill holes from the latest drilling programs, i.e., 5% of the 2020 and 2021 Program. The assays recorded in the databases were compared to the original certificates from ALS Minerals (North Vancouver, BC). The electronic transfer of the laboratory results via e-mail, followed by the electronic transfer directly into the databases by the issuer's staff, allowed for immediate error detection and prevented any typing errors.

No errors or discrepancies were found. The final databases are considered to be of good overall quality. The QPs consider the ODV Databases to be valid and reliable.

Discussions and reviews with the issuer's personnel convinced the QPs that the protocols and the QA/QC program in place are adequate.

12.3. Mined-out Voids

The Lowhee bulk sample has been mined by ODV. The MRE for this deposit is depleted with a solid representing the latest surveyed underground workings and the 2025 bulk sample stope. Both the underground workings and bulk sample are current as of the end of January 2025.

The voids models for all other deposits remain unchanged since the 2022 FS.

The "buffer voids" are a combination of the historical underground workings (stopes, drifts and shafts) of the Cariboo Gold Quartz Mine (Cow Mountain), the Aurum Mine and Mosquito Creek Mine (Island Mountain), and the Barkerville Mountain Mine (Barkerville Mountain) with a 5 m buffer around them.

These "buffer voids" were used to deplete the final resource estimate.

For the Cow, Valley, Shaft, Mosquito, Lowhee, and BC Vein deposits, the drilling program continues to intercept undocumented voids. To reduce the associated risk, a spherical buffer with a 10 m radius was applied around the intercepts to represent a potential stope of 20 m in diameter. These spherical buffers were also used to deplete the final resource estimate and referred to the mining engineers (mining plan and dewatering program).

The QPs consider the level of detail in the void triangulation to be of good quality and reliable, despite some uncertainty related to previously undocumented voids.

12.4. ODV Logging, Sampling, and Assaying Procedures

The drill holes from the 2020 Program and 2021 Program were examined.

All core boxes were labelled and properly stored on core racks or on pallets. Sample tags are present in the boxes and it was possible to validate sample numbers and confirm the presence of mineralization in the reference half-core samples from mineralized sections.

Independent resampling was also completed by the QP of mineralized intervals from the Cow deposit and Mosquito deposit. The results show that low-grade samples yielded grade that are consistent with the original results and more variable results for higher-grade samples (although gold values still considered high), reflecting a nugget effect commonly related to this type of deposit.

Table 12-1 shows the results of the independent resampling.

The pictures in Figure 12-1 illustrate the site visit and core review.

Table 12-1: Results of the independent resampling of material from the Cow and Mosquito deposits

Hole Information			Original (ODV)		1/4-Split (InnovExplo)		Litho. Code (Deposit)
Hole ID	From	To	Sample Number	Au (ppm)	Sample Number	Au (AA26) (ppm)	
CM-21-010	94.80	95.85	B859968	0.03	2155817	0.03	SS (V8-Cow)
CM-21-010	95.85	96.85	B859969	4.05	2155818	5.78	SS (V8-Cow)
CM-21-010	96.85	97.65	B859971	1.18	2155819	0.66	SS (V8-Cow)
CM-21-010	97.65	98.85	B859972	1.20	2155820	0.75	SS (V8-Cow)
CM-21-010	98.85	100.00	B859973	3.02	2155821	1.51	SS (V8-Cow)
CM-21-010	100.00	101.50	B859974	0.12	2155822	0.08	SS (V8-Cow)
IM-21-005	204.00	205.40	C235583	Below DL	2155823	0.02	SS (V39-Mosquito)
IM-21-005	205.40	206.05	C235584	1.94	2155824	2.10	SS (V39-Mosquito)
IM-21-005	206.05	207.15	C235585	17.95	2155825	18.85	SS (V39-Mosquito)
IM-21-005	207.15	208.00	C235586	0.02	2155826	0.03	SS (V39-Mosquito)
IM-21-005	208.00	209.50	C235587	0.02	2155827	0.02	SS (V39-Mosquito)

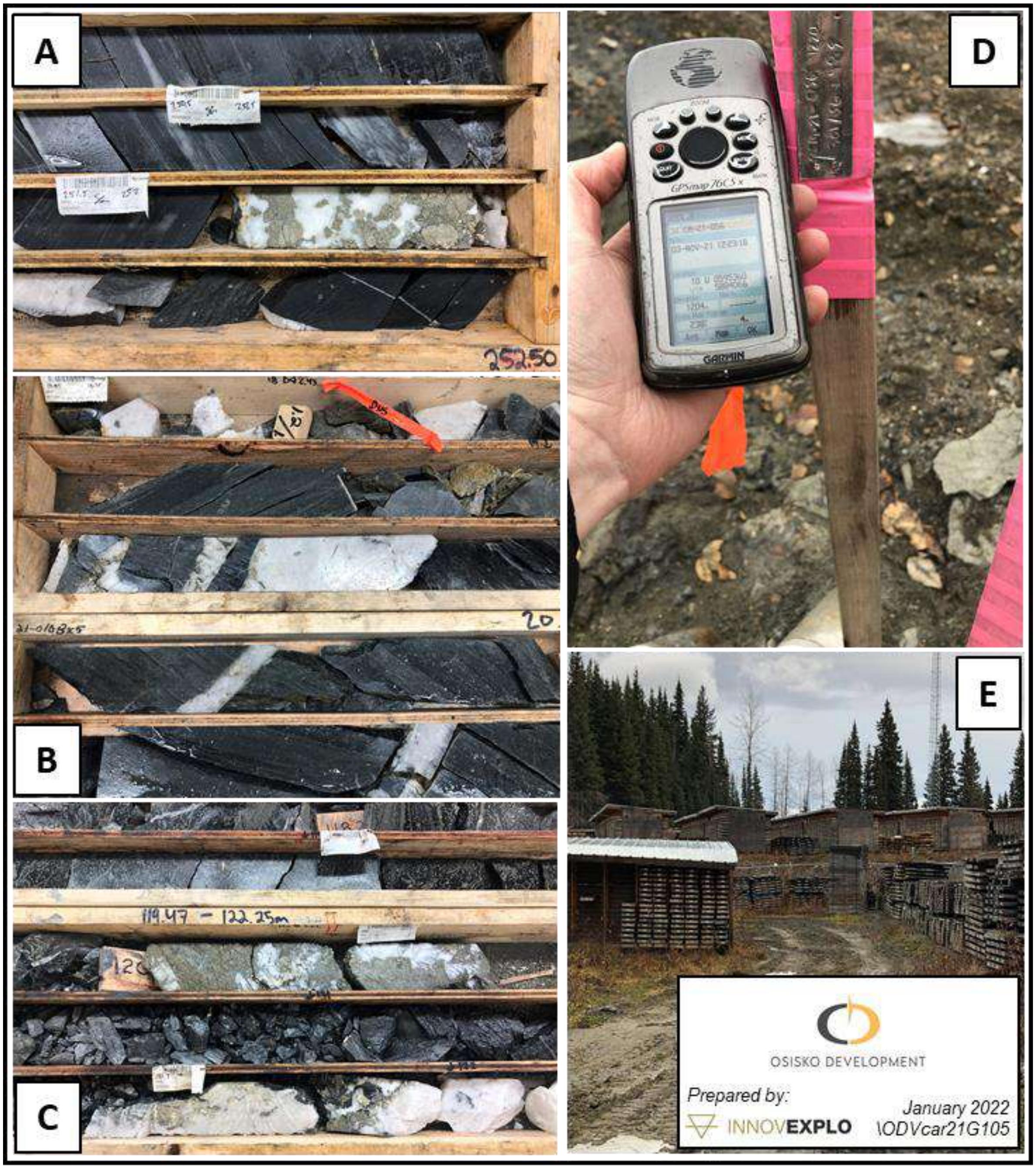


Figure 12-1: Site visit including core review (November 2021)
A) Review of hole BM-21-001 (Lowhee deposit); B) Review of hole CM-21-010 (Cow and Valley deposit); C) Review of hole IM-21-067 (Shaft deposit); D) Field check by QP on collar location; E) External core storage

12.5. Mineral Resource Estimation Process

There have been no changes to the mineral estimation since the 2022 FS.

The QPs reviewed the estimation process described in Chapter 14 for the deposits and consider these models to be acceptable.

12.5.1. Bulk Sample and Drilling Pattern

The drilling data and mapping of the bulk sample was provided by ODV. The QPs have reviewed the data and discussed the Project with the ODV team.

Based on data from ODV mapping (levels 1260 and 1290), the presence of sub-vertical AXPL veins is clear (Figure 12-2). Sub-vertical AXPL veins are observed to pinch and swell, narrow, discontinuous and sometimes can bifurcate. Individual mineralized veins show a thickness range from centimetre to decimetre. The spacing between individual veins within the same corridor ranges from 10 cm to 60 cm. The veins are quartz dominant, with few iron carbonate, and pyrite is the most prevalent sulphide mineral. Some of them show a massive pyritization, up to 30–40 %. AXPL veins preferentially develop within the sandstone-rich units of the gallery.

The mineralized interval observed at the lower level, with a grade higher than 3.0 g/t Au on the AXPL veins corridor, extends approximately 30 m. In that specific interval 2–3 distinct APXL vein were observed, with a range of 20–25 m (Figure 12-2). A deviation, in certain surface holes was also observed, located approximately 200 m from the target area, reveals 5–6 m displacement when comparing the interpretation of the drill zone with their actual spatial location. Considering the location of the mineralized target within the deposit and the method used to access it, it is strongly recommended to use a 12–15 m drilling pattern, with collars located no more than 100–120 m from the target. Particular attention should be given to the boundary of the economic zone, where a tighter drilling pattern (8–9 m) may be necessary to accurately define the start or end of the mineralized zone.

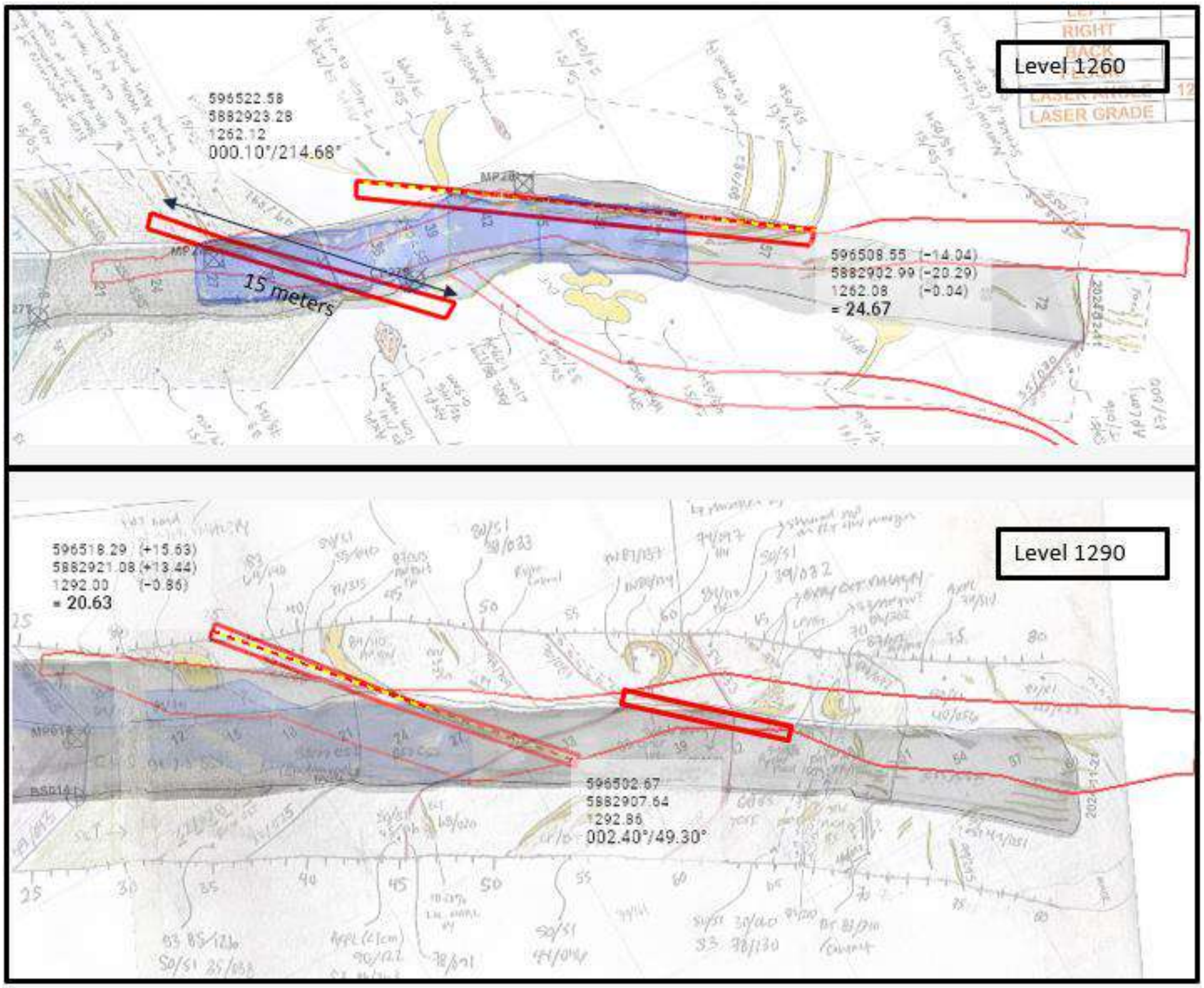


Figure 12-2: Plan view, continuity of AXPL veins

12.6. Conclusion

Regarding the 2016 and 2021 site visits, the QPs data verification demonstrates that the data, interpretation of protocols, and estimation processes are acceptable. The QPs consider the ODV Databases to be valid and of sufficient quality to be used for the MRE herein.

Overall, the QPs believe that the structural understanding and steps involved in bulk sample are generally well understood. However, it is recommended to provide additional support and experience for production purposes within the technical services department.

13. Mineral Processing and Metallurgical Testing

The Cariboo deposit is divided into five main zones: Shaft, Valley, Cow, Lowhee and Mosquito. The metallurgical test work programs were developed by BBA and ODV to characterize the Cariboo Gold Project mineralized material. Extensive work has been carried out to determine the metallurgical characterization of the deposits (Table 13-1). The test programs up to year 2022 were presented in more detail in the previous reports by BBA in 2022 (PEA) and 2023 (FS) (Hardie et al., 2022; 2023).

The main objectives of the 2024/2025 metallurgical programs were to further assess the variability across ore zones, ore sorter amenability, gravity recoverable gold and the ability to generate a sealable flotation concentrate. Mineralogy, thickening, filtration and paste backfill works were completed, and details are presented within this section of the Report.

Table 13-1: Summary of metallurgical test work programs

Testing Facility	Description of Program	Material Tested
2018-2019		
Steinert USA	Ore sorting test work	Drill core variability samples from Shaft, Cow, Valley and Mosquito zones and LOM composite
SGS, Burnaby	Sample characterization, mineralogical analysis, comminution tests, flotation, gravity separation, cyanide ("CN") leaching and cyanide destruction tests	
Cyanco, Nevada	Cyanide leaching and cyanide destruction tests	LOM composite
Pocock, Utah	Sample rheology, thickening and filtration tests	LOM composite Flotation concentrate, Flotation tailings, pre-leach thickener, detoxed tailings
Golder	Paste fill testing and tailings characterization	LOM composite Flotation tailings
2020-2021		
Tomra, Germany	Ore sorting test work	Shaft Zone bulk sample
SGS, Burnaby	Sample characterization, mineralogical analysis, comminution tests, flotation, gravity separation, cyanide leaching and cyanide destruction tests	

Testing Facility	Description of Program	Material Tested
2022		
Steinert, USA	Ore sorting test work	Drill core sample from Lowhee deposit
SGS, Burnaby	Sample characterization, mineralogical analysis, comminution tests, gravity separation, cyanide leaching and cyanide destruction tests	Drill core sample from Lowhee deposit and remaining Shaft Zone bulk sample from 2021 test program
SGS, Lakefield	Rheology	Shaft Zone bulk sample flotation concentrate, Detoxed tailings
FLS, Utah	Thickening and filtration tests	Shaft Zone bulk sample flotation tailings
Cyanco, Nevada	Cyanide leaching and cyanide destruction tests	Shaft Zone bulk sample
WSP Golder	Paste fill testing and tailings characterization	Flotation tailings of Shaft Zone bulk sample
2024-2025		
Base Met, Kamloops	Sample characterization, comminution tests, XRT amenability and bench scale ore sorting, comminution tests, flotation and gravity separation	Drill core variability samples from Shaft, Deep Shaft, Cow, Lowhee and Valley zones, Zone composites and two blend composites
Metso	Thickening and filtration	Flotation products - rougher tail, cleaner scavenger tails and copper concentrate
AMTEL	Gold deportment	Zone composites (Shaft, Cow and Valley)
T Engineering	Paste backfill test work - sample preparation, material characterization, rheological characterization, and UCS testing	Rougher and cleaner scavenger flotation tails

13.1 Sample Selection and Characterization

13.1.1 SGS – 2018

The test work program was designed to determine the mineralized material response to a pre-concentration process and, subsequently, to the cyanide leach process. The test work was conducted at Steinert, SGS, Cyanco, and Pocock testing facilities (Hansuld and Gajo, 2019).

13.1.1.1 Sample Origin and Compositing

The program included composite samples from four zones: Shaft Zone ("SZ"), Cow Zone ("CZ"), Valley Zone ("VZ"), and Mosquito Zone ("MZ"). The material for the composites was obtained from NQ drill core intervals of the drilling campaigns performed by ODV in 2016, 2017, and 2018. The spatial distribution of the selected intervals is represented in Figure 13-1 and Figure 13-2.

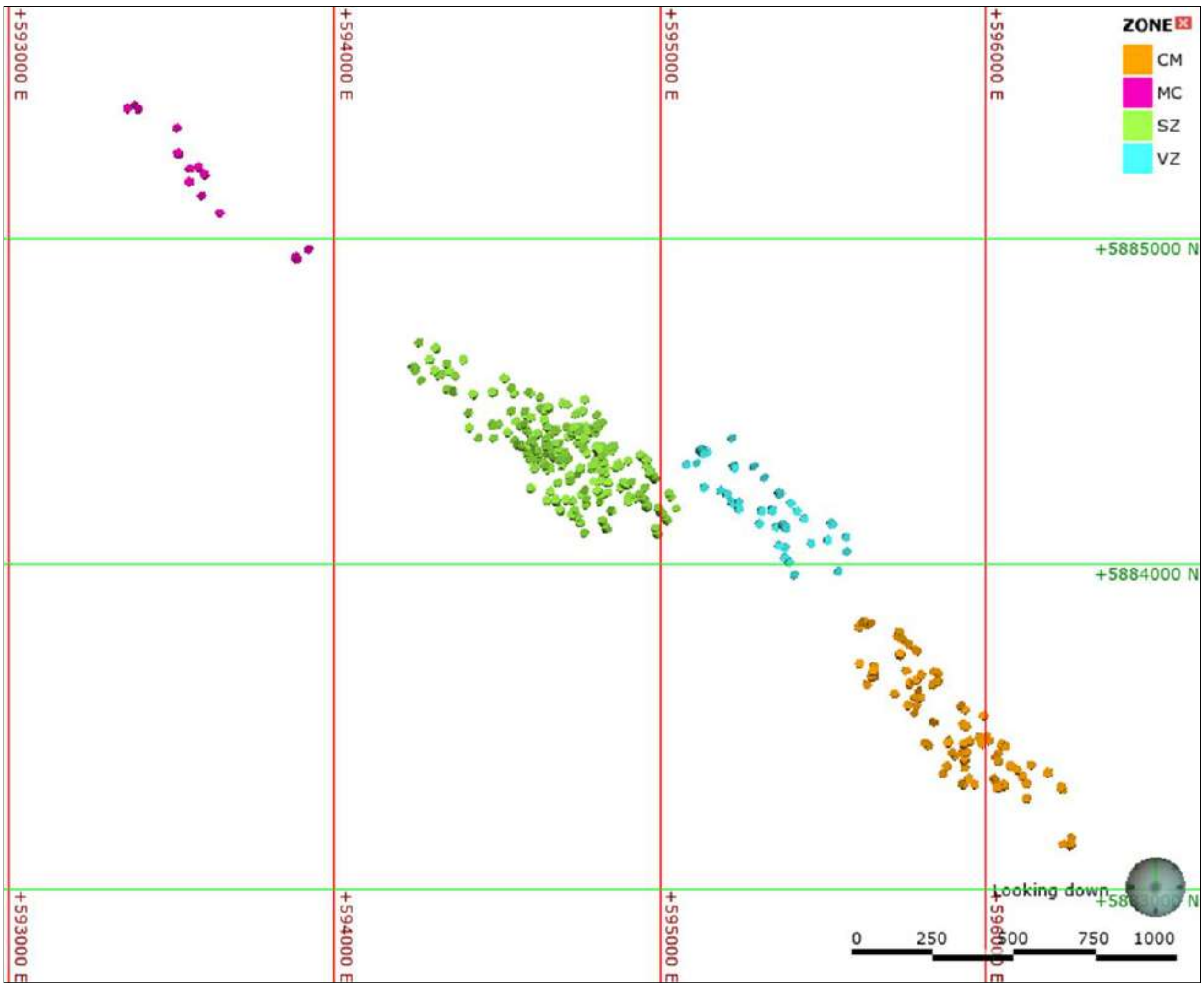


Figure 13-1: 2018 Sample locations – Plan view

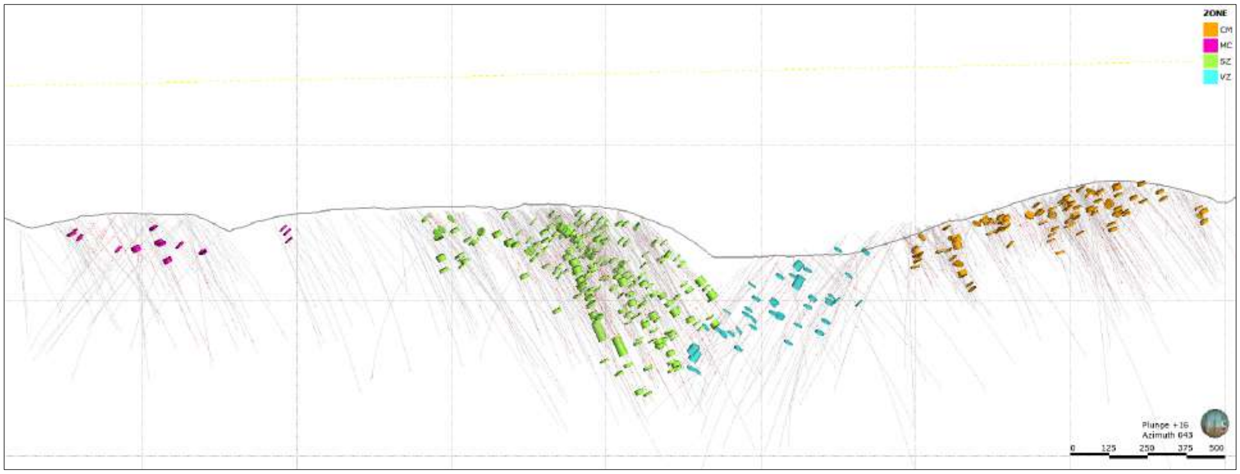


Figure 13-2: 2018 Sample locations – Section view

The selected mineralized intervals for the life of mine ("LOM") composite included wall rock/shoulder samples from quartered NQ drill core and were separated on site into two size fractions: coarse (-60 mm/+10 mm) sized material sent to Steinert in Kentucky, USA for ore sorting test work; and (-10 mm) sized material called "fines" sent to SGS Burnaby, BC, for compositing for metallurgical test work. The amount of material received by SGS is presented in Table 13-2.

Ore sorting pre-concentration products from Steinert were sent back to SGS and blended to create composites for further testing.

Table 13-2: 2018 Material received for LOM composites

Zone	Weight (kg)	
	Fines	Coarse
Cow	257.8	365.2
Valley	59.4	172.4
Mosquito	81.0	33.2
Shaft	287.8	237.2
Shaft 2	411.8	590.8
Total	**1,097.8**	**1,398.8**

Drill core intervals for variability composites that represented gold grade variation of each mineralized zone was selected by ODV and BBA and sent to SGS for a second metallurgical test work campaign. The material received for the variability test work program was 1,243 kg from Shaft Zone, 728 kg from Cow Zone, and 180 kg from Valley Zone (Table 13-3). The drill core intervals received were crushed to -35 mm and screened. The coarse fraction (-35/+10 mm) of the material was sent to Steinert for ore sorting test work. Material sized below 10 mm was kept at SGS for metallurgical test work. Ore sorting products received back from Steinert were assayed and prepared for metallurgical test work at SGS.

Table 13-3: 2018 Material received for variability composites

Zone	Composite Name	Weight (kg)		
		Fines	Coarse	Total
Shaft Zone	SZ-LOM	157	370	**527**
	SZ-High	89	160	**249**
	SZ-Low	87	174	**261**
	SZ-Deep	64	142	**206**
Cow Zone	CZ-LOM	58	167	**225**
	CZ-High	70	139	**209**
	CZ-Low	78	216	**294**
Valley Zone	VZ-LOM	18	38	**56**
	VZ-High	14	29	**43**
	VZ-Low	17	64	**81**

13.1.1.2 Sample Characterization

Head Assays

The samples were submitted to screen metallic analysis ("SMA") for gold at 150 mesh size. Oversize ("O/S") material was assayed via fire assay in its entirety and undersize ("U/S")material was assayed in triplicate. The U/S was also assayed for total sulphur and total organic carbon ("TOC") and semi-quantitative inductively coupled plasma ("ICP") scan for multi-element analysis. Head grade ranges for ore sorter concentrate ("OSC") composites were 3.8 g/t to 9.3 g/t Au and 2.3% to 4.9% total sulphur. The LOM fines composite assayed 3.42 g/t Au and 2.62% S. Table 13-4 summarizes the results of variability and zone LOM composites for fines and OSC.

Table 13-4: Variability composites head assays via SMA and ICP

Sample ID	O/S Mass (%)	U/S Mass (%)	O/S Au (g/t)	U/S Au (g/t)	Calculated Total Au Grade[1] (g/t)	Total TOC[2] Grade (%)	Total S Grade (%)	Total Cu (g/t)	Total Fe (g/t)
Fines (-10 mm)									
SZ LOM	3.7	96.3	10.9	9.3	9.4	0.1	7.4	<40	71,287
SZ High	3.6	96.4	30	20.5	20.9	0.1	10.4	140	102,439
SZ Low	3.7	96.3	79.5	8.2	10.8	0.2	7.8	<40	80,090
SZ Deep	3.9	96.1	7	2.7	2.9	0.5	2.3	121	35,611
CZ LOM	3.7	96.3	20	3.2	3.8	0.4	2.8	<40	50,877
CZ Low	3.9	96.1	46.9	5.7	7.4	0.5	6.7	<40	74,497
CZ High	2.3	97.7	283	14.9	21.2	0.7	8.1	<40	83,066
VZ LOM	2.9	97.1	89.7	5.1	7.7	1.4	3.5	87	89,018
VZ Low	96.9	3.1	14.9	3.5	3.9	0.7	5.4	162	43,225
VZ High	96.7	3.3	48.9	9.5	10.9	0.8	9.3	117	51286
Ore Sorting Samples									
SZ LOM	3.1	96.9	9.4	6.4	6.5	0.2	4.2	105.6	46,736
SZ High	3.1	96.9	55	8.9	9.7	0.1	4.3	278.8	52,407
SZ Low	3.4	96.6	17.1	4.3	4.7	0.1	3.1	33.9	41,011
SZ Deep	3	97	88.4	1.5	3.4	0.5	1.4	49.8	29,508
CZ LOM	3.2	96.8	62.6	2.1	4	0.3	1.7	52.5	34,771
CZ Low	3.3	96.7	15.8	3	3.5	0.3	2.9	<40	37,368
CZ High	3.4	96.6	208.4	6.8	14.1	0.5	5.7	<40	57,561
VZ LOM	4	96	18.7	5.3	5.8	0.9	4.8	118.2	58,423
VZ Low	3.6	96.4	5.4	2.7	2.9	0.5	3.5	63.3	43,225
VZ High	5.4	94.6	14.6	5.7	6	1.2	3.2	108.7	48,112

(1) Head grades calculated using ore sorting product assays.

(2) "TOC": Total organic carbon.

Gold Deportment

A sample of LOM fines composite was submitted for gold deportment analysis at SGS. The study reported 13.8% of total liberated gold (liberated and pure gold minerals) and 86.2% gold associated with other minerals. 59.9% of the gold was associated with pyrite, 7.3% with heavy silicates, and 2.5% with complex sulphides. Approximately 43% of pure gold was found in the coarse size range of 125-180 µm and gold associated with heavy silicates was under 20 µm.

13.1.2 SGS – 2020

13.1.2.1 Sample Origin and Compositing

This test program was completed on Shaft Zone material received from Tomra ore sorting test work (Sun, 2022a). Three composite samples were prepared by combining the U/S material ("prep fines") with the OSC generated at Tomra. The ratio of prep fines to OSC varied for each blend. Blends recipes and head assays are presented in Table 13-5.

Table 13-5: Recipes of composite samples

Sample ID	Weight (%)		Total Mass (kg)	Au (g/t)	Ag (g/t)	Cu (%)	Fe (%)	Zn (%)	S (%)	TC (%)	TOC (%)
	Prep Fines	OSC									
Blend 1	32	68	243.5	8.81	4.28	0.02	5.9	0.14	5.48	0.54	0.11
Blend 2	55	45	243.5	6.22	4.61	0.02	6.21	0.13	6.22	0.49	0.12
Blend 3	72	28	243.5	6.95	4.42	0.02	6.79	0.11	6.38	0.47	0.12

13.1.3 SGS – 2022

13.1.3.1 Sample Origin and Compositing

The program included a composite sample from Lowhee Zone. The material for the composite was obtained from NQ drill core intervals from the diamond drill core of the drilling campaign performed by ODV in 2021. A total of 134.4 kg of material from the Lowhee Zone was sent to SGS Burnaby. At SGS, it was crushed under 35 mm. Minus 10 mm material was screened and saved as prep fines. Plus 10 mm material was sent to Steinert in Kentucky, USA, for ore sorting test work. The gold content and mass distribution of the Lowhee composite is presented in Table 13-6 (Sun, 2022a).

Table 13-6: Lowhee composite gold content

Description	Au (g/t)	Mass (kg)
Sorting Feed (-35 +10 mm)	1.11	103.8
Prep Fines (-10 m)	5.68	30.6
Total – Lowhee Head	**2.15**	**134.4**

13.1.3.2 Sample Characterization

Mineralogy

A subsample of the Lowhee head composite was sent for mineralogical analysis and the X-ray diffraction results show sample composition of 89% silicates, 7% iron carbonates and 3% pyrite (Zhou & Kapusianyk, 2022).

13.1.4 Base Met Labs – 2024

The test work program was designed to determine the mineralized material response to a pre-concentration process and, subsequently, to gravity and rougher and cleaning flotation. It included flotation optimization work and variability work. The test work was conducted at Base Metallurgical Laboratories Ltd.("Base Met Labs"), AMTEL Ltd., and Metso.

13.1.4.1 Sample Origin and Compositing

The material for the test program was obtained from NQ drill core intervals from the diamond drill core of the drilling campaign performed by ODV between 2021 and 2023. About 1.3 t of material was received at the testing facility. The spatial distribution of the selected intervals is represented in Figure 13-1 and Figure 13-2. The program included composite samples from each of the following five zones: Cow, Deep Shaft, Lowhee, Shaft and Valley and 16 variability samples from each of the following five zones: Cow, Deep Shaft, Shaft, Deep Valley and Valley.

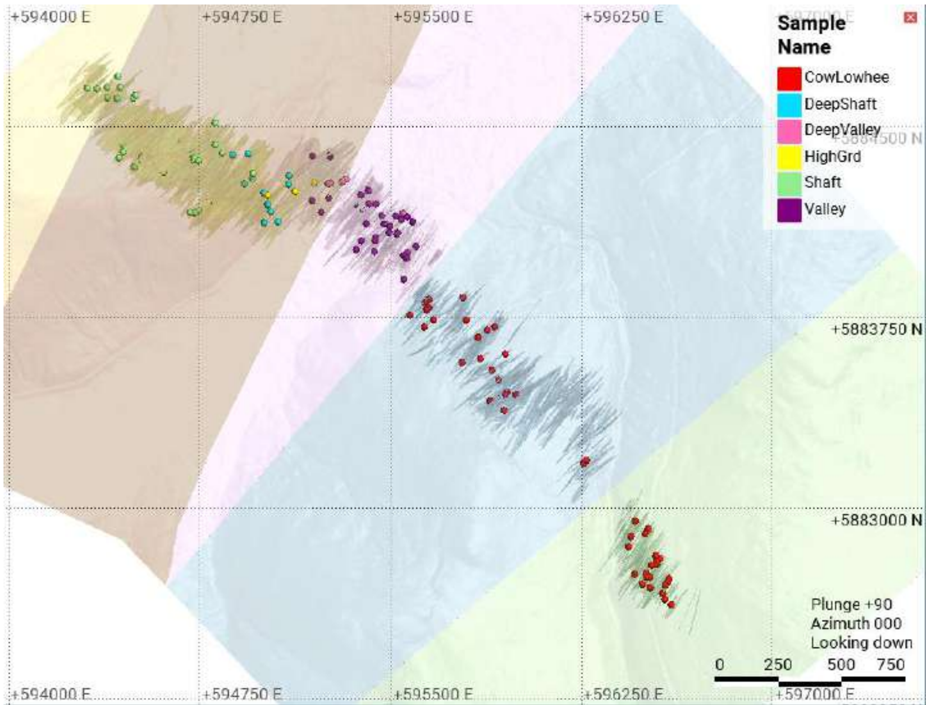


Figure 13-3: 2024 Sample locations – Plan view
Source: ODV, 2025

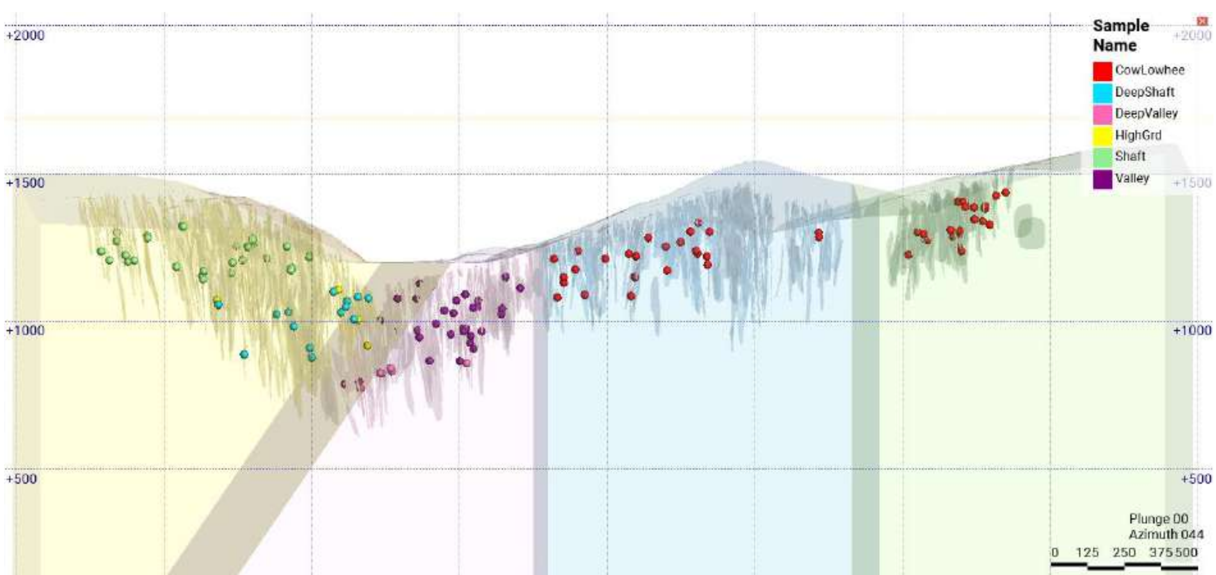


Figure 13-4: 2024 Sample locations – Section view
Source: ODV, 2025

Two production composites were also prepared: the bulk composite and the blend composite. The bulk composite was used for gravity testing and to generate sample for paste backfill and dewatering test work on a sample representative of the first five years of production. The blend composite, more representative of LOM mineral composition, was used to confirm flowsheet performance including a standard locked cycle test ("LCT") on gravity tailings after pre concentration via ore sorting. The mass split by zone of the two composite samples is shown in Table 13-7.

Table 13-7: Composites construction

Zone Composite	Weight (kg)		Weight (k%)	
	Bulk	Blend	Bulk	Blend
Shaft	66	96	41%	51%
Deep Shaft	24		15%	
Lowhee	26	8	16%	4%
Cow	21	44	13%	23%
Valley	24	40	15%	21%
Total Production Composite Mass	**160**	**188**	**100%**	**100%**

13.1.4.2 Sample Characterization

Head Assays

The samples were submitted to 30 g fire assay with Flame Atomic Absorption Spectroscopy ("FAAS") finish for gold determinations. ICP was used to assay silver ("Ag") and arsenic ("As"), and LECO was used to assay sulphur ("S"), carbon ("C") and TOC. FAAS was used for iron ("Fe") assay. The bulk composite was sampled twice to determine the head assay, and the variability samples and Shaft Zone composite were also assayed via SMA at 106 µm screen size. Results are summarized in Table 13-8 and detailed SMA results are presented in Table 13-9.

Table 13-8: Head assays

Zone	Sample	Au	Au[1]	Ag	As	S	C	Fe	TOC
		g/t		g/t	ppm	%	%	%	%
Shaft Zone - Variability									
Shaft	Shaft Var 1	1.4	2.1	1.2	154	2.4	1.8	3.3	0.5
Shaft	Shaft Var 3	4.4	5.7	1.0	389	4.7	1.3	5.7	0.0
Shaft	Shaft Var 5	11.6	12.1	2.4	356	4.4	1.0	5.0	0.0
Shaft	Shaft Var 7	3.6	3.7	1.8	1540	1.4	0.8	2.3	0.1
Deep Shaft	Shaft Var 2	5.4	5.9	0.7	423	4.6	2.1	6.9	0.0
Deep Shaft	Shaft Var 4	4.0	5.3	1.2	234	5.8	1.1	6.6	0.0
Deep Shaft	Shaft Var 6	2.4	2.5	1.4	114	2.3	1.4	4.7	0.0
Deep Shaft	Shaft Var 8	6.7	5.9	1.6	168	1.2	2.1	4.1	0.0
South Zone - Variability									
Cow	South Var 3	4.5	4.5	0.4	211	4.1	0.9	4.2	0.3
Cow	South Var 4	0.7	1.1	0.2	78	0.9	1.3	3.4	0.0
Cow	South Var 7	0.2	0.5	0.2	88	1.1	1.5	3.7	0.1
Cow	South Var 8	0.2	0.8	0.2	35	1.0	2.0	5.1	0.1
Deep Valley	South Var 2	2.2	2.3	0.4	227	3.9	1.3	4.3	0.3
Deep Valley	South Var 6	0.8	0.7	0.2	91	1.4	0.8	2.3	0.0
Valley	South Var 1	2.9	2.1	0.2	134	4.1	1.0	2.9	0.5
Valley	South Var 5	2.1	2.4	0.2	68	1.2	1.8	5.4	0.0
Zone Composites									
Shaft	Shaft Composite	3.4	3.8	0.6	1229	3.5	1.4	5.3	0.2
Deep Shaft	Deep Shaft Composite	4.6		0.9	234	2.7	1.5	3.8	0.1
Lowhee	Lowhee Composite	4.0		0.5	160	3.1	0.6	3.4	0.2
Cow	Cow Composite	1.5		0.4	142	1.8	1.3	3.4	0.2
Valley	Valley Composite	3.4		0.8	244	3.7	1.4	4.3	0.2
Production Composite									
LOM	Bulk Comp Hd 1	2.6		1.1	457	3.3	1.3	4.4	0.2
	Bulk Comp Hd 2	3.1		0.9	358	2.8	1.4	4.0	0.2
	AVERAGE	**2.8**		**1.0**	**408**	**3.0**	**1.3**	**4.2**	**0.2**

[1] Screen metallics assay

Table 13-9: SMA results

Zone	Sample ID	O/S Mass (g)	U/S Mass (g)	O/S Au (g/t)	U/S Assay 1 Au (g/t)	U/S Assay 2 Au (g/t)	Calculated Total Au Grade (g/t)
Shaft	Shaft Composite	25.1	474.9	9.7	3.63	3.35	3.8
Shaft	Shaft Zone Var 1	27.8	472.2	4.59	1.64	2.29	2.11
Shaft	Shaft Zone Var 3	28.4	471.6	30.5	3.98	4.34	5.65
Shaft	Shaft Zone Var 5	27.4	472.6	13.6	11.7	12.3	12.1
Shaft	Shaft Zone Var 7	27.7	472.3	45.4	1.46	1.12	3.73
Deep Shaft	Shaft Zone Var 2	24.3	475.7	21	5.27	5.00	5.91
Deep Shaft	Shaft Zone Var 4	29.7	470.3	11.7	4.93	4.83	5.29
Deep Shaft	Shaft Zone Var 6	24.1	475.9	5.96	2.79	1.89	2.51
Deep Shaft	Shaft Zone Var 8	25.7	474.3	9.39	5.63	5.70	5.86
Cow	South Zone Var 3	29.3	470.7	13.8	4.51	3.36	4.51
Cow	South Zone Var 4	29.1	470.9	5.48	0.75	0.82	1.06
Cow	South Zone Var 7	27.6	472.4	4.33	0.29	0.23	0.48
Cow	South Zone Var 8	22.2	477.8	4.3	0.53	0.77	0.81
Deep Valley	South Zone Var 2	26.1	473.9	9.62	1.94	1.81	2.28
Deep Valley	South Zone Var 6	25.2	474.8	1.44	0.66	0.72	0.73
Valley	South Zone Var 1	23.1	476.9	3.85	2.14	1.96	2.13
Valley	South Zone Var 5	18.8	481.2	17.3	1.93	1.68	2.39

From SMA results we can see the gold grade of the coarse fraction higher than 3-fold of the finer fraction grade in three of the eight variability samples for Shaft Zone, and in six of the eight variability samples for South Zone. A significantly higher gold grade on the O/S might be the indication of gravity-recoverable gold in the sample.

Diagnostic Leaching

Diagnostic leaching tests were performed to assess gold association on 16 variability samples, eight samples from Shaft Zone and eight samples from South Zone (comprised of Cow and Valley zones), and run of mine ("ROM") composite samples from each of the following five zones: Cow, Deep Shaft, Lowhee, Shaft and Valley. The three-stage diagnostic includes intensive cyanide leaching to infer free and exposed gold, Aqua Regia digestion to infer gold associated to sulphides, and fire assay to infer gold encapsulated in silica. All samples were ground to a target P_{80} of 45 µm in preparation for the test. Results are summarized in Table 13-10 (Base Met Labs, 2025).

Table 13-10: Diagnostic leaching results

Zone	Sample	Test	Gold Distribution - %			Head Assay
			Intensive Cyanide Leach	Aqua Regia Digest	Fire Assay	Au (g/t)
Shaft	Shaft Var 1	T02	93.4	2.6	4.0	2.1
Shaft	Shaft Var 5	T06	95.2	4.7	0.1	12.0
Shaft	Shaft Var 7	T08	98.1	1.7	0.2	4.8
Shaft	Shaft Var 3	T04	98.9	1.0	0.1	17.9
Deep Shaft	Shaft Var 4	T05	94.3	5.4	0.2	4.4
Deep Shaft	Shaft Var 2	T03	95.0	4.8	0.2	5.4
Deep Shaft	Shaft Var 8	T09	96.7	3.1	0.2	5.8
Deep Shaft	Shaft Var 6	T07	97.5	2.2	0.3	3.2
Cow	South Var 7	T16	81.2	16.7	2.1	0.5
Cow	South Var 8	T17	87.4	11.0	1.6	0.6
Cow	South Var 4	T13	92.3	6.6	1.1	0.9
Cow	South Var 3	T12	95.9	2.5	1.5	3.9
Deep Valley	South Var 2	T11	93.3	6.3	0.4	2.2
Deep Valley	South Var 6	T15	94.0	4.5	1.5	0.7
Valley	South Var 1	T10	98.1	1.1	0.8	2.6
Valley	South Var 5	T14	99.7	0.0	0.3	1.8
Shaft	Shaft Composite	T18	94.0	4.3	1.7	3.5
Deep Shaft	Deep Shaft Composite	T19	94.5	4.4	1.1	2.7
Lowhee	Lowhee Composite	T20	93.3	6.1	0.6	3.6
Cow	Cow Composite	T21	96.5	0.0	3.5	2.3
Valley	Valley Composite	T22	96.8	2.6	0.6	3.4

On average, the eight variability samples from Shaft and Deep Shaft zones had 96% of the gold leachable by cyanide, 3.2% dissolved by Aqua Regia and 0.7% incapsulated in silica while the average for the Shaft and Deep Shaft composites was 94% of the gold leachable by cyanide, 4.3% dissolved by Aqua Regia and 1.4% incapsulated in silica.

Gold Deportment

A gold deportment study was completed by AMTEL Ltd. in October 2024 (AMTEL, 2024). AMTEL Ltd. received three samples representing Shaft, Valley and Cow zones.

The following observations were made:

- Rock and sulphide mineral assemblages were found to be similar amongst all the samples. The sulphides content, namely pyrite, was lower in the Cow Zone deposit.
- Five split were assayed to determine the gold grade of the samples. The Shaft, Valley and Cow zones had gold grades of 3.82 g/t, 4.83 g/t, and 1.52 g/t, respectively.
- The ores TOC content ranged from 0.17–0.21%. It was noted that the carbon matter did not appear highly active and minimal potential for preg-robbing was observed in samples for Valley and Cow zones. No preg-robbing material was seen for the Shaft Zone sample.
- Leach tests were performed under 'intensive' conditions (24 h leach time, 5 g/l sodium cyanide ("NaCN"), 30% solids, and approximately 30 kg/t activated carbon) for head sample and each of the individual size fractions used to determine the gold deportment.
- Theoretical flotation performance calculations were completed to determine the potential metallurgical response of the three mineralized zones and findings are summarized in Table 13-11, along with the leaching test results.

Table 13-11: Leaching and flotation results

Sample ID	Leaching				Flotation (Estimations)		
	Description	Feed Grade g/t Au	Residue Grade g/t Au	Au Recovery %	Rougher Conc. Grade ppm Au	Mass Pull %%	Rougher Recovery %
Shaft	Head Sample	3.802	0.222	94.2	42.9	10.2	95
	Individual Fractions	4.595	0.37	92			
Valley	Head Sample	4.826	0.291	94	65.5	8.5	97
	Individual Fractions	5.739	0.298	94.8			
Cow	Head Sample	1.506	0.073	95.2	36	5.4	96
	Individual Fractions	2.014	0.08	96			

Source: AMTEL, 2024

Both leaching and theoretical flotation yielded positive recovery results. The forecast for rougher flotation gold recovery ranged from 95–97%. The forecast for whole ore leaching shows gold recoveries of 92–96%.

13.2 Comminution Test Work

13.2.1 SGS – 2018

Samples were submitted to crusher work index ("CWi"), Bond ball mill work index ("BWi"), and abrasion index ("Ai") testing at SGS. The OSC from the Shaft Zone had CWi ranging from 5.7 kWh/t to 6.9 kWh/t, while the unsorted material from the Cow Zone had a CWi ranging from 12.4 kWh/t to 18.5 kWh/t. BWi tests were performed on the fines and OSC individually. The fines had a BWi ranging from 10.7 kWh/t to 12.1 kWh/t for mesh size 150, and 14.2 kWh/t for mesh size 230. The OSC had a BWi ranging from 14.0 kWh/t to 17.0 kWh/t for mesh size 230.

The CWi and BWi results categorize the hardness of the mineralized material as medium. The Ai categorized the mineralized material abrasiveness as medium for the sorted Shaft Zone material, and moderately abrasive for the unsorted Cow Zone material.

13.2.2 SGS – 2022

Subsamples of Lowhee composite were submitted for BWi and Ai testing at SGS. BWi result was 13.2 kWh/t, and categorized the hardness of the mineralized material as moderately soft, and the Ai result was 0.285, categorized as medium abrasive.

13.2.3 Base Met Labs – 2024

The Base Met Labs campaign included the following comminution test work to assess variability across the ore zones:

- SMC Testing (completed by JKTech);
- Hardness Index Test ("HIT");
- Bond test work (RWi, BWi and Ai).

SMC Results

The test work was conducted on composite samples from each of the following five zones: Cow, Deep Shaft, Lowhee, Shaft and Valley. SMC Test® results are summarized in Table 13-12 and Table 13-13, and Figure 13-5 and Figure 13-6.

Table 13-12: SMC Test® results

Sample Designation	DWi (kWh/m³)	DWi (%)	Mi Parameters (kWh/t)			SG
			Mia*	Mih*	Mic*	
Cow	4.9	28	15	10.4	5.4	2.73
Deep Shaft	4.4	22	13.4	9.1	4.7	2.78
Lowhee	3.8	16	12.1	8	4.1	2.72
Shaft	4.7	25	14.2	9.8	5.1	2.79
Valley	3.5	14	11.2	7.3	3.8	2.8

DWi = Drop Weight index
Mi = Ore work index (includes Mia, Hih and Mic)
Mia = Coarse ore work index; Mih = HPGR ore work index; Mic = Crushing ore work index
Source: JKTech, 2024

Table 13-13: Parameters derived from the SMC Test® results

Sample Designation	A	b	A*b	ta	SCSE[1] (kWh/t)
Cow	67	0.83	55.6	0.53	8.58
Deep Shaft	65.3	0.98	64	0.6	8.16
Lowhee	66.1	1.1	72.7	0.69	7.69
Shaft	62.3	0.95	59.2	0.55	8.44
Valley	63.6	1.25	79.5	0.74	7.51

[1] "SCSE": SAG Circuit Specific Energy

Overall, Cariboo samples are classified as moderate hardness according to JKTech database.

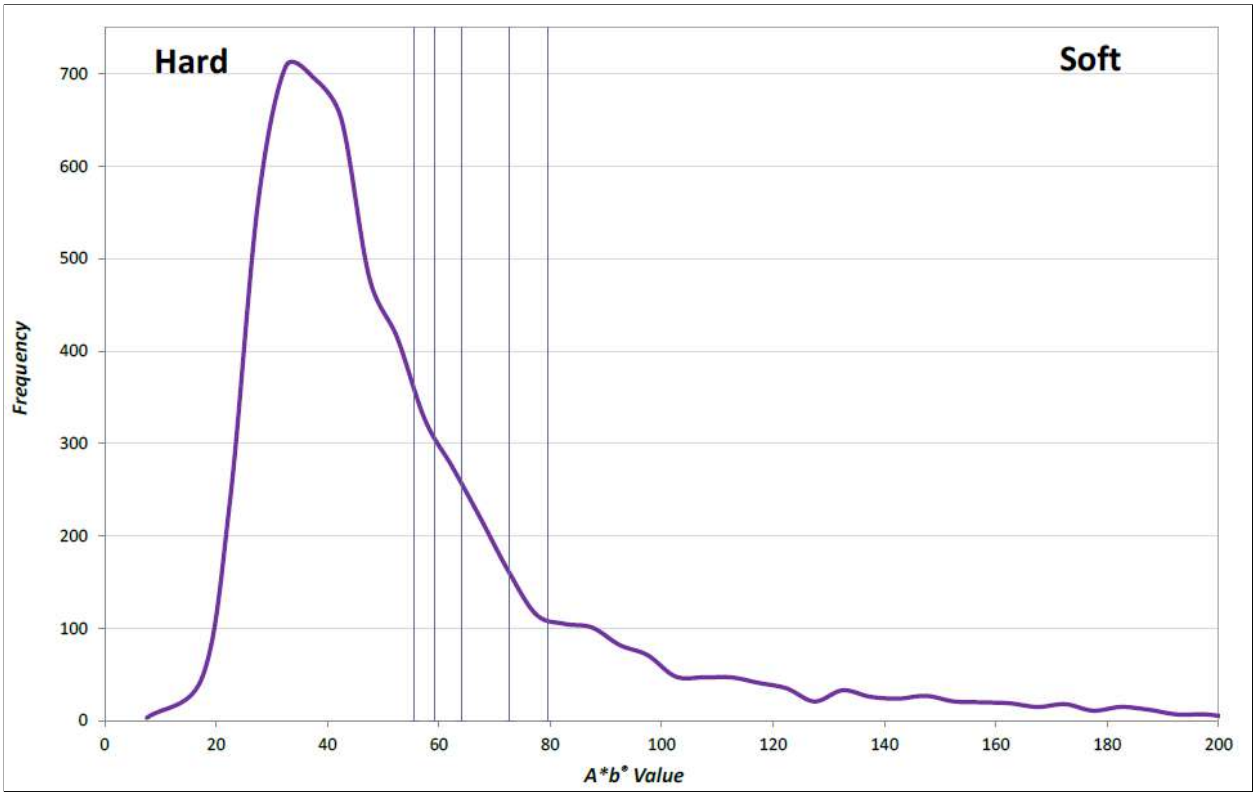


Figure 13-5: Frequency distribution of A*b in the JKTech database
(Source: JKTech, 2024)

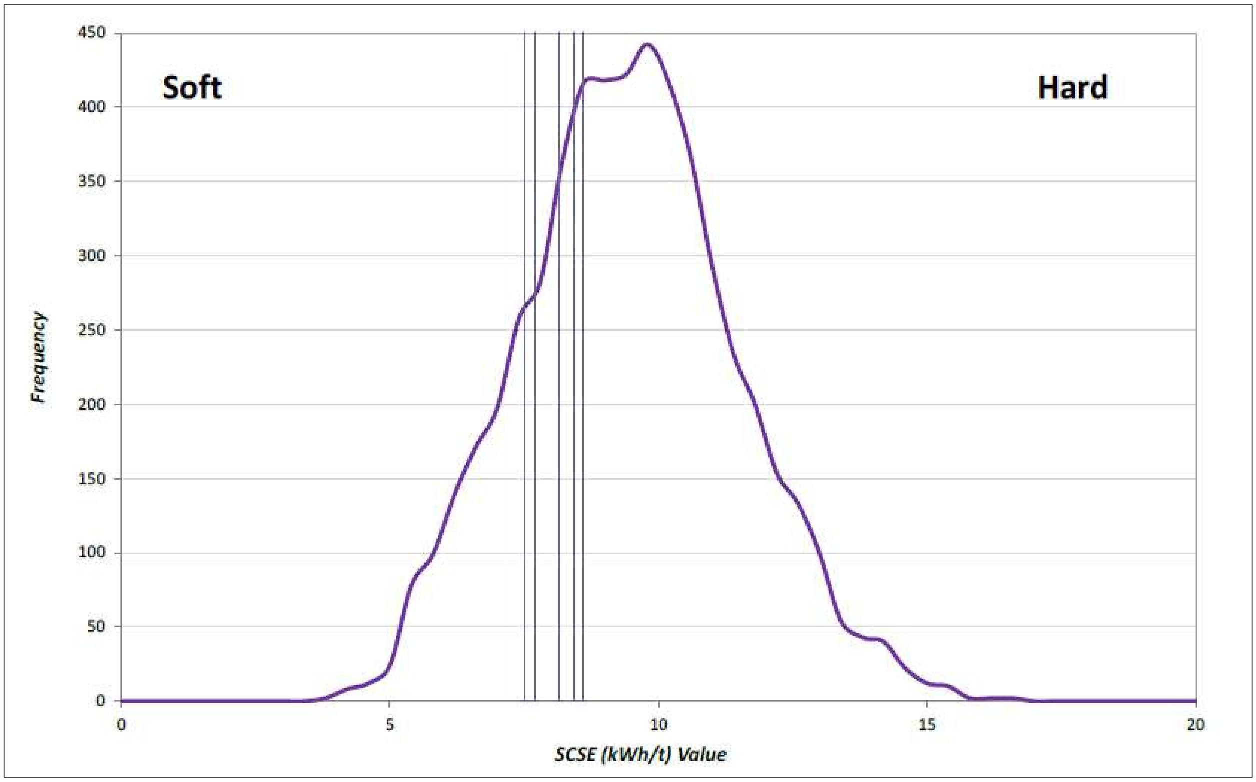


Figure 13-6: Frequency distribution of A*b in the JKTech database
(Source: JKTech, 2024)

Hardness Index Test

SimSAGe Pty Ltd. designed the HIT to enable rapid, on-site rock hardness assessments, providing instant insights into material variability at mining locations. The HIT leverages a key principle of single particle impact testing, allowing for a reliable estimation of the Axb index through a precise, low-energy test Industrial trials have validated its accuracy, demonstrating that HIT results closely match Axb values obtained through the JK Drop Weight Test or SMC Test—provided the same fragments and standardized sizing protocols are used in both methods. (Kojovic, 2016; Napier-Munn et al., 1996).

The HIT was intended to assess variability within the Shaft Zone and South Zone (comprised of Cow and Valley). Results are presented in Table 13-14.

Table 13-14: HIT test work results

Zone	Sample Designation	HIT – Axb (16 mm x 19 mm)			
		Set 1	Set 2	Set 3	Av
Shaft	Shaft Zone 0	65	120	65	83
Shaft	Shaft Zone 1	51	63	67	61
Deep Shaft	Shaft Zone 2	94	85	69	83
Shaft	Shaft Zone 3	68	87	67	74
Deep Shaft	Shaft Zone 4	95	67	121	94
Shaft	Shaft Zone 5	53	93	88	78
Deep Shaft	Shaft Zone 6	65	50	45	53
Shaft	Shaft Zone 7	53	43	57	51
Deep Shaft	Shaft Zone 8	77	84	64	75
Valley	South Zone 1	92	72	83	82
Deep Valley	South Zone 2	56	57	74	63
Cow	South Zone 3	76	58	65	67
Cow	South Zone 4	66	67	67	67
Valley	South Zone 5	60	71	47	59
Deep Valley	South Zone 6	53	112	51	72
Cow	South Zone 7	96	94	86	92
Cow	South Zone 8	63	53	56	57

Bond Test Work

The BWi and Ai test work was conducted on OSC for Shaft Zone and ROM composite samples from each of the following five zones: Cow, Deep Shaft, Lowhee, Shaft and Valley. Bond Rod Work Index ("RWi") was only performed on the Shaft Zone composite sample.

BWi was tested at sieve size of 212 µm and RWi at sieve size 1,180 µm. Table 13-15 summarizes test results, including test feed size (F_{80}), test product size (P_{80}) and net U/S produced per mill revolution (grams per revolution ("Gpr")).

Table 13-15: Bond test work results

Sample Designation	Bond RWi				Bond BWi				Abrasion Index
	F_{80}-µm	P_{80}-µm	Gpr	kWh/t	F_{80}-µm	P_{80}-µm	Gpr	kWh/t	
Shaft (OSC)					1,786	151	2.39	12.2	
Shaft	9,292	915	15.08	10.9	1,993	159	2.65	11.3	0.11
Deep Shaft					1,887	155	2.62	11.3	0.12
Lowhee					1,952	162	2.88	10.8	0.20
Cow					1,959	159	2.75	11.0	0.14
Valley					2,003	162	2.52	11.9	0.20

13.3 Ore Sorting Test Work

13.3.1 Steinert – 2018

Ore sorting test work was conducted at Steinert facilities in Kentucky, USA, in August 2018. The initial test work program focused on 1,264 kg of drill core material, from Shaft, Cow, Valley and Mosquito zones, crushed to -60 mm/+10 mm. The ore sorting products of two samples from Shaft Zone and Cow Zone were recombined to reproduce the previously tested -60 mm/+10 mm feed, crushed to -35 mm/+10 mm, and sent back to Steinert for ore sorting. A summary of these samples is presented in Table 13-16.

Table 13-16: Ore sorted LOM composites

Zone	Sample ID	Mass (kg)	Size Fraction
Shaft	SZ1	239	-60 mm/+10 mm
Shaft	SZ2	252	
Cow	CZ	325	
Valley	VZ1	46	
Mosquito	MC	8	
Run of Mine	ROM 1	30	
Run of Mine	ROM 2	70	
Run of Mine	ROM 1-2	62	
Valley	VZ2	70	
Shaft	LOM-SZ	178	
Shaft	SZ	66	-35 mm/+10 mm
Cow	CZ	58	

The second ore sorting test work program involved the variability samples from three mineralized deposits. Ten variability samples sized -35 mm/+10 mm were ore sorted at Steinert in January 2019. The summary of the variability samples is presented in Table 13-17.

Once the ore sorting tests were completed, the ore sorting products were sent to SGS for analysis along with the -8 mm fines generated during ore sorting due to sample handling.

Table 13-17: Ore sorted variability composites

Zone	Sample ID	Mass (kg)	Size Fraction
Shaft	SZ LOM	330	-35 mm/+10 mm
	SZ High Grade	149	
	SZ Low Grade	158	
	SZ Deep	129	
Cow	CZ LOM	161	
	CZ Low Grade	208	
	CZ High Grade	134	
Valley	VZ LOM	36	
	VZ Low Grade	61	
	VZ High Grade	27	

13.3.1.1 Sensor Evaluation

In order to determine the best sensor suited to the project material, hand-picked core samples representing mineralized rock and waste rock were prepared. The response of these two groups of rocks to X-Ray Transmission ("XRT"), colour camera, induction, and XRT/laser combination scanners were evaluated.

An XRT/laser combination was used for the testing based on the results of the evaluation.

13.3.1.2 Flowsheet Tests and Results

The tests on each sample were run in a five-stage process. The first four stages were "rougher" stages consisting of XRT only at different scanner settings. The purpose of the XRT scanner is to collect the sulphide minerals. The fifth stage was a laser scanner "scavenger" to collect quartz-bearing particles.

The XRT rougher stage conditions were set up to be highly selective at first to produce the highest-grade concentrate with the least amount of mass pull. With each additional stage, the conditions became less selective, increasing recovery but decreasing concentrate grade. Conditions for maximum gold recovery and simultaneous waste rejection were selected based on the analysis of the results. A summary of the results for each sample tested is presented in Table 13-18. The "Fines" in the table refers to the fines generated during the sorting test manipulation. According to the ore sorter strategy, they can be combined with concentrate. The mass-recovery curves for each sample are illustrated in Figure 13-7.

Table 13-18: Ore sorting test results – ROM composites

Zone	Sample ID	Feed Grade (Au, g/t)	Mass Pull (%)			Au Distribution (%)			Product Grade (Au, g/t)		
			Conc.[(1)]	Waste	Fines	Conc.[(1)]	Waste	Fines	Conc.[(1)]	Waste	Fines
Shaft	SZ1	7.48	70.4	29.6	4.2	99.2	0.8	3.7	10.8	0.2	6.6
Shaft	SZ2	7.35	60.7	39.3	2.6	98.2	1.8	4.5	11.9	0.3	12.7
Cow	CZ	4.67	48.7	51.3	4.1	97.4	2.6	5.6	9.6	0.2	6.4
Valley	VZ1	3.77	78.1	21.9	3.1	99.0	1.0	7.9	4.6	0.2	9.7
Mosquito	MC	4.92	86.1	13.9	6.7	99.1	0.9	8.9	5.6	0.3	6.3
Run of Mine	ROM 1	5.19	82.2	17.8	3.8	99.2	0.8	7.9	6.0	0.2	10.7
Run of Mine	ROM 2	5.3	52.4	47.6	11.2	95.1	4.9	10.9	10.8	0.5	5.2
Run of Mine	ROM 1-2	6.89	42.4	57.6	0.1	96.9	3.1	0.2	15.8	0.4	9.6
Valley	VZ2	3.77	44.2	55.8	0.9	97.4	2.6	1.1	8.4	0.2	4.5
Shaft	LOM-SZ	9.27	65.2	34.8	1.9	98.9	1.1	1.4	14.3	0.3	6.8
Shaft	SZ (-35 mm/+10 mm)	5.94	44.2	55.8	0.9	96.6	3.4	1.2	13.1	0.4	7.8
Cow	CZ (-35 mm/+10 mm)	7.10	65.2	34.8	1.9	77.5	22.5	2.8	8.4	4.6	10.9
Global Average		**5.97**	**61.7**	**38.4**	**3.5**	**96.2**	**3.8**	**4.7**	**9.9**	**0.7**	**8.1**
Minimum		**-**	**42.4**	**13.9**	**0.1**	**77.5**	**0.8**	**0.2**	**4.6**	**0.2**	**4.5**
Maximum		**-**	**86.1**	**57.6**	**11.2**	**99.2**	**22.5**	**10.9**	**15.8**	**4.6**	**12.7**

(1) Concentrate ("Conc.") mass recovery, gold distribution, and grade values include fines.

Table 13-19: Ore sorting test results – Variability composites

Zone	Sample ID	Feed Grade (Au, g/t)	Mass pull (%)			Au distribution (%)			Product grade (Au, g/t)		
			Conc.[(1)]	Waste	Fines	Conc.[(1)]	Waste	Fines	Conc.[(1)]	Waste	Fines
Shaft	SZ LOM	6.47	33.6	66.4	0.1	86.8	13.2	0.2	16.73	1.28	9.66
	SZ High Grade	9.74	44.5	55.5	0.1	92.0	8.0	0.3	20.17	1.40	18.60
	SZ Low Grade	4.68	34.8	65.2	0.1	93.5	6.5	0.2	12.58	0.46	8.99
	SZ Deep	3.41	32.4	67.6	0.1	35.6	64.4	0.2	3.74	3.25	6.32
Cow	CZ LOM	3.95	65.7	34.3	6.8	64.0	36.0	5.6	3.85	4.14	3.24
	CZ Low Grade	3.45	65.6	34.4	4.7	96.2	3.8	7.1	5.06	0.38	5.21
	CZ High Grade	14.05	70.0	30.0	9.1	99.7	0.3	5.3	20.01	0.15	8.14
Valley	VZ LOM	5.77	61.2	38.8	5.8	98.4	1.6	11.1	9.27	0.24	5.77
	VZ Low Grade	2.90	56.3	43.7	5.4	95.5	4.5	7.3	4.92	0.29	3.86
	VZ High Grade	5.96	43.0	57.0	6.3	97.6	2.4	8.0	13.53	0.25	7.65
SZ Average		**6.07**	**36.3**	**63.7**	**0.1**	**77.0**	**23.0**	**0.2**	**13.30**	**1.60**	**10.89**
CZ Average		**7.15**	**67.1**	**32.9**	**6.9**	**86.6**	**13.4**	**6.0**	**9.64**	**1.56**	**5.53**
VZ Average		**4.88**	**53.5**	**46.5**	**5.8**	**97.2**	**2.8**	**8.8**	**9.24**	**0.26**	**5.76**
Global Average		**6.04**	**50.7**	**49.3**	**3.9**	**85.9**	**14.1**	**4.5**	**10.99**	**1.18**	**7.74**

(1) Concentrate mass recovery, gold distribution, and grade values include fines.

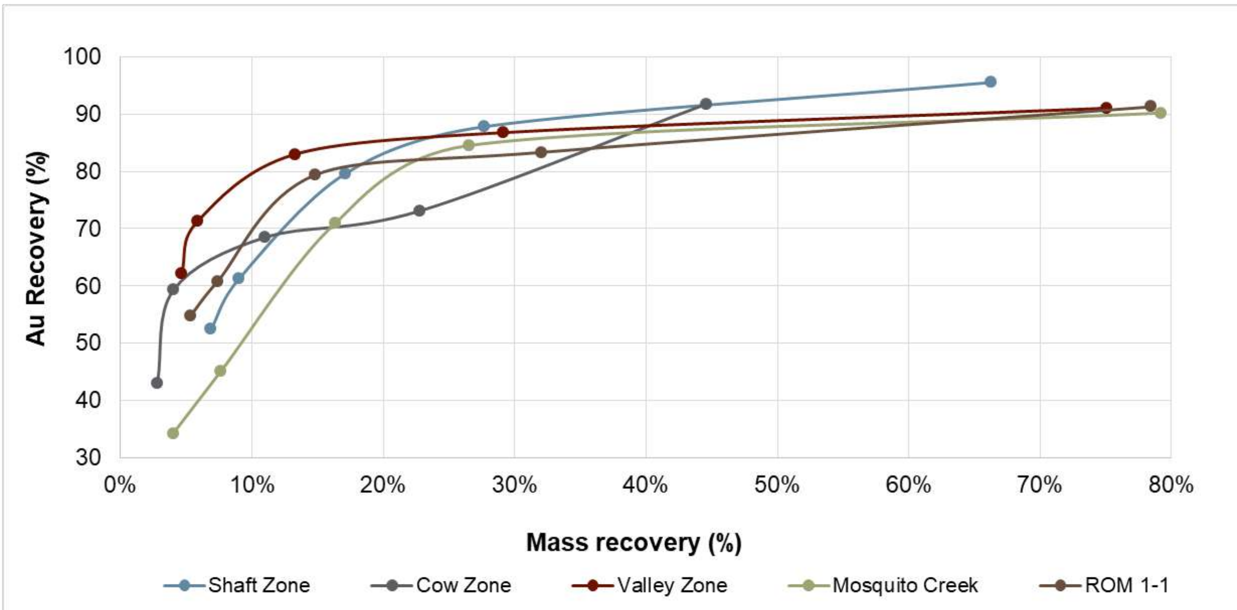


Figure 13-7: Ore sorting mass-recovery curves

The XRT was successful in recovering 70% to 94% of the gold after four roughing stages targeting sulphide bearing rock with only 23% to 37% mass pull. The implementation of a laser scavenging step to collect quartz particles increased gold recovery on average by approximately 2% for Shaft Zone samples and approximately 9% for Cow Zone and Valley Zone samples. However, the associated mass recovery increased by 19% on average; ranging between 7% and 32%. In general, Shaft Zone samples had lower mass recoveries at the laser stage. With further testing, it may be possible to optimize the ore sorter setting for quartz recovery to maintain gold recovery and limit mass pull.

The samples prepared and sent to Steinert were screened to the designated feed sizes (-60 mm/+10 mm or -35 mm/+10 mm); however, there were fines generated during transport, material handling, and testing. The mass and gold recoveries of the generated fines (-8 mm) collected at the end of the tests were included in the total recovery and grade. It is critical to consider the fines during circuit design as they represent an average of 5% of the gold fed at the ore sorting stage. In the test work, the concentrate was targeted for separation by air jet while the fines reported with the waste to the conveyor belt and then were screened out. In operations, the waste will be removed by air jetting and the fines will report with the concentrate (Steinert, 2019).

13.3.1.3 Ore Sorter Performance

Table 13-20: Summary – Average ore sorting recoveries

Zone	Feed grade (Au, g/t)	Mass recovery (%)	Au recovery (%)	Conc. grade (Au, g/t)	Waste grade (Au, g/t)
Shaft	6.8	48.2	87.6	12.9	0.9
Cow	6.6	63.0	87.0	9.4	1.9
Valley	4.4	56.6	97.6	8.1	0.2

The average mass recovery of the Cow Zone and Valley Zone ore sorting concentrates were higher than the Shaft Zone ore sorting concentrates. Although gold recoveries for the majority of the tested samples were higher than 87%, Shaft Zone Deep, Cow Zone LOM, and Cow Zone (-35 mm/+10 mm) samples were outliers with lower recoveries. The global average recovery increases to 95.7% if these outlying data points are excluded. Further test work is required to determine the response to mineralogical variation and to optimize the ore sorting settings.

13.3.1.4 Effect of Particle Size

The Shaft Zone and Cow Zone samples of -60 mm/+10 mm size fraction, which were outside the recommended top size to minimum size range of 3:1, were re-crushed to -35 mm/+10 mm and re-submitted to the ore sorting procedure. The results of re-runs are presented in Table 13-18. For the Shaft Zone, the mass recovery improved significantly from an average of 65% to 44% without compromising the gold recovery. However, for the Cow Zone, gold recovery dropped unexpectedly. Although the mass pull was higher, 4.6% of gold was reported to waste. The test work on the -35 mm/+10 mm size range with the variability samples followed the same trend for Shaft Zone.

13.3.2 Tomra – 2020 (Shaft Zone)

Ore sorting test work was conducted in Wedel, Germany by Tomra in 2020. The initial sample was 2,213 kg from the Shaft Zone. The sample was screened, the U/S material (-10 mm) was removed, and two ranges of grain sizes, +10/-25 mm and +25 mm, were generated. In Test Series 1, the +25 mm material was sorted, while in Test Series 2, the +10/-25 mm fine-grain materialwas sorted. The sample preparation flowsheet is shown in Figure 13-8. Tomra used XRT sensors to detect sulphides, and laser sensors to detect quartz particles.

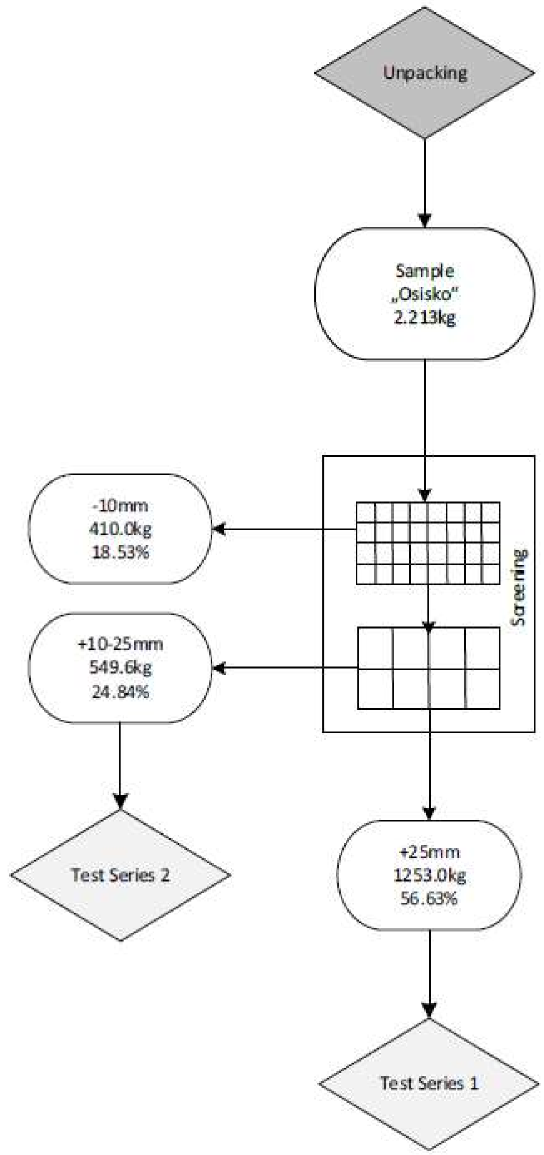


Figure 13-8: Sample preparation flow diagram
(Source: Tomra, 2021)

The flowsheet used to produce ore sorter concentrates is a "cascade" method, where the sorting is conducted in series with increased sorting sensitivity. The first two sorting steps were performed with the XRT sensor to produce a high-medium-grade concentrate and a low-grade concentrate. The waste from XRT tests was sorted with the laser sensor in scavenger tests. The Series 1 sample underwent additional screening and a second laser sorting stage after the first scavenger test, to produce a massive quartz and a quartz vein product.

Test work results showed that the use of XRT sorting resulted in significant upgrades and high recovery rates. For the coarser sample +25 mm, using setting 1 resulted in a recovery of 96.4% with a mass pull of 35.5% while the feed grade 2.33 g/t upgraded to 6.24 g/t. Applying a more sensitive setting 2 increased the recovery up to 99.2% with a total mass pull of 47.5% including the screened fines. The results achieved by XRT showed no need for additional techniques and contributed to the assumption that the gold in the tested material was mainly associated with sulphides.

13.3.3 Steinert – 2022 (Lowhee Zone)

Sorting test work was performed on the (-50/+16 mm) (Sun, 2022a) size fraction of the Lowhee composite at Steinert using a combination of Laser and XRT sensors (von Ketelhodt and Karem, 2022). The sorting products obtained from the test work were sent back to SGS Burnaby for assaying. The sorting test results are summarized in Table 13-21. Products 426.1.1, 426.2.1, and 426.3.2 (fine) were combined to create a sorting concentrate of 3.45 g Au/t with 91% gold recovery and 47% mass recovery.

Table 13-21: Lowhee sorting test results

Sorting Product ID	Au grade (g/t)	Mass distribution (%)	Au distribution (%)
426.1.1	3.45	25	78
426.2.1	0.49	20	9
426.3.1	0.17	21	3
426.3.2 (fine)	2.67	2	4
426.3.2 (coarse)	0.20	32	6
Sorting Feed	**1.11**	**100**	**100**

13.3.4 Base Met Labs – 2024

Bench scale XRT amenability tests were completed to assess mass and metal recoveries to up to six levels of XRT response to determine the theoretical mass-metal recovery curves. XRT scanning was completed on composite samples from Shaft, Deep Shaft, Cow, Valley and Lowhee zones, one Shaft Zone bulk composite sample, and two variability samples.

All samples were crushed to 100% passing 32.5 mm and each sample was separated into three size fractions via screening. The two coarse size fractions were combined (-32.5/+16 mm) and the remaining fines (-16 mm) were collected. XRT scanning was completed on the combined coarse size fractions. After scanning, each rock was classified and hand picked into one of up to six XRT response groupings. Each of the XRT groups were then weighed and assayed to identify the mass pull and recovery of gold, silver, sulphur and other elements in the grouping.

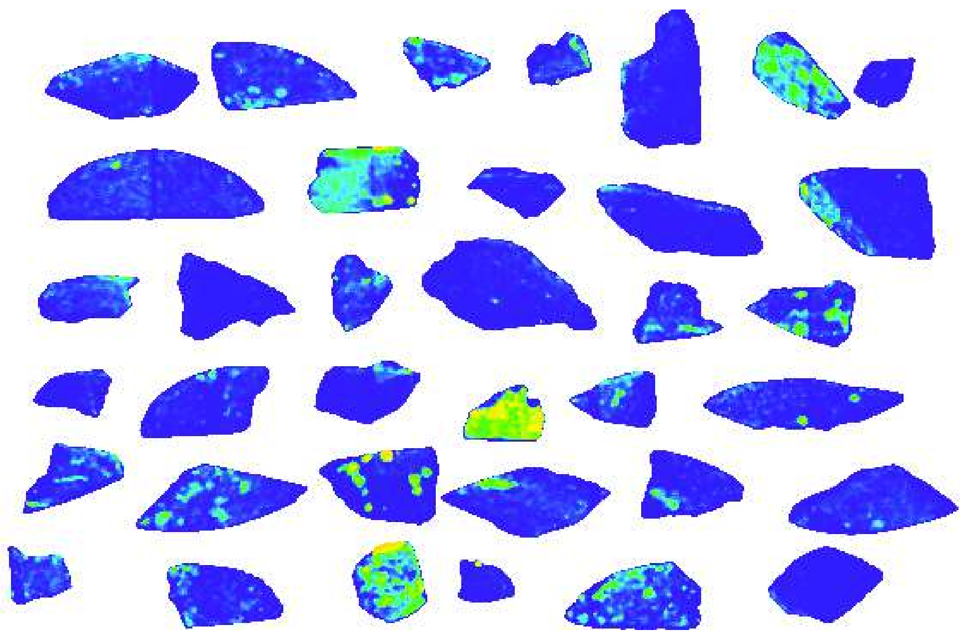


Figure 13-9: XRT Scan (Shaft 1A sample)

The fines upgrade was observed again in this test work program. The results of the mass recovery versus gold and sulphur recoveries for each zone are shown in Figure 13-10.

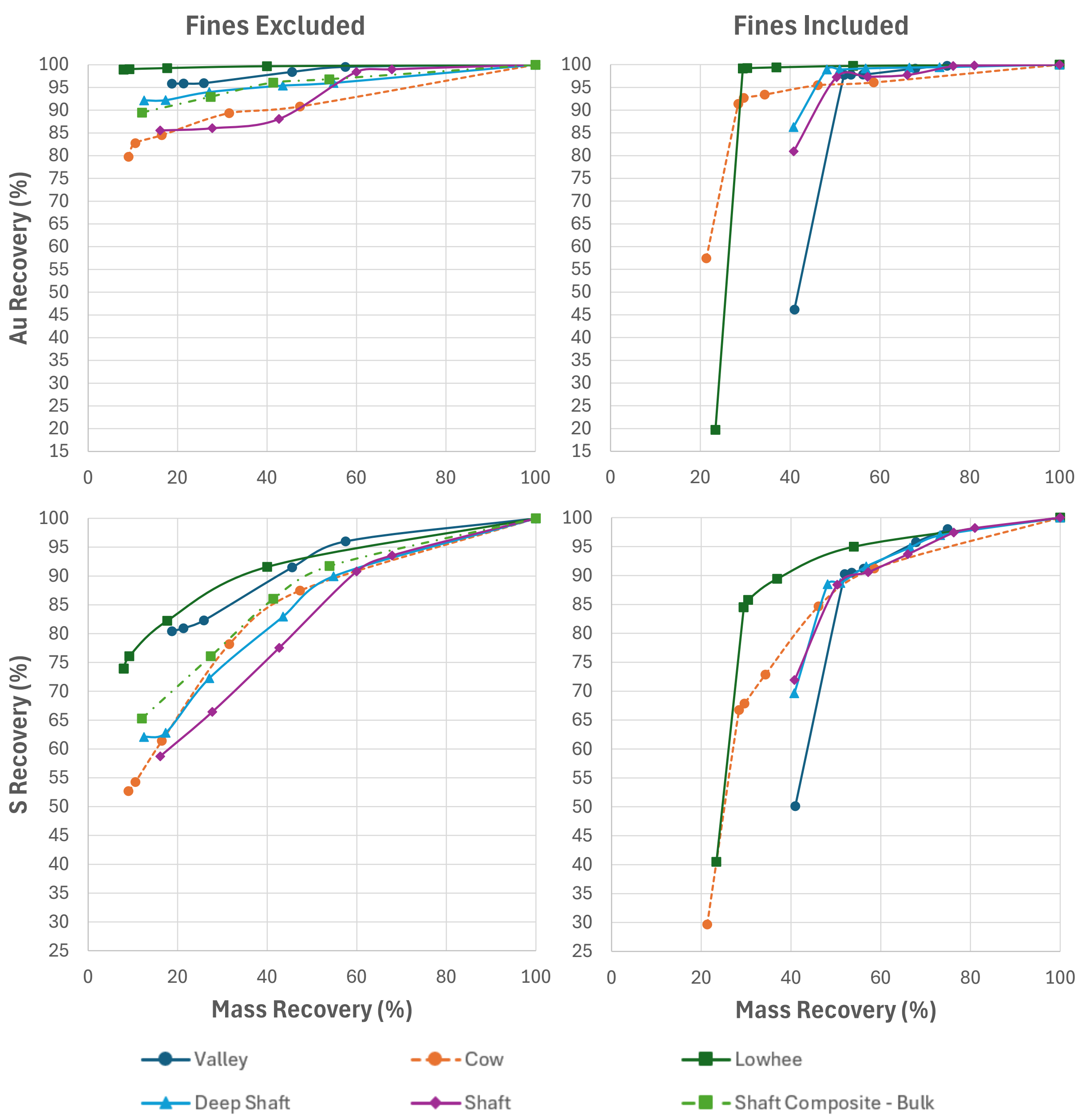


Figure 13-10: Gold and sulphur recovery vs mass recovery
(Base Met Labs, 2025)

13.3.4.1 Ore Sorting Results

Ore sorting results for the samples and composites used for downstream test work are summarized in Table 13-22. Samples were sorted manually, assuming rock belongs to rejects if from XRT response groups 1 or 2 (the weaker XRT response groups), which is assumed to be the conditions for maximum gold recovery.

Table 13-22: Ore sorting results

Zone	Sample	Mass (g)	Grade			Distribution (%)			
			Au (g/t)	S (%)	Fe (%)	Mass	Au	S	Fe
Shaft	**Zone Comp**	**10,000**	**2.97**	**2.7**	**4.9**	**100**	**100**	**100**	**100**
	Sorter Feed	5,921	0.95	1.3	3.4	59.2	19.0	28.1	41.5
	Fines (< 16 mm)	4,079	5.89	4.8	7.0	40.8	81.0	71.9	58.5
	OSC	3,551	1.57	2.0	4.6	35.5	18.7	25.5	33.5
	Sorter Tails	2,370	0.04	0.3	1.6	23.7	0.3	2.6	8.0
	Sorted Comp	**7,630**	**3.88**	**3.5**	**5.9**	**76.3**	**99.7**	**97.4**	**92.0**
Deep Shaft	**Zone Comp**	**9,960**	**5.01**	**3.2**	**4.2**	**100**	**100**	**100**	**100**
	Sorter Feed	5,901	1.16	1.6	3.1	59.2	13.7	30.4	43.5
	Fines (< 16 mm)	4,059	10.60	5.5	5.8	40.8	86.3	69.6	56.5
	OSC	2,569	2.54	3.1	5.1	25.8	13.1	25.2	31.7
	Sorter Tails	3,332	0.09	0.5	1.5	33.5	0.6	5.2	11.8
	Sorted Comp	**6,628**	**7.48**	**4.6**	**5.5**	**66.5**	**99.4**	**94.8**	**88.2**
Lowhee	**Zone Comp**	**9,966**	**4.29**	**2.8**	**3.0**	**100**	**100**	**100**	**100**
	Sorter Feed	7,637	4.49	2.2	2.5	76.6	80.3	59.5	65.4
	Fines (< 16 mm)	2,329	3.62	4.9	4.4	23.4	19.7	40.5	34.6
	OSC	1,350	25.23	10.2	9.2	13.5	79.7	48.9	42.0
	Sorter Tails	6,286	0.04	0.5	1.1	63.1	0.6	10.6	23.4
	Sorted Comp	**3,679**	**11.55**	**6.8**	**6.2**	**36.9**	**99.4**	**89.4**	**76.6**
Cow	**Zone Comp**	**9,995**	**2.64**	**1.6**	**3.0**	**100**	**100**	**100**	**100**
	Sorter Feed	7,862	1.43	1.4	2.8	78.7	42.6	70.4	75.0
	Fines (< 16 mm)	2,133	7.09	2.2	3.5	21.3	57.4	29.6	25.0
	OSC	2,480	4.04	3.5	5.5	24.8	38.1	55.0	46.1
	Sorter Tails	5,382	0.22	0.4	1.6	53.8	4.5	15.3	29.0
	Sorted Comp	**4,613**	**5.45**	**2.9**	**4.6**	**46.2**	**95.5**	**84.7**	**71.0**
Valley	**Zone Comp**	**9,975**	**3.77**	**4.2**	**5.1**	**100**	**100**	**100**	**100**
	Sorter Feed	5,889	3.44	3.5	4.4	59.0	53.8	49.9	51.1
	Fines (< 16 mm)	4,085	4.25	5.1	6.1	41.0	46.2	50.1	48.9
	OSC	2,685	7.43	7.1	7.8	26.9	53.0	45.7	40.8
	Sorter Tails	3,205	0.10	0.6	1.6	32.1	0.9	4.2	10.3
	Sorted Comp	**6,770**	**5.51**	**5.9**	**6.8**	**67.9**	**99.1**	**95.8**	**89.7**

The recoveries to the sorted composite were 76% mass and 99.7% Au for the Shaft Zone, 66% mass and 99.4% Au for the Deep Shaft Zone, 37% mass and 99.4% Au for the Lowhee Zone, 46% mass and 95.5% Au for the Cow Zone, and 68% mass and 99.1% Au for the Valley Zone.

13.4 Gravity Concentration

13.4.1 SGS – 2018

13.4.1.1 E-GRG

The Extended Gravity Recoverable Gold ("E-GRG") test was performed on a subsample of the Fines composite. Gravity concentration tests were performed on the blend of OSC and flotation concentrate prior to leach tests as per envisioned flowsheet at the time. The samples were first subjected to gravity concentration using a lab scale Knelson concentrator and further concentrated with Mozley table. The average gold recovery was 28.1%.

13.4.2 SGS – 2021

A standard E-GRG test was conducted on the blend of the three rougher flotation concentrates from the rougher flotation testing in Section 13.5.2.3. The E-GRG test on the combined flotation concentrate sample (Fconc) was performed to determine the theoretical maximum amount of gold recovery. The test was done at two grind sizes (two stages) and the results are shown in Table 13-23. The overall gold and silver gravity recoveries for the combined flotation sample were 31.8% and 14.2%, respectively.

Table 13-23: E-GRG test results summary – gold and silver

Sample ID	P_{80}, (µm)		Mass (%)		Cumulative Recovery (%)		Concentrate Grade (g/t)	Head Grade (g/t)	
	Stage 1	Stage 2	Stage 1	Stage 2	Stage 1	Stage 2		Direct	Calculated
Fconc - Gold	112	50	0.62	0.55	17.9	31.8	1,028	39.2	37.8
Fconc - Silver	112	50	0.62	0.55	9.4	14.2	291	26.7	23.9

13.4.3 SGS – 2022

A 6-kg composite of the Lowhee Blend composite was submitted to gravity concentration. The material was ground to a P_{80} of 199 µm and processed on a single-pass through a Knelson MD-3 concentrator. The gravity concentrate was assayed for gold and silver to extinction and the test results are summarized on Table 13-24. Gravity tailings were used for leaching tests.

Table 13-24: Gravity separation results for Lowhee

Sample ID	Product	Weight		Assays (g/t)		Distribution (%)	
		g	%	Au	Ag	Au	Ag
Lowhee Blend	Knelson Concentrate	97.1	1.6	203	10.5	47.6	21.0
	Knelson Tailings	5,902.3	98.4	3.68	0.65	52.4	79.0
	Head (calc. gravity products)	6,000	100	6.91	0.81	100	100
	Head Direct			4.0	0.65		

13.4.4 Base Met Labs – 2024

13.4.4.1 E-GRG

E-GRG test work was conducted by Base Met Labs in July 2024 on the bulk composite sample. The test program flowsheet consisted of two grinding stages and three stages of gravity concentration using a lab Knelson concentrator. The E-GRG flowsheet is shown in Figure 13-11.

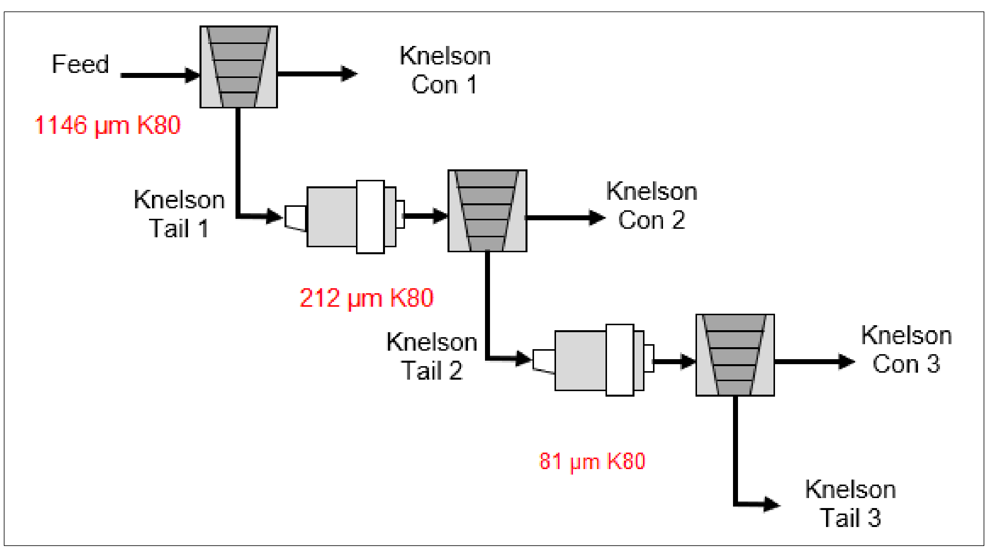


Figure 13-11: E-GRG flowsheet schematic (Base Met Labs, 2025)

The Knelson conditions applied to the E-GRG test work and the test results are included in Table 13-25 and results are summarized in Table 13-26. The overall gold gravity recovery for the three combined flotation concentrates was 55.1%.

Table 13-25: E-GRG test Knelson conditions

Knelson Concentration Conditions	
G's	60
Water Pressure to Bowl	13.8 kPa
Fluidization Water Flowrate	4.0 L/min
Feed Mass	20 kg

Table 13-26: E-GRG test results summary

Composite (Test)	Product	Feed Size K_{80} (µm) per Stage	Mass (%)	Assay Au g/t	% Au Distribution
Bulk Composite GRG (T-01)	Stage 1 Conc	1,146	0.48	94.3	12.7
	Stage 2 Conc	212	0.47	223.0	29.7
	Stage 3 Conc	81	0.54	83.7	12.8
	Tailings	**-**	**96.4**	**1.66**	**44.9**
	Comb Conc 1-3	**-**	**1.50**	**131.2**	**55.1**

The E-GRG test results were used by FLSmidth to model the gravity circuit performance on both primary grinding circuit and regrind circuit. The results are summarized in Table 13-27. The parameters assumed were:

- Mill feed rate: 3,300 tpd, 138 tph;
- Circulating load: 350%;
- Cyclone P_{80} µm: 200 µm;
- Sulphide content: 3.5% sulphur by mass;
- Circulating load treated: 95% (in both circuits);
- The as-tested GRG of 55.7% was corrected to 37.4% to account for the observed nugget effect on test results.

Two scenarios were evaluated to predict the gravity performance within the regrind circuit and the maximum recovery results, assuming all GRG gold would be recovered in the two gravity circuits, are aligned with the test results observed within the Base Met Labs test program.

Table 13-27: Gravity recovery model results (Source: FLSmidth)

Primary Grinding				Regrind				Overall, Au Plant Recovery
Installed Location	Feed to Primary Gravity (tph)	No of Knelsons	Au Primary Recovery to Gravity Conc	Installed Location	Feed to Regrind Gravity (tph)	No of Knelsons	Au Regrind Recovery to Gravity Conc	
Ball Mill Discharge	580	2 x QS48	24.8%	Mill Discharge	30	1 x QS30	4.3%	29.1%
Ball Mill Discharge	580	2 x QS48	24.8%	Mill Discharge	30	1 x QS30	19.5%	44.3%

13.4.4.2 Variability

Single pass gravity concentration tests were performed on sorted composite samples for Shaft, Cow, Valley and Lowhee zones. Test work was completed within the envisioned flowsheet for the Project including gravity concentration of ball mill discharge and regrind mill discharge target sizes of P_{80} of 200-250 µm and P_{80} of 20-25 µm, respectively. Results are summarized in Table 13-28.

Gravity recoveries of gold on individual samples ranged from 10% to 64% on primary grinding product and 17% to 46% (of primary mill feed) on regrind product. When looking at the averages by zone, we see a much narrower range with 46% combined gold recovery for Lowhee Zone, 30% for Deep Shaft Zone, 32% for Cow Zone, 25% for Valley Zone and 18% for Shaft Zone. The Blend composite sample yielded an average 36% combined gold recovery.

Table 13-28: Gravity concentration tests

Test ID	Composite sample		Grind P_{80} (µm)		Recalculated Feed			Gravity Recovery (%)		
			Primary	Regrind	Au (g/t)	Ag (g/t)	S (%)	Con. 1	Con. 2	Total
R96	SORT	Cow	232		13.3	1.2	3.3	10		10
CI100	SORT	Cow	234	22	5.5	0.6	3.0	25		25
CI108	SORT	Cow	234	24	5.6	0.5	3.1	14	46	60
R98	SORT	Deep Shaft	269		5.7	1.1	3.9	30		30
CI102	SORT	Deep Shaft	201	21	4.5	1.1	3.8	16		16
CI110	SORT	Deep Shaft	201	22	4.1	1.2	3.9	14	30	44
R99	SORT	Lowhee	317		4.7	0.6	4.7	27		27
CI103	SORT	Lowhee	264	23	4.3	0.6	4.7	29		29
CI111	SORT	Lowhee	264	23	10.2	0.5	5.0	64	17	81
CI60D	SORT	Shaft	250	20	5.1	0.9	4.3	20		20
CI60E	SORT	Shaft	250	21	5.9	0.9	5.3	17		17
R97	SORT	Valley	274		7.0	8.6	5.7	27		27
CI101	SORT	Valley	232	24	4.8	10.7	5.5	13		13
CI109	SORT	Valley	232	25	4.8	10.0	5.8	13	24	37
CI79	SORT	Blend	200	20	7.5	0.8	3.7	45	36	80
R92	SORT	Blend	200		7.5	1.2	3.6	30		30
CI93	SORT	Blend	200	25	4.7	0.9	3.7	15		15
CI94	SORT	Blend	200	22	5.5	1.0	3.7	24		24
CI95	SORT	Blend	200	22	9.6	1.1	3.7	51		51
CI112	SORT	Blend	200	22	8.7	0.9	3.6	37		37
CI113	SORT	Blend	200	22	4.4	0.9	3.5	19		19
CI114	SORT	Blend	200	22	5.3	1.0	3.8	35		35
CI86	SORT	Blend	200	21	4.8	1.0	3.7	22		22
CI91	UN-S	BULK	200	22	2.4	0.7	2.8	23		23

13.5 Flotation Test Work

13.5.1 SGS – 2018

13.5.1.1 Samples

Kinetic flotation tests were conducted on fine fraction gravity tails, fine fraction of whole rock composites, OSC, and a blend of OSC with fines.

The gravity tails composites were produced from bulk gravity concentration tests, while the whole rock samples consisted of the -25 mm fines. The effect of grind size on flotation performance at target P_{80} values of 200 µm, 150 µm, and 100 µm was tested on these samples. Whole rock variability composites (SZ1, SZ2, SZ3, and SZ4) were tested at two target P_{80} values of 200 µm and 400 µm. The results of the flotation tests on the fines are provided in Table 13-29. Variability fines of Cow Zone and Shaft Zone were also tested at 100 µm and 200 µm. The results are provided in Table 13-30.

Table 13-29: Flotation test results

Test ID	Feed Type	Grind Size (P_{80}, µm)		Au Grade (g/t)			Mass Pull (%)		Au Recovery (%)	
		Target	Actual	Head	Conc.[1]	Tails	9 min	20 min	9 min	20 min
F1	Gravity Tails	200	248	2.11	13.5	0.04	15.4	21.0	98.4	98.9
F2	Gravity Tails	150	205	2.56	14.0	0.05	18.0	23.9	98.5	98.8
F3	Gravity Tails	100	131	2.57	11.2	0.04	22.7	31.0	98.9	99.2
F10	Whole Rock	200	178	3.18	14.11	0.03	18.3	22.5	99.3	99.5
F11	Whole Rock	150	123	3.58	16.42	0.04	17.2	21.6	99.1	99.3
F12	Whole Rock	100	75	3.20	12.24	0.03	20.5	26.0	99.3	99.5
F-SZ1-A	Whole Rock	200	221	12.04	47.24	0.06	22.9	25.4	99.6	99.8
F-SZ1-B	Whole Rock	400	351	10.75	44.73	0.21	21.2	23.9	98.4	99.4
F-SZ2-A	Whole Rock	200	131	15.46	35.42	0.10	37.7	43.5	99.6	99.6
F-SZ2-B	Whole Rock	400	211	14.34	36.80	0.06	33.9	38.9	99.7	99.8
F-SZ3-A	Whole Rock	200	144	7.01	30.23	0.06	19.1	23.1	99.3	99.5
F-SZ3-B	Whole Rock	400	234	5.41	27.73	0.02	15.6	19.4	99.7	99.7
F-SZ4-A	Whole Rock	200	89	2.74	9.61	0.01	21.7	28.4	99.6	99.7
F-SZ4-B	Whole Rock	400	156	2.86	11.84	0.03	18.7	24.0	99.1	99.2
						Minimum	**15.4**	**19.4**	**98.4**	**98.8**
						Average	**21.2**	**26.1**	**99.1**	**99.4**
						Maximum	**37.7**	**43.5**	**99.7**	**99.8**
						Standard Deviation	**6.3**	**6.7**	**0.5**	**0.3**

[1] Concentrate and tailings grades presented are at 9 min.

Table 13-30: Flotation test results – Variability composite fines

Test ID	Feed Type	Grind Size (P_{80}, µm)		Au Grade (g/t)			Mass Pull (%)		Au recovery (%)	
		Target	Actual	Head	Conc.[1]	Tails	9 min	20 min	9 min	20 min
CZ-LOM-F1	Fines	200	180	4.51	38.6	0.11	11.4	13.5	97.8	98.1
CZ-LOM-F2	Fines	100	205	4.07	18.5	0.29	20.8	25.0	94.3	95.2
CZ-Low-F1	Fines	200	131	6.90	33.5	0.07	20.4	23.8	99.2	99.4
CZ-Low-F2	Fines	100	178	6.27	22.2	0.05	28.1	31.8	99.5	99.6
CZ-High-F1	Fines	200	123	21.68	91.2	0.15	23.7	25.1	99.5	99.7
CZ-High-F2	Fines	100	75	13.60	40.6	0.15	33.2	38.9	99.3	99.6
SZ-LOM-F1	Fines	200	300	10.97	67.0	0.12	16.1	17.0	98.1	99.1
SZ-LOM-F2	Fines	100	133	9.74	44.6	0.08	21.7	24.3	99.3	99.4
SZ-Low-F1	Fines	200	182	7.35	34.3	0.04	21.3	23.4	99.4	99.6
SZ-Low-F2	Fines	100	124	7.54	27.9	0.09	26.8	30.3	99.1	99.2
SZ-High-F1	Fines	200	213	18.20	75.3	0.11	24.0	28.3	99.1	99.6
SZ-High-F2	Fines	100	128	19.78	67.2	0.08	29.3	32.9	99.7	99.7
SZ-Deep-F1	Fines	200	214	3.02	19.2	0.02	15.6	18.5	99.2	99.5
SZ-Deep-F2	Fines	100	127	3.08	13.3	0.04	22.9	26.4	98.9	99.0
						Minimum	**15.4**	**19.4**	**98.4**	**98.8**
						Average	**21.2**	**26.1**	**99.1**	**99.4**
						Maximum	**37.7**	**43.5**	**99.7**	**99.8**
						Standard deviation	**6.3**	**6.7**	**0.5**	**0.3**

[1] Concentrate and tailings grades presented are at 9 min.

13.5.1.2 Fines Flotation

As seen in Table 13-29 and Table 13-30, regardless of grind size, the average gold recovery of fines flotation achieved was approximately 99% after 9 minutes ("min") flotation. In general, an increase in mass pull was observed with decreasing grind size, with no discernible improvement in recovery. It is therefore recommended to use a flotation time of 9 min at a targeted grind size of 200 µm for fines fraction.

A graph of the gold recovery as a function of flotation time is presented in Figure 13-12. The plot illustrates that gold recovery reaches a plateau after 9 min beyond which additional flotation time does not improve recovery. While gold recovery is not improved, Figure 13-13 illustrates that increasing flotation time from 9 min to 20 min results in an average increase of approximately 5% in mass pull for an average 0.2% increase in gold recovery.

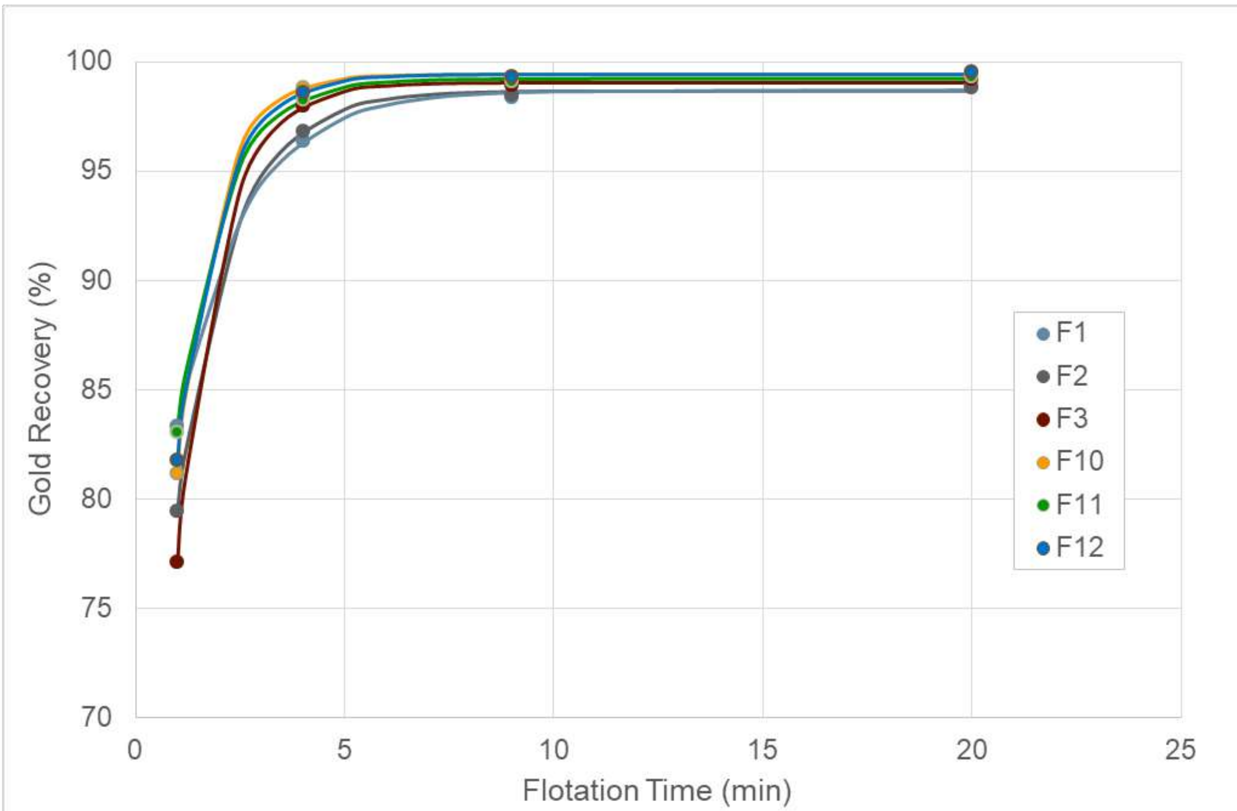


Figure 13-12: Gold recovery flotation kinetics (Hansuld and Gajo, 2019)

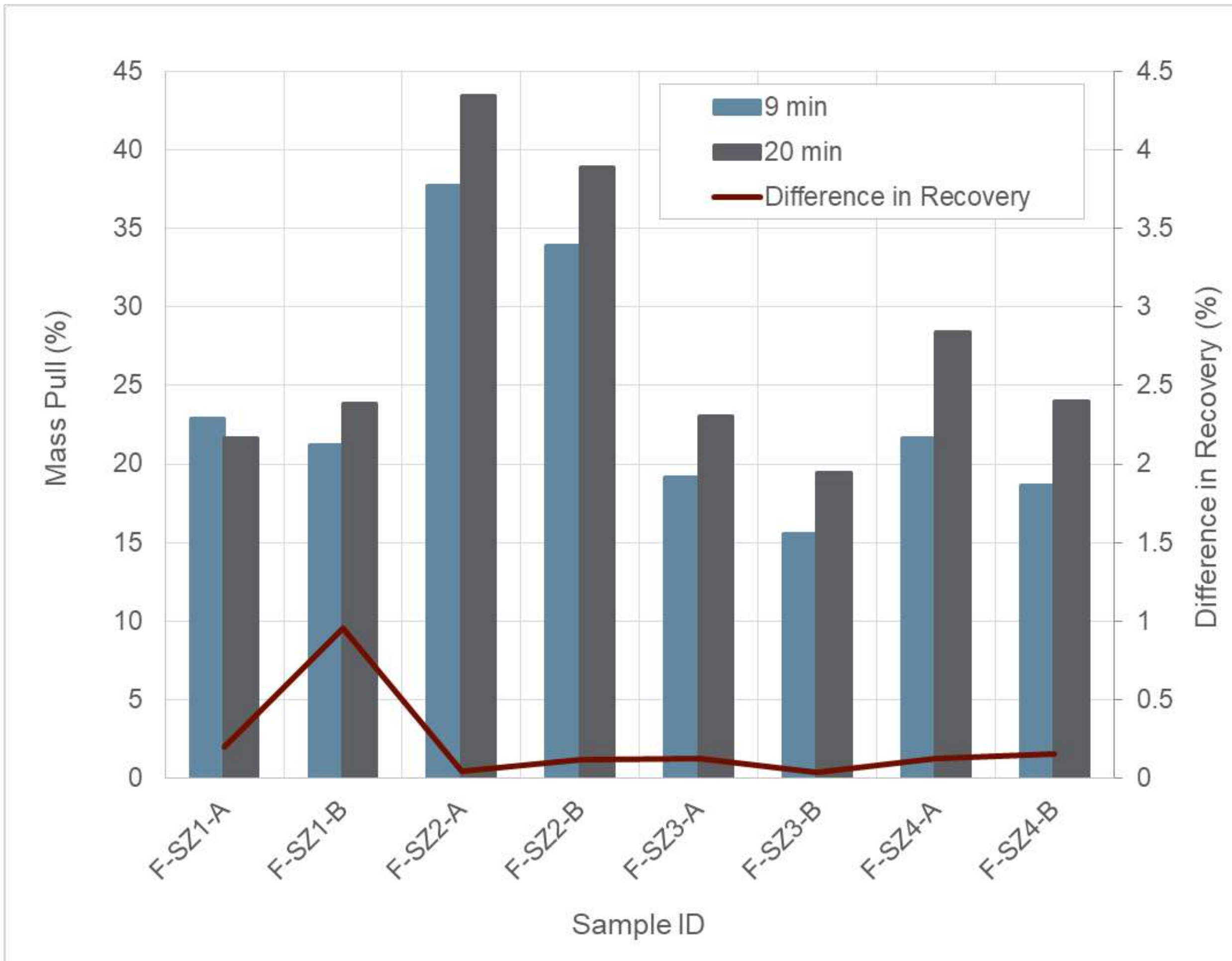


Figure 13-13: Impact of flotation time on mass pull and gold recovery

13.5.1.3 Ore Sorter Concentrate Flotation

Ore sorting concentrate of Cow Zone and Shaft Zone variability samples were tested at 100 µm and 200 µm. The same OSC samples were blended with their generated fines and tested at 100 µm and 200 µm. Table 13-31 shows that the OSC flotation average gold recovery was higher than 98.6% after 9 min of flotation. In general, an increase in mass pull was observed with decreasing grind size, without any noticeable improvement in recovery. CZ-LOM blend of ore sorter concentrates and fines achieved 72% and 78% at 9 min flotation and >99% at 15 min. Further test work is recommended on OSC and fines blend.

Table 13-31: Flotation test results – Ore sorter concentrate

Test ID	Feed Type	Grind Size (P_{80}, µm)		Au Grade (g/t)			Mass Pull (%)		Au Recovery (%)	
		Target	Actual	Head	Conc.[1]	Tails	9 min	15 min	9 min	15 min
CZ-LOM-OSC-F1	OSC	100	116	2.08	9.2	0.04	22.2	29.1	98.6	99.3
CZ-LOM-OSC-F2	OSC	200	200	2.06	14.1	0.03	14.4	19.6	98.6	98.8
CZ-LOM-Blend-F1	OSC + Fines	100	101	9.06	24.1	3.43	27.3	36.3	72.4	99.8
CZ-LOM-Blend-F2	OSC + Fines	200	174	4.76	18.3	1.32	20.2	26.0	77.9	99.7
VZ-LOM-OSC-F1	OSC	100	101	8.49	24.5	0.02	34.6	42.3	99.8	99.9
VZ-LOM-OSC-F2	OSC	200	197	10.15	32.9	0.04	30.8	34.7	99.7	99.8
VZ-LOM-Blend-F1	OSC + Fines	100	97	6.88	20.1	0.04	34.2	38.7	99.6	99.7
VZ-LOM-Blend-F2	OSC + Fines	200	201	1.21	3.1	0.06	37.9	43.4	96.9	97.7
						Minimum	**14.4**	**19.6**	**72.4**	**97.7**
						Average	**27.7**	**33.8**	**93.0**	**99.3**
						Maximum	**37.9**	**43.4**	**99.8**	**99.9**
						Standard deviation	**7.63**	**7.74**	**10.40**	**0.71**

(1) Concentrate and tailings grades presented are at 9 min.

13.5.2 SGS – 2020 (Shaft Zone)

13.5.2.1 Rougher Flotation Test Work Results

The samples, Blend 1, Blend 2 and Blend 3 were tested at three different grind sizes: 150 µm, 100 µm, and 75 µm. The effect of the grind size on rougher flotation was observed while keeping the reagent dosages, pH (natural) and flotation duration constant. These conditions are shown in Table 13-32.

Table 13-32: Rougher flotation test conditions

Test #	Grind Size K_{80} (µm)	Reagent		pH	Rougher Stages	Time (min)
		Collector PAX(1) (g/t)	Frother MIBC(2) (g/t)			
F1	150	30	19	natural	4	8
F2	100	30	19	natural	4	8
F3	75	30	19	natural	4	8

(1) "PAX": Potassium amyl xanthate.
(2) "MIBC": Methyl isobutyl carbinol.

Figure 13-14, Figure 13-15, and Figure 13-16 present the flotation kinetics for each blend and each rougher flotation test condition. All tests yielded higher than 97% gold recovery at the eighth minute of flotation, regardless of the grind size.

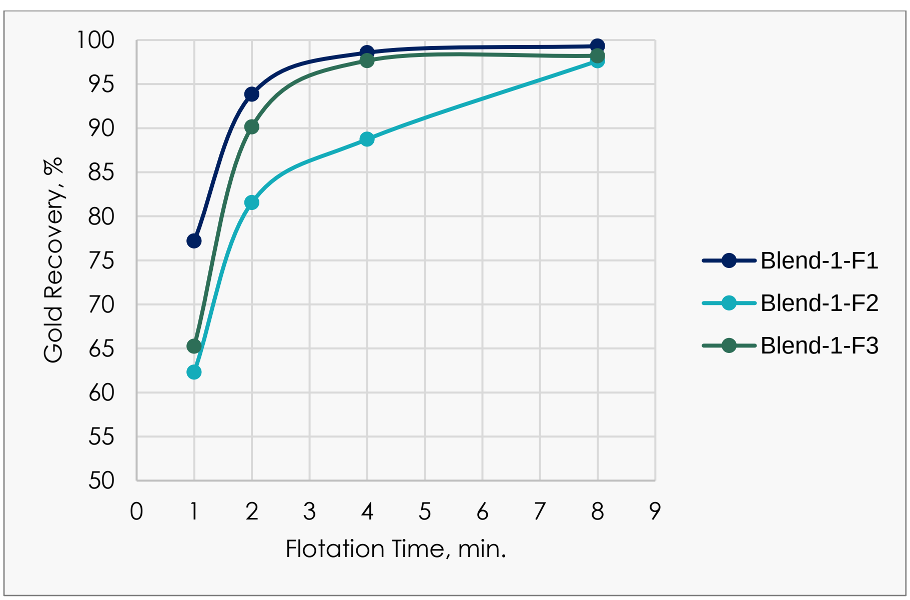


Figure 13-14: Flotation time vs gold recovery – Blend 1

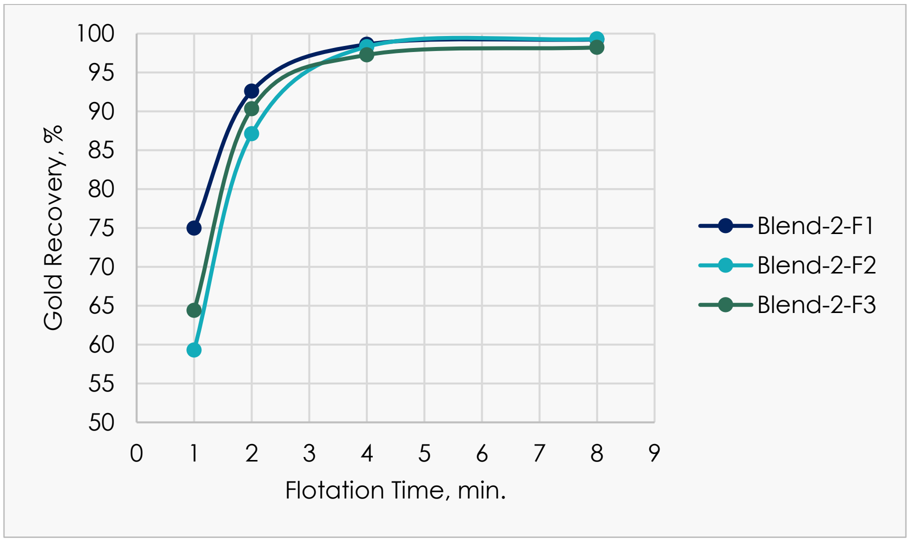


Figure 13-15: Flotation time vs gold recovery – Blend 2

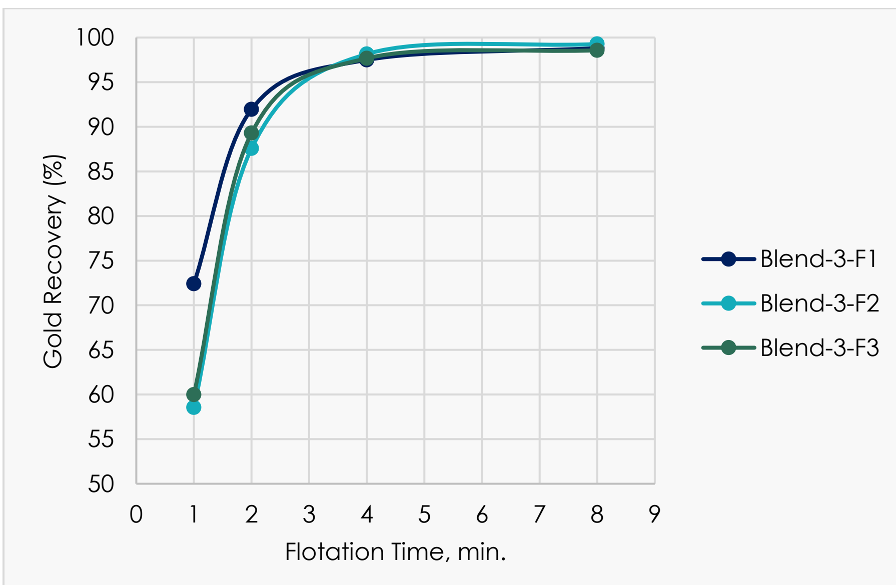


Figure 13-16: Flotation time vs gold recovery – Blend 3

For Blend 1, F1 (150 µm) has the highest gold recovery with 99.3%, while F2 (100 µm) has the lowest gold recovery with 97.6%. For Blend 2, F2 (100 µm) has the highest gold recovery with 99.3%, while F3 (75 µm) has the lowest gold recovery with 98.2%. For Blend 3, F2 (100 µm) has the highest gold recovery with 99.3%, while F3 (75 µm) has the lowest gold recovery with 98.6%.

13.5.2.2 Cleaner Flotation Test Work Results

The cleaner flotation samples were tested at three different grind sizes: 100 µm (no regrind), 45 µm, and 25 µm. The effect of regrinding on cleaner flotation was observed while keeping the same reagent dosages, pH, cleaner stages, and flotation durations. These conditions are shown in Table 13-33.

Table 13-33: Cleaner flotation test conditions

Grind Size K80 (µm)	Reagent		pH	Cleaner Stages	Time (min)
	PAX (g/t)	MIBC (g/t)			
No	5	2	Natural	2	8
45	5	2	Natural	2	8
25	5	2	Natural	2	8

Table 13-34 shows that regrinding has a negative effect on gold and silver recoveries for Blend 1 and Blend 2. However, for Blend 3, regrinding the sample to 46 µm improved the gold recovery by 11.1% with little impact on the silver recovery.

Table 13-34: Cleaner flotation test results

Sample ID	Regrind	Weight	Concentrate Grade						Recovery					
			Au	Ag	Cu	Fe	S	TOC	Au	Ag	Cu	Fe	S	TOC
	K_{80}	%	g/t	g/t	%	%	%	%	%	%	%	%	%	%
Blend-1	-	10.8	62.3	34.6	0.06	39.4	46.0	0.32	96.4	86.2	41.5	75.5	91.9	23.0
Blend-1	40	8.65	76.7	39.2	0.07	41.4	48.0	0.27	95.3	83.1	39.3	63.5	77.6	17.1
Blend-1	24	3.62	153	89.0	0.14	36.7	43.3	0.57	88.4	76.1	33.8	23.8	29.5	14.8
Blend-2	-	11.8	58.6	31.1	0.06	39.9	47.0	0.31	97.1	87.2	44.6	78.6	93.6	25.0
Blend-2	40	9.43	66.0	34.0	0.07	42.6	49.2	0.23	92.6	80.3	40.9	66.8	79.1	17.2
Blend-2	22	2.97	190	107	0.15	38.2	44.6	0.47	79.4	73.2	30.1	19.1	22.6	10.4
Blend-3	-	12.4	53.1	31.1	0.05	40.7	47.1	0.25	82.0	89.0	41.3	76.5	90.1	23.7
Blend-3	46	10.7	77.9	34.6	0.06	43.4	49.0	0.21	93.3	87.5	39.0	70.5	81.5	18.8
Blend-3	24	4.64	136	68.0	0.11	38.7	44.6	0.37	85.9	76.4	33.7	27.3	31.9	13.8

13.5.2.3 Bulk Rougher Flotation Test

The three blend's rougher flotation samples were mixed and their test results of the three series of 22 tests were averaged. The blend mixes were used for the subsequent E-GRG test and leaching tests. Table 13-35 shows the average weight recovery, gold rougher concentrate grade, gold rougher tailings grade, and gold recovery for each blend average. The blend weight recovery averages vary between 16.9% and 18.5%; gold recovery averages vary between 98.2% and 99.5%; gold rougher concentrate grade averages vary between 37.4 g/t and 38.0 g/t.

Table 13-35: Bulk rougher flotation test results summary

Test #	Mass Pull	Au (g/t)		Au Recovery
	%	Ro Conc	Ro Tailings	%
Blend -1-Average	16.9	38.0	0.04	99.5
Blend -2-Average	18.0	37.4	0.17	98.2
Blend -3-Average	18.5	37.8	0.05	99.4

13.5.2.4 Combined Flotation Concentrate Assay

The assay results of the flotation concentrate are shown below. In addition to having 39.2 g/t of gold and 26.7 g/t of silver, the combined concentrate has high amounts of iron, sulphur, and copper.

Table 13-36: Assay results summary – Combined flotation concentrate

Element	Unit	Assay Result	Element	Unit	Assay Result
Au	g/t	39.2	Mg	g/t	1,840
Ag	g/t	26.7	Ni	g/t	<300
Fe	%	30.9	As	g/t	4,490
Cl	g/t	<50	Bi	g/t	51.1
S	%	34.9	Cd	g/t	85.9
Hg	g/t	<0.3	Pb	g/t	4,790
F	%	0.074	Sb	g/t	38.6
Ca	g/t	1,060	Se	g/t	<10
Cu	g/t	349	Te	g/t	<4

13.5.3 Base Met Labs – 2024

The flotation work was intended to produce a sealable cleaner concentrate. Conditions were optimized for the OSC for Shaft Zone (Sorted Shaft composite) and flotation performance was confirmed for the sorted composite samples from each of the following five zones: Cow, Deep Shaft, Lowhee and Valley. Variability per zone was tested on small interval samples (non-sorted material) for Cow, Shaft and Valley zones.

13.5.3.1 Rougher Flotation Optimization

Rougher flotation tests were performed for grind sizes from 80% passing (P_{80}) 83 µm to 423 µm to determine the target primary grind size for the project. Concentrates were collected at minutes 1, 3, 5 and 9 for all tests. Flotation was performed at natural pH, and MIBC and PAX were the reagents used.

Figure 13-17 summarizes the results for all six grind sizes tested on OSC from the Shaft Zone composite. For mass pull 20% or above, all grind sizes yielded gold recoveries above 95% and sulphur recoveries above 90%.

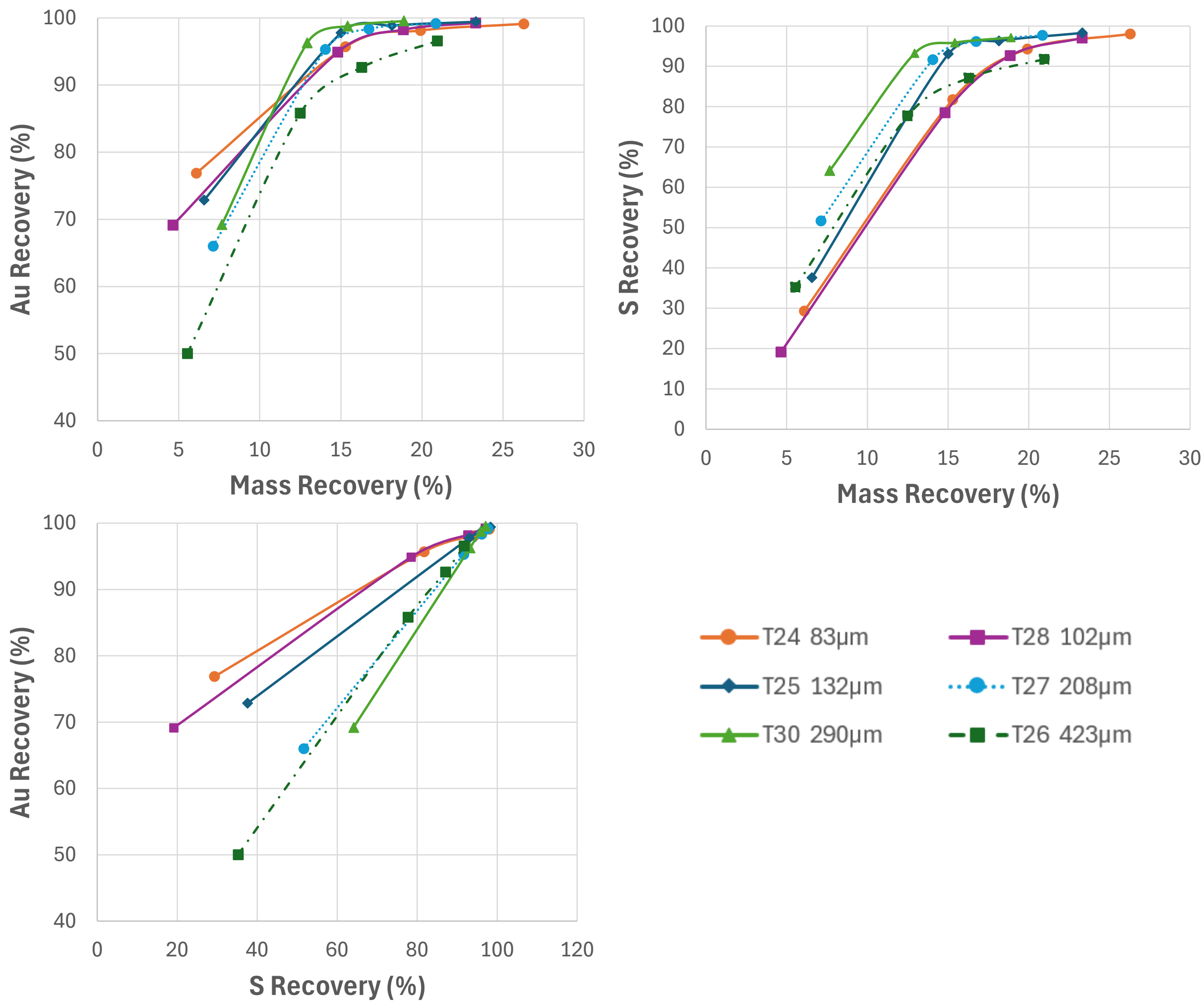


Figure 13-17: Effect of particle size on gold and sulphur recoveries – Rougher flotation

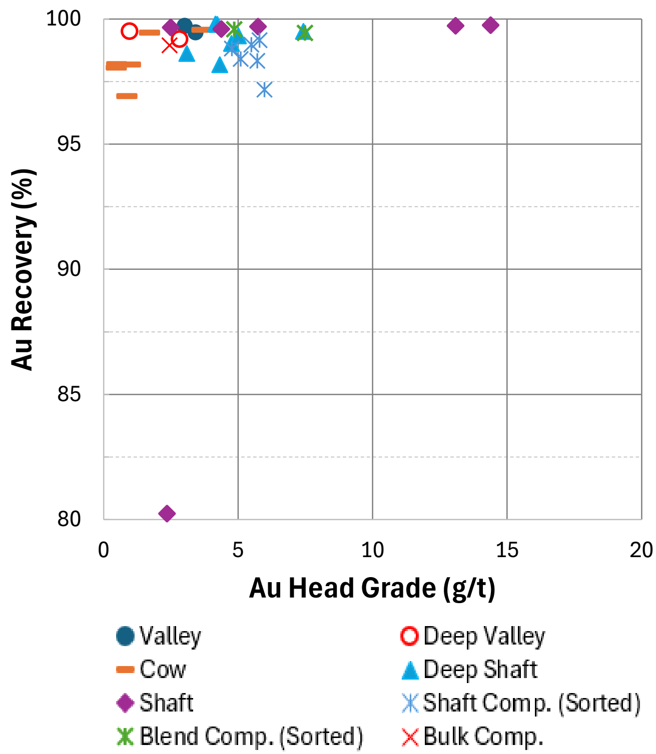


Figure 13-18: Gold head grade vs recovery – Rougher flotation

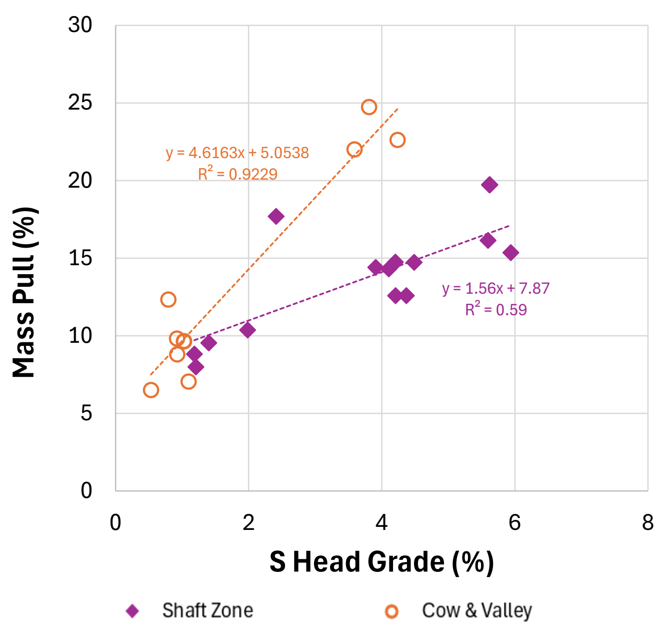


Figure 13-19: S head grade vs mass pull – Rougher flotation

13.5.3.2 Cleaner Flotation Optimization

Cleaner flotation tests were performed for grind sizes from 80% passing (P80) 20 µm to 52 µm to determine the target regrind grind size for the project. Concentrates were collected at minutes 5, 9 and 12 for all tests. A cleaner scavenger of 2 min was performed on the first cleaner tail. Figure 13-20 summarizes the results for all six grind sizes tested on OSC from the Shaft Zone composite.

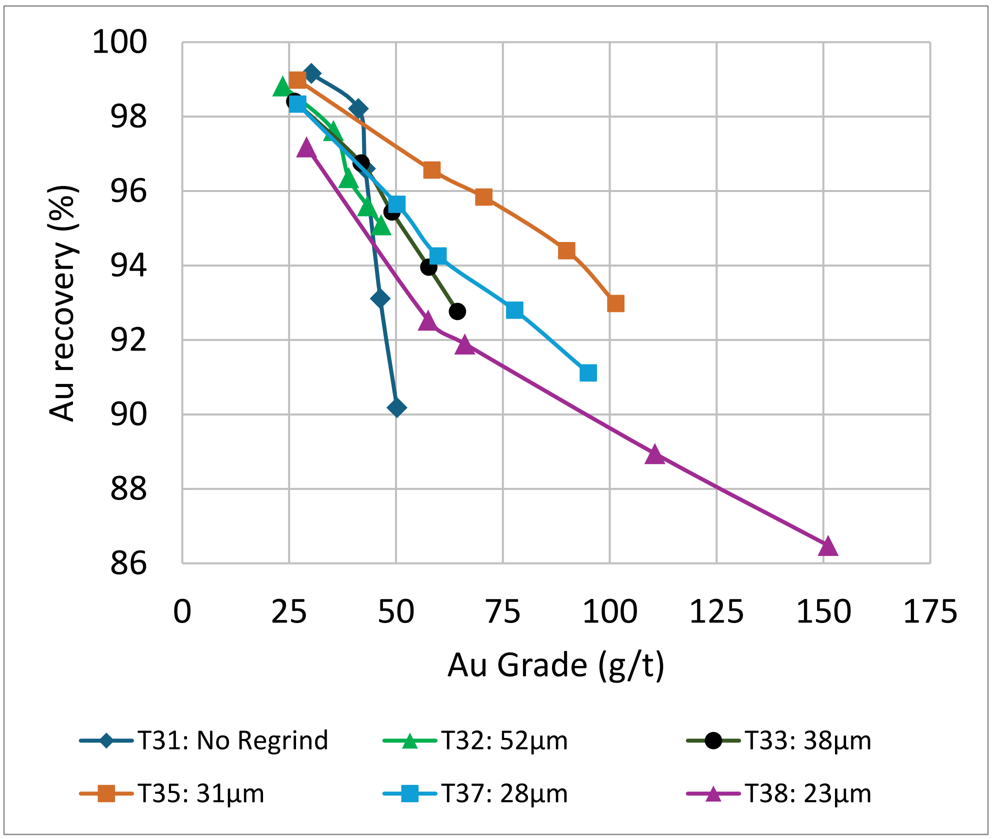


Figure 13-20: Effect of regrind size – Cleaner flotation

Reagent optimization tests showed cleaning performance improvement with the use of Polyfloat 7040 in the cleaning circuit. Figure 13-21 summarizes the results. Tests were performed on gravity tails of OSC from the Shaft Zone composite.

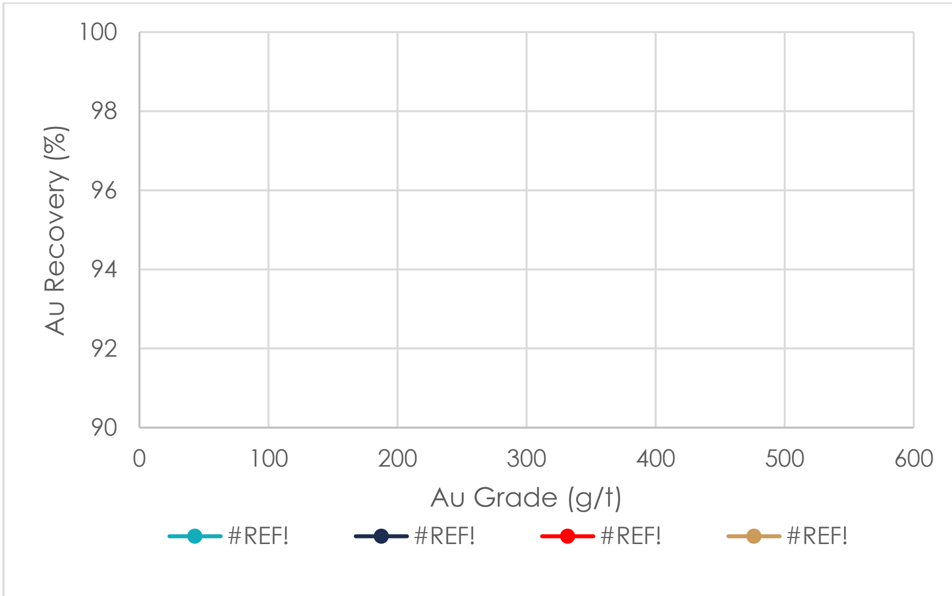


Figure 13-21: Reagent optimization – Cleaner flotation

13.5.3.3 Flotation Circuit Confirmation and Variability

Flotation was performed at natural pH, and MIBC and Polyfloat 7040 (PF7040) were the reagents used on both, cleaner and scavenger stages. Results for tests on sorted composites are summarized in Figure 13-22.

The LCT was completed on sorted Blend composite at optimized conditions and test results are summarized in Table 13-37.

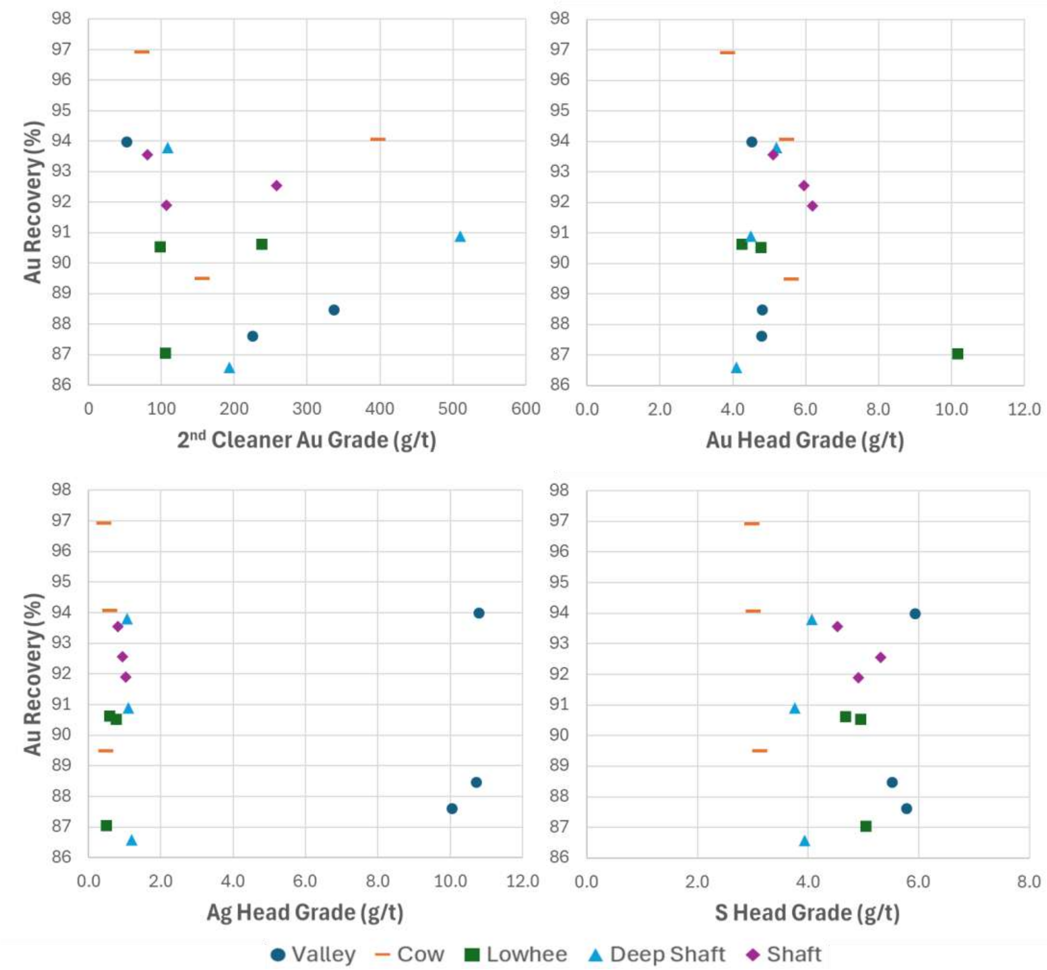


Figure 13-22: Head grade vs recovery – Cleaner flotation on sorted samples

Table 13-37: LCT results

Product	Weight		Assay (% or g/t)						Distribution (%)					
	%	g	Au	Ag	As	S	C	Fe	Au	Ag	As	S	C	Fe
Cycle D														
Feed	100	984.0	4.85	1.28	804	3.93	1.57	6.13	100	100	100	100	100	100
Mozley Table Conc.	0.2	1.5	488.8	200.0	1,000	40.00	0.01	35.0	15.6	24.2	0.2	1.6	0.0	0.9
Bulk Conc.	1.7	16.9	228.4	44.0	1,160	9.42	5.89	9.1	80.8	59.1	2.5	4.1	6.4	2.5
Clnr Scav Tails	16.5	162.1	0.96	0.8	3,870	22.20	0.61	20.1	3.3	10.3	79.3	93.2	6.4	54.0
Rougher Tails	81.7	803.5	0.02	0.10	178	0.06	1.68	3.20	0.3	6.4	18.1	1.1	87.2	42.6
Cycle E														
Feed	100	990.6	14.29	1.15	736	3.82	1.55	6.09	100	100	100	100	100	100
Mozles Table Conc.	0.1	1.0	10,097	200.0	1,000	40.00	0.01	35.0	68.8	16.9	0.1	1.0	0.0	0.6
Bulk Conc.	1.6	15.8	268.2	47.0	1,197	9.19	6.01	8.9	29.9	65.0	2.6	3.8	6.2	2.3
Clnr Scav Tails	15.8	157.0	1.05	0.8	3,770	22.60	0.65	20.9	1.2	11.0	81.2	93.7	6.6	54.4
Rougher Tails	82.5	816.8	0.02	0.1	144	0.07	1.64	3.16	0.1	7.1	16.1	1.5	87.2	42.8
Cycles D+E														
Feed	100	1,974.6	9.59	1.22	770	3.87	1.56	6.11	100	100	100	100	100	100
Mozles Table Conc.	0.1	2.5	4,217.9	200.0	1,000	40.00	0.01	35.0	55.4	20.7	0.2	1.3	0.0	0.7
Bulk Conc.	1.7	32.7	247.6	45.4	1,178	9.31	5.95	9.0	42.8	61.9	2.5	4.0	6.3	2.4
Clnr Scav Tails	16.2	319.1	1.00	0.8	3,821	22.40	0.63	20.5	1.7	10.6	80.2	93.4	6.5	54.2
Rougher Tails	82.1	1,620.3	0.02	0.10	161	0.06	1.66	3.18	0.2	6.7	17.1	1.3	87.2	42.7

Clnr Scav: Cleaner Scavenger

13.6 Leaching Test Work

Leaching test work was carried out in the 2018, 2020 and 2022 test campaigns completed by SGS. The results of these test campaigns are summarized in the subsections below. No leaching test work was completed on cleaner flotation concentrate.

2018

In 2018, a leaching program was conducted and included leaching of flotation rougher concentrates, OSC, and blends of flotation/ore sorter concentrates at 70:30, 50:50, and 30:70 of fines-to-coarse ratios. The fines-to-coarse proportion for operations had not been established when the tests were performed, the test work program was designed to cover a range of scenarios. The samples were prepared to a pulp density of 45% (weight/weight [“w/w”]) solids, with the exception of the flotation rougher concentrate leach tests that were run at 35% (w/w) solids. All leaching tests were conducted at a target pH of 11 to 11.5 and dissolved oxygen levels of 6 parts per million (“ppm”) to 8 ppm.

Fines flotation concentrate, OSC flotation concentrate and OSC of variability composites were blended in proportions, which would represent the pre-concentrate production and leached at 45 µm and 75 µm with and without pre-treatment.

In general, excellent gold leaching recoveries between 95% and 98% were observed for all tests performed on OSC and blended OSC/flotation concentrate samples. A 3–4% decrease in recovery was observed for the rougher flotation concentrates when leached alone. Silver recoveries were quite variable, averaging 77% and 86% for the flotation concentrates and ore sorter concentrates respectively. While gold recoveries were excellent for the blended samples, silver recoveries for the same samples averaged 46%.

Leaching of blended pre-concentrates at approximately 50 µm on average resulted in 94% gold recovery. A range of 0.8–2.4% decrease in recovery was observed for leaching at 75 µm compared to 45 µm. In general, the pre-aeration stage decreased cyanide consumption insignificantly; however, lime consumption increased 0.6 kg/t on average.

2020

In 2020, SGS completed standard cyanide bottle roll tests on rougher flotation concentrates from the three composite samples (Shaft Zone bulk samples). Regardless of the testing conditions, gold recoveries varied between 95.7% and 96.8%, and silver recoveries varied between 44.8% and 55.5%.

2022

The leaching campaign in 2022 focused on the Lowhee Zone and used a blend of sorting concentrate and prep fines to conduct further gravity and leaching test work. Lowhee leaching test work was performed on the gravity tails of the blend and directly on the blend.

Leaching of the Lowhee blend resulted in gold and silver recoveries of 95.7–96.5% and 66.2–77%, respectively. The gravity tails leaching recoveries ranged from 91.5–93.9% for gold and 58–64.3% for silver.

13.7 Thickening, Filtration, and Rheology

The objective of the thickening, filtration and rheology testing is to measure solid-liquid separation rates to predict sizing and operating parameters for full-scale dewatering equipment.

Several test works were conducted during the Cariboo Project phases. As the mineralogical zone and flowsheet evolved, the physicochemical characteristics of the solids and the liquids changed. Some of the paste backfill laboratory test work including dewatering test work specific to this area are presented in the paste backfill Section 13.8.

Six types of flocculants were screened and tested. Flocculant dosage and solid feeds were optimized using 1 L vessels. Optimal condition was carried in 4 L vessel to determine the underflow ("U/F") density. Results showed that a feed density of 12.5 wt% solids and a flocculant dosage of 25 g/t generated an underflow density of 69 wt% solids. The underflow of the settling tests was centrifuged to determine the maximal density achievable through gravimetric settling methods, which reached 77 wt% solids. The vacuum disc filtration was not a viable option, the material was falling off the filter. Tests were, therefore, conducted to evaluate belt vacuum filtration. The sample was then filtered on an apparatus simulating a vacuum belt filter to determine a possible option for paste production and test results are shown in Table 13-38.

Table 13-38: Belt vacuum filtration test

Feed wt% Solids	Average Cake Moisture (wt%)
75%	19.1%
70%	21%

13.7.1 Pocock Industrial – 2018

13.7.1.1 Samples Tested

Three samples were sent to Pocock Industrial in Salt Lake City, Utah, for thickening, filtration, and rheology testing. The characteristics of the as-received materials are summarized in Table 13-39.

Table 13-39: Sample characterization

Sample	Particle Size (P_{80}, µm)	pH (as received)	SG for Calculations
Flotation Tailings	105	7.8	2.76
Pre-leach Thickener Feed	41	10.9	2.88
Detoxed Tailings	36	9.2	2.97

13.7.1.2 Thickening

Flocculant Screening

All three samples were submitted to flocculant screening tests to identify the best reagent for flocculation of solids to promote rapid settling and reducing suspended solids concentration in overflow. The screening tests also provided an indication of the required reagent dosing. The selected flocculant for all three samples was a high molecular weight, 10% charge anionic polyacrylamide.

Once an appropriate flocculant was selected, static settling tests were conducted to provide an estimate of the optimized operating parameters, including feed slurry density and flocculant dosing, for dynamic testing. The recommended flocculant dosing for dynamic testing ranged between 24 g/t and 36 g/t.

Dynamic Testing

Dynamic thickening tests were performed on each material to determine the recommended maximum hydraulic design basis for high-rate thickener design. Expected underflow solids concentrations and overflow suspended solids concentrations were also determined in testing. Table 13-40 provides high-rate thickener design criteria and operating parameters for each material.

Table 13-40: Recommended high-rate thickener operating parameters

Sample	Feed Pulp Density	Flocculant Dose	Design Net Feed Loading	Predicted TSS	Predicted U/F Density
	(%, w/w)	(g/t)	($m^3/m^2/h$)	(mg/L)	(%, w/w)
Flotation Tailings	14.8	24–26	3.7	150–250	71%
Pre-leach Thickener Feed	15.0	27–30	4.0	150–250	62%
Detoxed Tailings	17.2	32–36	3.8	150–250	64%

The overflow clarities achieved were shown to be in the range of what is generally acceptable. For further reduction of overflow suspended solids concentration, a polish filtration step may be required to treat the thickener overflow.

Each of the three thickening applications requires dilution of feed to between 13% and 17% (w/w) solids.

The suggested maximum design hydraulic loading rate is as follows:

- The flotation tailings material is 3.7 $m^3/m^2/h$, with a maximum recommended underflow density of 71% (w/w);
- The pre-leach thickener feed material is 4.0 $m^3/m^2/h$ with a maximum recommended underflow density of 62% (w/w);
- The detoxed tailings material is 3.8 $m^3/m^2/h$ with a maximum recommended underflow density of 64% (w/w).

13.7.1.3 Rheology

Rheological measurements were performed on thickened samples on each of the flotation tailings, pre-leach thickener feed, and detoxed tailings materials. A typical yield stress versus percent solids is presented in Figure 13-23.

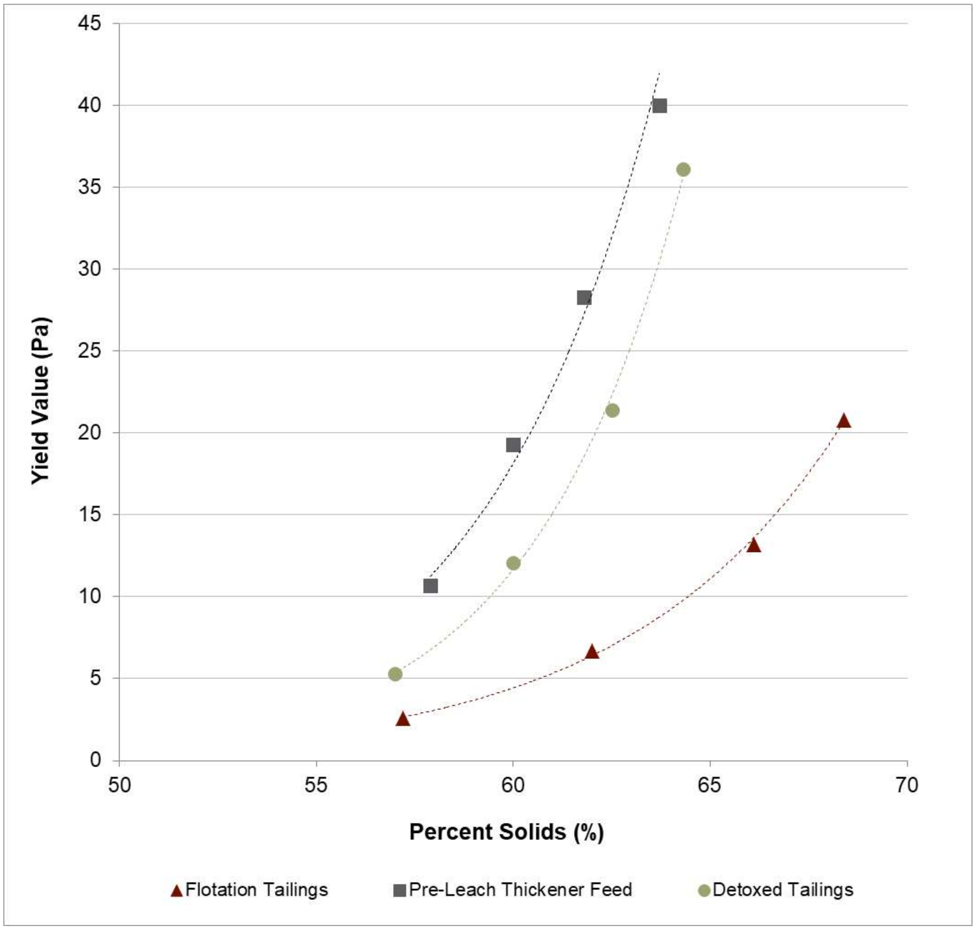


Figure 13-23: Yield value vs percent solids
(Source: Pocock Industrials, 2019)

Rheology results indicate that for each of the materials, the yield value was less than 30 pascals ("Pa") at the maximum thickened underflow density recommended from the thickening tests. For these materials, a heavy-duty thickener rake mechanism is recommended to minimize the thickener underflow density due to insufficient rake torque.

13.7.1.4 Filtration Tests

Pressure filtration tests were conducted on both flotation and detox tailings. The tests were done in a 60 mm chamber, using air blow with and without membrane squeeze. The test conditions and main filtration results are presented in Table 13-41.

Table 13-41: Pressure filtration results and design parameters

Sample	Membrane Squeeze	Feed Pulp Density	Dry Bulk Density	Cake Thickness	Cycle Time	Cake Moisture
		(%, w/w)	(t/m3)	(mm)	(min)	(%)
Flotation Tailings	N	68.3	1.49	60.0	12.0	8.5
Flotation Tailings	Y	68.3	1.53	58.3	12.5	8.0
Detoxed Tailings	N	62.7	1.50	60.0	12.0	13.9
Detoxed Tailings	Y	62.7	1.57	57.4	12.5	12.7

The results demonstrate that both with and without the membrane squeeze, both tailings materials dewatered well within an acceptable cycle time (12 min to 12.5 min). The cake moisture achieved for the flotation tailings and detoxed tailings ranged from 8.0% to 8.5% and from 12.7% to 13.9%, respectively. Obtained results for detoxed tailings are in the industry standard for tailings dry stacking (above 80% solid w/w).

13.7.2 FLSmidth – 2022 (Shaft Zone)

13.7.2.1 Thickening and Filtration Tests

The objective of the thickening, filtration and rheology testing is to measure solid-liquid separation rates to predict sizing and operating parameters for full-scale dewatering equipment. Tests were performed at FLS Laboratory in Midvale, Utah, on a flotation tailings composite. Process water from the flotation testing was used to represent full scale slurry sample. Characteristics are summarized in Table 13-42.

Table 13-42: As-received sample characteristic summary

Description	Unit	Flotation Tailings Solid Sample	Process Water
Suspended Solids	wt%	84.0	-
Dissolved Solids	wt%	0.00	0.01
Solids Specific Gravity		2.70	-
Liquor Specific Gravity		-	1.00
pH		-	8.1
D80	µm	101	-
D50	µm	37.5	-
D20	µm	11	-
D10	µm	5.7	-

Thickening Tests

As part of the thickening tests, five different flocculants were tested, and BASF Magnafloc MF10 was selected for the remaining tests, as it performed the best. All the tests generated clear overflow and good settling rates.

Table 13-43: Evaluated flocculants

Flocculant	Charge	Molecular Weight	Charge Density
AN 923 VHM	Anionic	Medium	Low
AN 910	Anionic	Low	Low
MF 351	Non-ionic	Medium	None
MF 1011	Anionic	High	Medium
MF 10	Anionic	High	Very low

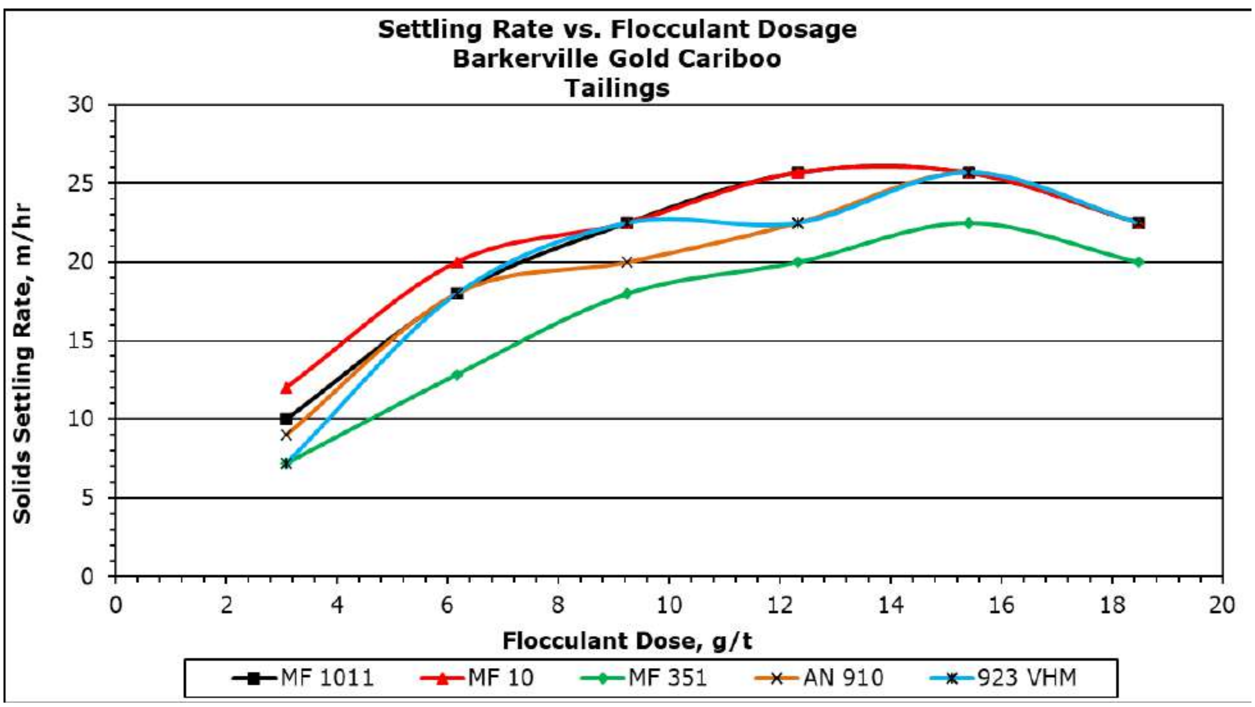


Figure 13-24: Settling rate vs Flocculant dosage
(Source: De Paula, 2022)

Additional tests were performed to determine the maximum flux rate and the corresponding percent solids, which were then used for the 2-litre static tests to represent a high-rate thickener, and continuous fill tests to determine the underflow density. These tests showed that at a feed percent solids of 12% and flocculant dosage of 12 g/t an underflow percent solids of 68% can be achieved. The recommended thickener operating parameters are shown in Table 13-44.

Table 13-44: Recommended thickener operating parameters

Description	Unit	Value
Recommended Feed Solids Density	wt%	12
Underflow Characteristics		
Design Underflow Solids	wt%	68
Minimum Mud Residence Time Required	min	60
Underflow Yield Stress	Pa	35
Overflow Characteristics		
Overflow Clarity	ppm	100
Flocculant		
Recommended Flocculant		MF 10
Recommended Total Flocculant Dose	g/t	12
Recommended Flocculant Concentration	g/L	0.1
Thickener Sizing		
Solids Unit Area	m^2/tpd	0.03
Recommended Rise Rate	m/h	12

Filtration Tests

There were two types of filtration tests conducted to simulate both a vacuum disc filter and pressure filter. Both filter tests were performed at 68% solids to represent flotation tailings thickener underflow. The vacuum filter was able to achieve a cake moisture of 18–22% with thicknesses ranging from 19–44 mm, in 14–126 seconds. The pressure filter was able to achieve a cake moisture of 10.4% at both 32 mm and 50 mm thicknesses, with a blow time of 8–10 minutes at a pressure of 10 bar.

Table 13-45: Vacuum filtration test results

Process Parameter	Unit	Flotation Tailings
Filter Media	-	Paste Backfill
Feed Solids Density	wt%	68
Form Vacuum	kPa	68
Dry Vacuum	kPa	68
Cake Thickness	mm	34
Dry Cake Weight	kg/m^2	54
Formation Time	min	0.7
Dry Time	min	1.1
Cake Moisture	wt%	19
Filtration Rate	$kg/m^2/h$	1,056

Table 13-46: Pressure filtration test results

Process Parameter	Unit	Flotation Tailings	
Test ID	-	1	2
Chamber Type	-	Recessed	
Filter Media	-	POPR 966	
Filter Feed Suspended Solids	wt%	68.0	
Chamber Thickness	mm	50	32
Feed Pressure	bar	10.0	10.0
Drying Pressure	bar	7.0	7.0
Fill Time	min	0.33	0.17
Air Blow Time	min	10.0	8.0
Ultimate Cake Moisture	wt%	10.4	10.4
Dry Cake Density	kg/m^3	1,543	1,521
Filtration Rate	$kg/m^2/h$	168	123

13.7.3 SGS – 2022

13.7.3.1 Samples Tested

Two samples were sent to SGS in Lakefield, Ontario, for rheology testing: one from the flotation concentrate thickener underflow and one from the carbon in pulp ("CIP") detoxified tailings (Liu and Ashbury, 2022a). The characteristics of the as-received material are summarized in Table 13-47.

Table 13-47: Rheology sample characterization

Sample ID	Test Code	K_{80} µm	ASG	SG	a ASG/SG	Temp °C	Solids % w/w	Density g/L
Flotation Concentrate Underflow	T5	117	3.87	3.89	1.00	22	78.9	2,402
	T1		3.86		0.99		78.1	2,377
	T2		3.83		0.98		74.4	2,231
	T3		3.91		1.01		70.5	2,088
	T4		3.84		0.99		66.0	1,966
CIP Detox Tailings Underflow	T7	52	3.76	3.71	1.00	21	71.1	2,093
	T8		3.72		1.00		69.1	2,021
	T9		3.58		0.97		67.1	1,937
	T10		3.70		1.00		65.1	1,906
	T11		3.70		1.00		62.6	1,842
	T12		3.70		1.00		60.1	1,782

13.7.3.2 Results

The results from the rheological testing show that for the flotation concentrate thickener underflow, a percent-solids of 75% could be expected, while for the detoxified tailings, a percent-solids of 68% could be expected from commercial thickeners. A summary of the results for the flotation concentrate is shown in Table 13-48 and Figure 13-25, and Table 13-49 and Figure 13-26 provide a summary for the detoxified tailings.

Table 13-48: Summary of rheology results – Flotation concentrate underflow

Test Code	Solids % w/w	Unsheared Sample			Unsheared Sample			Observations
		Shear Rate ϒ range, 1/s	Yield Stress τ_{yB} Pa	Plastic Viscosity η_P mPa.s	Shear Rate ϒ range, 1/s	Yield Stress τ_{yB} Pa	Plastic Viscosity η_P mPa.s	
T5	78.9	100-300	114	724	100-300	72	614	Thixotropic
T1	78.1	100-300	80	546	100-300	61	411	Thixotropic
T2	74.4	100-300	35	87	100-300	18	86	Thixotropic
T3	70.5	100-300	9.9	30	100-300	5.9	32	Minor Settling
T4	66.0	100-300	3.3	14	Not available			Fast Settling

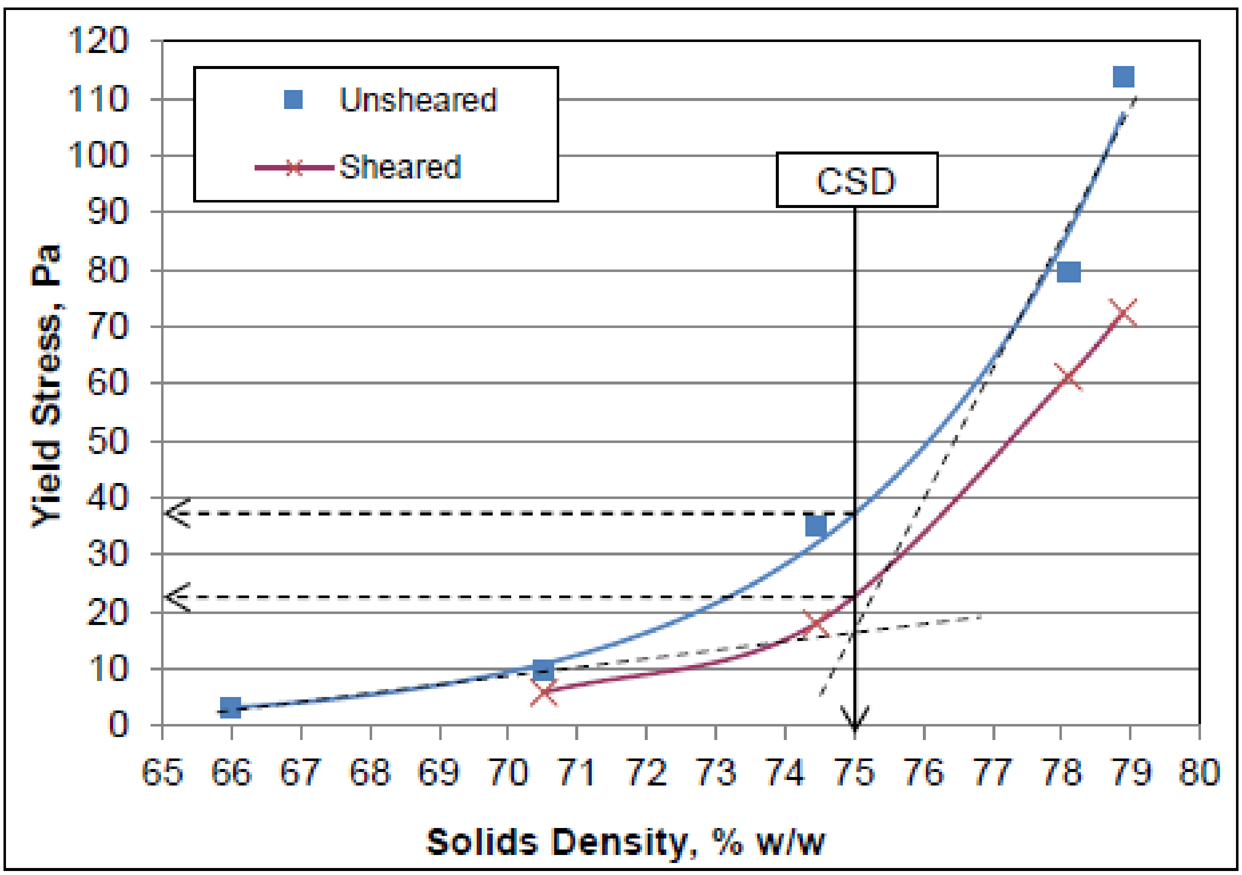


Figure 13-25: Yield stress vs solids density – Flotation concentrate underflow
(Source: Liu and Ashbury, 2022)

Table 13-49: Summary of rheology results – CIP detox tailings underflow

Test Code	Solids % w/w	Unsheared Sample			Unsheared Sample			Observations
		Shear Rate ϒ range, 1/s	Yield Stress τy_B Pa	Plastic Viscosity η_P mPa.s	Shear Rate ϒ range, 1/s	Yield Stress τy_B Pa	Plastic Viscosity η_P mPa.s	
T7	71.1	200-400	112	33	200-400	44	87	Thixotropic
T8	69.1	200-400	57	25	200-400	25	45	Thixotropic
T9	67.1	200-400	30	22	200-400	16	27	Thixotropic
T10	65.1	200-400	17	19	200-400	11	19	Thixotropic
T11	62.6	200-400	9.2	14	200-400	6.5	14	Minor Settling
T12	60.1	200-400	4.8	12	200-400	3.2	13	Settling

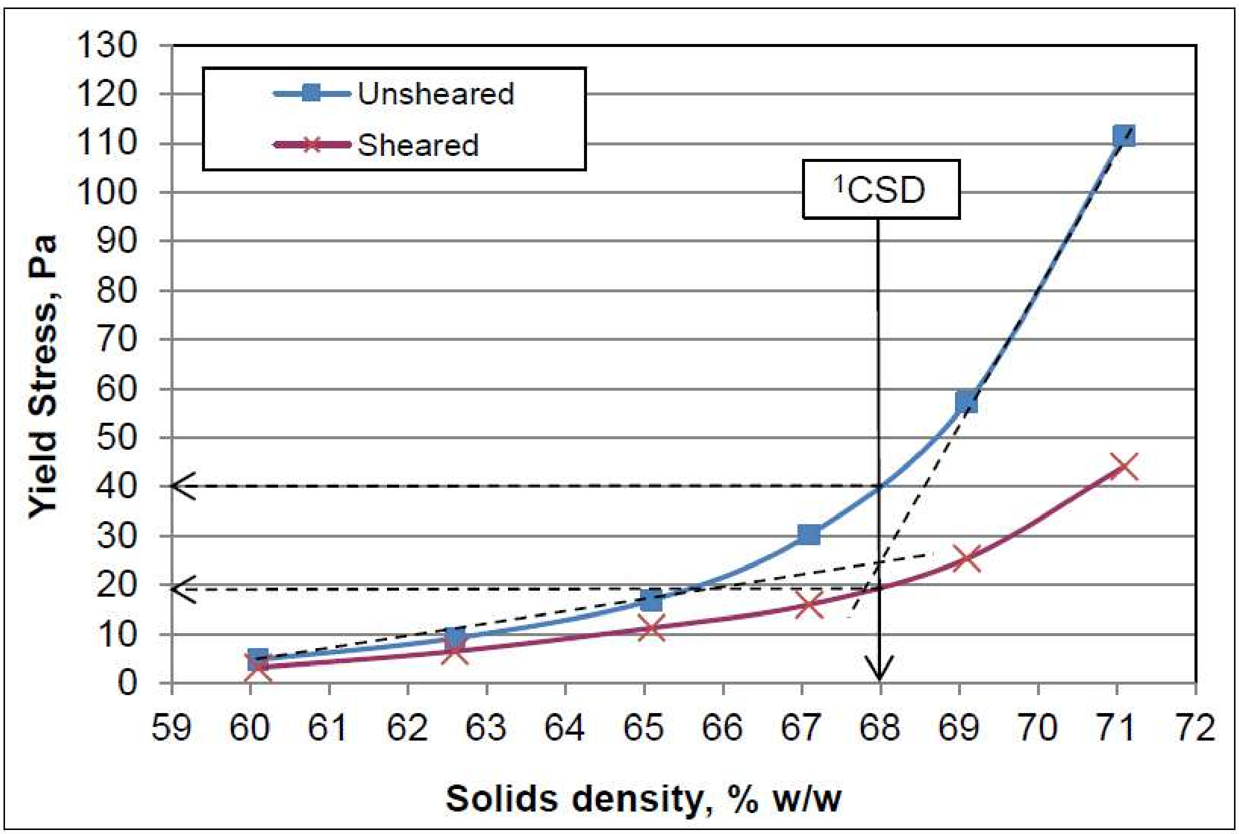


Figure 13-26: Yield stress vs solids density – CIP detox tailings underflow (Source: Liu and Ashbury, 2022)

13.7.4 Metso – 2024

The 2024 Metso test campaign included filtration and dynamic thickening testing for two blended tailings samples and a bulk gold concentrate. The two blends were created by blending the two samples received, rougher tails and scavenger tails, in the following ratios:

- Tails Blend 8:1 (Rougher Tails: Cleaner Scavenger Tails);
- Tails Blend 5:1 (Rougher Tails: Cleaner Scavenger Tails).

The dynamic thickening testing was completed on the two blended tailings samples. The results of the thickening test work were used to aid in determining the design parameters suitable for equipment sizing purposes.

Pressure filtration testing was completed on both blended tails samples and belt vacuum filtration was completed on all three samples.

13.7.4.1 Thickening Results

The flocculant used in the test work was the SNF913 SH. Six runs were performed at various flocculant dosage to determine the settling characteristics. The results are summarized in Table 13-50 and Table 13-51.

Table 13-50: 8:1 Blended tails – Dynamic thickening results

Run No.	Feed		Flocculant	Underflow		Overflow
	Flux (t/(m² h))	Liquor RR (m/h)	Dose (g/t)	Meas. Solids (% (w/w))	YS (Pa)	Solids (mg/L)
1	0.80	3.94	30	66.1	147	<100
2	1.00	4.93	30	65.9	81	<100
3	1.10	5.42	30	65.2	67	<100
4	1.30	6.40	30	64.5	58	<100
5	1.30	6.40	20	64.3	31	<100
6	1.30	6.40	5	65.4	25	194

Sources: Keckes (2024a; 2024b)

Table 13-51: 5:1 Blended tails – Dynamic thickening results

Run	Feed		Flocculant	Underflow		Overflow
	Flux (t/(m² ·h))	Liquor RR (m/h)	Dose (g/t)	Meas. Solids (% (w/w))	YS (Pa)	Solids (mg/L)
1	0.80	3.94	30	66.8	102	<100
2	1.00	4.93	30	64.2	89	<100
3	1.10	5.42	30	62.8	60	<100
4	1.30	6.40	30	65.8	74	<100
5	1.30	6.40	20	65.7	62	<100
6	1.30	6.40	10	66.6	60	<100

Sources: Keckes (2024a; 2024b)

No thickening work was completed on concentrate samples due to limited amount of samples.

13.7.4.2 Filtration Results

Belt Vacuum Filtration

The vacuum filtration test work began with the cloth selection for the two blended tails samples and the gold bulk concentrate. The intermediate air permeability cloth named MaroS60 was chosen for the further testing of the tailings samples. The tightest air permeability cloth named MaroS30 was chosen for the gold bulk concentrate.

Different volumes of slurry were filtered with the same drying time to determine the impact of the cake thicknesses on the moisture and the filtration rate. Following the cake thickness test work, different drying times were tested to measure the impact on filtration rate and cake moisture.

The program also included, for the two blended tails samples, filtration with flocculant SNF913 SH used as filter aid to examine the potential improvement in filtration rate and cake moistures. Table 13-52 to Table 13-54 present the belt vacuum filtration results summary.

Table 13-52: 8:1 Blended tails – Belt vacuum filtration results

Parameters	Unit	Filter Cloth Selection			Cake Thickness			Drying Time		
		Run#1	Run#2	Run#3	Run#4	Run#5	Run#6	Run#7	Run#8	Run#9
Filter Cloth	-	Maro S90	Maro S60	Maro S30	Maro S60	Maro S60	Maro S60	Maro S60	Maro S60	Maro S60
Feed Solids	% w/w	~63%	~63%	~63%	~63%	~63%	~63%	~63%	~63%	~63%
Total Cycle Time	s	38	37	40	50	70	59	88	119	148
Slurry Volume	ml	100	100	100	200	300	250	250	250	250
Air Drying	s	30	30	30	30	30	30	60	90	120
Cake Thickness	mm	6.0	5.3	5.5	11.8	18.3	15.0	14.5	14.3	14.9
Cake Moisture	% w/w	17.9	17.2	16.9	19.8	20.5	20.7	20.5	19.6	20.3
Filtration Rate	kgD.S/m²h	920	959	897	1459	1,622	1,565	1,025	743	618

Table 13-53: 5:1 Blended tails – Belt vacuum filtration results summary

Parameters	Unit	Filter Cloth Selection			Cake Thickness			Drying Time		
		Run#1	Run#2	Run#3	Run#4	Run#5	Run#6	Run#7	Run#8	Run#9
Filter Cloth		Maro S90	Maro S60	Maro S30	Maro S60	Maro S60	Maro S60	Maro S60	Maro S60	Maro S60
Feed Solids	% w/w	~63%	~63%	~63%	~63%	~63%	~63%	~63%	~63%	~63%
Total Cycle Time	s	38	38	39	51	71	60	88	122	153
Slurry Volume	ml	100	100	100	200	300	250	250	250	250
Air Drying	s	30	30	30	30	30	30	60	90	120
Cake Thickness	mm	5.2	5.7	5.6	11.3	19.2	14.5	14.1	15.6	15.0
Cake Moisture	%w/w	18.6	17.0	17.5	20.6	20.8	20.3	20.0	20.6	20.1
Filtration Rate	kgD.S/m²h	820	875	853	1,362	1,531	1,466	966	760	616

Table 13-54: 8:1 and 5:1 Blended tails - Belt vacuum filtration results using filter aid

Parameters	Unit	8 :1 Blended Tails				5 :1 Blended Tails			
		Run#1[1]	Run#2[1]	Run#3[1]	Run#4[1]	Run#1[1]	Run#2[1]	Run#3[1]	Run#4[1]
Filter Cloth	-	Maro S60	Maro S60	Maro S60	Maro S60	Maro S60	Maro S60	Maro S60	Maro S60
Feed Solids	% w/w	~63%	~63%	~63%	~63%	~63%	~63%	~63%	~63%
Total Cycle Time	s	54	48	47	43	57	50	51	44
Slurry Volume	ml	250	250	250	250	250	250	250	250
Filter Aid Dosage	g/t	10	22	31	43	10	21	29	44Cake
Cake thickness	mm	15.6	14.5	15.5	15.7	15.9	15.0	16.4	15.3
Cake Moisture	%w/w	20.4	22.4	23.4	24.0	21.4	20.1	23.3	24.0
Filtration Rate	kgD.S/m²h	1,721	1,734	1,887	1,962	1,590	1,812	1,776	2,035

[1] SNF 913 SH filter aid used.

Table 13-55: Gold bulk concentrate – Belt vacuum filtration results

Parameters	Unit	Filter Cloth Selection		Cake Thickness		Drying Time		
		Run#1	Run#2	Run#3	Run#4	Run#5	Run#6	Run#7
Filter Cloth	-	Maro S60	Maro S30	Maro S30	Maro S30	Maro S30	Maro S30	Maro S30
Feed Solids	% w/w	~52%	~52%	~52%	~52%	~52%	~52%	~52%
Total Cycle Time	s	50	47	58	100	94	118	153
Slurry Volume	ml	150	150	200	300	200	200	200
Air Drying	s	30	30	30	30	60	90	120
Cake Thickness	mm	6.1	7.3	7.3	9.2	8.9	7.8	8.4
Cake Moisture	%w/w	27.2	26.8	26.8	27.0	26.8	27.0	26.7
Filtration Rate	kgD.S/m²h	726	685	793	811	537	358	316

Pressure Filtration

Pressure filtration was completed on both blended tails. The Labox 100 bench scale unit was used in double-sided filtration (FFP mode) with the filter cloth named MitoS610. Three runs of the test were completed. The initial test was performed using a 40 mm chamber to characterize the sample filtration properties. The two additional runs were done using 50 mm and 60 mm chambers to observe the filtering performance. Pumping, pressing and air-drying pressure were respectively 6, 12 and 10 bar for all the runs.

Overall, the pressure filtration observations were the same for the two samples. As the chamber size increased the moisture content increased. The cake released off the cloth easily and the cloths were easy to wash. The pressure filtration results summary is presented in Table 13-56.

Table 13-56: 8:1 and 5:1 Blended tails – Pressure filtration results

Parameters	Unit	8 :1 Blended Tails			5 :1 Blended Tails		
		Run#1	Run#2	Run#3	Run#1	Run#2	Run#3
Feed Density	% w/w	~63%	~63%	~63%	~63%	~63%	~63%
Chamber Depth	mm	40	50	60	40	50	60
Cycle Time	Min	8.5	9	9.5	8.5	9	9.5
Cake Thickness	mm	39.5	50.4	60.1	40.2	49.8	60.7
Cake Moisture	% w/w	9.6	10.9	11.3	11.0	12.2	11.7
Filtration Rate D.S.	kg/m^2h	228	280	314	233	282	323

Blended Tails

The process flowsheet and the design parameter are based on the 8:1 blended tails. The thickening results for this mix demonstrated that it is possible to achieve an underflow solid content around 65% for a flux between 1.10 t to 1.30 t(m²*h) and a flocculant consumption of 30 g/t.

The filtered blended tails will feed the paste backfill plant. The solid content of the tails must allow the addition of makeup water to adjust the paste slump and solid content around 75%. Belt vacuum filtration and pressure filtration test work achieved average moisture content in the given order of 20% and 10% that should provide enough flexibility to adjust the paste slump.

13.8 Paste Backfill

Four paste backfill laboratory investigation programs were carried out with Cariboo tailings samples. The results vary from test to test since the Cariboo metallurgical flowsheet evolved affecting the physical and chemical characteristics of the tailings.

Golder (WSP Golder since April 2021) performed two series of test work campaigns in 2019 and 2022. In the 2019 campaign, the paste tested was deemed unstable and Golder highlighted risks of sanding pipelines when pumping through a paste distribution system. In the 2022 campaign, a larger sample, more representative of the mill tailings, was evaluated and a paste recipe was determined.

The recent laboratory test work was conducted by T Engineering (Ting and Pasqual, 2024). The test work was required to confirm the paste backfill recipe and paste backfill feasibility.

A summary of the results obtained prior to 2024 is presented in this section along with a more detailed presentation of the latest study.

13.8.1 Paste and Solid-Liquid Investigation - Golder – 2019

The purpose of the laboratory program was to provide information on the dewatering, rheological, and strength characteristics of flotation tailings for the paste backfill mix design.

13.8.1.1 Tailings Characterization

Samples were prepared and characterized before testing. The material for testing was dewatered and homogenized to be treated as a unique sample called 19124019 Cariboo Tailings. It was re-diluted with tap water, and the pH was adjusted to 7.8 with lime.

Particle size distribution was determined with a mechanical sieving and laser particle size analyzer and is shown in Table 13-57.

Table 13-57: Tailings particle size distribution

Sample	D10 (µm)	D30 (µm)	D50 (µm)	D60 (µm)	D80 (µm)
19124019 Cariboo Tailings	10	37	85	116	201

Specific gravity ("SG") was determined to be 2.67, using de-aired water, after de-airing the sample itself.

Chemical and mineralogical analyses were performed using Whole Rock Analysis, by means of ICP and X-ray diffraction ("XRD") methods. Sulphur analysis, performed by LECO method, shows 0.17 wt% sulphur, and the mineralogical composition is shown in Table 13-58.

Table 13-58: XRD Mineralogical composition

Mineral	Chemical Formula	wt%
Quartz	SiO_2	80.60
Muscovite	$H_2KAl_3SiO_{12}$	6.92
Calcite	$CaCO_3$	4.99
Orthoclase	$Al_2O_3.K_{20}.6SiO_2$	4.16
Ankerite	$Ca(Mg_{0.6}Fe_{0.33}^{2+})(CO_3)_2$	3.33

13.8.1.2 Rheological Tests

Rheological testing was done to evaluate flow and handling properties. The test measured the slump in function of the solids content, where water was added in small increments. Figure 13-27 shows the relation of slump versus solids content.

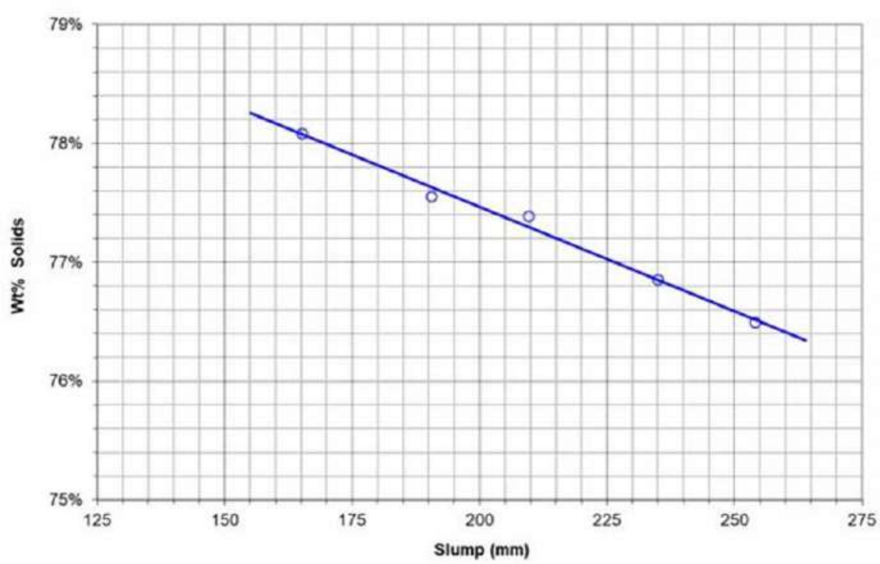


Figure 13-27: Solid content vs slump

Static yield tests determined the minimum force required to initiate flow. Measurements were taken at various solids contents by using a vane spindle attached to a torque spring. Results are shown in Figure 13-28.

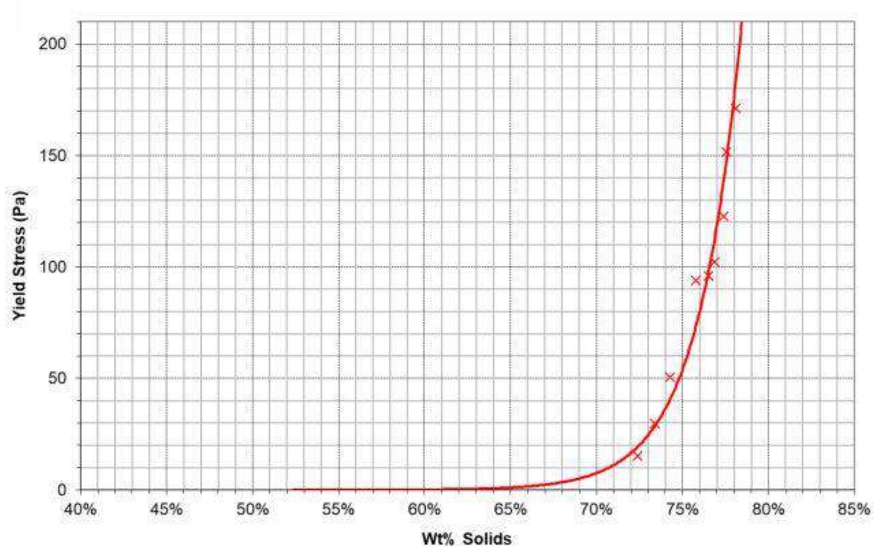


Figure 13-28: Yield stress vs solids density

Tests were carried out to determine water bleed properties of the paste while sitting idle in test beakers. Two slump consistencies were tested at four-time intervals. Water bleed and yield stress were measured, as shown in Figure 13-29.

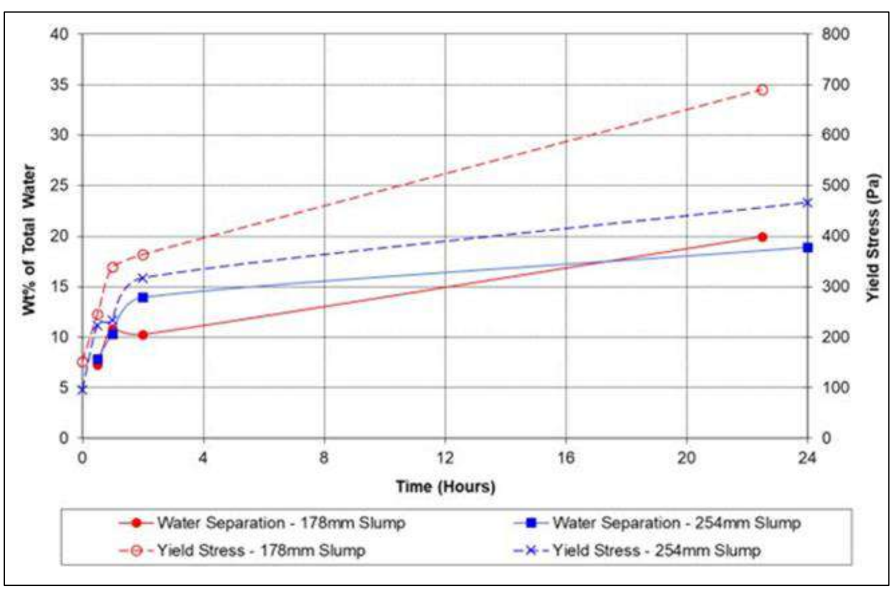


Figure 13-29: Water bleed and yield stress vs time

A plug yield stress analysis was performed to determine if consolidation had occurred through the idle paste material. Two slump consistencies sat idle for two hours and a special design vane spindle was immersed at three depths. The tests are summarized in Figure 13-30.

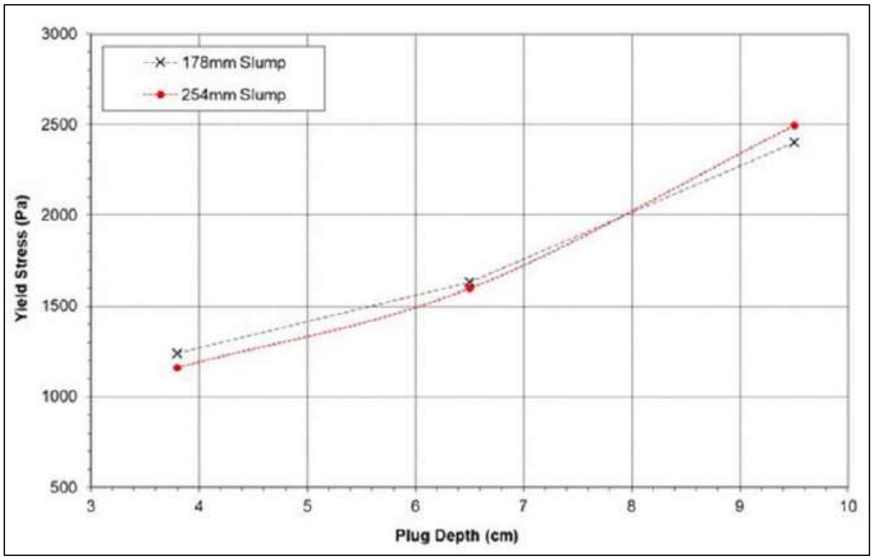


Figure 13-30: Plug depth vs yield stress

Dynamic viscosity and dynamic yield stress are extrapolated from dynamic shear stress to zero shear. The measurement is made by a sensor rotated inside a cup that contains the sample. The torque measurements were recorded at several speeds or shear rates. Results from tests are presented in Table 13-59.

Table 13-59: Bingham viscosity and yield stress

wt% Solids	Bingham Yield Stress (Pa)		Bingham Viscosity (Pa·s)	
	Ramp up	Ramp down	Ramp up	Ramp down
76.6	97	31	0.522	0.583
75.2	53	20	0.374	0.400
74.7	43	19	0.402	0.378
73.5	33	9	0.243	0.255
72.2	20	6	0.152	0.159
70.4	12	2	0.065	0.071

13.8.1.3 Unconfined Compressive Strength Testing

A series of unconfined compressive strength ("UCS") tests were performed for two different binder contents, two slumps, and three curing times to assess the backfill strength. The mixes were cast in triplicate into 2" by 4". cylinders. The cylinders were cured in a high-humidity environment at 20 °C to 25 °C. The preliminary results are presented in Table 13-60.

Table 13-60: Unconfined compressive strength test results

Mix	wt% Binder	Binder	Material	Slump mm (inch)	Average UCS (kPa)			Average Bulk Density (kg/m³)
					Curing 7 days	Curing 28 days	Curing 56 days	
1	3	Lafarge NPC	19124019 Cariboo Tailings	178 mm (7")	203	305	332	2,009
2	3			229 mm (9")	195	247	283	2,022
3	5			178 mm (7")	358	634	715	2,031
4	5			229 mm (9")	359	619	695	2,035

13.8.1.4 Conclusion: Paste and Solid-Liquid Investigation

The tailings sample tested, does not produce a truly stable paste. Based on the viscosity and dynamic yield stress data, it would be possible to pump the material horizontally and maintain the total pressure loss below 90 bar. There is a high risk of sanding out the distribution pipeline.

13.8.2 Feasibility Paste Fill Testing - WSP Golder – 2022

The 2019, test work results carried out by Golder indicated that the tailings failed to form a stable paste. Therefore, a new test program was undertaken to confirm if a larger tailings sample could perform better, as it would be more representative of the mill tailings. In addition, the tailings characteristics had changed based on the metallurgical test optimization program.

The test program was divided into two stages: i) the tailings characterization and rheology testing; and ii) the design of the underground distribution system ("UDS") and the optimization of the mix recipe.

13.8.2.1 Tailings Characterization

Particle size distribution ("PSD") was measured using a Malvern Mastersizer 3000 laser particle size analyzer and the results are presented in Table 13-61.

Table 13-61: Tailings particle size distribution

Sample	D10	D30	D50	D60	D80
	(µm)				
177416001 Tailings	6	18	39	56	106

The semi-quantitative mineralogical composition of the sample was measured with XRD and results are presented in Table 13-62.

Table 13-62: XRD mineralogical composition

Sample	Chemical Formula	wt%
Quartz	SiO_2	78.87
Muscovite	(K,Na)(Al,Mg,Fe)2Si3.1Al0.9O10(OH)2	16.61
Dolomite	Ca(Ca0.13Mg0.87)(CO_3)2	4.52
Total		**100**

13.8.2.2 Rheological Tests

Rheological tests were carried out to evaluate flow and handling properties. In order to measure the sample's sensitivity to water additions, increments of water were added to the sample. After each addition, slump and solids contents were determined. The relationship between slump and solids content is presented in Figure 13-31.

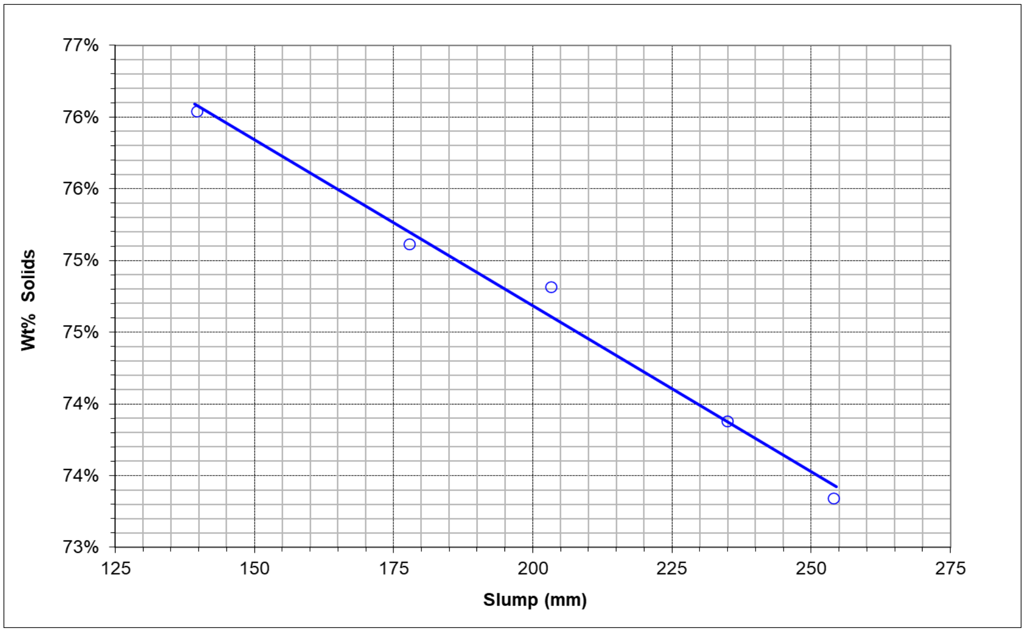


Figure 13-31: Solid content vs slump

Yield stress is the minimum force required to initiate flow. Static yield stress was determined by using a slow-moving (0.2 rotations per minute ("rpm")) vane spindle attached to a torque spring. Yield stress test results are presented in Figure 13-32.

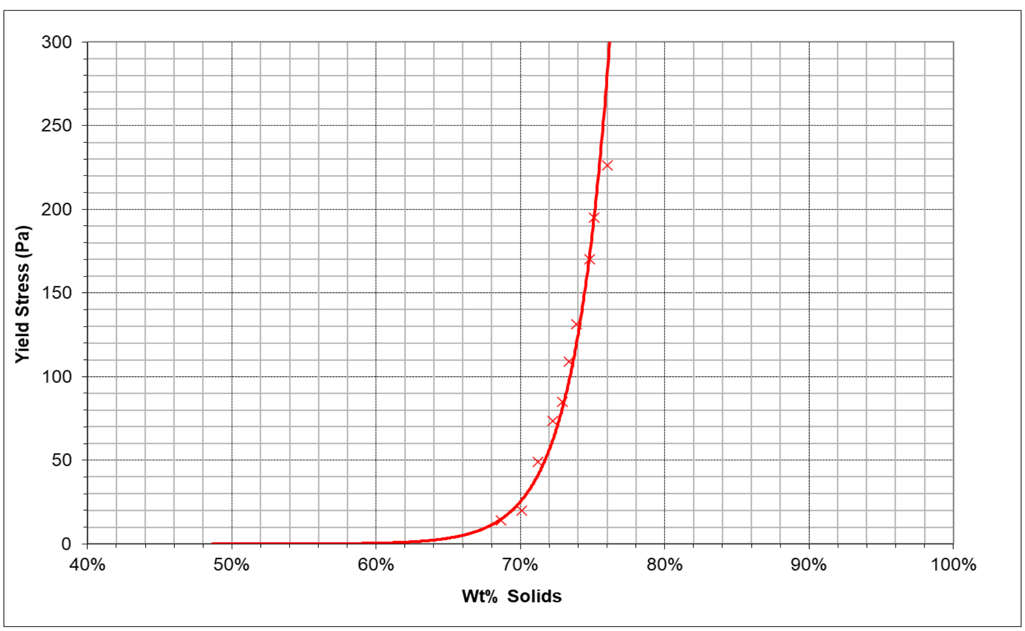


Figure 13-32: Static yield stress vs solids density

Moisture retention testing was performed to analyze the water bleed properties of the paste while idling in test beakers. Two slump consistencies were tested at four-time intervals. At each time interval, water bleed and yield stress were measured. The results are shown in Figure 13-33.

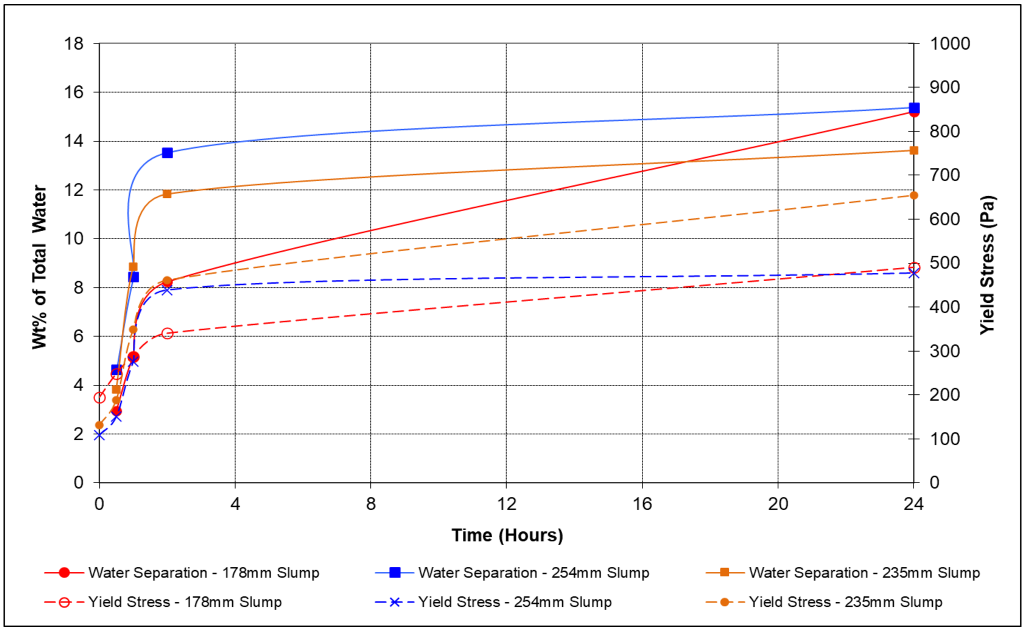


Figure 13-33: Water bleed and yield stress vs time

13.8.2.3 Flow Loop Testing

Pump selection and pipeline distribution systems design requires the data obtained from flow loop testing. The data provides viscosity and yield stress values essential to fluid characterization. The lab-scale flow loop system consisted of 50 mm (2") and 75 mm (3") schedule 40 steel piping, a progressive cavity pump, pressure transmitters, and a magnetic flow meter. A series of test runs were undertaken at each solid density to measure the pipeline friction loss at several flow rates. The relationship between the solid densities and pipeline yield stress is presented in Figure 13-34.

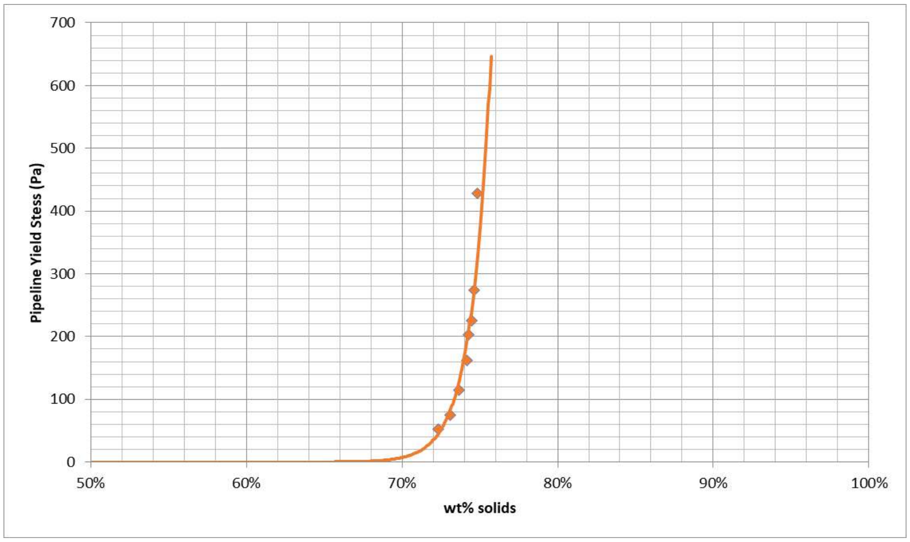


Figure 13-34: Pipeline yield stress vs solids density

From the flow loop data, the estimated pressure loss was measured for different pipeline diameters expected to be used for the UDS. The results are presented in Figure 13-35 and Figure 13-36.

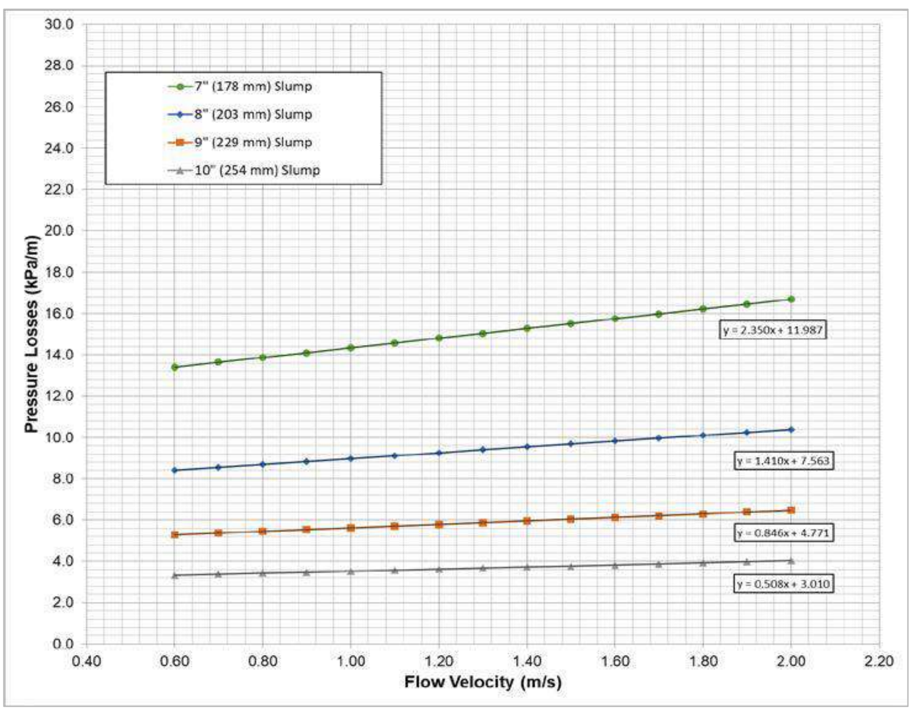


Figure 13-35: Estimated pressure losses in 6" SCH 80 pipeline

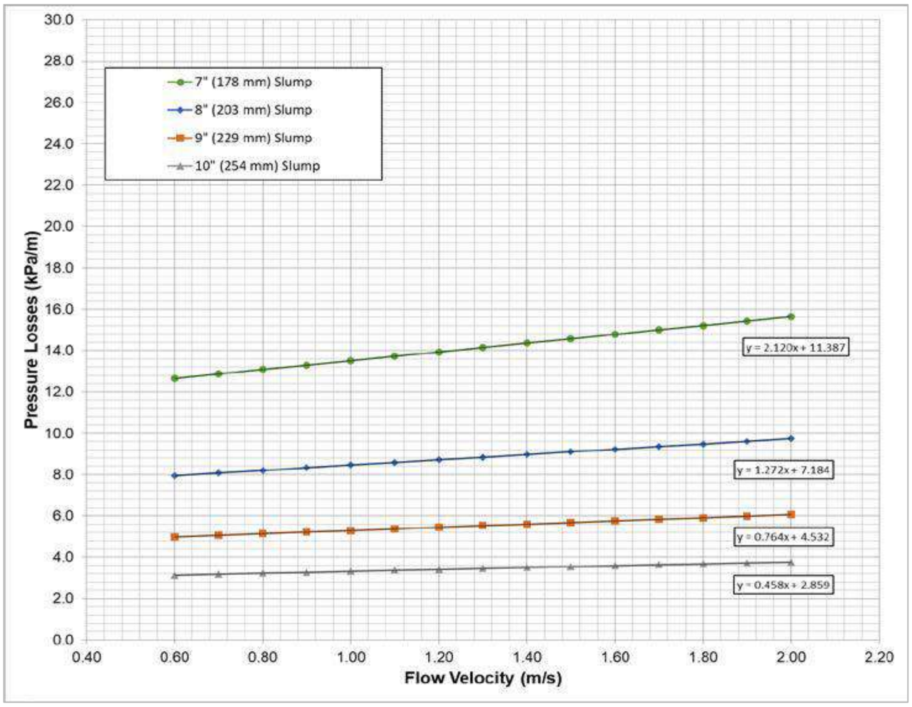


Figure 13-36: Estimated pressure losses in 6" SCH 40 pipeline

13.8.2.4 Unconfined Compressive Strength Testing

The UCS testing was conducted with a Humboldt HM2800 digital load frame. The load was measured using s-type load cells. Depending on the strength, either a 10 kN or 45 kN (2,000 lb or 10,000 lb) load cell was used. The cured cylinder was placed between two platens, and during testing, the bottom platen advanced at a rate of 2 mm (0.08") per minute. The load was continuously observed, and the maximum load was recorded automatically by the instrument.

The UCS program was undertaken to assess the backfill strength using 76 mm x 152 mm (3" x 6") cylinders. The cylinders were cured in a high humidity environment maintained at 20 °C to 25 °C. Three cylinders per curing period were cast and the results were averaged. The test results are presented in Table 13-63.

Table 13-63: UCS testing program results – WSP Golder

Mix	Weight % Binder	Binder	Material	Slump (mm)	Average UCS, kPa			Average Bulk Density (kg/m³)
					Curing Duration, 7 Days	Curing Duration, 14 Days	Curing Duration, 28 Days	
1	1.5	Lafarge Type 10	177416001 Tailings	178	108	114	114	1,946
2				229	68	74	87	1,929
3	2.5			178	143	147	150	1,950
4				229	79	145	151	1,940
5	4.0			178	190	187	239	1,951
6				229	156	132	186	1,921
4 (Redo)	2.5			229	116	170	155	1,931
6 (Redo)	4.0			229	226	265	227	1,918

13.8.3 T Engineering – 2024

In 2024, T Engineering completed a paste backfill testing campaign to establish the paste backfill mix design for the Project (Ting and Pascual, 2024). Two tailings samples were received by T Engineering as shown in Table 13-64.

Table 13-64: Samples received

Sample ID	Mass (kg)	Moisture (%)	Solid (%)
BL 1573-85 Rougher Tails	~200	21.9	78.1
BL 1573-85 Cleaner Scavenger Tails	35	28.7	71.3

Using the samples received, the following two tailings' blends were created for testing:

- Tails Blend 8:1 (Rougher Tails: Cleaner Scavenger Tails);
- Tails Blend 5:1 (Rougher Tails: Cleaner Scavenger Tails).

Material characterization test work was completed on the rougher tails, cleaner scavenger tails, and both tailings' blends. Rheology testing was completed on the 8:1 Tails Blend and UCS was completed on the two tailings blends.

13.8.3.1 Material Characterization

The particle size distribution of the four samples was analyzed by laser particle size analyzer (Table 13-65).

Table 13-65: Particle size distribution

Sample ID	d_{50} (µm)	d_{80} (µm)	% passing 20 µm	SG
Rougher Tails	37.0	223.8	31.5	2.84
Cleaner Scavenger Tails	14.4	27.6	66.0	3.28
8:1 Tails Blend	33.0	214.7	35.0	2.86
5:1 Tails Blend	26.6	132.9	39.5	2.9

The specific gravity was determined using a pycnometer (Table 13-66).

Table 13-66: Specific gravity of tailings and mixtures

Sample ID	Specific Gravity
Rougher Tails or *RT*	2.80
Scavenger Tails or *ST*	3.22
8:1 Mix (RT:ST)	2.86
5:1 Mix (RT:ST)	2.85

Chemical composition and mineralogy of the rougher and scavenger tailings were measured, respectively, by inductively coupled plasma mass spectroscopy ("ICP-MS") and XRD (Table 13-67 and Table 13-68).

Table 13-67: ICP-MS results

Sample ID		Rougher Tailings	Scavenger Tailings
Analyte	Unit	Assay	Assay
Al_2O_3	wt%	14.6	17.9
As	ppm	192	1820
Ba	ppm	656	70
CaO	wt%	2.45	1.17
Co	ppm	6.27	89.3
Ce	ppm	62	77
Cr	ppm	104	237
Fe_2O_3	wt%	4.65	21.5
K_2O	wt%	4.16	5.19
La	ppm	34	40
Li	ppm	19	20
MgO	wt%	1.86	1.12
MnO	wt%	0.134	0.063
Na_2O	wt%	0.35	0.34
P_2O_5	wt%	0.098	0.097
S	ppm	741	137,000
Se	ppm	0.3	0.8
Sr	ppm	114	90
TiO_2	wt%	0.709	0.728
V	ppm	105	121
Zr	ppm	98	137

Table 13-68: XRD results

Sample ID	Rougher Tailings	Scavenger Tailings
Mineral	**wt%**	**wt%**
Quartz - SiO_2	43.6	19.6
Muscovite - $(K_{.92}Na_{.08})Si_{3.2}Al_{2.65}Ti_{.04}Fe_{.12}Mg_{.06}O_{12})$	53.4	68.7
Albite - $(AlSi_3)(Na_{.75}K_{.25})O_8$	2.5	0
Kaolinite - $Al_2Si_2O_9H_4$	0.6	1.7
Pyrite - FeS_2	0	9.9
Total	**100**	**100**

13.8.3.2 Rheological Tests

Rheology test work assess the flow properties of the tailings and the paste for different percent solids. The yield stress of uncemented and cemented paste was measured. The binder used for the cemented paste was the Portland-limestone (GUL) cement added at a ratio of 5% by weight. All rheological characterization tests were performed on 8:1 tailings mixture.

To assess the sensitivity of the water addition, decant water from the as-received tailings was added gradually to the uncemented sample. The slump and the solid content were measured after each addition. The results are presented in Figure 13-37.

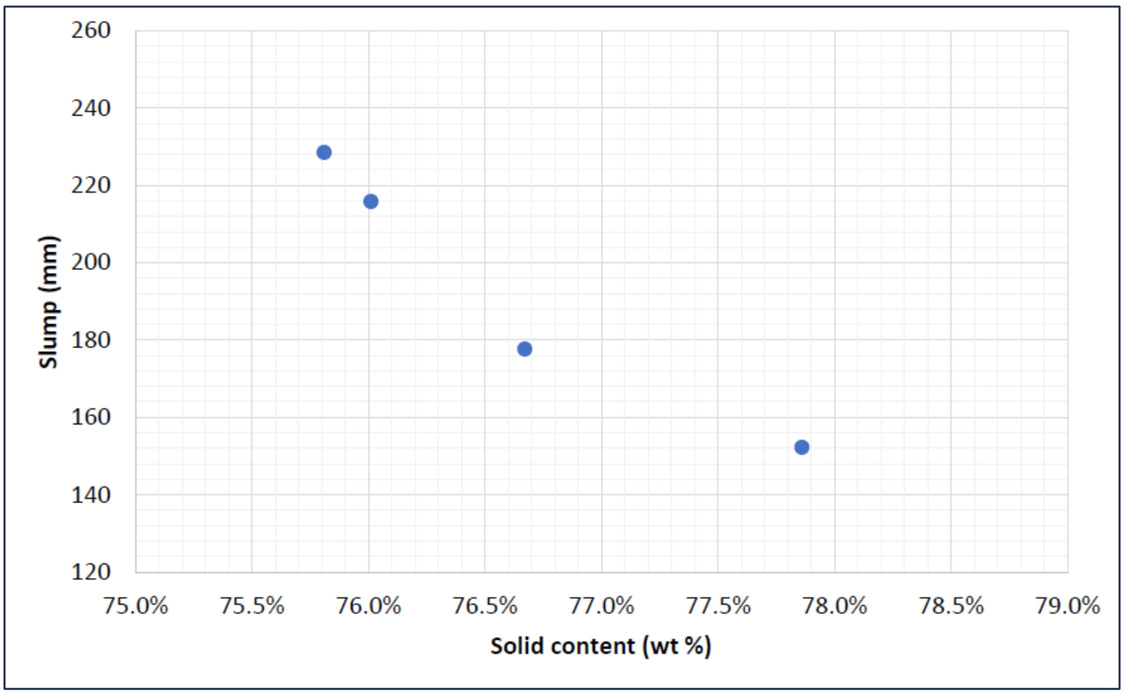


Figure 13-37: Uncemented sample - solid content vs slump

Static Yield Stress, Dynamic Yield Stress and Dynamic Viscosity Test Work

Yield stress is the minimum force required to initiate flow. Static yield stress was determined by using a vane spindle rotating at a very low speed connected to a torque spring. Measurements were taken at various solids content.

Dynamic viscosity and dynamic yield stress were also tested to understand the fluid behaviour. Figure 13-38, Figure 13-39 and Figure 13-40 illustrate the static yield stress, dynamic yield stress, and dynamic viscosity of the cemented tailings paste compared the uncemented tailings.

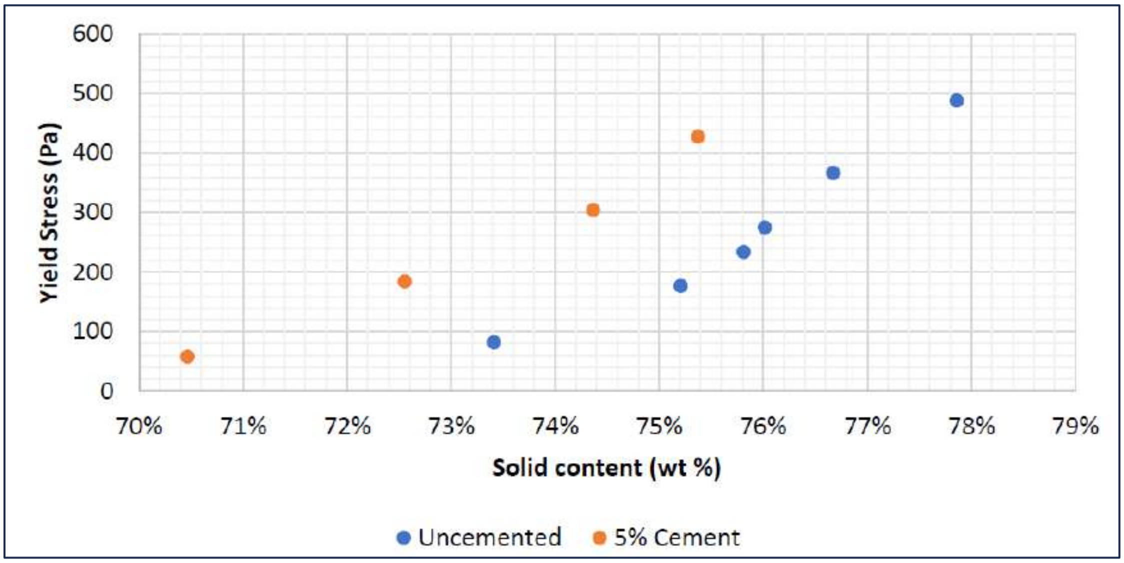


Figure 13-38: Static yield stress vs solid density

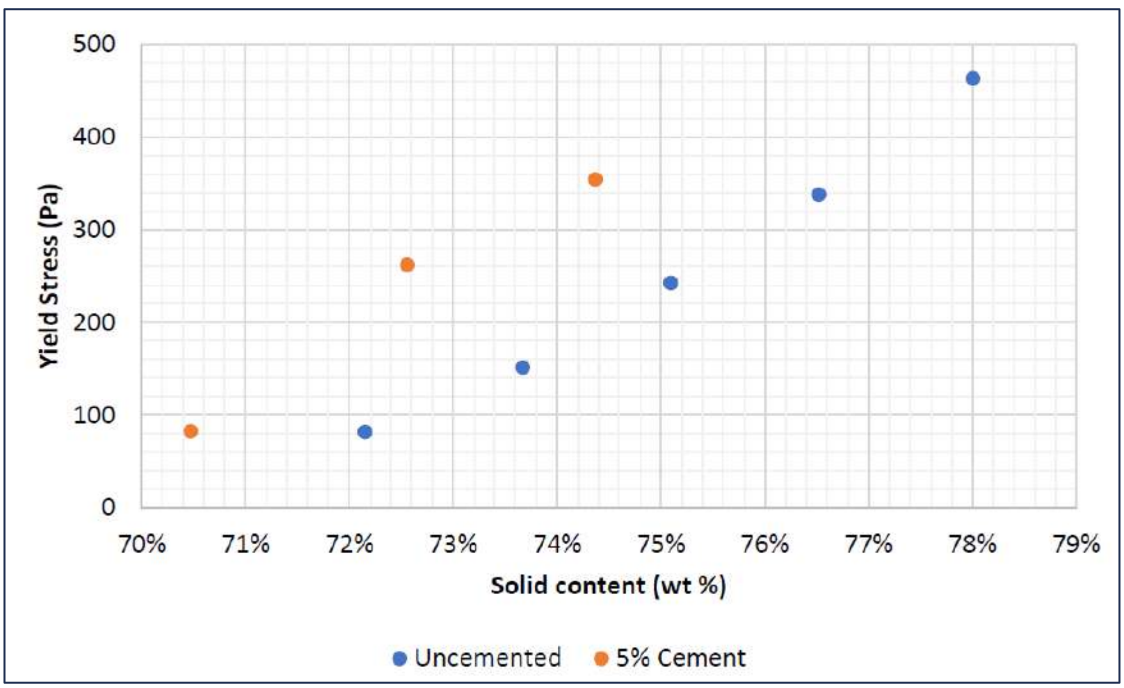


Figure 13-39: Dynamic yield stress vs solid density

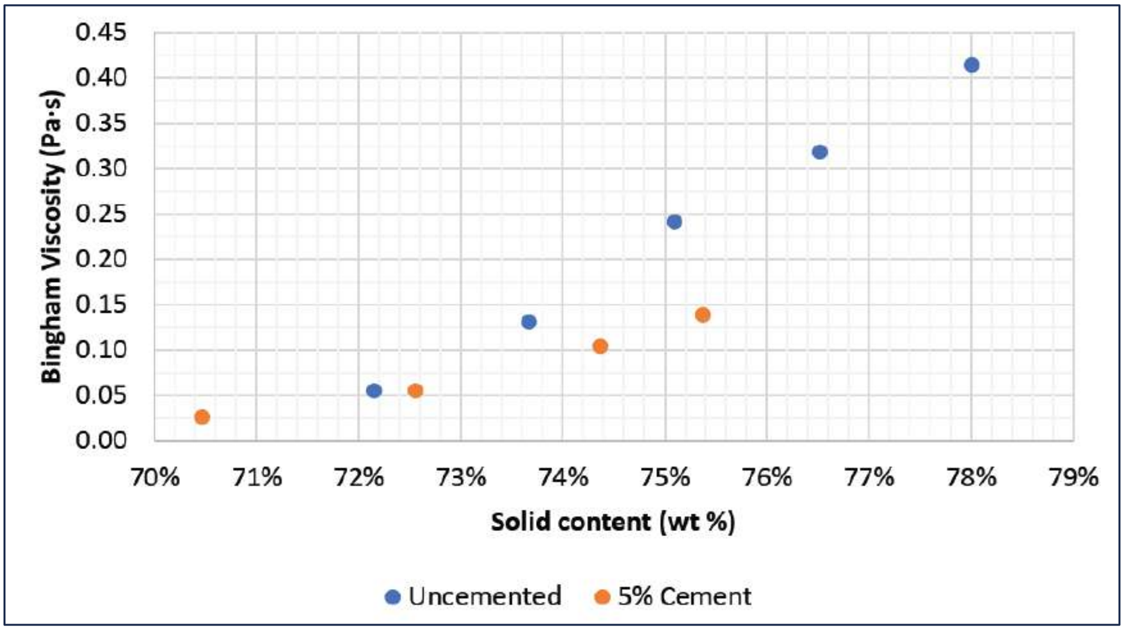


Figure 13-40: Dynamic viscosity vs solid density

Water Bleed Test Work

Water bleeding refers to the separation of water from the paste during the curing phase. Paste with three binder contents, 3%, 5% and 7%, were tested for water bleed at various time intervals. Results are shown in Table 13-69.

Table 13-69: Water bleed test results

Slump (mm)	247.7	245.0	251.6
Paste Density (kg/m³)	1,888	1,883	1,889
Solid Content (%)	73.2	73.2	73.3
Binder Content (%)	3.0	5.0	7.0
Time (h)	**Bleed Water (%)**		
0.5	0.5	0.5	0.5
1	0.9	1.1	1.1
2	1.1	1.4	1.6
4	1.1	1.5	1.6
24	1.1	1.5	1.6

13.8.3.3 Unconfined Compressive Strength

The USC testing program was performed to assess the strength of the various paste mix design and curing time. The solid content, slump and binder content were varied during the test to determine the effects on the USC. The binder used was the GUL cement.

Decanted sample water, binder and tailings were mixed using a hand drill and casted in cylinder molds (51 mm x 102 mm) in triplicate. Samples were cured in covered curing bins at ≥95% humidity, at a temperature of 21 °C +/- 2 °C for 7, 28 and 120 days.

The USC was calculated based on the peak load applied to the sample by a strain-controlled load frame of 5,000 lb S-type.

Table 13-70: Summary of UCS matrix and test results

Batch #	Material	Target Slump (mm)	Actual Slump (mm)	Binder Content (wt%)	Solid Content (wt%)	UCS (kPa)		
						Day 7	Day 28	Day 120
1	8:1 RT/ST mix	200	197	3	74.5	129	157	156
2	8:1 RT/ST mix	200	194	5	74.4	220	319	386
3	8:1 RT/ST mix	200	195	7	74.5	437	546	665
4	8:1 RT/ST mix	225	235	3	73.2	111	134	138
5	8:1 RT/ST mix	225	231	5	73.1	193	253	266
6	8:1 RT/ST mix	225	240	7	73.5	342	521	718
7	8:1 RT/ST mix	250	248	3	73.2	119	135	184
8	8:1 RT/ST mix	250	245	5	73.2	211	240	397
9	8:1 RT/ST mix	250	252	7	73.3	396	513	623
10	5:1 RT/ST mix	225	235	3	72.2	98	137	142
11	5:1 RT/ST mix	225	229	7	72.6	311	422	592
12	8:1 RT/ST mix	225	223	11	73.3	850	1,032	N/A*
13	8:1 RT/ST mix	225	219	14	73.5	1,667	2,023	N/A*

* UCS Data for Day 120 not available due to limited material.

13.8.4 Backfill Analysis

The fourth paste backfill testing programs provided valuable information on the material properties and paste performance characteristics. As the tailings physicochemical properties have changed along the Project, the paste backfill analysis will be based on the latest testing program results.

As measured, an increase in the paste solid content leads to a higher UCS. As well, the UCS increases with higher amount of cement in the paste. For the 7 to 120 days curing time, the strength of the paste improves.

The binder content to obtain the backfill strength required after a specific curing time is estimated from the UCS results for the 8:1 ratio (rougher tails: cleaner scavenger tails).

A paste with a solid content between 72% to 75% and a cement content between 3% to 7% will cover the uncompressed strength needed for the mine plan. Over the mine life, the average binder consumption will be 4%. A summary of requirements for the mine is presented in Table 13-71.

Table 13-71: Binder content estimate based on the mining plan UCS and curing time requirement

Stope Volume	UCS	Curing Time	Binder
(% mine)	(kPa)	(day)	(%)
50%	165	7	3.9
12%	240	7	5.0
8%	285	7	5.7
4%	233	7	4.9
1%	370	7	7.0
0%	393	7	7.3
20%	100	14	2.9
4%	100	14	2.9
0%	100	14	2.9
Weighted Average			**4.0**

13.9 Recovery Considerations

For overall recovery calculations, the performance of Mosquito Zone was assumed to be the same as Shaft Zone. The recovery model was built by unit operation and takes into consideration the natural enrichment of the fines bypassing the ore sorters, the ore sorter performance and the recoveries to gravity and flotation (after only two stages of cleaning with scavenging of the first cleaner tails) concentrates. The model is mostly based on test results for the Base Met Labs test program by ore zones and validated against tests on blended composites and previous test results. However, the fines bypass (to the Ore Sorters) is assumed to be 30% of ROM as per a blast simulation for the PSD of the mill feed, and all datapoints available per ore zones were used for the calculation of the grade enrichment of the fines. The fines enrichment considerations are summarized in Table 13-72.

Table 13-72: Fines bypass enrichment parameters

Parameter	Production - Zones				
	Lowhee	Shaft	Mosquito	Cow	Valley
Au to Ore Sorter Bypass (fines)	52.3%	46.1%	46.1%	49.5%	37.4%
Mass to Ore Sorter Bypass	30.0%	30.0%	30.0%	30.0%	30.0%

13.9.1 Ore Sorting

The ore sorting test work demonstrated the effectiveness of various sorting methods and technologies in recovering valuable minerals from the ore. The XRT and laser sensors proved to be successful in achieving high recovery rates with minimal mass pull. The test work highlighted the importance of considering fines during circuit design and optimizing ore sorter settings

The recent test results at Base Met Labs were utilized to determine settings for the development, evaluation, and measurement of recovery per zone. The focus was on achieving higher recovery, lower mass pull, and an intermediate setting.

Table 13-73: Ore sorting recovery parameters

Parameter	Lowhee Zone		Shaft Zone		Mosquito Zone		Cow Zone		Valley Zone	
	Mass (%)	Gold (%)	Mass (%)	Gold (%)	Mass (%)	Gold (%)	Mass (%)	Gold (%)	Mass (%)	Gold (%)
High Recovery	17.7%	99.3%	54.5%	97.4%	54.5%	97.4%	31.5%	89.4%	45.6%	98.4%
Lower Mass Pull	7.9%	98.9%	14.9%	87.8%	14.9%	87.8%	9.0%	79.8%	18.7%	95.8%
Intermediate	9.2%	99.0%	37.5%	90.1%	37.5%	90.1%	16.5%	84.5%	25.9%	95.9%

13.9.2 Gravity Concentration

Variability gravity concentration tests performed on sorted composite samples were completed within the envisioned flowsheet for the project, including gravity concentration of ball mill discharge and regrind mill discharge target size. Results showed fluctuations in various zones with specific recovery rates. The results are summarized in Table 13-74.

Table 13-74: Gravity recovery parameters

Parameter	Production - Zones				
	Lowhee	Shaft	Mosquito	Cow	Valley
Au Recovery to Gravity	55.0%	45.0%	45.0%	50.0%	35.0%

The overall gravity recovery calculated via recovery model for the mineral composition of the Bulk composite yielded a 45.8% Au recovery from ball mill feed and the model from FLSmidth, based on E-GRG results on the same composite sample, show an overall 44.3% Au recovery to gravity concentrates.

13.9.3 Flotation

Recovery and mass pull forecast for each zone was based on averages of the latest test work on sorted material with gravity separation integrated to the flowsheet and variability tests, when available. Results from Deep Shaft Zone were included with the Shaft Zone dataset. For mass pull forecast, only tests with regrind size within the 17 µm to 25 µm range were considered. Flotation mass pull was calculated from ball mill feed to final concentrate. The results are summarized in Table 13-75.

Table 13-75: Flotation recovery parameters

Parameter	Production - Zones				
	Lowhee	Shaft	Mosquito	Cow	Valley
Au Recovery to Flotation	90.7%	92.6%	92.6%	88.1%	92.9%
Mass Pull	1.6%	1.4%	1.4%	1.3%	1.2%

13.9.4 Lock Cycle Test

The LCT was completed on sorted Blend composite. The overall recovery (to the second cleaner concentrate and gravity concentrate) was 98.5% Au. The flotation circuit performance (including gravity concentration and excluding losses to ore sorting tailings) calculated via recovery model for the mineral composition of the Blend composite yielded a 97.6% Au recovery showing potential for actual plant performance to be better than the forecast in this study.

14. Mineral Resource Estimates

The 2025 Feasibility Study Mineral Resource Estimate (the "2025 FS MRE") for the Cariboo Gold Project encompasses mineral resources for the deposits of Cow Mountain (Cow Zone and Valley Zone), Island Mountain (Shaft Zone and Mosquito Zone), and Barkerville Mountain (Lowhee Zone, KL Zone, BC Vein Zone, and the Bonanza Ledge Zone).

There have been no changes to the mineral resource estimation as previously reported in the 2022 FS MRE, other than adjustments for mining depletion in the Lowhee Zone, changes to the cut-off grade assumptions and removal of silver from the estimate.

Silver has been removed due to limited supporting data and because the estimated ounces were not material.

The 2022 FS MRE for Cow, Valley, Mosquito, Shaft, KL, Lowhee, and BC veins was prepared by Daniel Downton, P.Geo., of ODV. The Bonanza Ledge deposit remained unchanged.

The Lowhee Zone is depleted by the underground workings and the bulk sample stope. As mineralization is present in the walls of the bulk sample, a 5-m buffer has not been added as there is still mining potential. Both the underground workings and bulk sample are current as of the end of January 2025.

The depletion was reviewed and validated by Carl Pelletier, P.Geo., and Tessa Scott, P.Geo., both of InnovExplo, using all available information.

The effective date of the 2025 FS MRE is April 22, 2025.

14.1 Methodology

The 2025 FS MRE covers all the deposits in the Cow-Island-Barkerville Mountain Corridor. The Mineral Resource model area for the Cow/Island segment covers a strike length of 3.7 km and a width of approximately 700 m, down to a vertical depth of 600 m below surface. The estimate for the Barkerville segment covers a strike length of 3 km and a width of approximately 700 m, down to a vertical depth of 500 m below surface.

The models for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee deposits were prepared using LeapFrog GEO v.2021.2.4 ("LeapFrog") and Datamine Studio™ RM Pro 1.11.300.0 ("Datamine"). Leapfrog was used for the modelling, which included the construction of the dilution halos and 481 mineralized solids: 109 for Cow; 106 for Valley; 98 for Shaft; 75 for Mosquito; six for BC Vein, including five BC Vein splays; 40 for KL; and 47 for Lowhee. Datamine was used for the estimation, which consisted of 3D block modelling and the ordinary kriging ("OK") interpolation method. Statistical studies, capping and variography were completed using Datamine, Supervisor v.8.14.3 software ("Supervisor"), GSLIB, and Microsoft Excel. Capping and validations were carried out in Datamine, Supervisor, and Microsoft Excel.

The Bonanza Ledge model was prepared using GEOVIA GEMS™ software v.6.7 ("GEMS"). GEMS was used for the modelling, which included the construction of one mineralized solid, and for the estimation, which consisted of 3D block modelling and OK interpolation. Statistical studies and variography were done using Supervisor. Capping and several validations were conducted in Microsoft Excel and Supervisor.

The main steps in the methodology were as follows:

- Compile and validate the diamond drill hole databases used for Mineral Resource estimation;
- Validate the geological model and interpretation of the mineralized zones based on lithological and structural information, historical underground mapping and general orientation of stopes, and metal content;
- Validate the drill hole intercepts database, compositing database, and capping values, for the purposes of geostatistical analysis, and variography;
- Validate the block models and grade interpolation;
- Revise the classification criteria and validate the clipping areas for Mineral Resource classification;
- Assess the Mineral Resources with "reasonable prospects for economic extraction" and select appropriate cut-off grades and produce "resources-level" optimized underground potentially mineable shapes;
- Generate a Mineral Resource statement.

14.2 Drill Hole Database

Two diamond drill hole databases cover the Project: Bonanza Ledge and BM-CM-IM (Barkerville Mountain, including the BC Vein, KL, and Lowhee deposits, Cow Mountain, including the Cow and Valley deposits, and Island Mountain, including the Shaft and Mosquito deposits).

These databases were filtered by deposit (Cow, Shaft, Valley, Mosquito, BC Vein, KL, or Lowhee) before working in Datamine. A subset of drill holes was used to generate the 2022 FS MRE database for each deposit (Table 14-1 and Figure 14-1). Holes often overlap between deposits and the geological models are reviewed to avoid using the same samples in different models.

- The close-out date for the Cow deposit is August 25, 2021. It contains 1,219 validated drill holes (1,067 surface DDH and 152 underground DDH);
- The close-out date for the Valley deposit is March 9, 2022. It contains 254 validated surface drill holes;
- The close-out date for the Shaft deposit is March 31, 2022. It contains 1,010 validated drill holes (851 surface DDH and 159 underground DDH);
- The close-out date for the Mosquito deposit is July 19, 2021. It contains 841 validated drill holes (590 surface DDH and 256 underground DDH);
- The close-out date for the Lowhee deposit is April 6, 2022. It contains 158 validated surface drill holes;
- The close-out date for the BC Vein and KL deposits is February 14, 2020. It contains 420 validated surface drill holes;
- The close-out date for the Bonanza Ledge GEMS database is July 18, 2016. It contains 213 validated holes, of which a subset of 162 was used as the Mineral Resource database (103 surface DDH and 59 underground DDH) (Table 14-1and Figure 14-2). The database also contains 7,432 blast holes that were used to guide the interpretation only.

Assay results from 27 drill holes were received after April 6, 2022, representing 6,563.9 m of assays, and, as such, are excluded from the 2025 FS MRE. As noted in Section 10.9, these results would not make a material difference to the 2025 FS MRE.

All databases include lithological, alteration, and structural descriptions taken from drill core logs. Oriented core data have been available since the 2016 Program.

The databases cover the strike length of each Mineral Resource area at variable drill spacings, ranging from 10 m to 60 m for the Cow, Island, and Barkerville mountain deposits, and from 5–15 m for the Bonanza Ledge deposit.

In addition to the tables of raw data, each database includes several tables of calculated drill hole composites and wireframe solid intersections, which are required for the statistical evaluation and Mineral Resource block modelling.

Table 14-1: Number of drill holes in each database

Deposit	Validated Drill Holes Used for the 2024 FS MRE		
	Surface	Underground	Total
Cow	1,067	152	1,219
Valley	254	0	254
Shaft	851	159	1,010
Mosquito	590	256	841
KL	113	0	113
Lowhee	158	0	158
BC Vein	307	0	307
Bonanza Ledge	103	59	162

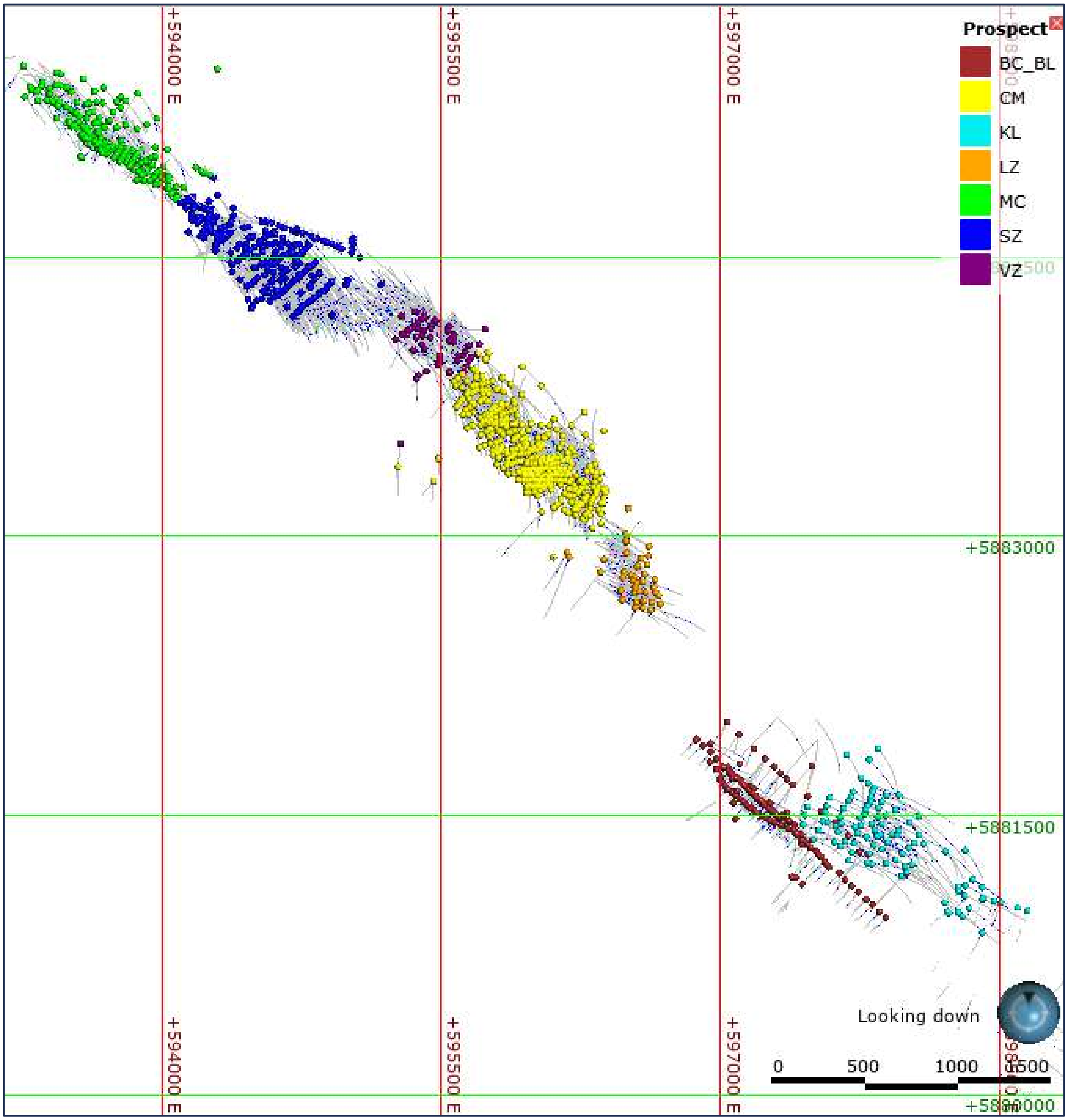


Figure 14-1: Surface plan view of the validated DDH used to in the 2025 FS MRE for the deposits of the Cow-Island-Barkerville Mountain Corridor

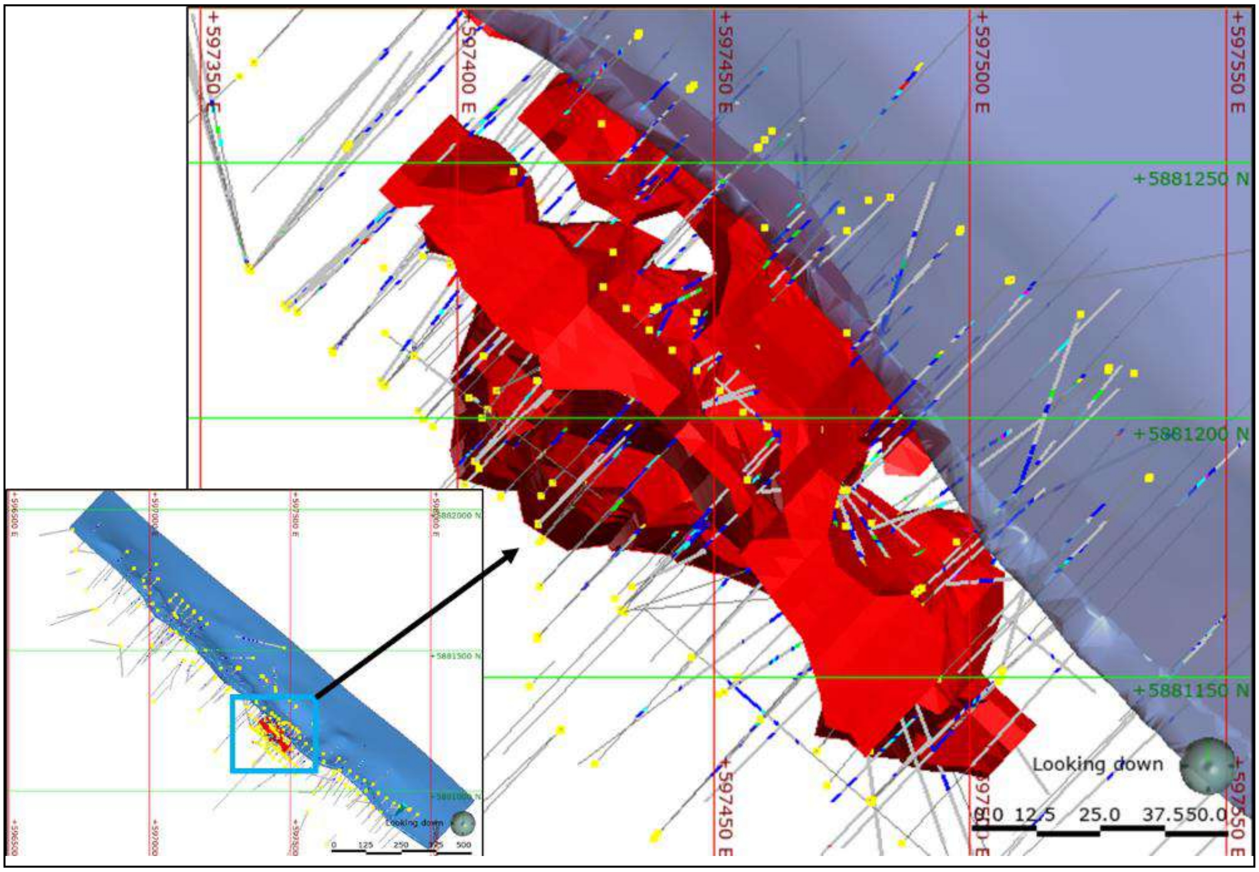


Figure 14-2: Surface plan view of the validated Bonanza Ledge DDH for the 2025 FS MRE
The inset figure shows the location of Bonanza Ledge (red) along the BC Vein (blue)

14.3 Geological Model

The geological models remain unchanged since the 2022 FS.

All the geological models were reviewed, validated, and approved by the QPs for the 2025 FS. The QPs are of the opinion that the models are acceptable for the mineral resource.

The Bonanza Ledge geological model, as documented in Brousseau et al. (2017), was reviewed and validated by the QPs. No new data have been acquired at Bonanza Ledge since the technical report of Brousseau et al. (2017).

The data used to create the geological models consists of drill hole data (including oriented core), underground mapping from historical level plans, and stope orientations. Oriented core data have been available since 2016 for all the deposits.

A total of 482 geological solids were created for the deposits.

The Cow, Valley, Shaft, Mosquito, Lowhee, and KL geological models consist of 475 mineralized solids representing axial planar ("AXPL") veins (Figure 14-3). All geological solids were modelled in Leapfrog. The solids were designed with a minimum thickness of 2 m and based on a cut-off grade of 2.0 g/t gold. The solids veins extend to a radius of up to 50 m from the last selected intercept or are fixed at the mid-distance of an intercept that does not meet the minimum grade criterion. The solids were snapped to drill holes. The solids were created from the AXPL structural data, using indicator interpolants as guides.

Figure 14-4 shows an example of a modelled solid representing AXPL veins from the Shaft deposit model.

A solid representing a 5-m halo surrounding the AXPL vein corridors was also created for each of the Mosquito, Shaft, Valley, Cow, Lowhee, and KL deposits. These were created to limit and provide a halo of dilution around the AXPL mineralized veins. The halos were created using the numerical distance function around the combined AXPL solids in LeapFrog. An example of the dilution halo for the Lowhee Zone is presented in Figure 14-5. Dilution halos were not created for the BC Vein and Bonanza Ledge deposits.

The geological model for the BC Vein includes one sheared solid representing the mineralized Layer Parallel ("LP") vein, along with five solids representing mineralized LP splays (Figure 14-6). The solids were modelled in Leapfrog. The BC Vein and splays were modelled from geological logs and grade intervals. The BC Vein was designed with a minimum thickness of 2 m, controlled by the hanging and footwall of the shear, and was based on a cut-off grade of 1.0 g/t Au. Geological contacts were given precedent over grade. The splays were designed with a minimum thickness of 2 m and were based on a cut-off grade of 1.0 g/t Au. All solids were snapped to drill holes.

A geological structural contact was modelled between the BC Vein and the KL deposits. The surface is a major lithological contact between the brittle sandstone, which hosts the KL AXPL veins, and the more ductile carbonaceous mudstones and siltstones that host the BC Vein shear and LP veins. This contact was used as a hard boundary to limit the extent of the mineralized geological models (Figure 14-6).

In 2017, InnovExplo created one solid for the Bonanza Ledge deposit (Brousseau et al., 2017). Construction lines were created on cross-sections spaced 5 m to 25 m apart, which were snapped to drill hole intercepts. The solid was inspired by a sulphide shell defined in Brousseau et al. (2017) using a threshold of 3% pyrite and clipped to the Footwall Fault to the southwest, which was modelled from drill hole logs (Figure 14-7). The MRE QPs for the 2025 FS reviewed and validated the 2017 model and concluded that the model remains accurate for the 2025 FS MRE update.

Two surfaces were created for each deposit to define the topography and the overburden/bedrock contact. The topography was created using LIDAR data from 2016, except for Bonanza Ledge, which used LIDAR data from 2000 (before the test pit was excavated at the Bonanza Ledge mine). The overburden-bedrock contact was modelled using logged overburden intervals. A waste solid was also created for Bonanza Ledge corresponding to the block model limits.

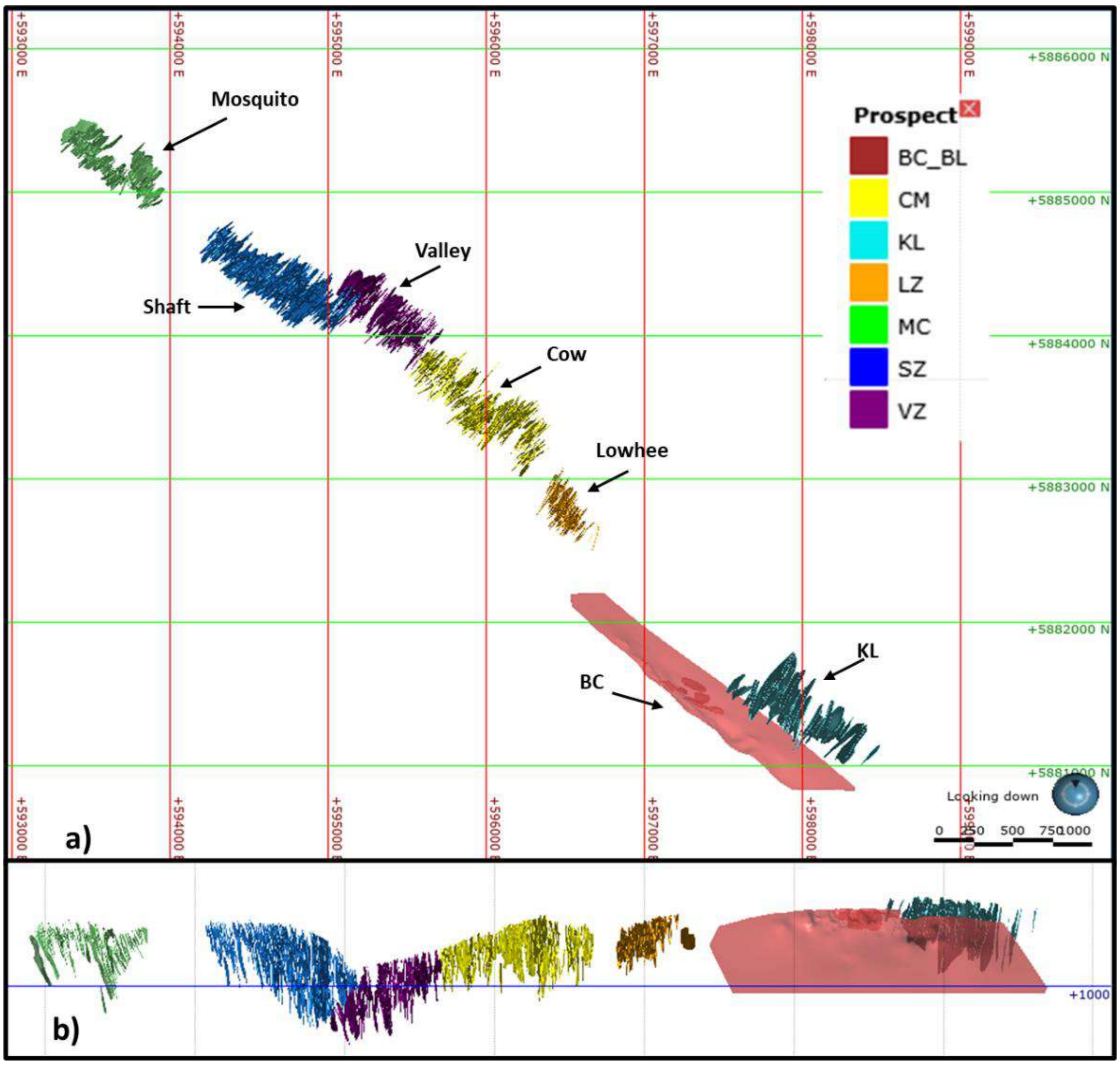


Figure 14-3: Mineralized solids of the Cow, Valley, Shaft, Mosquito, Lowhee, BC Vein, and KL models a) Surface plan view; b) Section view looking north-northeast

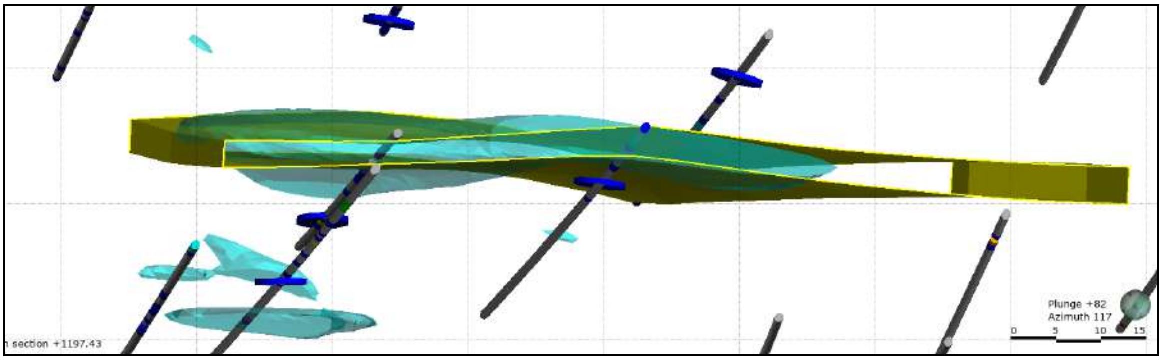


Figure 14-4: Example of data used for the 3D Shaft deposit model
Vein solid (yellow); 3.0-g/t Au indicator interpolant (cyan); oriented core AXPL veins (blue); 25-m-thick plan view section

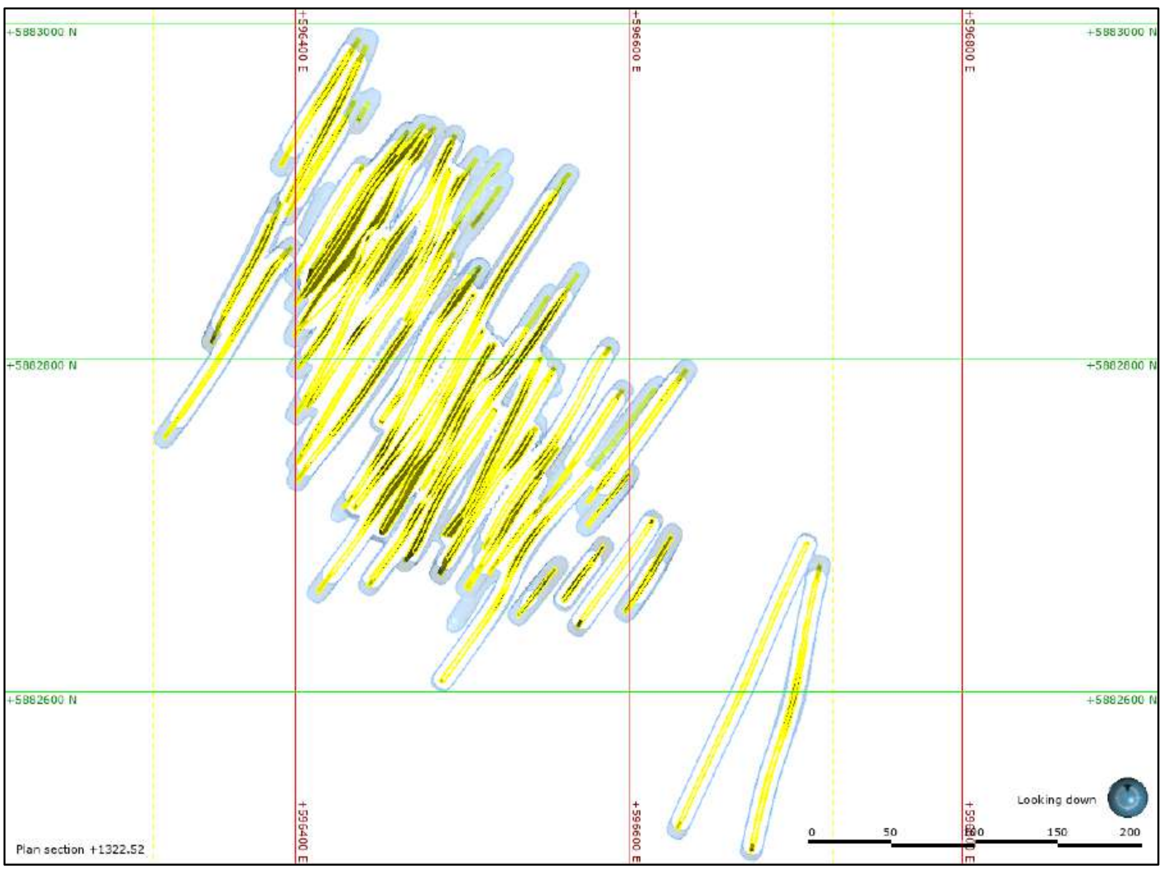


Figure 14-5: Plan view section of the Lowhee AXPL Veins and surrounding 5 m dilution halo
Lowhee AXPL Veins (Yellow); 5 m dilution halo (pale blue)

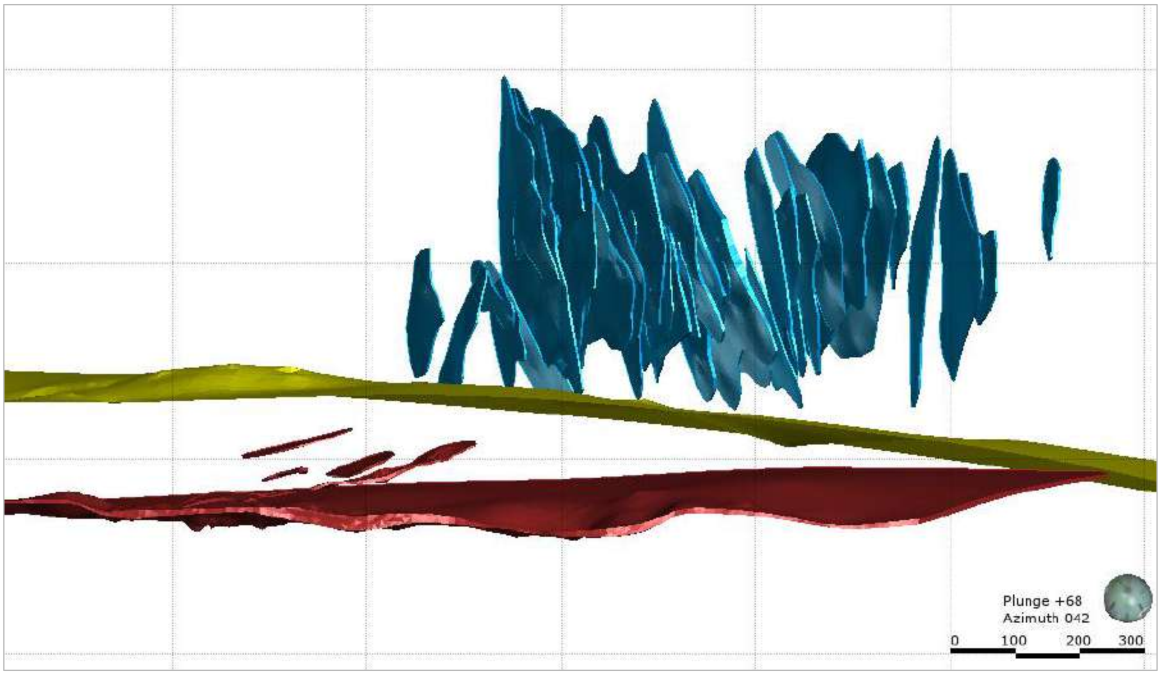


Figure 14-6: Isometric view of the BC Vein and KL deposit models, and the AXPL-LP contact surface BC Vein (dark red); KL (blue); AP-LP contact (yellow)

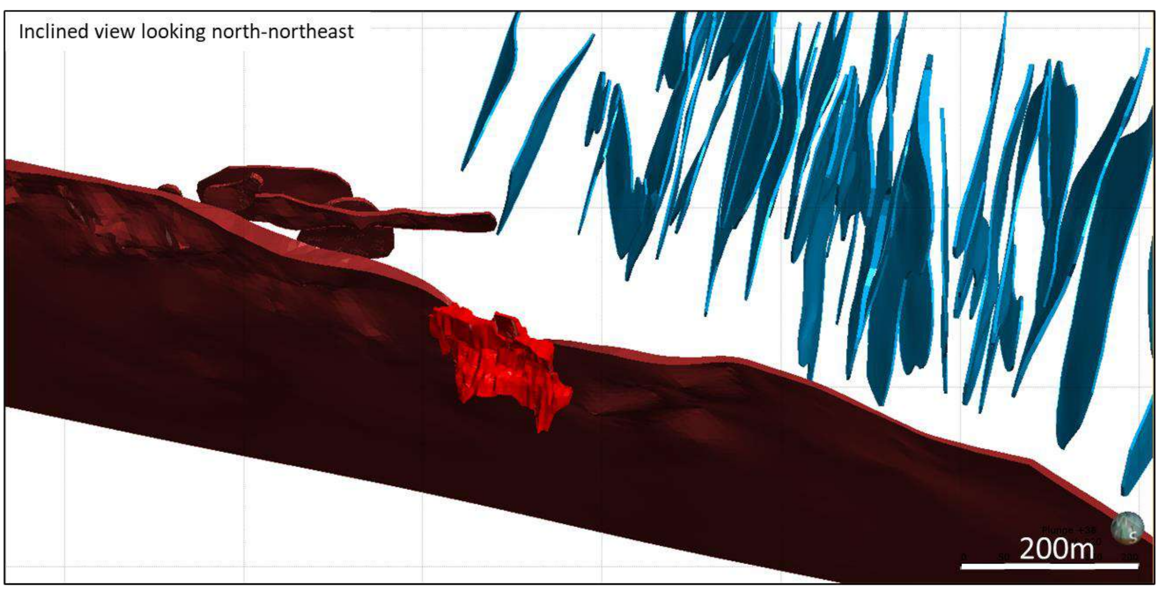


Figure 14-7: Isometric view of the BC Vein, Bonanza Ledge, and KL deposit models BC Vein (dark red); Bonanza Ledge (red); KL (blue)

14.4 Voids Model

The only change to the 2022 FS void models is the development and bulk sample at the Lowhee Zone in 2024/2025. The voids models for all other deposits remains unchanged since the 2022 FS.

The Underground infrastructure mined at Bonanza Ledge and BC Vein by ODV was surveyed and modelled by ODV. These voids were used to deplete the Bonanza Ledge deposit, which remains unchanged. The BC Vein infrastructure was given a 5-m buffer for the recent workings. The BC Vein was last depleted for the 2022 FS.

An underground historical infrastructure voids model was developed through review of historical data from several past mines from Island through Barkerville mountains. A 5-m buffer was applied to all the modelled infrastructure voids of the Cow, Valley, Shaft, Mosquito, Lowhee, and BC Vein deposits to compensate for the uncertainty in void locations.

For the 2025 MRE, the Lowhee Zone is depleted by the underground workings and the bulk sample stope. As mineralization is present in the walls of the bulk sample, a 5-m buffer has not been added as there is still mining potential. Both the underground workings and bulk sample are current as of the end of January 2025.

Drilling continues to intercept undocumented voids. When the drilled void intercepts are not explained through intersection of the 5-m infrastructure buffer, to reduce the associated risk, a spherical buffer with a 10-m radius was applied around the intercepts to represent a potential stope of 20 m in diameter. These “intercept buffer voids” were added to the 5-m infrastructure buffers, which were then used to deplete the final MRE of the Cow, Valley, Shaft, Mosquito, Lowhee, and BC Vein deposits.

The void solids and underground workings were reviewed and validated by the QPs. Based on the available data, the voids in the Datamine and GEMS projects are considered accurate to support the 2025 FS MRE.

Figure 14-8, Figure 14-9, and Figure 14-10 show the voids used to deplete the current Mineral Resource Estimate.

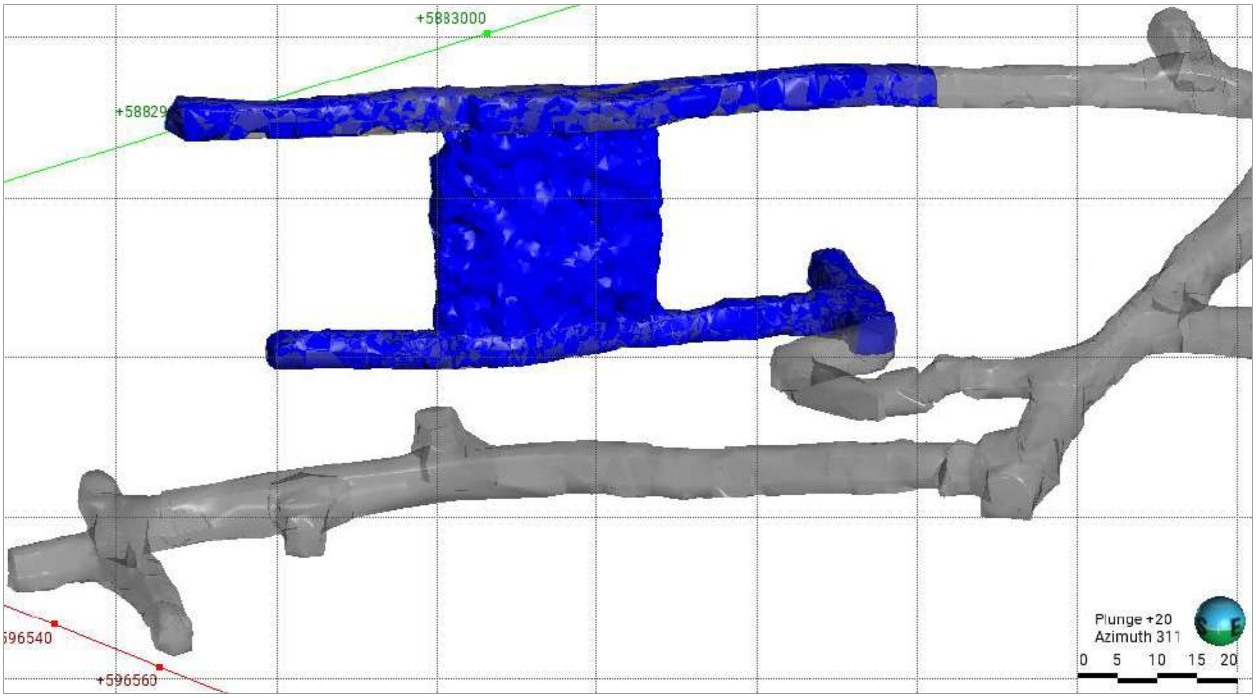


Figure 14-8: Bulk sample at Lowhee and development (blue) with the previous development (grey)

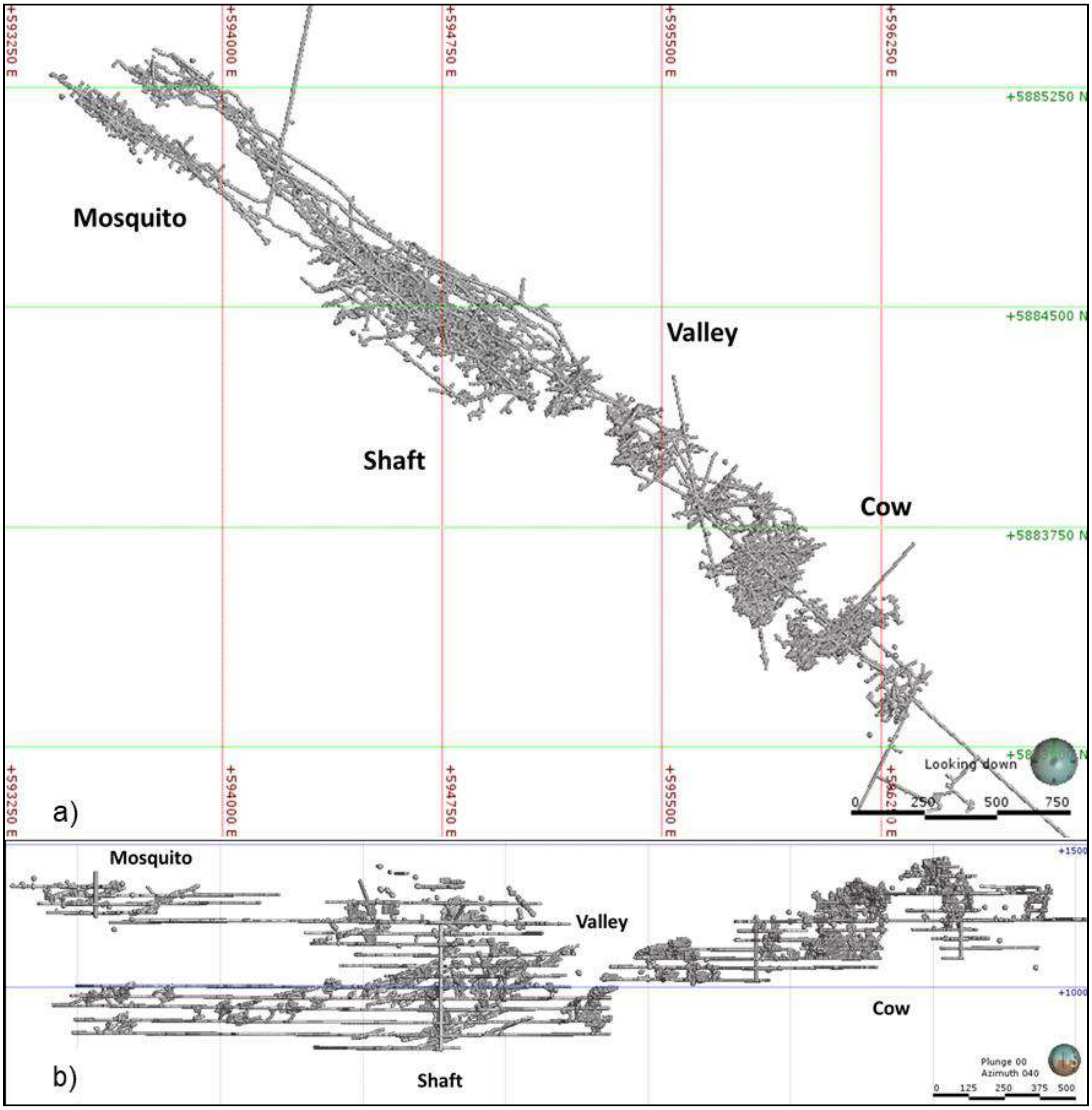


Figure 14-9: Plan and longitudinal view of the 5-m buffer voids for Cow Mountain and Island Mountain

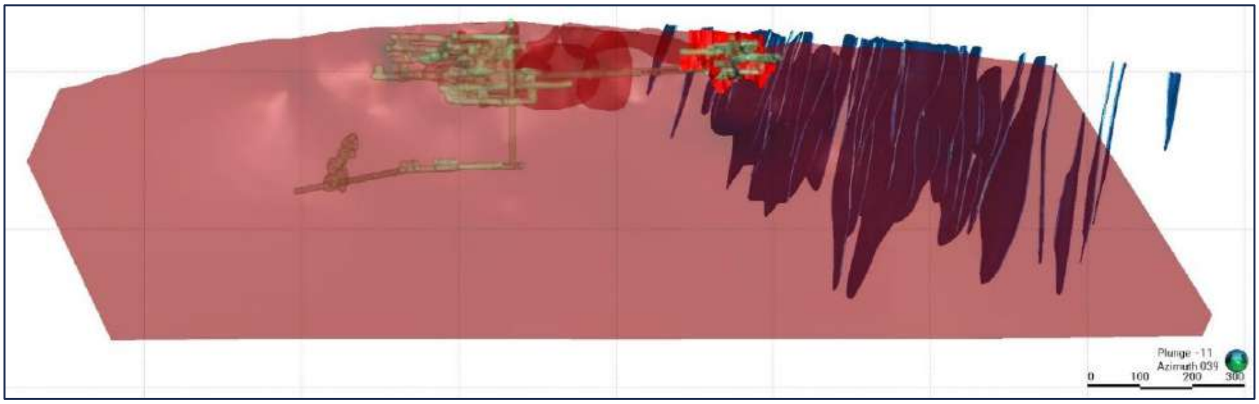


Figure 14-10: Longitudinal view of the 5-m buffer voids for the BC Vein, Bonanza Ledge, and KL deposits 5-m buffer voids (transparent green); BC Vein (transparent red); Bonanza Ledge (red); KL (blue); looking north-northeast

14.5 Compositing

Codes were automatically attributed to DDH assay intervals intersecting the mineralized veins and dilution halos. 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 14-2 and Table 14-3 summarize the statistical analysis of the original (raw) assays for each deposit. The raw sample statistics used for composite length, capping, and variograms were defined by deposit and not individual veins due to the paucity of data.

Table 14-2: Summary statistics for the DDH raw gold assays from mineralized veins

Deposits	Number of Samples	Max (Au g/t)	Mean (Au g/t)	Standard Deviation	Coefficient of Variation
Cow	14,876	6,590	4.31	56.54	13.12
Valley	12,982	1,870	3.37	24	7.12
Shaft	26,002	3,780	3.71	27.81	7.5
Mosquito	4,103	1,965	4.58	33.72	7.36
BC Vein	3,919	309	2.76	11.07	4.01
KL	2,413	145	1.88	6.09	3.23
Lowhee	5,450	2,420	3.61	36.28	10.07
Bonanza Ledge	3,062	234.5	7.08	15.35	2.17

Table 14-3: Summary statistics for the DDH raw gold assays from dilution halos

Deposits	Number of Samples	Max (Au g/t)	Mean (Au g/t)	Standard Deviation	Coefficient of Variation
Cow	43,481	154.5	0.18	1.68	9.35
Valley	35,414	278	0.23	2.8	12.03
Shaft	78,184	192.5	0.15	1.42	9.2
Mosquito	13,470	78.1	0.15	1.16	7.93
KL	6,150	21.1	0.13	0.51	4.11
Lowhee	15,327	137.5	0.19	1.89	9.97

The DDH gold assays were composited within each of the mineralized veins to minimize any bias introduced by variable sample lengths. DDH gold assays were also composited within the dilution halo. Vein thickness, proposed block size, and original sample length were taken into consideration when calculating the composite lengths. Therefore, the composite lengths were calculated for each deposit: Cow (3.0 m), Valley (1.5 m), Shaft (2.0 m), Mosquito (2.5 m), BC Vein (2.0 m), Lowhee (1.5 m) KL (1.75 m), and Bonanza Ledge (2.0 m).

Tails were redistributed equally for all intervals that were smaller than half the composite length. A grade of 0.00 g/t Au was assigned to missing sample intervals from historical holes (pre-2016) within the solids. A few holes from the 2016–2021 programs were only partially sampled; a value of 0.00 g/t Au was assigned to these missing intervals. Missing samples from the 2016–2019 drilling programs due to lost core, voids, or lost samples were ignored.

Table 14-4 and Table 14-5 present the summary statistics of the capped composites by deposit.

Table 14-4: Summary statistics for capped gold composites from mineralized veins

Deposits	Number of Samples	Max (Au g/t)	Mean (Au g/t)	Standard Deviation	Coefficient of Variation
Cow	5,811	50	2.76	5.99	2.17
Valley	7,807	40	2.31	5.2	2.25
Shaft	12,879	50	2.67	6.46	2.42
Mosquito	1,897	50	3.09	6.96	2.26
BC Vein	2,040	40	2.3	5.45	2.37
KL	1,294	20	1.39	2.66	1.91
Lowhee	3,217	40	2.08	5.13	2.47
Bonanza Ledge	2,602	70	5.98	10.77	1.8

Table 14-5: Summary statistics for capped gold composites from dilution halos

Deposits	Number of Samples	Max (Au g/t)	Mean (Au g/t)	Standard Deviation	Coefficient of Variation
Cow	19,594	2.0	0.12	0.26	2.18
Valley	24,529	2.0	0.12	0.28	2.41
Shaft	43,870	2.0	0.09	0.25	2.64
Mosquito	7,450	2.0	0.10	0.25	2.54
KL	3,794	1.5	0.09	0.20	2.26
Lowhee	10,743	1.5	0.10	0.22	2.20

14.6 High-grade Capping

Although the indicator variograms suggest that high-grade continuity ranges increase with decreasing grade, the lack of detailed underground mapping and sampling is an obstacle to defining the most suitable grade ranges in areas with wider drilling grids.

Multiple capping (capping at different ranges in each deposit) was selected as the capping methodology for the gold grades in the Cow, Valley, Shaft, Mosquito, KL, Lowhee, and BC Vein mineralized vein models (see below for Bonanza Ledge).

For these deposits, the highest selected capping value corresponds to the grade at 99% of the total variance on the indicator variograms. The highest grades vary from 20 g/t to 70 g/t Au. The second and third grades were selected based on the probability plot and vary from 7 g/t to 30 g/t Au. The Shaft deposit is shown as an example in Figure 14-11 and Figure 14-12.

The maximum range for high-grade connectivity was established using the indicator variograms, which suggests a loss of connectivity after 17 m to 33 m, depending on the mineralized zone. A range of 25 m was selected and applied to all zones as a general average, given the lack of detailed information for each deposit.

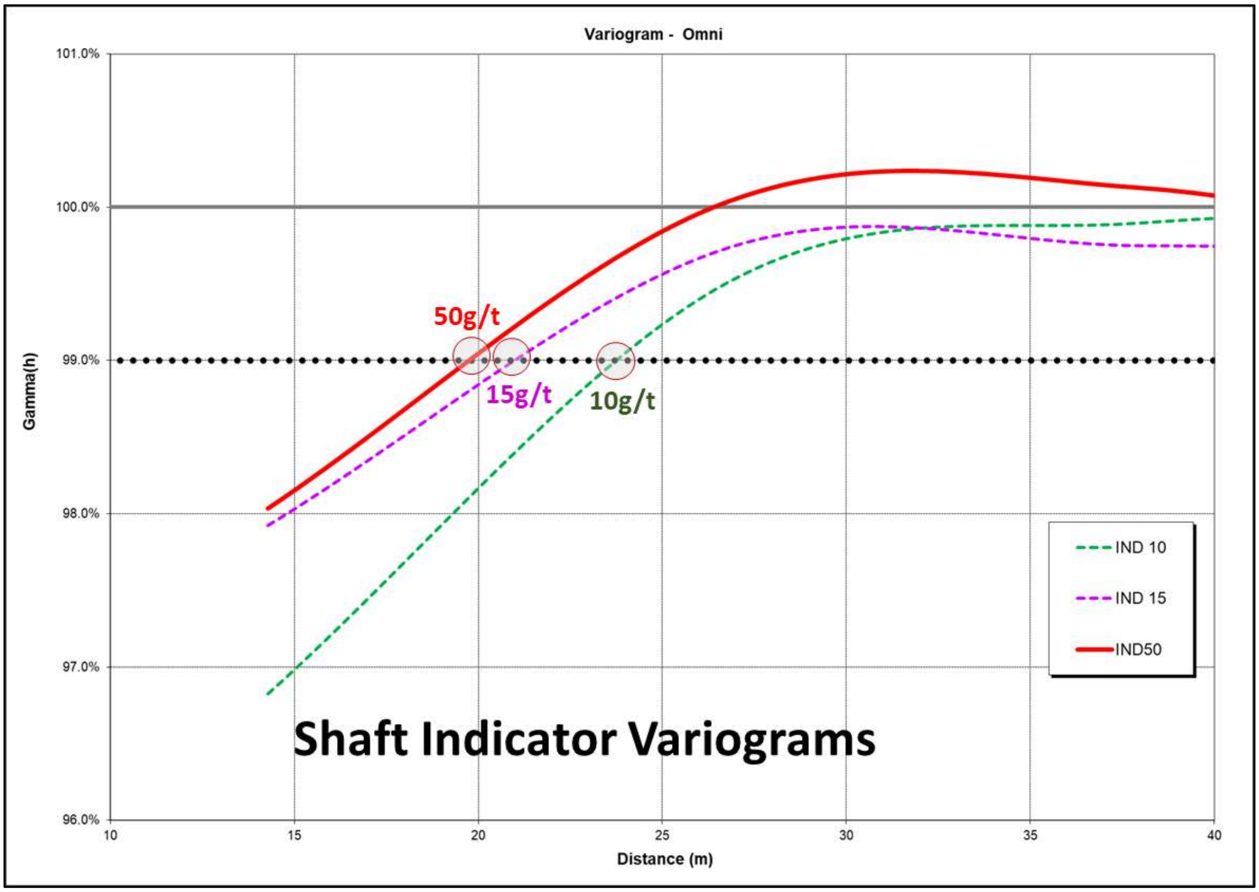


Figure 14-11: Indicator variograms for the Shaft deposit

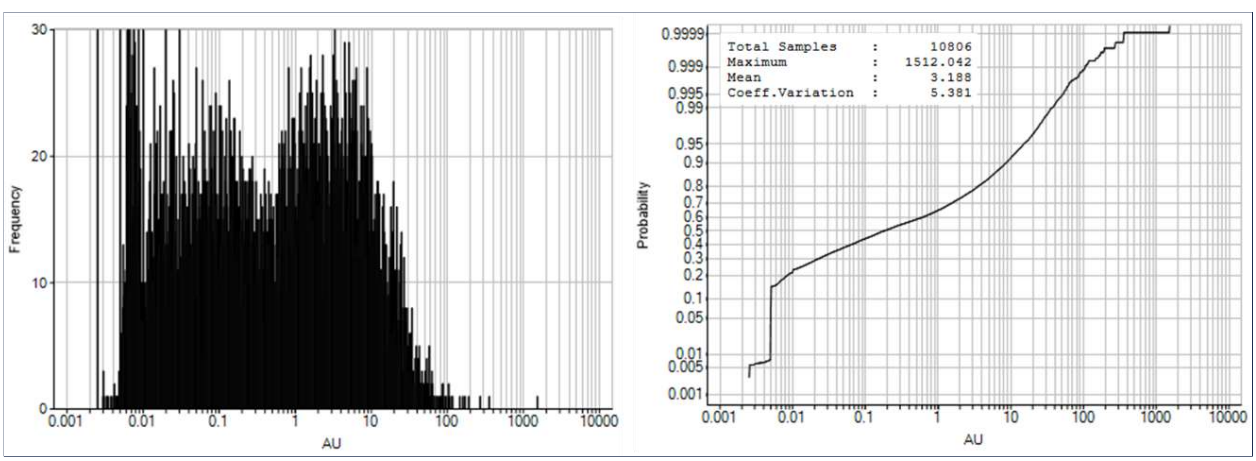


Figure 14-12: Grade log histogram and probability plot for the Shaft deposit

For Bonanza Ledge, basic univariate statistics were performed on individual composited gold assay datasets. The capping applied for Bonanza Ledge was a single top cap of 70 g/t Au on the composited data. 16 samples were capped with this value, which was selected by combining the dataset analysis with the probability plot and log-normal grade distribution.

High-grade gold values in the dilution halos are primarily associated with AXPL veins that could not be modelled due to lack of continuity between drill holes. Basic univariate statistical analysis of the gold values within these halos indicates a change in the populations between 1.5 g/t Au (Lowhee and KL) and 2.0 g/t Au (Mosquito, Shaft, Valley, and Cow) on log probability and mean / variance plots.

14.7 Density

Bulk densities were determined by standard water immersion methods on half-core samples. ODV's Mineral Resource databases contain 8,584 measurements taken on samples from within the mineralized veins from all deposits. A combination of 21,006 measurements were used to determine the bulk density of the surrounding dilution from all deposit areas. Table 14-6 provides a breakdown of bulk density measurements in both modelled mineralized solids and the surrounding dilution by zone.

Table 14-6: Bulk density by mineralized zone

Deposit	Inside / Outside	Number of Samples	Median SG	Method
Cow	Inside Mineralized Veins	1,109	2.8	ID^2 and Median
Valley		1,835	2.81	Median
Shaft		2,881	2.78	ID^2 and Median
Mosquito		515	2.79	Median
BC Vein		323	2.69	ID^2 and Median
KL		437	2.81	Median
Lowhee		1,279	2.74	ID^2 and Median
Bonanza Ledge		205	3.2	Median
Cow	Surrounding Dilution	2,932	2.74	Median
Valley		4,488	2.76	Median
Shaft		6,627	2.74	Median
Mosquito		3,489	2.75	Median
KL		1,683	2.76	Median
Lowhee		1,787	2.72	Median

For the Cow, Shaft, Lowhee, and BC Vein models, the bulk density was estimated by the Inverse Distance Squared ("ID2") interpolation method in the block model. The median bulk density was applied to non-estimated blocks: 2.80 g/cm^3" at Cow, 2.78 g/cm^3 at Shaft, 2.74 g/cm^3 at Lowhee, and 2.69 g/cm^3 at BC Vein.

Due to the paucity of density data in each of the Valley, Mosquito and KL Zones, the median value of the bulk density measurements in each of those mineralized veins was applied to all blocks in each of the Valley (2.81 g/cm^3), Mosquito (2.79 g/cm^3), and KL (2.81 g/cm^3) deposits, respectively.

The median value of the bulk density measurements in the surrounding dilution was applied to all six deposit dilution halos: Cow (2.74 g/cm^3), Valley (2.76 g/cm^3), Shaft (2.74 g/cm^3), Mosquito (2.75 g/cm^3), KL (2.76 g/cm^3), and Lowhee (2.72 g/cm^3).

For Bonanza Ledge, the average value of 3.20 g/cm^3 from Sandefur and Stone (2006) was applied. In 2017, InnovExplo confirmed this value with 23 bulk density measurements during the independent resampling program, returning an average of 3.19 g/cm^3 (Brousseau et al., 2017).

A density of 2.00 g/cm^3 was assigned to the overburden, 2.70 g/cm^3 to any uncoded waste rock, and 0.00 g/cm^3 to the 5-m buffer voids (including underground drifts and stopes). The 3D mineralized zones and dilution halos were clipped at the overburden.

Bulk densities were used to calculate tonnages from the volume estimates in the block model.

14.8 Block Model

A block model was created for each of the deposits. They were last updated on September 8, 2022, but remain appropriate for use in the 2025 FS MRE due to the lack of data generated since then.

For the Cow, Valley, Shaft, Mosquito, Lowhee, KL, and BC Vein models, unrotated sub-block models were used in Datamine. The sub-blocks were created within each mineralized vein zone and dilution halo.

The Bonanza Ledge block model corresponds to an unrotated percent block model in GEMS. All blocks with more than 0.01% of their volume falling within a selected solid were assigned the corresponding block code for that solid in their respective folder. A percent block model was generated, reflecting the proportion of each block inside every solid (i.e., individual mineralized zones, overburden, voids and waste).

The origin of each block model is the lower-left corner. Block dimensions reflect the sizes of mineralized zones and plausible mining methods.

Table 14-7 shows the properties of each block model.

Table 14-7: Block model properties

Deposits	Description	Easting (m)	Northing (m)	Elevation (m)
Cow	Block Model Origin	595,500	5,883,000	850
	Parent Block Dimension	5	5	5
	Number of Parent Blocks	190	190	128
	Sub-block Dimension	0.625	0.625	0.5
Valley	Block Model Origin	595,000	5,883,700	600
	Parent Block Dimension	5	5	5
	Number of Parent Blocks	160	160	130
	Sub-block Dimension	0.625	0.625	0.5
Shaft	Block Model Origin	594,160	5,884,000	690
	Parent Block Dimension	5	5	5
	Number of Parent Blocks	212	164	154
	Sub-block Dimension	0.625	0.625	0.5
Mosquito	Block Model Origin	593,250	5,884,850	800
	Parent Block Dimension	5	5	5
	Number of Parent Blocks	150	140	130
	Sub-block Dimension	0.625	0.625	0.5
BC Vein	Block Model Origin	596,500	5,880,800	940
	Parent Block Dimension	5	5	5
	Number of Parent Blocks	370	284	118
	Sub-block Dimension	1.0	1.0	1.0
KL	Block Model Origin	597,500	5,880,900	1,000
	Parent Block Dimension	5	5	5
	Number of Parent Blocks	210	190	130
	Sub-block Dimension	0.5	0.5	0.5
Lowhee	Block Model Origin	596,300	5,882,450	1,000
	Parent Block Dimension	5	5	5
	Number of Parent Blocks	90	140	100
	Sub-block Dimension	0.5	0.5	0.5
Bonanza Ledge	Block Model Origin	596,700	5,880,800	1,600
	Block size	2	2	5
	Block extent (m)	1,300	1,200	620

14.9 Variography and Search Ellipsoids

For the Cow, Valley, Shaft, Mosquito, KL, Lowhee, and BC Vein models, the 3D directional-specific search ellipses were guided by the hanging wall and footwall of each vein for an anisotropic search. The search radii were determined by the indicator variograms in Section 14.6.

Variogram models were designed for gold using composited assay data. Spherical variograms were modelled for each of these deposits. Separate variograms were designed for the dilution halo domains along an orientation that corresponds to the strike and dip of the mineralized zones based on the assumption that any mineralization in the dilution is associated with AXPL veins.

Figure 14-13 shows an example of the variogram models used in the Mineral Resource estimation for the Cow model.

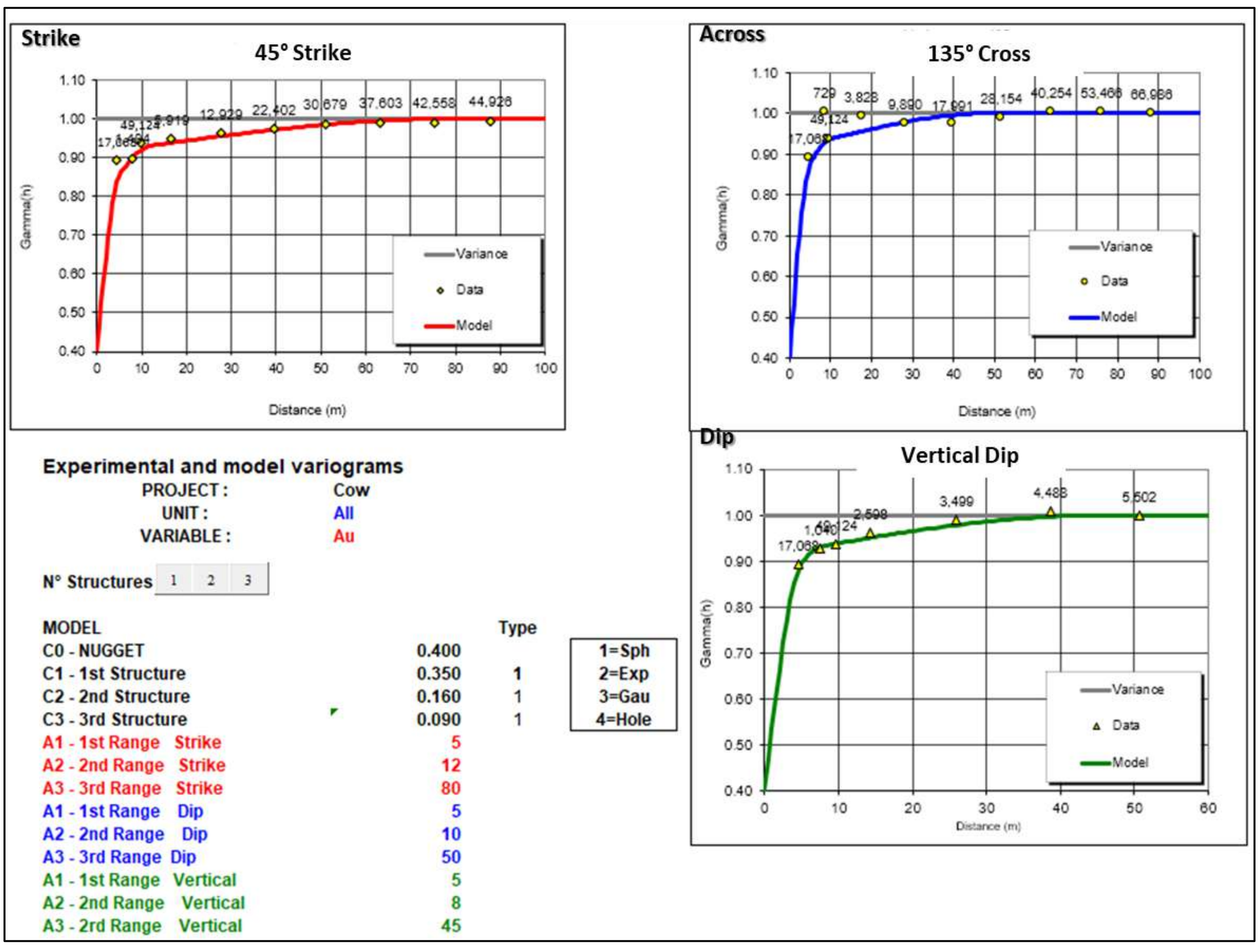


Figure 14-13: Variogram models of gold grade for the Cow deposit

For the Bonanza Ledge model, a 3D directional variography was completed on DDH composites of capped gold assay data. The study was carried out in the Supervisor software. The 3D directional-specific investigations yielded the best-fit model along an orientation that corresponds to the strike and dip of the mineralized zones.

The downhole variograms suggest a low nugget effect of 3% for the Bonanza Ledge zones. Two sets of search ellipsoids were built from the variogram analysis, corresponding to 1x the results and 1.5x the results.

14.10 Grade Interpolation

The interpolation profiles were customized for each vein of each deposit to estimate grades with hard boundaries.

For the Cow, Valley, Shaft, Mosquito, KL, Lowhee, and BC Vein deposits, the mineralized vein blocks were estimated independently. Gold was estimated with an anisotropic three-pass search to estimate all blocks within the veins. For each pass, the high-grades were restricted, as determined in Section 14.6. The first pass range and distance for the restricted search grade (high-grade capping) correspond to a maximum of 25 m, as determined in Section 14.6. For the second and third passes, the ranges increased (respectively 2x and 2.5x the previous pass ranges), but the restricted search grade values decreased. These grade values were determined from indicator variograms and the geological knowledge for each deposit. The fourth interpolation pass was used to fill the wireframes with gold grades. In the dilution halos, gold was estimated with a three-pass search relative to the continuity rotation orientations determined from variogram analysis in Section 14.9. For each pass, the high-grades were restricted, as determined in Section 14.6. The first pass range correspond to a maximum of 12.5 m x 12.5 m x 2.5 m, determined by variogram analysis in Section 14.6 and chosen to limit the influence of distal high-grade samples in the dilution interpolation. For the second and third passes, the ranges increased by 2x and 4x the first pass range, respectively.

For the Bonanza Ledge deposit, passes ranges were derived from the variography using capped composites. The interpolation was run on a point area workspace extracted from the DDH dataset in GEMS. A two-pass search was used for the MRE. The ellipsoid radii for Pass 1 were the same as the variography results (1x). The ellipsoid radii from Pass 2 were 1.5x the results for blocks not interpolated during Pass 1.

The OK method was selected for the final Mineral Resource estimation as it better honours the grade distribution for all the deposits.

The grade estimation parameters are summarized in Table 14-8 and Table 14-9.

Table 14-8: Mineralized veins gold grade estimation parameters

Deposit	Pass	Min Comp	Max Comp	Min DDH	Orientation			Ranges			Au g/t Cap
					Azi (Z)	Dip (X)	Azi (Z)	X (m)	Y (m)	Z (m)	
Cow	1	4	12	2	Anisotropic			25	25	25	50
	2	4	12	2	Anisotropic			50	50	50	25
	3	4	12	2	Anisotropic			125	125	125	15
	4	3	12	2	Anisotropic			250	250	250	10
Valley	1	4	12	2	Anisotropic			25	25	25	40
	2	4	12	2	Anisotropic			50	50	50	25
	3	4	12	2	Anisotropic			125	125	125	15
	4	3	12	2	Anisotropic			250	250	250	10
Shaft	1	4	12	2	Anisotropic			25	25	25	50
	2	4	12	2	Anisotropic			50	50	50	30
	3	4	12	2	Anisotropic			125	125	125	15
	4	3	12	2	Anisotropic			250	250	250	10
Mosquito	1	4	12	2	Anisotropic			25	25	25	50
	2	4	12	2	Anisotropic			50	50	50	30
	3	4	12	2	Anisotropic			125	125	125	15
	4	3	12	2	Anisotropic			250	250	250	10
BC Vein	1	4	12	2	Anisotropic			25	25	25	40
	2	4	12	2	Anisotropic			50	50	50	30
	3	4	12	2	Anisotropic			125	125	125	10
	4	4	12	2	Anisotropic			250	250	250	5
KL	1	4	12	2	Anisotropic			25	25	25	20
	2	4	12	2	Anisotropic			50	50	50	10
	3	4	12	2	Anisotropic			125	125	125	7
	4	3	12	2	Anisotropic			250	250	250	7
Lowhee	1	4	12	2	Anisotropic			25	25	25	40
	2	4	12	2	Anisotropic			50	50	50	20
	3	4	12	2	Anisotropic			125	125	125	15
	4	NA – All blocks were estimated with the first three passes									
Bonanza Ledge	1	3	15	2	320	25	140	31	16	14	70
	2	3	15	2	320	25	140	47	24	21	70

Table 14-9: Dilution halo gold grade estimation parameters

Deposit	Pass	Min Comp	Max Comp	Min DDH	Orientation			Ranges			Au g/t Cap
					Azi (Z)	Dip (X)	Azi (Z)	X (m)	Y (m)	Z (m)	
Cow	1	4	12	2	125	85	-130	12.5	12.5	2.5	2
	2	4	12	2				25	25	5	2
	3	4	12	2				50	50	10	2
Valley	1	4	12	2	125	80	-120	12.5	12.5	2.5	2
	2	4	12	2				25	25	5	2
	3	4	12	2				50	50	10	2
Shaft	1	4	12	2	130	75	-130	12.5	12.5	2.5	2
	2	4	12	2				25	25	5	2
	3	4	12	2				50	50	10	2
Mosquito	1	4	12	2	130	70	-130	12.5	12.5	2.5	2
	2	4	12	2				25	25	5	2
	3	4	12	2				50	50	10	2
KL	1	4	12	2	120	80	90	12.5	12.5	2.5	1.5
	2	4	12	2				25	25	5	1.5
	3	4	12	2				50	50	10	1.5
Lowhee	1	4	12	2	125	85	90	12.5	12.5	2.5	1.5
	2	4	12	2				25	25	5	1.5
	3	4	12	2				50	50	10	1.5

14.11 Block Model Validation

The block models were validated visually and statistically. The visual validation confirmed that each block model honours the drill hole composite data and justifies the multiple capping for the second and third passes (Figure 14-14).

ID2 and Nearest-Neighbor ("NN") models were produced to check for local bias in the models. The ID2 models matched well with the OK models, and the differences in the high-grade composite areas are within acceptable limits. The trend and local variation of the estimated ID2 and OK models were compared with the NN models and composite data using swath plots in three to five directions (north, east, elevation, along strike, and across strike) for the first pass. The ID2, NN and OK models show similar trends in grades with the expected smoothing for each method when compared to the composite data. Figure 14-15 shows the swath plot in the three-five principal directions of the Shaft deposit as an example.

The Bonanza Ledge model of Brousseau et al. (2017) was reviewed and validated, and a reconciliation exercise performed, but no changes were made to the block model. According to the reconciliation results of the 2018 development in the Bonanza Ledge mine, grade produced versus estimated is 87.5% for a combined dilution-recovery rate of 14.3%. No activities were carried out at the Bonanza Ledge mine in 2019–2025.

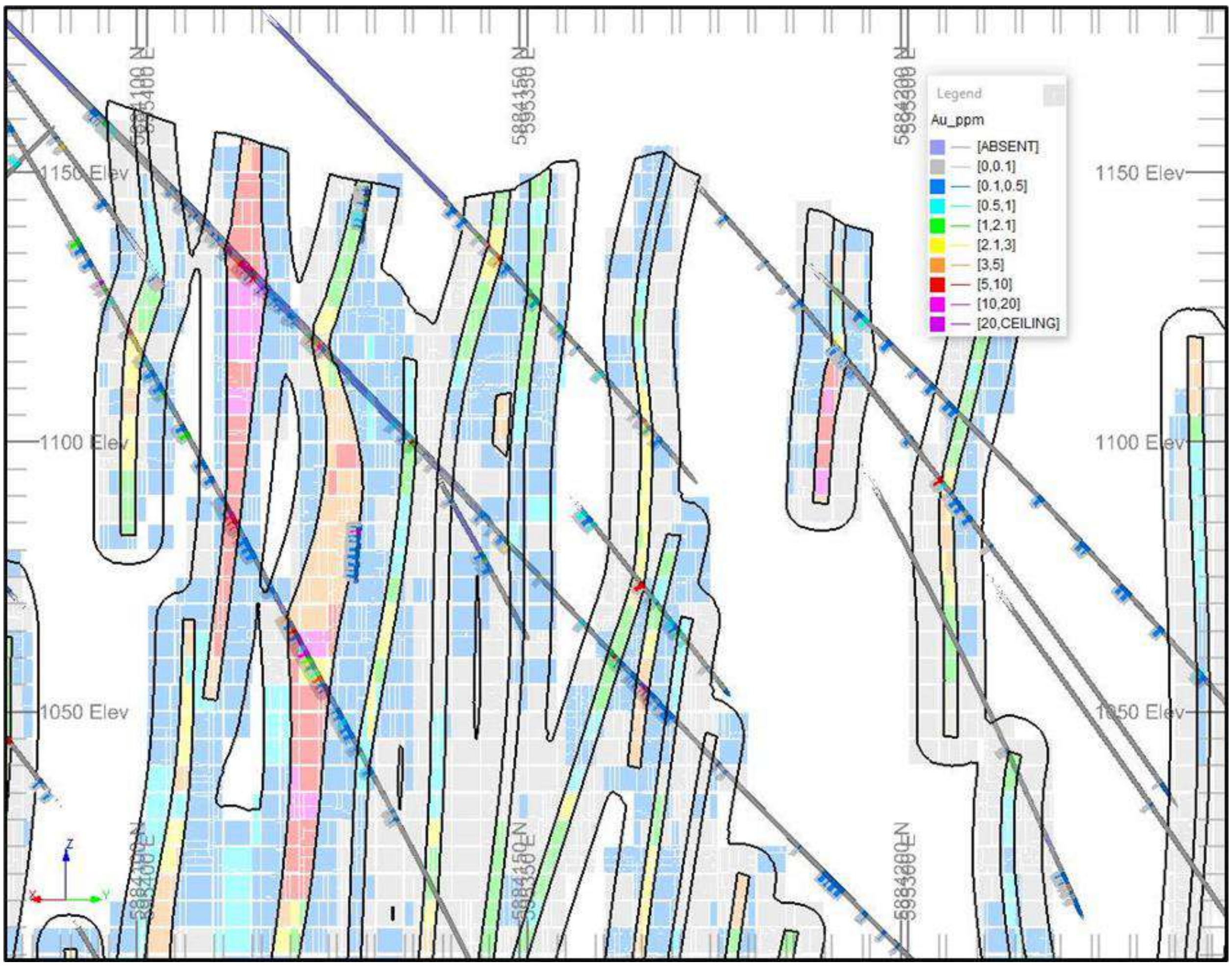
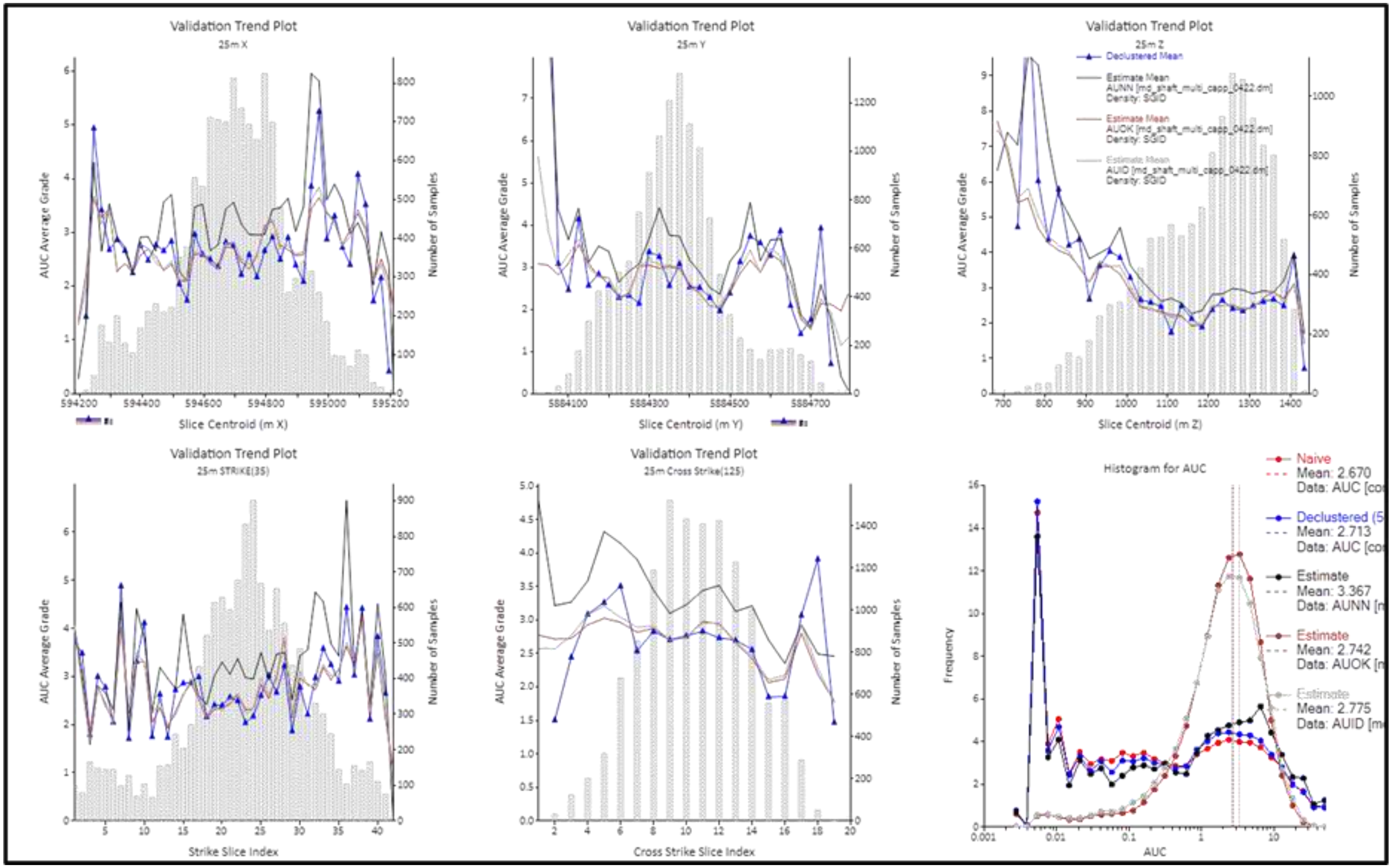


Figure 14-14: Validation of the Valley block model, comparing drill hole composites and block model gold grade values - Cross-section looking southwest (±5 m)


Validation Trend Plot
25m X
AUC Average Grade
Number of Samples
Slice Centroid (m X)
Validation Trend Plot
25m Y
Slice Centroid (m Y)
Validation Trend Plot
25m Z
Declustered Mean
Estimate Mean
AUNN [md_shaft_multi_capp_0422.dm]
Density: SGID
Estimate Mean
AUOK [md_shaft_multi_capp_0422.dm]
Density: SGID
Estimate Mean
AUID [md_shaft_multi_capp_0422.dm]
Density: SGID
Slice Centroid (m Z)
Validation Trend Plot
25m STRIKE(35)
Strike Slice Index
Validation Trend Plot
25m Cross Strike(125)
Cross Strike Slice Index
Histogram for AUC
Frequency
AUC
Naive
Mean: 2.670
Data: AUC [co
Declustered (5
Mean: 2.713
Data: AUC [co
Estimate
Mean: 3.367
Data: AUNN [m
Estimate
Mean: 2.742
Data: AUOK [m
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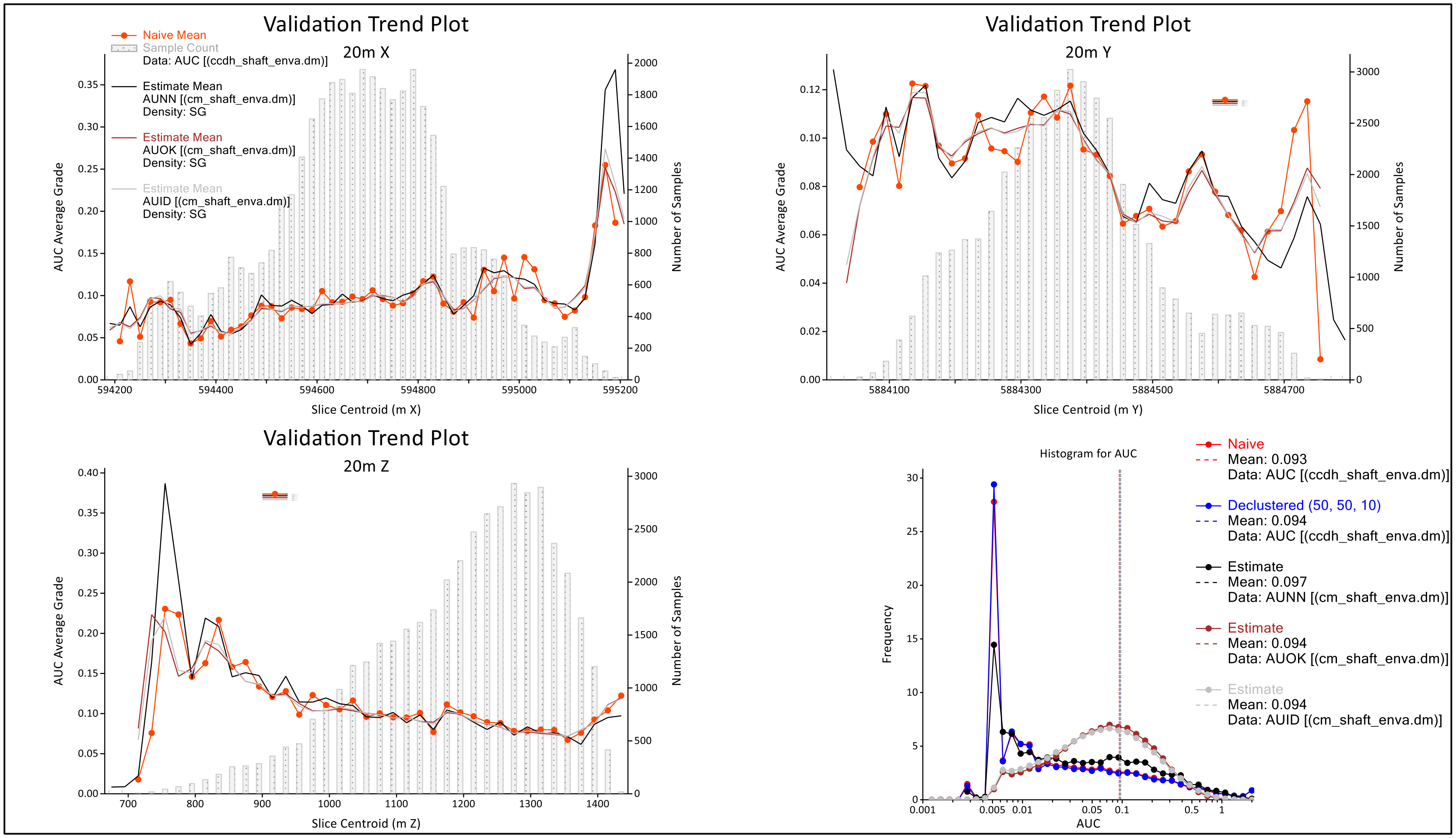
Mean: 2.775
Data: AUID [m
a)



b)

Figure 14-15: Shaft model validation using three or five-direction swath plots and log frequency plots comparing the different interpolation methods to the DDH composites a) Gold in veins; b) Gold in dilution

14.12 Economic Parameters and Cut-off Grade

Cut-off grade ("CoG") parameters were determined by Éric Lecomte, QP, using the parameters presented in Table 14-10 and Table 14-11. All deposits (Cow, Valley, Mosquito, Shaft, Lowhee, KL, and BC Vein) are reported at a CoG of 1.8 g/t Au. Bonanza Ledge is reported at a CoG of 3.5 g/t Au.

Table 14-10: Input parameters used to calculate the U/G cut-off grade for Cow, Valley, Mosquito, Shaft, Lowhee, KL, and BC Vein deposits

Input Parameter	Unit	Value
Gold Price	USD/oz	1,915.00
Exchange Rate	USD:CAD	1:1.32
Gold Price	$/oz	2,528
Royalty	%	5.0
Recovery	%	92.1
Global Mining Cost	$/t	54.19
Processing and Transport Costs	$/t	30.53
G&A plus Environmental Costs	$/t	16.85
Sustaining CAPEX	$/t	25.63
Total Cost	**$/t**	**127.21**
Mineral Resource Cut-off Grade	**g/t Au**	**1.8**

Table 14-11: Input parameters used to calculate the U/G cut-off grade for Bonanza Ledge

Input Parameter	Unit	Value
Gold Price	USD/oz	1,700.00
Exchange Rate	USD:CAD	1:1.27
Gold Price	$/oz	2,159
Royalty	%	5.0
Recovery	%	86.0
Global Mining Costs	$/t	79.13
Processing and Transport Costs	$/t	65
G&A plus Environmental Costs	$/t	51.65
Total Cost	**$/t**	**195.78**
Mineral Resource Cut-off Grade	**g/t Au**	**3.5**

The QP considers the selected cut-off grades of 1.8 g/t Au and 3.5 g/t Au to be adequate based on the current knowledge of the Project and to be instrumental in outlining Mineral Resources with reasonable prospects for eventual economic extraction for an underground mining scenario in each deposit.

The Deswik Stope Optimizer ("DSO") was used to demonstrate spatial continuity of the mineralized zones within "potentially mineable shapes". The DSO parameters used a minimum mining shape of 4.0 m for Mosquito and Shaft and 5.0 m for the remaining zones along the strike of the deposit, a height of 10.0 m and a minimum width of 2.0 m. The maximum shape measures 30.0 m x 5.0 m width of the mineralized zone. The typical shape was optimized first. If it was not potentially economical, smaller stope shapes were optimized until it reached the minimum mining shape. Only those blocks of the model constrained by the resulting conceptual mineable shapes are reported as resources.

The use of those conceptual mining shapes as constraints to report Mineral Resource Estimates demonstrates that the "reasonable prospects for eventual economic extraction" meet the criteria defined in the CIM Definition Standards (2014), and the Mineral Resources and Mineral Reserves ("MRMR") Best Practice Guidelines (2019).

Economics of the resources were based solely on the gold content within the mineralized vein zones.

14.13 Mineral Resource Classification

14.13.1 Cow, Valley, Shaft, Mosquito, KL, Lowhee, and BC Vein Deposits

Mineral Resource classification was determined through geometric criteria deemed reasonable for these deposits by the QP. The samples containing gold values were used for the geometric classification criteria.

No Measured Mineral Resources were defined.

Indicated Mineral Resources were defined for blocks estimated with a minimum of two DDH and within 25 m of a drill hole. The classification can extend up to 35 m if the mineralized trend is demonstrated by multiple adjacent holes.

Inferred Mineral Resources were defined for blocks estimated with a minimum of two DDH and within 50 m of a drill hole. The classification can extend to 60–65 m from a hole if the mineralized trend is demonstrated by multiple adjacent holes.

Based on the criteria described above, the final classification, for all deposits, was obtained after applying a series of outline rings (clipping boundaries) created in longitudinal views, keeping in mind that a significant cluster of blocks would be necessary to obtain an Indicated Mineral Resource. Within the Indicated category outlines, some Inferred blocks were upgraded into Indicated, whereas some Indicated blocks outside of these outlines were downgraded to the Inferred category. The QPs considered this a necessary step to homogenize (smooth out) the Mineral Resource volumes in each category and to avoid the inclusion of isolated blocks in the Indicated category.

Figure 14-16 shows an example of the Mineral Resource classification for the Cow deposit.

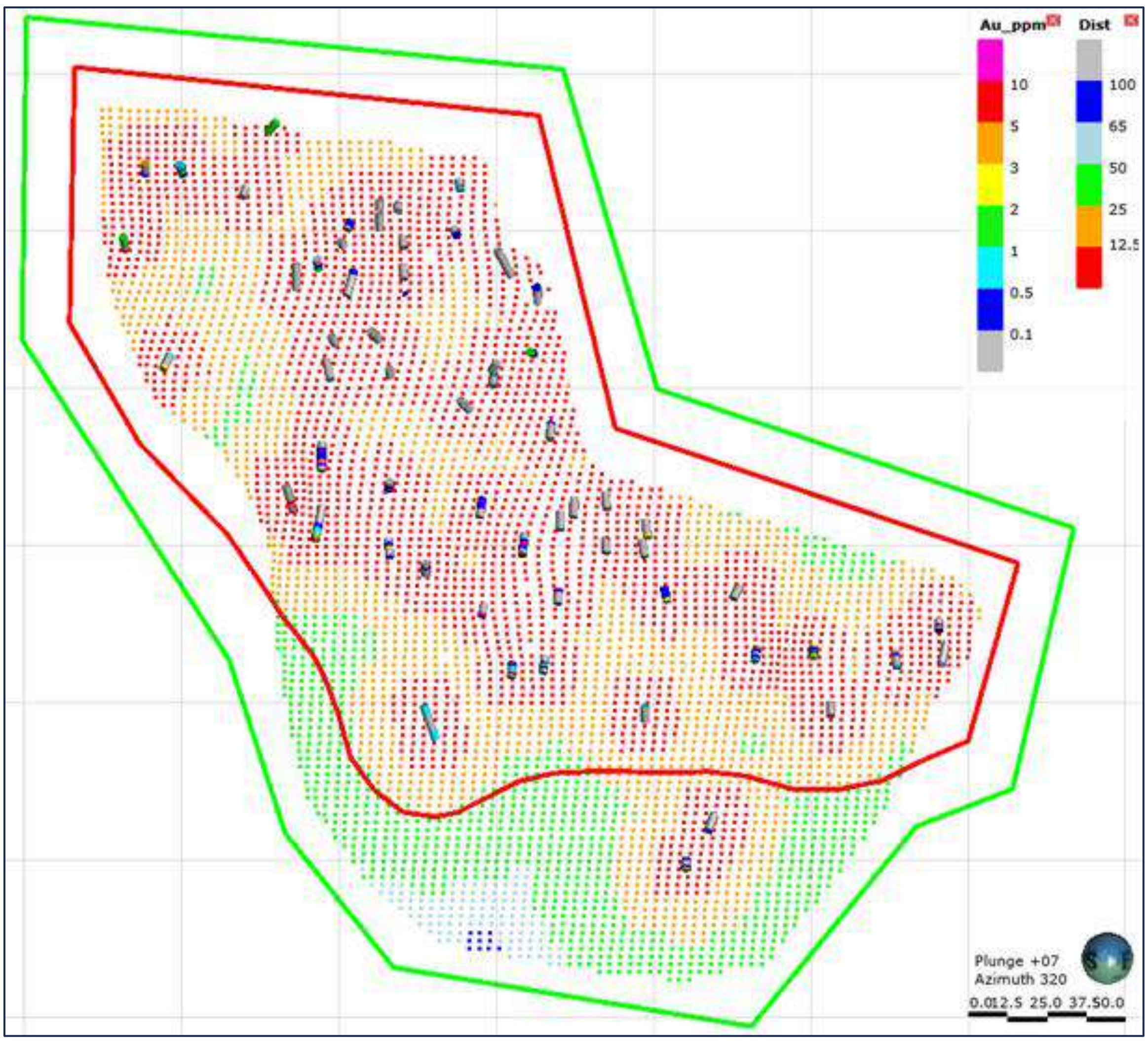


Figure 14-16: Example of a clipping boundary for classification
Indicated category clip (red); Inferred category clip (green) for the V11 vein of the Cow deposit

14.13.2 Bonanza Ledge Deposit

Measured Mineral Resources were defined for blocks showing geological and grade continuity interpolated during Pass 1 only, with a minimum of three drill holes and the closest distance at less than 10 m, and for blocks no more than 40 m below the pit.

Indicated Mineral Resources were defined for blocks showing geological and grade continuity interpolated with a minimum of two drill holes during Pass 1 and the closest distance at less than 20 m.

Inferred Mineral Resources were defined by the remaining blocks interpolated from Pass 1 and Pass 2.

Figure 14-17 shows the Mineral Resource classification for the Bonanza Ledge deposit.

In some areas, interpolated blocks remained unclassified due to the lack of confidence in grade and/or continuity; these are kept as exploration potential.

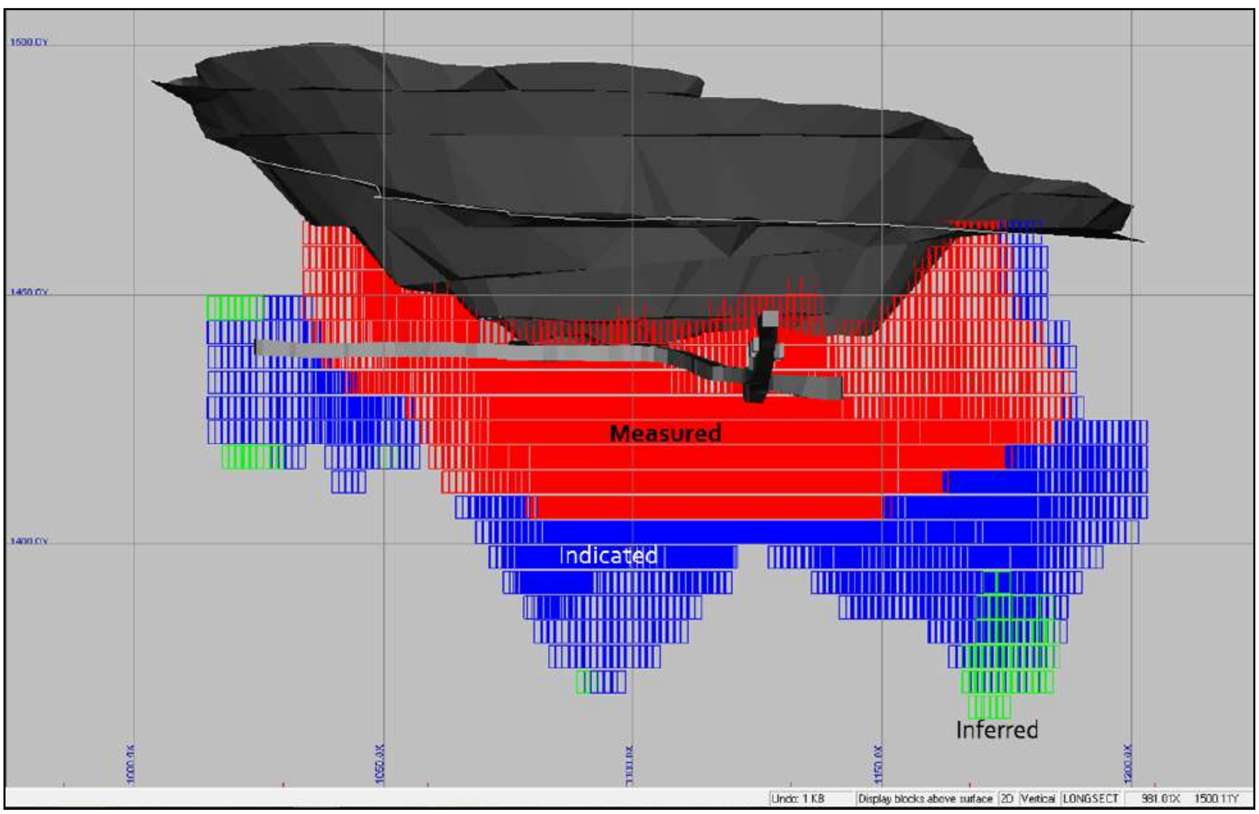


Figure 14-17: Longitudinal view showing the classified Mineral Resources of the Bonanza Ledge deposit

14.14 Mineral Resource Estimate

There has been no change to the MRE since the 2022 FS, other than that the 2025 FS MRE results incorporate a change in cut-off grade, mining depletion at Lowhee Zone and the elimination of silver from the estimate.

The silver has been removed due to limited data and because the estimated ounces were not material.

The approach to classification is unchanged since the 2022 FS MRE. The MRE was classified as Measured, Indicated, and Inferred Mineral Resources based on data density, search ellipse criteria, drill hole density, and interpolation parameters. The 2025 FS MRE is considered to be reliable and based on quality data and geological knowledge. The Mineral Resource Estimate follows the 2014 CIM Definition Standards on Mineral Resources and Reserves and the 2019 CIM Best Practice Guidelines.

Table 14-12 displays the results of the 2025 FS MRE exclusive of the reserves for the Project for all eight deposits: Cow, Valley, Shaft, Mosquito, KL, Lowhee, BC Vein and Bonanza Ledge.

Table 14-13 and Table 14-14 show the cut-off grade sensitivity analysis on gold of the 2025 FS MRE, exclusive of the reserves. The reader should be cautioned that the figures provided in Table 14-13 and Table 14-14 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 Mineral Resource model for gold to the selection of a reporting cut-off grade.

Table 14-12: Cariboo Gold Project 2025 FS MRE reported at a 1.8 g/t Au cut-off grade (except for Bonanza Ledge reported at a 3.5 g/t Au cut-off grade)

Category	Deposit	Tonne	Au Grade	Au Ounce
		'000	(Au g/t)	'000
Measured	**Bonanza Ledge**	**47**	**5.06**	**8**
Indicated	Bonanza Ledge	32	4.02	4
	BC Vein	1,057	3.00	102
	KL	527	2.80	47
	Lowhee	1,333	2.76	118
	Mosquito	1,553	2.96	148
	Shaft	6,121	2.92	575
	Valley	2,718	2.70	236
	Cow	3,991	2.91	374

Category	Deposit	Tonne	Au Grade	Au Ounce
		'000	(Au g/t)	'000
Total Indicated Mineral Resources		**17,332**	**2.88**	**1,604**
Inferred	BC Vein	596	3.17	61
	KL	2,514	2.53	205
	Lowhee	486	3.01	47
	Mosquito	1,883	3.08	186
	Shaft	7,457	3.44	826
	Valley	2,470	3.01	239
	Cow	3,368	2.78	301
Total Measured and Indicated Mineral Resources		**17,380**	**2.88**	**1,612**
Total Inferred Mineral Resources		**18,774**	**3.09**	**1,864**

Mineral Resource Estimate notes (Table 14-12):

1. The independent and qualified persons for the Mineral Resources estimates, as defined by NI 43-101, are Carl Pelletier, P.Geo., and Tessa Scott, P.Geo. of InnovExplo Ltd. The effective date of the 2025 FS MRE is April 22, 2025.
2. These Mineral Resources, exclusive of the reserves, are not Mineral Reserves as they do not have demonstrated economic viability.
3. The MRE follows the 2014 CIM Definition Standards on Mineral Resources and Reserves and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.
4. A total of 481 vein zones were modelled for the Cow Mountain (Cow and Valley), Island Mountain (Shaft and Mosquito), Barkerville Mountain (BC Vein, KL, and Lowhee) deposits and one gold zone for Bonanza Ledge. A minimum true thickness of 2.0 m was applied, using the gold grade of the adjacent material when assayed or a value of zero when not assayed.
5. The estimate is reported for a potential underground scenario at a cut-off grade of 1.8 g/t Au, except for Bonanza Ledge at a cut-off grade of 3.5 g/t Au. The cut-off grade for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee deposits was calculated using a gold price of USD 2,400/oz; a USD:CAD exchange rate of 1.35; an underground mining cost of $66.3/t; a processing and transport cost of $30.80/t; a G&A plus Environmental cost of $22.40/t; and a sustaining CAPEX cost of $45.6/t. No changes have been applied for the Bonanza Ledge. The cut-off grade for the Bonanza Ledge deposit was calculated using a gold price of USD 1,700/oz; a USD:CAD exchange rate of 1.27; a global mining cost of $79.13/t; a processing and transport cost of $65.00/t; and a G&A plus Environmental cost of $51.65/t. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.).
6. Density values for Cow, Shaft, Lowhee, and BC Vein were estimated using the ID^2 interpolation method, with a value applied for the non-estimated blocks of 2.80 g/cm^3 for Cow, 2.78 g/cm^3 for Shaft, 2.74 g/cm^3 for Lowhee, and 2.69 g/cm^3 for BC Vein. Median densities were applied for Valley (2.81 g/cm^3), Mosquito (2.79 g/cm^3), and KL (2.81 g/cm^3). A density of 3.20 g/cm^3 was applied for Bonanza Ledge.
7. A four-step capping procedure was applied to composited data for Cow (3.0 m), Valley (1.5 m), Shaft (2.0 m), Mosquito (2.5 m), BC Vein (2.0 m), KL (1.75 m), and Lowhee (1.5 m). Restricted search ellipsoids ranged from 7 to 50 g/t Au at four different distances ranging from 25 m to 250 m for each deposit. High-grades at Bonanza Ledge were capped at 70 g/t Au on 2.0 m composited data.

8. The gold Mineral Resources for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee vein zones were estimated using Datamine Studio™ RM 1.9 software using hard boundaries on composited assays. The OK method was used to interpolate a sub-blocked model (parent block size = 5 m x 5 m x 5 m). Mineral Resources for Bonanza Ledge were estimated using GEOVIA GEMS™ 6.7 software using hard boundaries on composited assays. The OK method was used to interpolate a block model (block size = 2 m x 2 m x 5 m).
9. Results are presented in-situ. Ounce (troy) = metric tons x grade / 31.10348. Calculations used metric units (metres, tonnes, g/t). The number of tonnes was rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects. Rounding followed the recommendations as per NI 43-101.
10. The QPs responsible for this section of the technical report are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource Estimate other than as disclosed in this Report.

Table 14-13: Cut-off grade sensitivity analysis on gold for the Cow, Valley, Shaft, Mosquito, BC Vein, KL and Lowhee deposits of the Cariboo Gold Project

Cut-off Grade	Indicated			Inferred		
	Tonne ('000)	Grade Au g/t	Ounce ('000)	Tonne ('000)	Grade Au g/t	Ounce ('000)
1.6	19,918	2.7	1,744	21,078	2.9	1,991
1.7	18,275	2.8	1,666	19,718	3.0	1,926
1.8	17,300	2.9	1,600	18,774	3.1	1,864
1.9	15,370	3.1	1,515	17,312	3.2	1,799
2	14,125	3.2	1,444	16,270	3.3	1,740

Table 14-14: Cut-off grade sensitivity analysis on gold for the Bonanza Ledge deposit of the Cariboo Gold Project

Cut-off Grade	Measured			Indicated		
	Tonne ('000)	Grade Au g/t	Ounce ('000)	Tonne ('000)	Grade Au g/t	Ounce ('000)
3.2	65	4.5	9	38	3.6	4
3.5	47	5.1	8	32	4.0	4
3.7	43	5.2	7	21	4.3	3

15. Mineral Reserve Estimates

15.1 Introduction

Mineral Reserves are reported using the 2014 CIM Definition Standards and were estimated in accordance with the CIM 2019 Best Practices Guidelines, as required by NI 43-101 Standards of Disclosure for Mineral Projects. As such, the Mineral Reserves are based on Measured and Indicated Mineral Resources and do not include any Inferred Mineral Resources. Measured and Indicated Mineral Resources are exclusive of proven and probable reserves. Mineral Reserves are the estimated tonnage and grade of ore that is considered economically viable for extraction based on the assumptions set out in this Report.

Mineral Reserves for the Project deposit incorporate dilution and mining recovery factors based on the selected mining method and design as set out in Chapter 16. In addition, economic analyses were completed to validate the profitability of particular areas of the Mineral Resource to ensure it could be converted to Mineral Reserve.

The following sources of information were instrumental in the Mineral Reserve estimation process:

- The resource blocks model (last updated September 8, 2022) (see Section 14.8 of this Study);
- The previous 2023 FS ("NI 43-101 Technical Report - Feasibility Study for the Cariboo Gold Project") conducted by BBA in 2022-2023 for Osisko Development Corporation, effective date December 30, 2022 (Hardie et al., 2023);
- Current estimates of operating costs and other financial assumptions, as laid out in this Report;
- Updated forecasts for metal prices;
- The current 3D model of existing underground workings and historical stope outlines;
- The litho-structural model of the site.

15.2 Estimation Procedure

The Mineral Resource blocks model from the last update of September 8, 2022 was used as the basis for estimating the mineable tonnage considered in the mine plan. The cut-off grades for the Project were first estimated, then the stope shapes were optimized considering the general cut-off grade and according to various parameters, such as geometry and dilution. The final reserve estimate was obtained after completing the stope and underground mine designs, including the economic validation and considering additional factors, such as incremental blocks and mine recovery.

15.2.1 Cut-off Grades Calculations

The CoG calculations are based on technical and economic parameters developed specifically for this Study, building in part on data obtained from the 2023 FS (Hardie et al., 2023) and on cost estimates prepared by InnovExplo and ODV. These calculations consider current market conditions, including gold price and exchange rate assumptions derived from a trailing 3-year average, to reflect a balanced economic outlook. Mining costs were estimated using a zero-based approach tailored to the selected longitudinal long hole retreat mining method and benchmarked against comparable underground gold projects.

Stope optimization was conducted in two stages. The initial stage involved a preliminary screening using a cut-off grade-based stope optimization to identify potentially mineable zones. This was followed by a second pass that incorporated development costs into the economic evaluation, ensuring that only stopes with a positive economic margin, including access development, were retained. The parameters used in these calculations are summarized in Table 15-1.

For mineralized development material, a lower CoG of 1.7 g/t Au was applied to account for reduced incremental cost structures associated with pre-planned access development.

The base cut-off grade was determined using the following formula:

$$COG = \frac{C_{total} \times (1 + D)}{(P_{Au} - S_{Au}) \times R_{Au} \times R_{mining} \times (1 - R_f)}$$

Where:

COG	Cut-off grade, in grams per tonne of gold (g/t Au)
C_{total}	Total operating cost, in CAD per tonne of mined material (mining, processing, G&A, environment, sustaining capital)
P_{Au}	Gold price, in CAD per gram (converted from $/oz at market rate and exchange rate)
S_{Au}	Selling cost, in CAD per gram (converted from $/oz at market rate and exchange rate)
R_{Au}	Gold metallurgical recovery, expressed as a decimal (e.g., 92.1% = 0.921)
R_{mining}	Mining recovery, expressed as a decimal (e.g., 94% = 0.94)
R_f	Royalty as a decimal (e.g., 5.0% = 0.05)
D	Dilution, expressed as a decimal (e.g., 5% = 0.05)

Table 15-1: Cut-off grade calculation parameters

Input Parameters		Production Rate: 4,900 tpd
		General Economic Assessment
Gold Price	USD/oz	1,915
Exchange Rate	CAD/USD	1.32
Royalty	%	5.00
Refining Cost	USD/oz	5.0
Processing Cost and Transport	$/t treated	30.53
Metallurgical Recovery	%	92.10
Mining Recovery	%	94.00
Mining Dilution	%	5.00
Mining Cost	$/t treated	54.19
Sustaining Cost	$/t treated	25.63
Environment	$/t treated	6.47
General and Administration	$/t treated	10.39
Cut-off Grade	**g/t**	**2.0**

15.2.2 Dilution Factor Calculation

Internal dilution was considered when optimizing stope shapes and converting them into planned mineable stope shapes. External dilution was also considered during stope optimization by using the appropriate estimated linear overbreak and sloughing ("ELOS") values (see Chapter 16) based on stope size and location and rock mechanics properties. Backfill dilution was added afterwards, based on the location of each stope and the mining sequence.

The following parameters were used to estimate stope dilution:

- Dilution is expected to come from the hanging wall and foot wall for most stopes. ELOS applied to the different stopes varies according to the strike length and the geotechnical classification (see Section 16.2.3);
- A backfill dilution ranging from 1.3% to 5.3% by weight per wall in contact with backfill is assumed;
- No additional backfill dilution for sill due to rock sill pillar;
- A lower recovery is assumed for sill pillar stopes;
- No dilution is assumed for the stope floors;

- The grade of internal and external dilution is based on an ordinary kriging interpolation of the gold values in the vicinity of the mineralized zones (see Section 14.10);
- Backfill dilution assumed a dilution grade of 0 g/t.

In summary, the external waste dilution is estimated to be 9.0% by weight. When considering the backfill dilution, the average dilution of the Project is estimated to be 10.1% by weight.

15.2.3 Mining Losses

Mining loss (or mining recovery) is based on the material in the model that is left behind, for example, to provide structural support when facing blasting or operational challenges and rock mechanics issues.

Recovery varies mainly according to blasting method and the associated challenges, as well as rock mechanics conditions such as sill pillar recovery. Recovery values for stopes classified as geotechnical Class 1, 2, 3, 3L and 4 are based on the proposed production drilling approach for dilution control, past experience and estimates for typical stopes. The mining recovery associated with Class 4 stopes was limited to 85% for stopes using the two steps Doyon mining method. The factors seem reasonable given the selected mining method and the ground conditions.

The average mining recovery for the Project is 91.3%.

15.2.4 Stope Shape Optimization

The geological block model was the primary input in the Deswik Shape Optimizer ("DSO") version 2024.1, a Deswik software application used to optimize individual stope shapes from the block model using Stope Shape Optimizer algorithms from Alford Mining Systems and the parameters indicated in the Table 15-2.

Table 15-2: Stope shape optimization parameters

Parameters	Values
Cut-off Grade Value	2.0 g/t
Typical Sublevel Interval	30 m
Typical Stopes Length	From 15 m to 25 m
Minimal Stope Width	3.7 m
Minimum Horizontal Pillar Between Parallel Lenses	5 m
External Dilution Included	Presented in Section 15.2.2
Minimum Slope Wall Angle	45°

15.2.5 ESG Modifying Factors

Environmental, Social, and Governance (ESG) considerations have been evaluated as part of the modifying factors applied in converting Mineral Resources to Mineral Reserves. These factors are not expected to materially affect the viability of the mine plan.

Table 15-3: Summary of ESG modifying factors relevant to Mineral Reserve Estimation

EGS Domain	Parameter	Status / Description
Environment	Environmental Assessment Certificate (EAC)	Received Oct 10, 2023 under BC Environmental Assessment Act, 2018.
	Permitting Status	BC Mines Act and Environmental Management Act permits received (Q4 2024).
	Tailings Management	Underground paste fill – reduces surface storage needs and enhances ground stability
	Closure & Reclamation	Preliminary plan developed; reclamation cost included in sustaining capital
	GHG / Climate Risk	Greenhouse Gas Management Plan under development per EAC conditions
Social	Indigenous Agreement	Agreements signed with Lhtako Dené Nation and Williams Lake First Nation. Ongoing discussions with Xatśūll First Nation and other affected parties.
	Indigenous Consultation	Ongoing meetings for technical discussions and relationship building occur with Lhtako Dené Nation, Xatśūll First Nation and Williams Lake First Nation
	Community Impact	Expected to create 613 jobs (construction), 525 (operations); community engagement ongoing.
	Local Hiring & Procurement	Commitment to local hiring and regional business participation.
Governance	Compliance & Audits	Independent environmental audits planned; EAO and Ministry of Environment oversight.
	Corporate ESG Policy	Formal ESG policy adopted; integrated into project risk and decision-making framework.

These ESG factors have been reviewed by the QP and are not expected to present a material risk to the classification of Mineral Reserves. They support the conclusion of reasonable prospects for economic extraction as required under CIM and NI 43-101 standards.

15.3 Mineral Reserve Statement

Table 15-4 illustrates the tonnage and gold contents for the different zones of the Project's Mineral Reserves.

Table 15-4: Cariboo Gold Statement of Mineral Reserves at the effective date of April 10, 2025

Category	Tonnage (t)	Grade Au (g/t)	Contained Gold (oz)
Proven			
-	-	-	-
Probable			
Cow	3,999,971	3.35	430,548
Valley	3,238,636	3.59	374,058
Shaft	8,548,295	3.72	1,021,599
Mosquito	1,105,370	3.94	140,102
Lowhee	923,162	3.52	104,491
Total Proven & Probable	**17,815,435**	**3.62**	**2,070,798**

Notes:

1. The Qualified Person for the Mineral Reserve Estimate is Eric Lecomte, P.Eng. (InnovExplo, a subsidiary of Norda Stelo).
2. The Mineral Reserve Estimate has an effective date of April 10, 2025.
3. Estimated at USD 1,915/oz Au using an exchange rate of USD 1.32:CAD 1.00, variable cut-off value from 1.70 g/t to 2.0 g/t Au.
4. Mineral Reserve tonnage and mined metal have been rounded to reflect the accuracy of the estimate and numbers may not add due to rounding.
5. Mineral Reserves include both internal and external dilution along with mining recovery. The average external dilution is estimated to be 10.1%. The average mining recovery factor is 91.3% to account for mineralized material left in each block in the margins of the deposit.

15.4 Factors that May Affect the Mineral Reserves

Areas of uncertainty that may materially impact the Mineral Reserve Estimate include the following:

- Commodity prices, market conditions, and foreign exchange rate assumptions;
- Cut-off grade estimates;
- Capital and operating cost assumptions;
- Geological complexity and resource block modelling;
- Stope stability, dilution and mining recovery factors;
- Metallurgical recoveries and contaminants;
- Rock mechanics (geotechnical) constraints and the ability to maintain constant underground access to all working areas.

16. Mining Methods

16.1 Introduction

The Cariboo Gold Project will be an underground operation primarily using longitudinal retreat stoping method for the majority of the stopes (95% of production tonnage). This method is well suited to the geometry of the deposit, as the five mineralized zones, each comprising of several narrow veins, will support the development of multiple mining fronts to achieve a maximum production of 4,900 tonnes per day (“tpd”). The remaining 5% of production tonnage will be mined using the transverse stoping method in areas with wider mineralized zones.

Additionally, within the longitudinal retreat method, a modified version executed in two passes was considered for stopes located in poor ground conditions, geologically classified as "Class 4" (see Section 16.2.3). This variant accounts for 7% of the total stope tonnage, and a detailed description of the method is provided in Section 16.4.

At the start of the pre-production period, access to the development area will be through the Cow portal ramp, which has already been excavated. During this initial phase, development will focus on advancing the Cariboo ramp and developing access to key infrastructure, including the ventilation network, underground crusher chamber, slurry treatment facilities, maintenance installations, and the access ramp to the Valley portal. Once completed, the Valley portal—strategically located near the centre of the deposit—will serve as the primary access point to support ongoing mining operations. The Cow portal will remain active and will be used for the transport of waste material to the designated waste rock storage facility (“WRSF”).

In parallel, development crews will extend workings into the initial mining zones, specifically the upper zone of Shaft and Valley and the Lowhee Zone, as well as advance the development of deeper access ramps.

The pre-production period will extend until early Year 1, approximately 6 months after the progressive commissioning of the processing plant. Once stope production begins, a ramp-up period of approximately 10 months will be required to reach the nominal production rate of 4,900 tpd, which is expected to be achieved by first half of Year 1.

16.2 Rock Engineering

Alius is responsible for the content and conclusions presented in this section of the Report, which are based on a review and update of the geotechnical data and interpretations previously completed by SRK as part of the 2023 Cariboo Gold Project Geotechnical Feasibility Study (SRK, 2023).

Much of the information presented in Section 16.2 remains unchanged from the previous Feasibility Study (Hardie et al., 2023), particularly with respect to rock mass characterization, including laboratory test results, rock mass classification, and class definitions. This earlier work was completed to industry-accepted standards and remains valid and suitable for use in the current FS.

While additional stope classifications were carried out by Alius using the established geotechnical design classification scheme (Section 16.2.3.1), the primary scope of work completed by Alius focused on revising the interpretation of geotechnical data to support updated pillar and stope designs, dilution estimates, backfill strength parameters, and ground support recommendations.

16.2.1 Geotechnical Field and Test Work Programs

Alius acknowledged and relied upon the geotechnical characterization conducted by SRK, which was based on two geotechnical field investigation programs, included a geotechnical fieldwork program (i.e., geotechnical core logging) and a laboratory test work program.

Two geotechnical field data acquisition programs were completed, the first taking place during late summer and fall of 2018, and the second taking place in the summer of 2021. The location of the 2018 and 2021 dedicated geotechnical drill holes used for assessment of the Project deposit are shown in Figure 16-1.

Figure 16-1: Plan view showing collar locations of 2018 and 2021 geotechnical drill holes for the Project (Source: SRK, 2022)

In addition to the detailed geotechnical data collected during these dedicated geotechnical field programs, basic geotechnical data (recovery, fracture count, RQD, and estimated intact rock strength) were collected for the 2016 to 2021 resource exploration drill holes.

The 2018 geotechnical field data acquisition/investigation program comprised of geotechnical logging of oriented triple tube HQ core. Thirteen geotechnical drill holes were logged using RMR_{89} and Q' rock mass classification systems for a total length of 4,181 m. This program focused on the Shaft, Cow, and Valley zones, as well as the Valley (Main) portal location. Representative rock core samples from each geotechnical domain were collected from the geotechnical drill holes in the 2018 field program to complete 96 multi-stage triaxial compressive strength ("TCS") tests at the Queen's University laboratory.

The 2021 field program comprised of geotechnical logging of oriented triple tube HQ core from five geotechnical specific holes with a total length of 881 m using the same logging guidelines as 2018. This program focused on the expanded Mosquito Zone and new Lowhee Zone. During the 2021 field program, core samples were collected to complete four UCS tests and nine TCS tests.

Representative laboratory test results for unit weight and intact Young's modulus data, based on laboratory testing, for each of the lithological facies, are presented in Table 16-1. The limited UCS results as well as extrapolated UCS values from TCS are presented in Table 16-2 and Table 16-3, respectively.

Table 16-1: Unconfined compressive strength test results from 2021 field program

Modelled Lithological Facies	Unit Weight, (tonnes/m³)	Intact Young's Modulus (GPa)
Calcareous Siltstone Facies	2.80	25.7
Calcareous Sandstone Facies	2.78	43.3
Aurum Limestone	2.77	35.8
Upper Sandstone Facies	2.74	29.7
Mafic Volcanic Facies	2.80	25.7
Lower Sandstone Facies	2.81	27.5
Basal Transitional Facies	2.86	30.7
Basal Facies	2.77	45.1

Table 16-2: Limited unconfined compressive strength test results from 2021 field program

	Unit	Count	Min	Average	Max	Standard Deviation
Mosquito	MPa	3	22	49	67	19
Calcareous Siltstone Facies	MPa	3	22	49	67	19
Island Mountain Portal	MPa	1	17	17	17	0
Calcareous Siltstone Facies	MPa	1	17	17	17	0
Total	**MPa**	**4**	**17**	**41**	**67**	**22**

Table 16-3: Unconfined compressive strength estimates extrapolated from 2018 and 2021 TCS tests

Zone	Lithological Facies	Triaxial Testing Results (2018 & 2021)				
		No. Valid Tests	Extrapolated UCS (MPa)			
			Min	Average	Max	Standard Deviation
Cow	Calcareous Siltstone Facies	11	10	24	57	13
	Calcareous Sandstone Facies	2	32	33	34	1
	Aurum Limestone	3	32	37	45	6
	Upper Sandstone Facies	13	7	26	47	15
	Mafic Volcaniclastic	3	33	47	69	16
	Lower Sandstone Facies	7	21	45	97	27
	Basal Transitional	1	72	72	72	0
	Basal	3	20	38	68	21
Shaft	Calcareous Siltstone Facies	0	-	-	-	-
	Calcareous Sandstone Facies	3	23	66	102	33
	Aurum Limestone	0	-	-	-	-
	Upper Sandstone Facies	10	15	44	107	28
	Mafic Volcaniclastic	7	10	60	102	30
	Lower Sandstone Facies	13	12	36	114	27
	Basal Transitional	3	16	49	78	25
	Basal	0	-	-	-	-
Valley	Calcareous Siltstone Facies	0	-	-	-	-
	Calcareous Sandstone Facies	1	46	46	46	0
	Aurum Limestone	1	32	32	32	0
	Upper Sandstone Facies	1	24	24	24	0
	Mafic Volcaniclastic	1	38	38	38	0
	Lower Sandstone Facies	0	-	-	-	-
	Basal Transitional	0	-	-	-	-
	Basal	0	-	-	-	-
Mosquito	Calcareous Siltstone Facies	2	4	12	21	8
	Calcareous Sandstone Facies	0	-	-	-	-
	Aurum Limestone	2	39	42	45	3
	Upper Sandstone Facies	1	21	21	21	0
	Mafic Volcaniclastic	1	59	59	59	0
	Lower Sandstone Facies	0	-	-	-	-
	Basal Transitional	0	-	-	-	-
	Basal	0	-	-	-	-

Zone	Lithological Facies	Triaxial Testing Results (2018 & 2021)				
		No. Valid Tests	Extrapolated UCS (MPa)			
			Min	Average	Max	Standard Deviation
Island Mountain Portal	Calcareous Siltstone Facies	0	18	20	22	2
	Calcareous Sandstone Facies	0	-	-	-	-
	Aurum Limestone	0	-	-	-	-
	Upper Sandstone Facies	0	-	-	-	-
	Mafic Volcaniclastic	0	-	-	-	-
	Lower Sandstone Facies	0	-	-	-	-
	Basal Transitional	0	-	-	-	-
	Basal	0	-	-	-	-

16.2.2 Structural Geology

A 3D structural model had already been created, by ODV, to represent the major Regional Fault structures on the Project property. A 3D fault model was created by SRK (2023) for the secondary structures of the Project property, where information existed to extend these faults. This model was based on the integration of drill hole data and underground mapping in the old mine-workings. Each of the mineralized zones were modelled separately. Modelling of the secondary faults in the Cow, Valley, Shaft, and Mosquito zones took place in 2019. Secondary faults in the Mosquito Zone were updated in 2021 and secondary faults in the Lowhee Zone were modelled in 2022.

16.2.3 Geotechnical Design

16.2.3.1 Geotechnical Design Classifications

SRK (2023) conducted a thorough evaluation of geotechnical parameters, laboratory strength testing to support the underground mine design. The lithological facies in the deposit have been modelled and initial assessments considered the geotechnical characteristics of the facies. The result of this assessment showed that the main indicator for rock mass quality on the Project site is the presence of faults, and the width of the damage zones associated with each fault or fault intersection.

Based on this assessment, five rock mass classifications with unique geotechnical characteristics were defined. Due to the variability in the Shaft and Mosquito zones, Class 3 Lower was broken out from the upper end of the Class 4 to represent the site-specific ground conditions better. The geotechnical characteristics for these classes are:

- **Classes 1 and 2**: Open Stoping – Represents the most competent rock mass in the deposit. It is massive, with high intact rock strength. Foliation parallel fractures are less pervasive in this class.
- **Classes 3 and 3 Upper ("Class 3U")**: Open Stoping – Reduced strike length. Characterized by moderately jointed rock mass. Foliation is well developed in this class.
- **Classes 3 Lower ("Class 3L") and 4**: Open Stoping – Further reduced strike length. characterized by a jointed rock mass with a lower RQD. Foliation is well developed in this class, and the rock tends to break along the foliation planes.
- **Class 5**: Cut-and-Fill – Represents the least competent rock mass that is not deemed suitable for massive mining due to increased fracture frequency and weak intact rock strength. Excavations in this class will require limited spans and appropriate support to maintain stability.

Stopes were reviewed individually, by zone, and the anticipated distribution of the stopes in each geotechnical class was determined. Ranges of rock mass properties were then assessed for each class, as summarized in Table 16-4.

Table 16-4: Summary of rock mass properties for each qualitative geotechnical classification

Qualitative Geotechnical Classification	RMR_{89} (Bieniawski, 1989)	Q' (Grimstad and Barton, 1993)
Classes 1 and 2	55 – 65 (Fair to Good rock mass)	3.39 – 10.31
Classes 3 and 3U	50 – 55 (Fair rock mass)	1.95 – 3.39
Class 3L	35 – 50 (Fair rock mass)	0.37 – 1.95
Class 4	33 – 40 (Poor rock mass)	0.29 – 0.64
Class 5	14 – 33 (Very poor rock mass)	0.04 – 0.29

16.2.3.2 Geotechnical Design Approach

Excavation stability assessments were carried out using well-established empirical and semi-empirical methods, supported by engineering judgment. These assessments were further informed by operational insights gained from the Bonanza Ledge Mine and the ongoing Lowhee Bulk Sample mining. From the experience gained at both sites, Alius notes that the ground conditions at Bonanza Ledge are generally poorer, mainly the ore sills along the BC Vein Corridor, than those of the Project.

16.2.3.3 Stope Design and Dilution Estimates

A back-analysis of stope performance at the Bonanza Ledge Mine was conducted by comparing the planned stope shapes to the actual mined geometry, as captured by Cavity Monitoring System ("CMS") surveys. The reconciliation included 21 stopes, as show in Table 16-5. The analysis revealed that 50% of the stopes (i.e., the median) exhibited a hydraulic radius greater than 4.4 m. The median rock mass quality (Q') of the footwall ("FW") and hanging wall ("HW") were 1.7 and 1.1, respectively, which fall within geotechnical Classes 3L and 4 at CGP. On average, the combined dilution (ELOS) of the footwall and hanging wall was 0.9 m, with a maximum value of 2.4 m. The results of this analysis have been used to establish stope design and dilution estimates in areas with Class 3L and 4 ground conditions.

Table 16-5: Summary of stope performance back-analysis at Bonanza Ledge Mine

Stope Parameters & Results	Unit	Min	Median	Average	Max
FW Q' Classification	-	0.2	1.7	8.7	61
HW Q' Classification	-	0.2	1.1	3.7	24
Hydraulic Radius	**m**	**3.8**	**4.4**	**4.5**	**6.2**
Strike Length	m	12	14	15	20
Width	m	2.4	6.2	6.8	15
Vertical Height	m	18	24	23	27
Dip	°	56	75	73	90
ELOS – FW	m	0.0	0.1	0.3	1.5
ELOS – HW	m	0.0	0.6	0.7	2.0
ELOS – Combined FW & HW	**m**	**0.0**	**0.8**	**0.9**	**2.4**

The surface stability of CGP stopes planned in ground classified as Classes 1, 2 and 3U were assessed using the empirical stability charts developed by Potvin (1988) and Mawdesley et al. (2001), along with the ELOS method (Clark, 1998) for dilution estimates. These approaches consider rock mass classification, induced stress conditions, intact rock strength, joint orientations, as well as stope geometry (i.e., hydraulic radius) and orientation. Proposed stope dimensions (for two different mining widths) and dilution estimates are shown in Table 16-6, for each geotechnical design class.

Table 16-6: Stope dimensions and dilution estimates

Stope Parameters & Dilution Estimate	Unit	Geotechnical Class				
		1 and 2	3 and 3U	3L	4	5
Mining Method	-	Open Stope				
Maximum Hydraulic Radius[1]	m	6.8	6.0	5.0	5.0	
Maximum Width	m	<8	<8	<8	<8	
Strike Length	m	25	20	15	15	
Maximum Width	m	<15	<10	<10	<10	Cut & Fill
Strike Length	m	12	12	10	10	
Vertical Height	m	30	30	30	30	
Geotechnical Mining Factor[2]	-	100%	100%	100%	70%[3]	
ELOS – Combined FW & HW	m	1.0	1.5	2.0	2.5[3]	

Notes:

(1) Maximum hanging wall and footwall hydraulic radius (surface area/perimeter)

(2) Geotechnical mining factor indicates the percentage of stopes that are estimated to be recovered at this sublevel spacing and rock mass classification. This percentage is to be applied to the inventory in advance.

(3) If using the Doyon method, apply geotechnical mining factor of 85% and ELOS of 1.5 m.

The stopes provided by InnovExplo were classified primarily by SRK (2023), with any remaining unclassified stopes subsequently assessed and categorized by Alius, resulting in fewer than 5% of stopes remaining unclassified. Due to variability in geotechnical conditions across stopes within the same mining area, individual stope dimensions were applied to ensure consistency in stope and brow geometry. For design purposes, a single representative geotechnical class was selected based on the class corresponding to the median stope tonnage within each vein corridor area. To ensure this approach did not result in overly optimistic designs, a comparison was conducted between the proposed stope strike lengths and those used in the mine plan, as summarized in Table 16-7. In this table, green cells represent stopes where conservative design dimensions were used, while orange and red cells indicate increasingly aggressive designs. Overall, approximately 80% of stopes were consistent with (or more conservative than) the recommended design parameters, 15% were more aggressive, and 5% remained unclassified.

Table 16-7: Comparison of proposed and actual (design) stope strike lengths

Proposed Strike Length	Actual Strike Length		
	≤ 15 m	20 m	25 m
15 m	313	281	4
20 m	314	810	107
25 m	94	140	328
Unclassified	43	58	20

16.2.3.4 Mine Pillars

Various pillars, including crown pillar, inter-lens and historic mine working pillars, were assessed to ensure safe mining conditions.

Crown pillar stability was assessed for all zones using the Scaled Span method (Carter et al., 2008), accounting for overburden loads and a range of Q' values (low to high), which vary by zone based on SRK (2023). The analyses assumed unsupported spans of up to 5.0 m. The resulting minimum required crown pillar thicknesses are summarized in Table 16-8. If larger stopes are to be mined under the crown pillar, additional ground support should be accounted for, and stopes should be backfilled (and tight filled) as soon as possible.

Table 16-8: Minimum crown pillar thickness

Zone	Overburden Thickness (m)	Q' Values (low–high)	Crown Pillar Thickness (m)
Cow	3	3.1–6.3	22
Lowhee	3	3.1–6.3	22
Mosquito	3	1.7–4.4	32
Shaft	3	1.7–4.4	32
Valley	8	3.1–6.3	25

The historic mine workings include abandoned portals, decline ramps, drifts, and stopes. ODV has developed a 3D model of these features (Figure 16-2), which has been integrated into the assessment. A stand-off distance of 5 m with the historical mine workings was used. However, in areas where intersections with old workings are expected, probe holes must be drilled ahead of development to verify their location, assess whether they are backfilled, identify their contents, and determine if they have been dewatered.

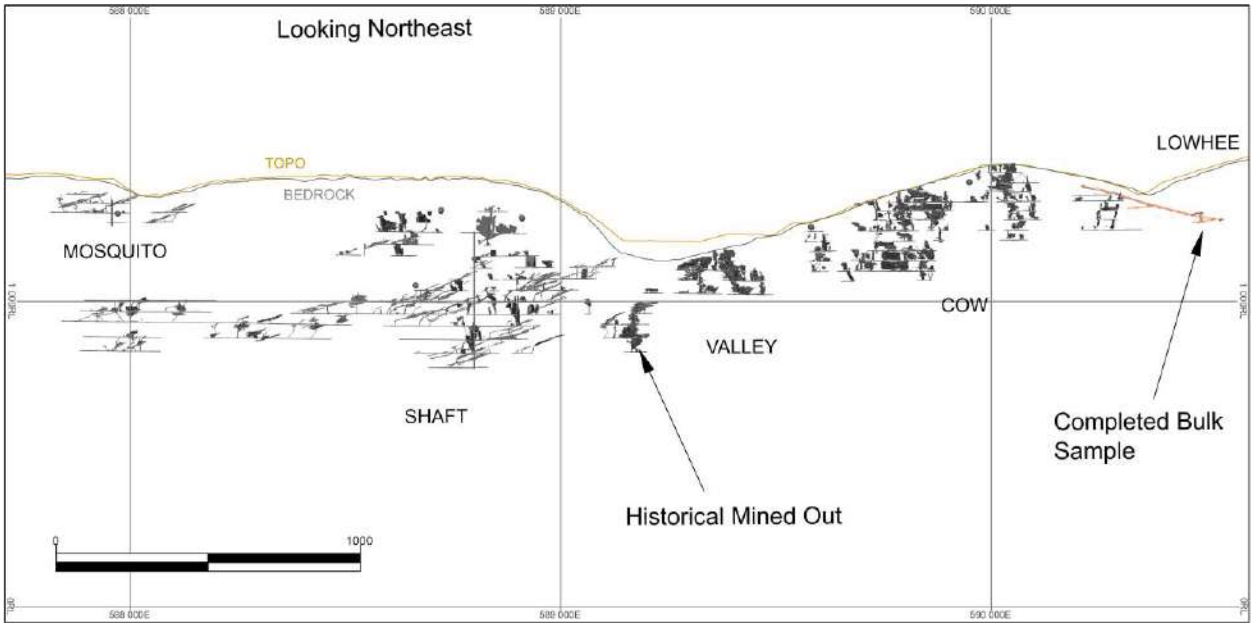


Figure 16-2: Existing underground workings and completed bulk sample – Section view looking NE (From InnovExplo, 2025)

16.2.3.5 Backfill Design

Open stope mining will requires backfill to manage stability and achieve the planned extraction. Paste backfill produced from the processed tailings and binding agents is required in stopes and closure areas where mining progresses towards previously mined areas. The closure areas will require placement of a higher strength plug or slab where the backfill will be undermined, with regular backfill in the rest of the stope. All excavations near surface need to be tight-filled to minimize the space for potential failure and rock settlement that could result in surface subsidence. This requirement is especially critical in the shallow areas of the mine where stope failure is more likely to cause surface subsidence. Backfilling strategy for the Project is detailed in Section 16.6.15 of this Report.

Stopes are planned to be backfilled using paste backfill to eliminate the need for rib pillars and to maintain the integrity of the excavation. Required strengths for the paste backfill are based on the limit equilibrium approach described by Li & Aubertin (2012) and numerical modelling completed by A2GC (2024). Depending on the geometry of the stope (e.g., span) and orientation of exposed surfaces (endwalls, hanging walls, or footwalls), required paste fill strengths range from 165 kPa to 500 kPa.

Where mining requires development through previously placed backfill – for example, to access sill-level stopes – higher binder content will be used to increase the strength of the fill and maintain the stability of the overlying excavation. In underhand mining conditions, where the backfill is exposed overhead, a strength of 750 kPa is recommended to ensure stability.

16.2.3.6 Extraction Sequence

Following geotechnical recommendations, the overall vein extraction sequence generally should follow a footwall-to-hanging wall direction, while leaving protective pillars in place at the cross-cuts. These protection pillars would later be mined in the opposite direction, hanging wall to footwall, retreating from the cross-cuts. To avoid overstressing as mining progresses, the cross-cut protection pillars must be designed with adequate strike length.

16.2.4 Ground Support Recommendations

Ground support requirements have been determined using several widely accepted empirical design charts, including Grimstad and Barton (1993), Potvin & Hadjigeorgiou (2016), but mainly based on previous Alius experience, and the knowledge gained at the Bonanza Ledge Mine and during the Cow portal and bulk sample development. Ground support recommendations for typical conditions are presented below. Wider mining spans, or development through challenging ground (e.g., fault-crossing) than those considered will require ground support designed on a case-by-case basis. Again, insights from the bulk sample development can be used by the mine engineering department.

16.2.4.1 Portals

Table 16-9 presents the ground support recommendations for the mine portals: conveyor portals (used for material handing, if required) and ramp portals (used for personnel and equipment transportation).

Table 16-9: Ground support recommendations for mine portals

Portal Type	Shotcrete / Mesh-straps	Face / Wall Support	Back Support
Conveyor			
Face Portal	SC: 3.0 m around opening	RB 2.4 m; 1.2 x 1.2 m	N/A
Brow	SC + M-S (3 rows)	RB 2.4 m; 1.2 x 1.2 m	CB 6.0 m; 3/row; 6 rows @ 1.5 m
Tunnel	SC: walls & back (16 m)	SS 1.8 m; 1.2 x 1.2 m	RB 2.4 m; 1.2 x 1.2 m
Ramp			
Face Portal	SC: 8.0 m around opening	RB 2.4 m; 1.2 x 1.2 m	N/A
Brow	SC + M-S (3 rows)	RB 2.4 m; 1.2 x 1.2 m	CB 6.0 m; 3/row; 6 rows @ 1.5 m
Tunnel	SC: walls & back (16.0 m)	SS 1.8 m; 1.2 x 1.2 m	RB 2.4 m; 1.2 x 1.2 m

Codes/Notes:

- **CB** 15 mm cable bolt; **M-S** 0.3 x 3.0 m 0-gauge mesh-straps; **RB** Rebar #6; **SS** Split set 35 mm; **SC** 3" One pass of 3-inch shotcrete.
- Screen/mesh for face portal and brow: chain link.
- Screen/mesh for tunnels: 1.5 x 2.7 m galvanized welded wire mesh ("WWM") #6, 1.5 m from floor.

16.2.4.2 Lateral and Vertical Development

Table 16-10 presents the ground support recommendations for lateral and vertical development. Experience gained during the development of the Cow decline to reach the bulk sample area was also considered.

Table 16-10: Ground support recommendations for lateral and vertical development

Excavation Type	Back Support	Wall Support	Max Span (m)
Lateral			
Decline / ramp	RB 2.4 m; 1.2 x 1.2 m	SS 1.8 m; 1.2 x 1.2 m	6
Permanent	RB 2.4 m; 1.2 x 1.2 m	SS 1.8 m; 1.2 x 1.2 m	6
Temporary	SX 1.8 m; 1.2 x 1.2 m	SS 1.8 m; 1.2 x 1.2 m	5
Intersection (<10 m)	Permanent/Temporary + 9x CB 6.0 m		10
Intersection (<12 m)	Permanent/Temporary + 16x CB 6.0 m		12
In or under cemented paste fill	SC 2x 2" + WWM + SS 1.8 m; 1.2 x 1.2 m (floor-to-floor)		5

Excavation Type	Back Support	Wall Support	Max Span (m)
Vertical			
Alimak raise (<3 x 3 m)	SS 1.8 m; 1.2 x 1.2 m	SS 1.8 m; 1.2 x 1.2 m	3
Raise (<3 m or equiv. section)	SS 1.8 m; 1.2 x 1.2 m	RB 1.8 m; 1.2 x 1.2 m	3
Raise (<5 m or equiv. section)	N/A	RB 2.1 m; 1.2 x 1.2 m	5
Raise (<8 m or equiv. section)	N/A	RB 2.4 m; 1.2 x 1.2 m	8

Codes/Notes:

- **CB** 15 mm Cable bolt; **M-S** 0.3 x 3.0 m 0-gauge mesh-straps; **RB** Rebar #6; **SS** Split set 35 mm; **SC** 2x 2" Two passes of 2-inch shotcrete; SX 12 t Swellex; SSX 24 t Super Swellex.
- Screen/mesh (for lateral development): assume 1.5 x 2.7 m galvanized WWM #6, 1.5 m from floor.
- Screen/mesh (for raises): assume chain link or WWM. For a temporary Alimak raise (used prior to slashing a raise to larger diameter): screen HW and face only.
- Development in classes 4 and 5: 3-inch shotcrete required; full wall coverage.

16.2.4.3 Stopes

Ground support provisions for stopes were also included, as shown in Table 16-11. Tendons can either be 24 t inflatable bolts (e.g., Super Swellex) or cemented cables.

Table 16-11: Ground support recommendations for stopes

Stope Type / Class	Tonne/Metre	Support Length (m)	Support Details
Longitudinal			
Classes 3 & 3U	35	6	HW: 3 tendons/ring; 2 m spacing
Classes 3L & 4	18	6	FW: 3 tendons/ring; 2 m spacing HW: 3 tendons/ring; 2 m spacing
Transversal			
Classes 3 & 3U	33	6	HW: 3 tendons/ring; 2 m spacing
Classes 3L & 4	44	6	FW: 3 tendons/ring; 2 m spacing HW: 3 tendons/ring; 2 m spacing
Brows	**--**	**3.6**	**6x Super Swellex or cables**

16.2.4.4 Permanent Infrastructure

Preliminary secondary ground support has been incorporated into the design of permanent underground infrastructure, including the crusher chambers and large excavations related to the underground mechanical workshop. Cost allowances account for the installation of cement-grouted cable bolts and application of shotcrete.

16.3 Mine Hydrogeology

WSP developed a numerical model to estimate groundwater discharge into the underground workings during mine construction and operations. The information presented in the following subsections is drawn from the WSP report (WSP, 2023d).

16.3.1 Mine Site Area Hydrogeology

The regional water table is generally a subdued replica of topography, with local depressurization near historical underground workings that are draining towards the Jack of Clubs Valley and/or Mosquito Creek. Regional groundwater flow directions are generally from areas of high elevation to areas of low elevation, with ultimate discharge to the streams located in the valley bottoms.

16.3.2 Groundwater Inflow Predictions – Mine Site Complex Area

ODV plans to begin dewatering the existing underground workings in Year -2. By Year -1, the groundwater level is expected to reach the base of the existing underground, approximately 400 m below the current groundwater surface elevation. For the remainder of the mine's operations, the water level will be maintained at this depth to ensure suitable operating conditions.

Model simulations were developed based on predicted inflow rate to the underground, with results presented in Table 16-12 for two scenarios:

- Base Case – Model simulation with calibrated model values;
- Alternative Scenario – Hydraulic conductivity of bedrock increased by a factor of two.

Table 16-12: Total predicted groundwater inflow to the existing and new underground workings

Year	Base Case (m^3/day)	Alternative Scenario (Higher Bedrock Hydraulic Conductivity) (m^3/day)
-3	800	1,300
-2	5,800	8,300
-1 to 10	6,000	8,700

Table 16-12 provides an estimate of the ongoing mine dewatering requirements. In addition to this, the volume of groundwater currently stored in the existing underground workings will need to be pumped out during the Year -2 to Year -1 mine drawdown period. According to ODV (ODV, 2024b), the volume of flooded mine workings is estimated at 1,090,000 m^3, which will be dewatered during this timeframe.

16.3.3 Limitations of Inflow Predictions

The groundwater flow model is a simplification of complex hydrostratigraphy and the network of underground workings. The following model assumptions, exclusions, and limitations should be considered as new data is collected as the Project progresses:

- A simplified 3D geology model was constructed to support hydrogeological numerical modelling. As such, geology was simplified into major aquifers and aquitards, and may omit units of geotechnical significance. This approach is considered reasonable for the objective of the model, which is to support the understanding of changes in seepage migration pathways and groundwater discharge quantities, but it may not represent precise pathways on a local scale.
- In general, consistent hydraulic properties were assigned to each hydrostratigraphic unit, though in reality local variations will occur spatially within each unit. While local modifications may have improved calibration, it is not practical to collect sufficient data to make these modifications. During calibration, assigned parameters were selected to be within the range of available field measured values and to represent local groundwater conditions and observed gradients over a larger scale.
- The Mine Site has historical underground workings, and it is assumed the extent are as provided by ODV (ODV, 2024b).
- The historical workings are assumed to be free draining, and it is assumed that no bulkheads were installed to restrict the hydraulic connection within the underground workings.

16.4 Underground Mining Method

The primary mining method selected is longitudinal longhole stoping with paste backfill, representing 88% of the total stopes tonnage. This method was selected based on several key factors, including average vein width, metal content (value), and ground conditions. Figure 16-3 illustrates the selected method.

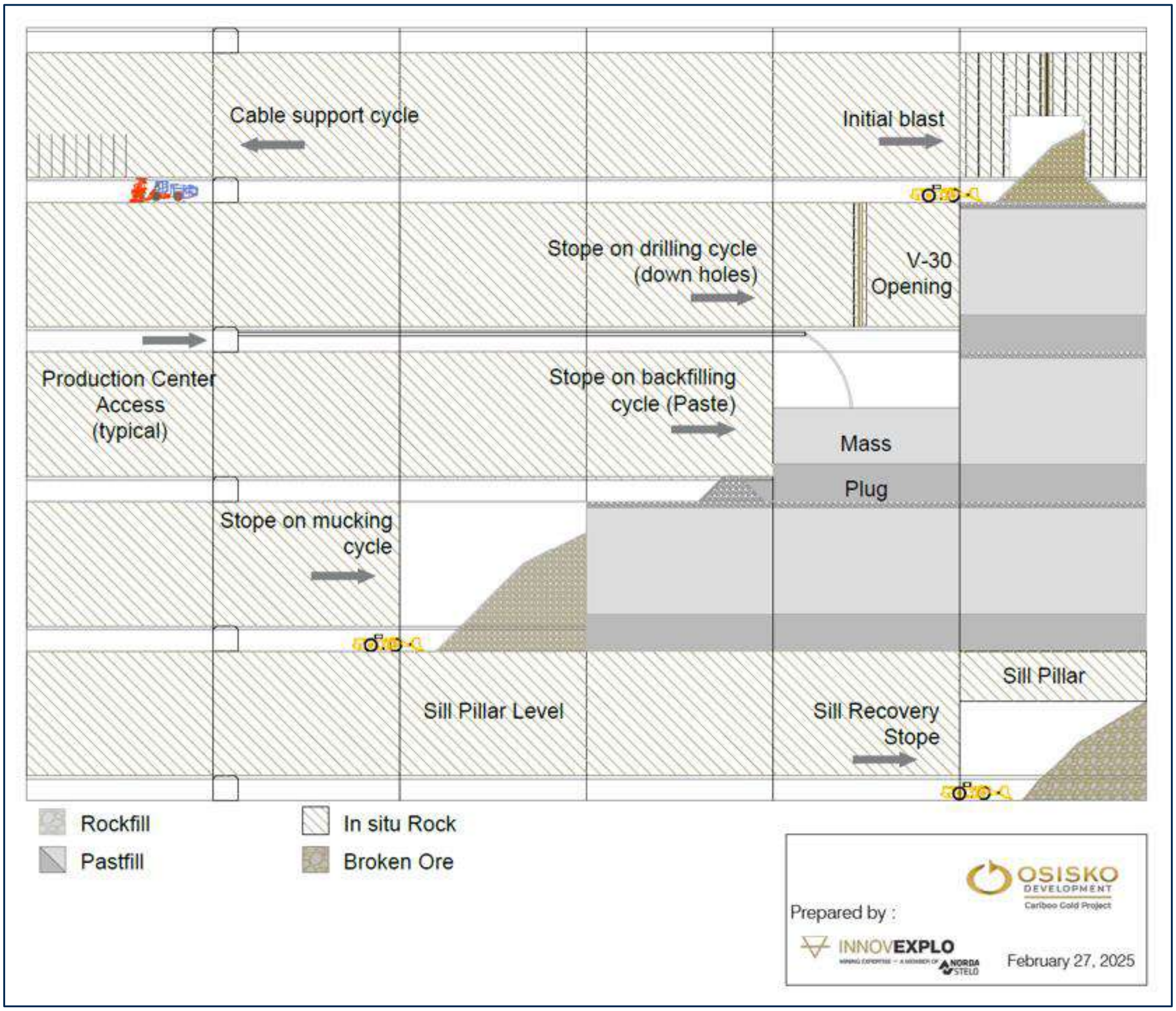


Figure 16-3: Longitudinal longhole retreat - Mining cycle

Two additional methods will be used in specific or marginal cases:

- Transverse longhole stoping will be applied to stopes located in very wide mineralized zones (5% of the total stopes tonnage) (Figure 16-3).
- A two-pass variant of longitudinal longhole stoping will be employed in zones geotechnically classified as Class 4 ground (see Section 16.2.3.1 for geotechnical design classification details).

The two-pass variant was considered for stopes located in geotechnical ground classified as "Class 4" (see Section 16.2.3). These stopes are primarily found in the Shaft, Cow, and Mosquito zones. This "modified" method, which requires paste backfill, was selected to improve ore recovery, estimated at approximately 87% using this approach (see Section 16.5.10 for mining recovery estimation details). The method has been tested at the Doyon Mine (Williams and Denoncourt, 2004) during the mining of stopes with similar characteristics in weak ground conditions. It involves drilling and blasting the stope as in the conventional method; however, only about half of the tonnage is initially extracted. The upper part of the stope is then backfilled with paste, followed by a curing period. Once curing is complete, the remaining ore is recovered. Two service holes are then drilled from the upper drift to allow paste backfilling of the lower portion of the stope. Figure 16-4 illustrates the sequential steps of the two-pass stoping method.

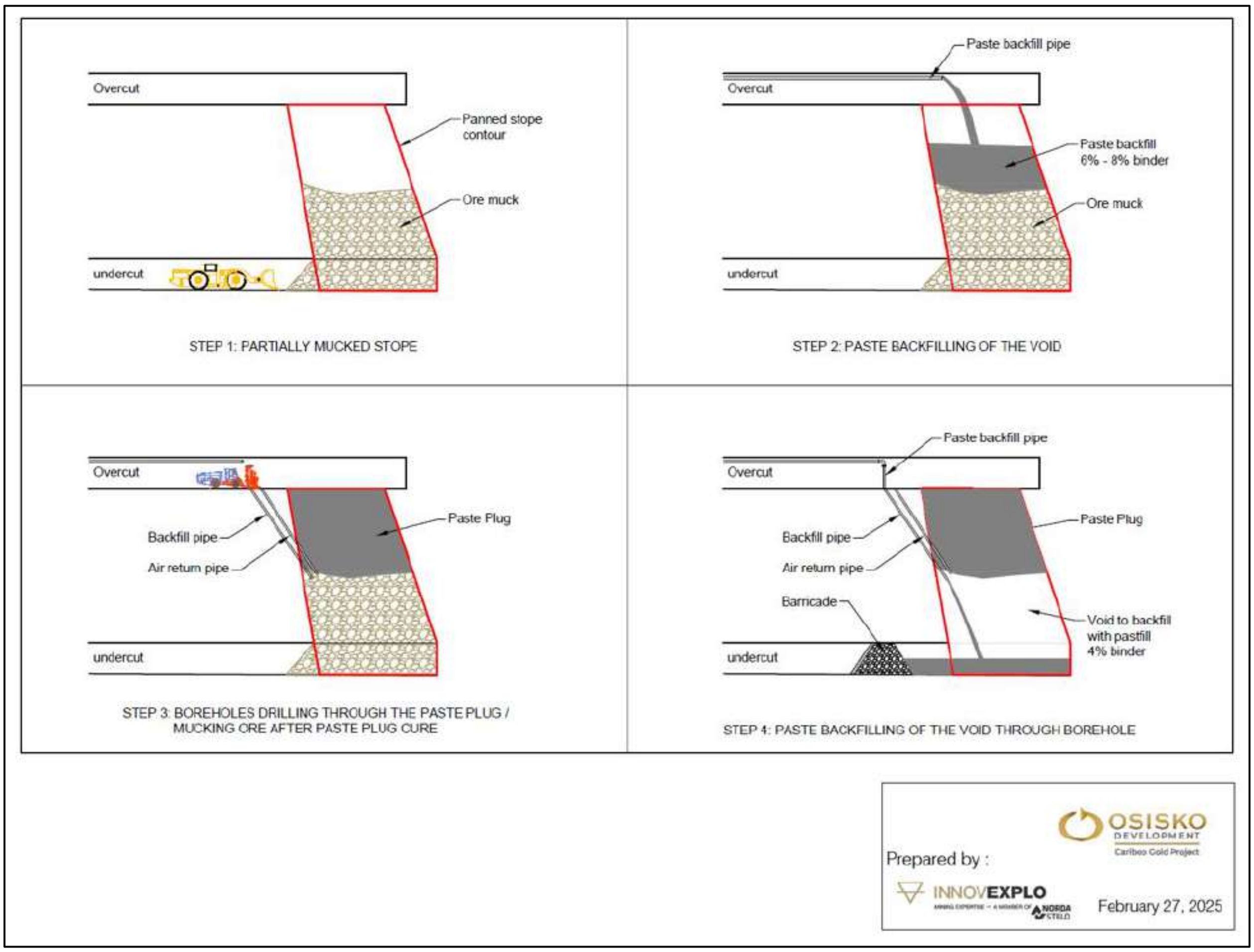


Figure 16-4: Two-pass variant of the longitudinal longhole stoping

Despite higher costs and a loss of approximately 1 m of ore at the paste/ore interface, this method allows for a reduced open stope exposure time. For this Project, this modified approach is applied to 7% of the total tonnage for stoping.

16.4.1 Cut-off Grade Calculation

The following cut-off grades were used for the final mine design:

- 2.0 g/t Au ore envelopes for potential minable stopes design. These core envelopes were used for the main mine design (ramps, access, etc.);
  - A two-stage stope optimization was performed, first using cut-off grade to identify mineable zones, then refining results by incorporating development costs to retain only economically viable stopes.
- 1.7 g/t Au ore – For mineralized development material, a lower cut-off grade of 1.7 g/t Au was applied to account for reduced incremental cost structures associated with pre-planned access development.

A detailed description of the cut-off grade estimation is provided in Section 15.2.1.

16.4.2 Selection of Economical Material for Life of Mine

Minable Shape Optimiser® ("MSO") was used to determine the correlation between cut-off grade and the resulting mineable envelope. The optimization is driven by the following inputs:

- Cut-off grade;
- Mining extents;
- Minimum and maximum stope width;
- Level spacing;
- Minimum and maximum dip angle;
- Dilution Parameters.

Table 16-13 illustrates the general input parameters used in the MSO runs.

Table 16-13: MSO input parameters

Parameters	Unit	Value
Cut-off Grade	g/t Au	2.0
Min Mining Width	m	3.7
Level Spacing	m	30
Minimum DSO Strike	m	15
Maximum DSO Strike	m	25
Side Ratio	m	2.5
Minimum Trans Pillar Width	m	5
Minimum Dip Angle	deg	45
Maximum Dip Angle	deg	135

16.5 Mine Design

The Project comprises five main mining zones, listed below and shown in Figure 16-5:

1. Shaft Zone
2. Valley Zone
3. Cow Zone
4. Mosquito Zone
5. Lowhee Zone

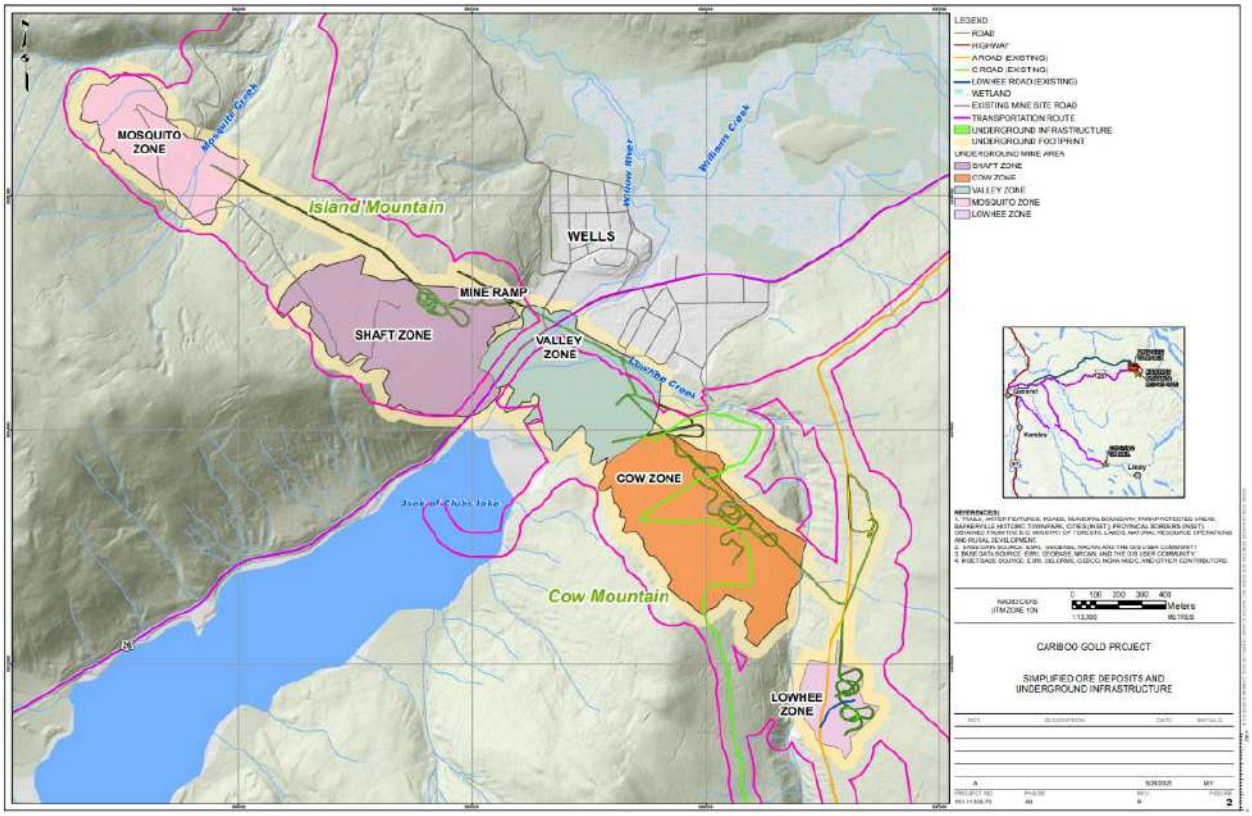


Figure 16-5: Plan view of main mining zones

The vertical extent of all mineable blocks spans approximately 630 m. The mineralized system is composed of discrete, parallel ore lenses that strike northwest and dip predominantly sub-vertically. These lenses are distributed within a deposit extending over approximately 4.4 km in length.

Access to the mine is provided via two surface portals, which connect directly to the Cow and Valley zones. Internal ramp systems connect these primary access points to all mining zones, facilitating efficient movement of personnel, equipment, and material throughout the deposit. Figure 16-6 illustrates the overall mine layout, including the portal locations and internal ramp network.

Following a detailed geotechnical analysis, mining levels have been established at 30 m vertical intervals to optimize ground stability and operational efficiency.

For each mineralized zone, a haulage drift will be developed perpendicular to the axis of the sub-parallel lens system, allowing multiple mining fronts to be accessed simultaneously. This design optimizes production flexibility and scheduling.

Given the relatively shallow depth of the deposit, all stopes will be mined using load-haul-dump ("LHD") equipment. Ore will be transported by truck from each mining level to either the underground crusher feed point, or to the ore silo feed point located in the Shaft Zone. From the Shaft Zone silo, ore will be re-handled by truck and hauled to the crusher for processing. From there, the material will be conveyed to surface where it will be directed to the ore sorter at the processing plant.

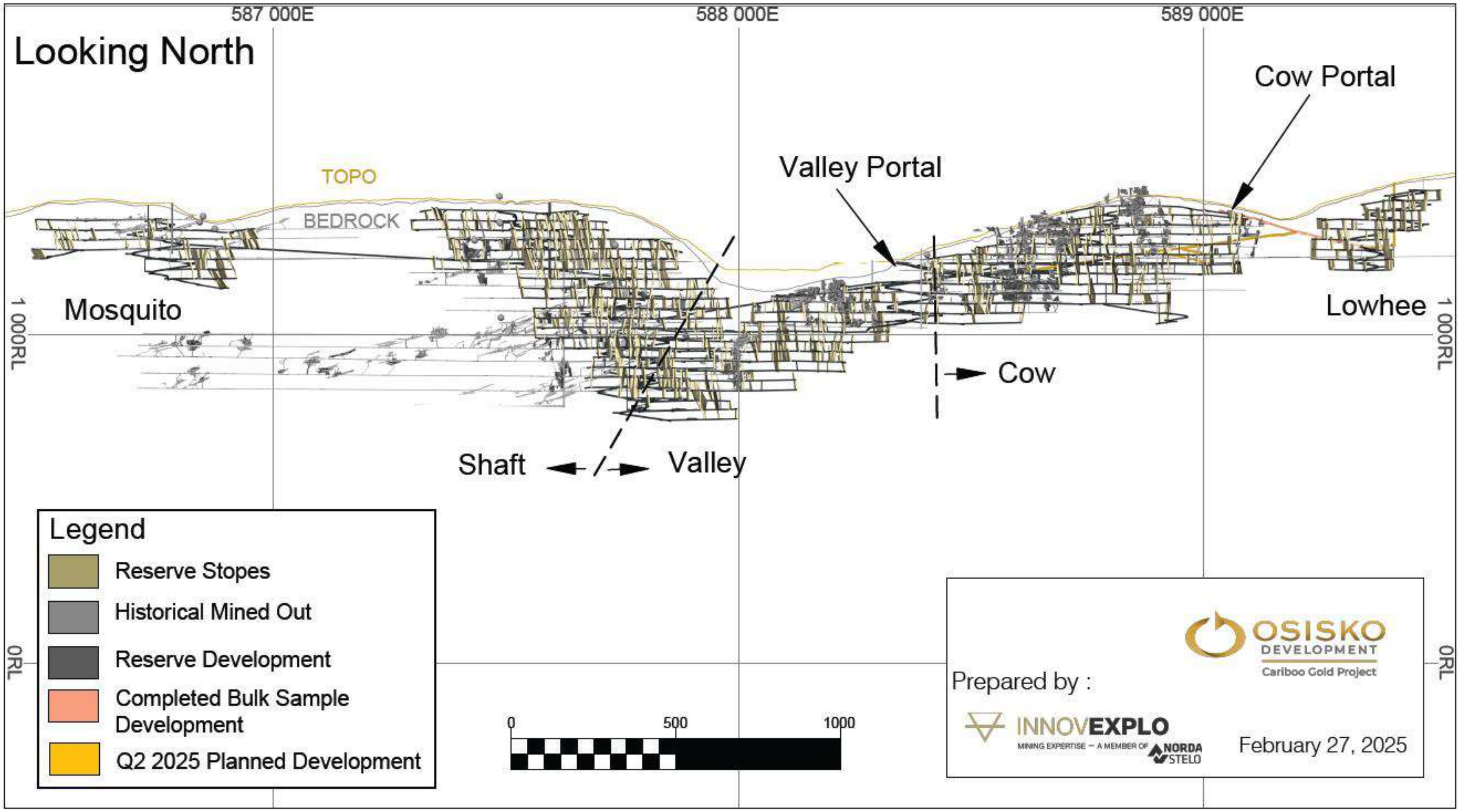


Figure 16-6: Cariboo Gold Project – Longitudinal section looking north

16.5.1 Development Design

Level accesses, haulage and ore drifts will be excavated using conventional development drill and blast techniques. Decline and inter-zone ramp development during the pre-production period will be achieved by Roadheaders, these units will be replaced by development drills during the production phase.

Declines and inter-zone ramps linking the different portals to the five main mining zones are strategically placed throughout the mine to facilitate efficient material movement by trucks. The development profiles by type are listed in Table 16-14.

Table 16-14: Lateral development dimensions and cost category

Development Type	Development Profile (width x height)	Capital / Operating
Main Ramp	5.4 m x 5.8 m	Capital
Ramp Re-muck	5.4 m x 5.8 m	Capital
Level Access	5.4 m x 5.8 m	Capital
Truck Loading/Unloading Bay	5.4 m x 7.5 m	Capital
Level Haulage	4.3 m x 5.0 m	Capital
Paste Transfer Bay	5.4 m x 5.8 m	Capital
Pump Station	5.3 m x 5.3 m	Capital
Refuge Station	5.3 m x 5.3 m	Capital
Level Re-muck	5.4 m x 5.8 m	Capital
Sump	4.3 m x 5.0 m	Capital
Sump	5.0 m x 5.3 m	Capital
Vent Access	4.3 m x 5.0 m	Capital
Electrical Station	6.0 m x 5.3 m	Capital
Electrical Substation	5.0 m x 5.3 m	Capital
Ore Drift	3.7 m x 4.0 m	Operating

16.5.2 Main Infrastructure

The main infrastructure for the Project includes the main ramps, the maintenance shop, the sumps and pumping stations, electrical power grid, paste line and pumping station, lunchroom, powder and cap magazines, rock breaker and crushing facilities including ore conveyor.

The crushing facilities are designed to handle 4,900 tpd and are located along the Cariboo ramp in the eastern extent of Valley Zone and along the Cow ramp, as shown in Figure 16-7.

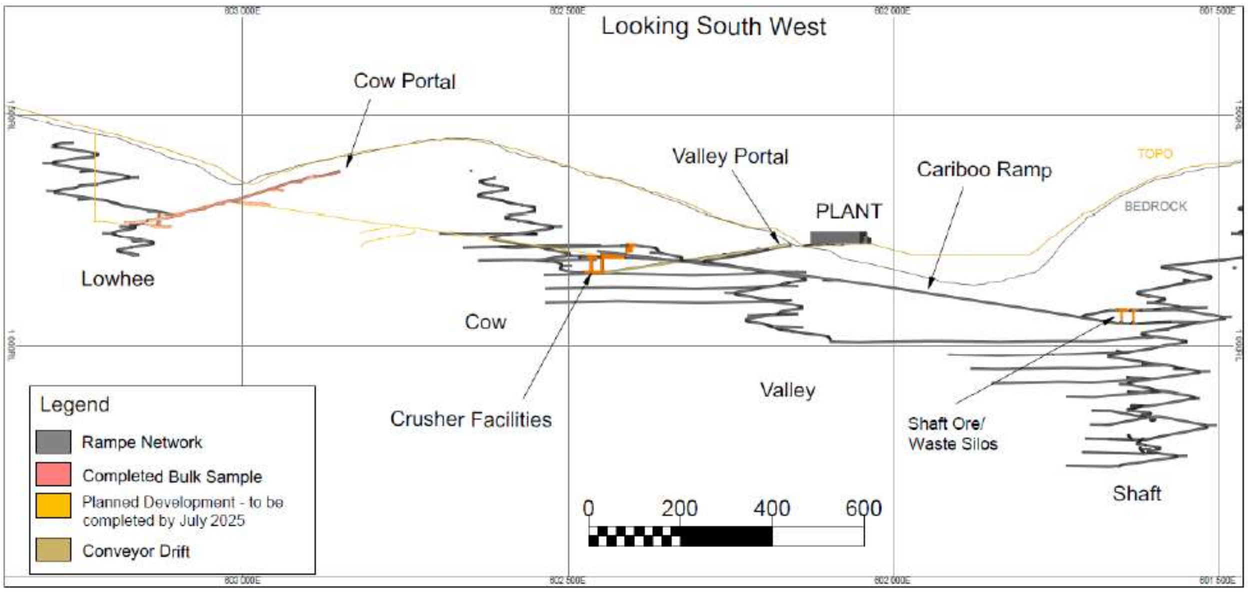


Figure 16-7: Location of Cariboo ramp, crusher facilities and Shaft ore silos

The Mine Site will include two portals to access the underground mine. Valley portal is located on the southern limit of the MSC while the Cow portal is located on the side of Barkerville Mountain, south-east of the MSC. The Cow portal was developed in 2021 while the development of the Valley portal will occur during construction of the Project. The Valley portal development will require excavation of overburden and rock and the removal of historic concrete structures including a foundation and portal infrastructure.

The Cow portal will be used as access for development in pre-production as well as the access for the waste hauling transfer to the WRSF. It will be the hauling road for ore and waste material during that period. Once the Valley portal is connected to Cow portal via the underground ramp, the Valley portal will become the main access portal for production. The ramp will progress directly to the Cow Zone. This layout allows for traffic alleviation between the two zones. This ramp will be the main access ramp to access and provide the services to the different zones.

The associated infrastructure at each portal during the development period will include an electrical substation, temporary ventilation fans and heater, and water management infrastructure.

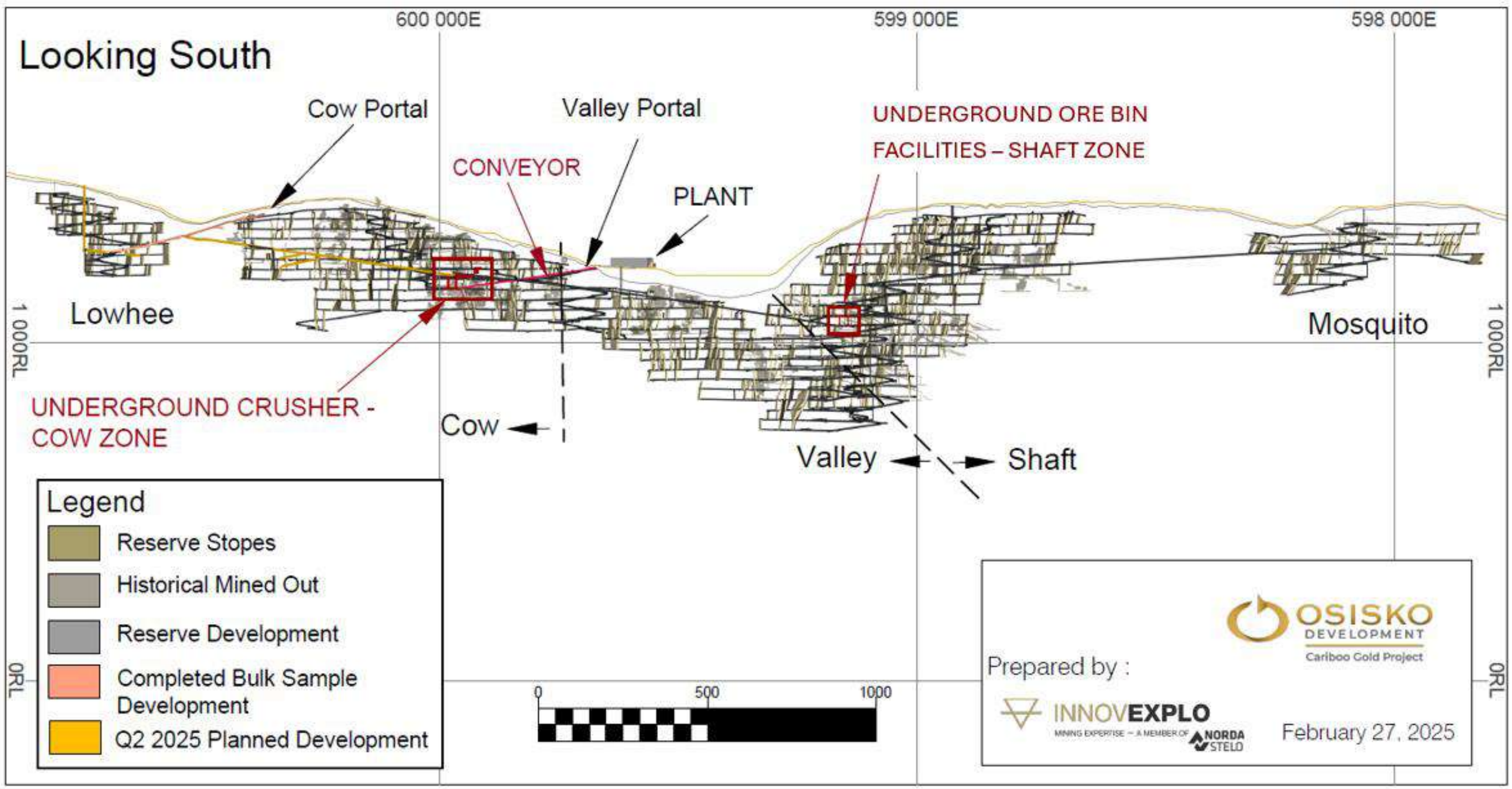


Figure 16-8: Location of crushing facility and conveyor

16.5.3 Level Layout Design

The typical mine level layout consists of in the level access, ventilation access, loading bay, sump, electrical substation ("ESS"), refuge station, haulage drift, and ore drift. The typical mine level is shown in Figure 16-9. Minor variations exist between levels due to the trend of the ore veins, logistic, or required infrastructure.

Specific areas mainly pertaining in the vicinity of the level access will be capitalized as per Figure 16-9 (blue, yellow, green, pink, gray, orange and cyan), with remaining development categorized as operating development (red).

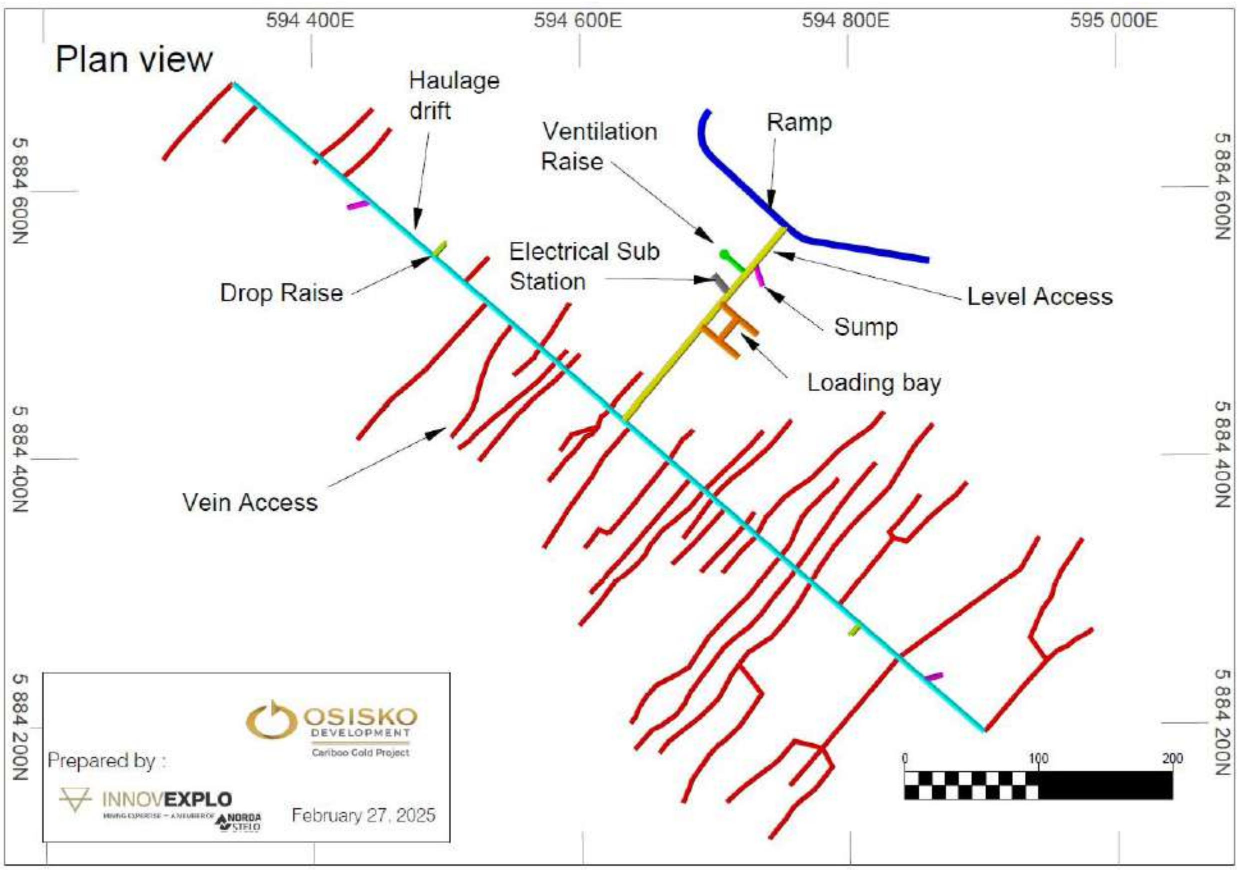


Figure 16-9: Plan view of typical level layout

The level access will be excavated to the same dimensions as the main ramp, 5.4 m wide x 5.8 m high, to allow for truck access. The typical electrical substation is located near the level entrance with a sump located along the level access.

The level access typically intersects the haulage drift (4.3 m wide x 5.0 m high), allowing for access of a 10 t capacity LHD into the ore drives. The smaller profile dimension serves as a safeguard restricting haul trucks to operating in the level access and truck loading area.

The haul drift is typically linked to ore drives (3.7 m wide x 4.0 m high), providing access to the production stopes. These drifts are generally positioned in the centre of the veins to allow maximum stopes availability for production. The production drilling equipment has been selected to enable operation within the smaller profile dimensions and minimize dilution.

All development infrastructure on each level were designed with 2% gradients. Sumps were placed at a low point along the access to facilitate drainage. Sumps with a drain hole will be 4.3 m wide x 5.0 m high with a length of 15 m and a gradient of -12%; while the electrical stations will be 6.0 m wide x 5.3 m high with an overall length of 16 m and electrical substations and 5.0 m wide x 5.3 m high with an overall length of 7 m.

Two types of configurations have been developed for truck loading operations to optimize material handling and reduce LHD transport distances. On selected levels, an inverted ventilation raise has been strategically positioned between two levels, approximately at the mid-point of the haulage drift. To facilitate direct truck access for loading, the haulage drift on these levels has been deliberately O/S up to the ventilation raise access.

For levels where no secondary ventilation raise is present, a dedicated truck loading and unloading area has been planned within the access drift. This ensures operational efficiency while maintaining flexibility in the overall haulage design. This area includes a 20 m long truck turnaround and waste storage (7.5 m high x 5.4 m wide), with a parallel 33 m long loading access drift (7.5 m high x 5.4 m wide), and one perpendicular drift (7.5 m high x 5.4 m wide), serving as a loading bay.

The truck loading access drift will be excavated at a +2% gradient with the parallel loading access drift to be excavated at a 2% gradient. The loading bay will be excavated at a +3.5% gradient to provide an elevated offset allowing a loaded LHD to dump material directly into a truck from above. Figure 16-10 provides a typical truck loadout area:

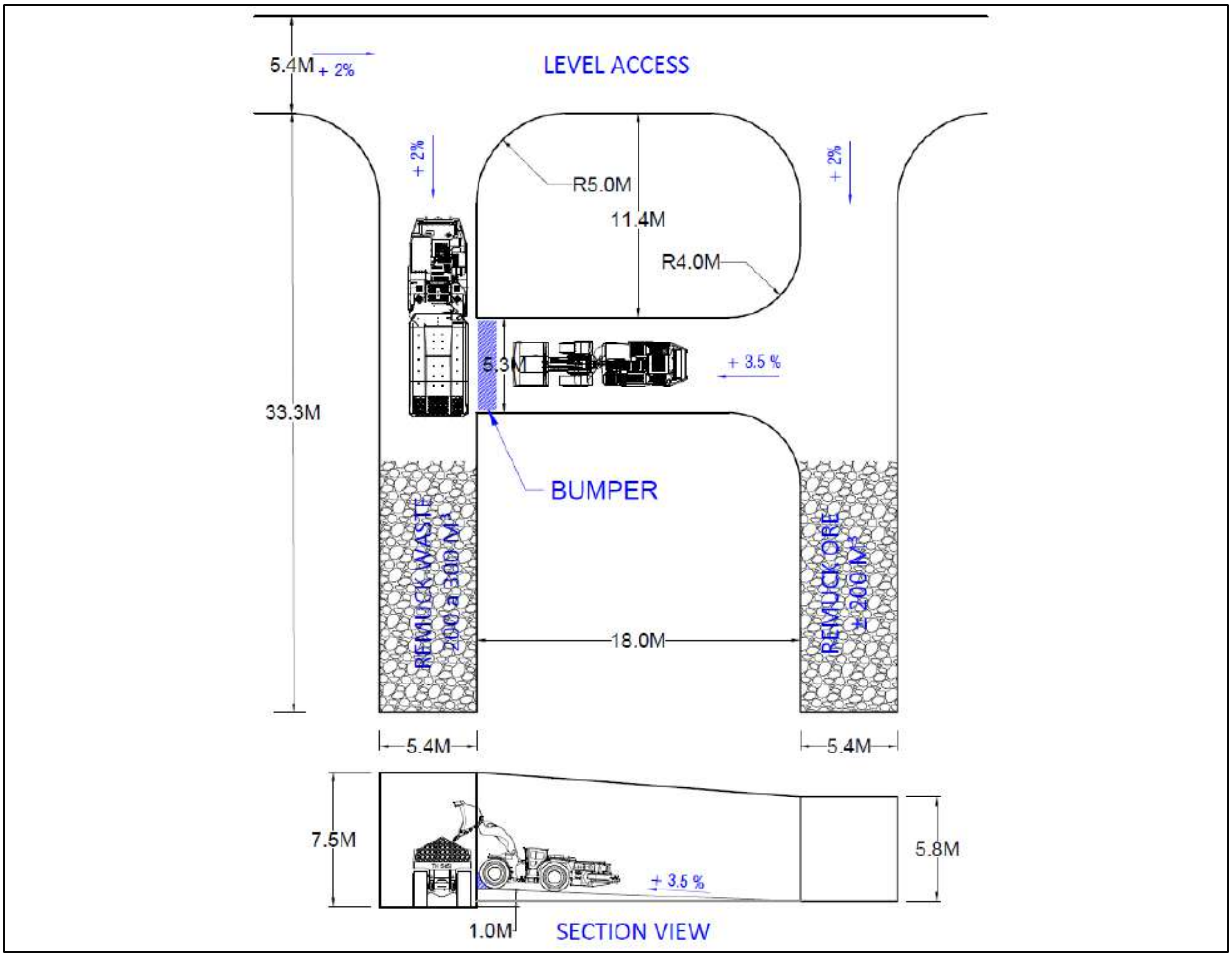


Figure 16-10: General arrangement truck loading and unloading

16.5.4 Production Stopes

Production stopes will consist of a set of 89 mm or 102 mm blasthole rings configured on a dice five or fan pattern depending on the width of the different veins in each zone. All blastholes will be loaded with emulsion along with detonator, booster, and stemming in each hole. A 30-inch diameter V30 slot raise with 102 mm blastholes around the perimeter will be positioned in the middle of the stope and will generate the opening necessary for the first blast. Blastholes will be drilled using a long hole drill from the top sill down to the undercut drift. Figure 16-11 and Figure 16-12 detail the specific drill configuration for production stopes in each zone. Typical stope blasting will be in two blasts: a primary opening to achieve 20% void indices and a final blast.

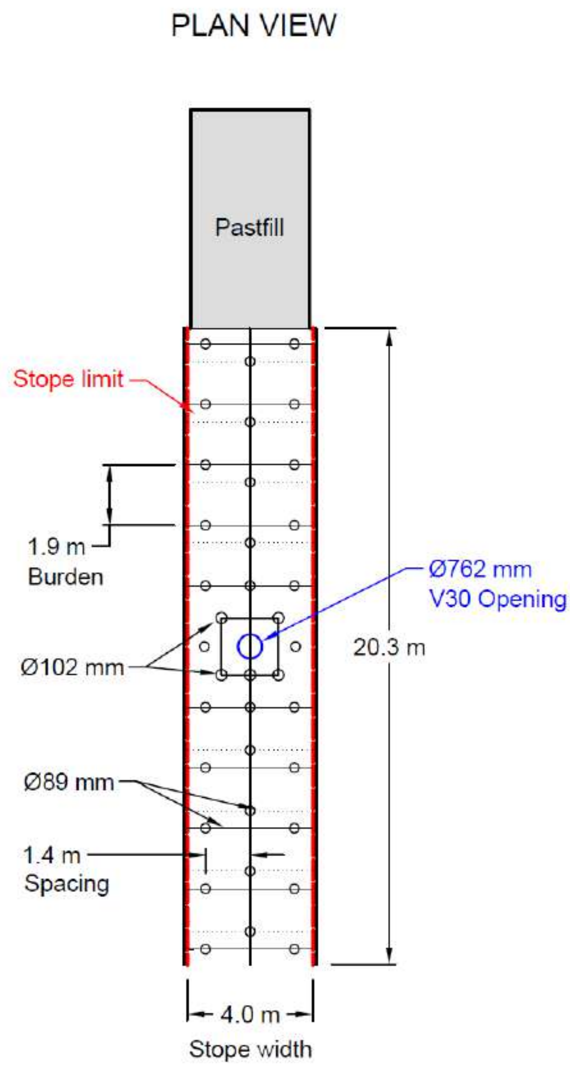


Figure 16-11: Typical drilling pattern - Valley Zone – Plan view

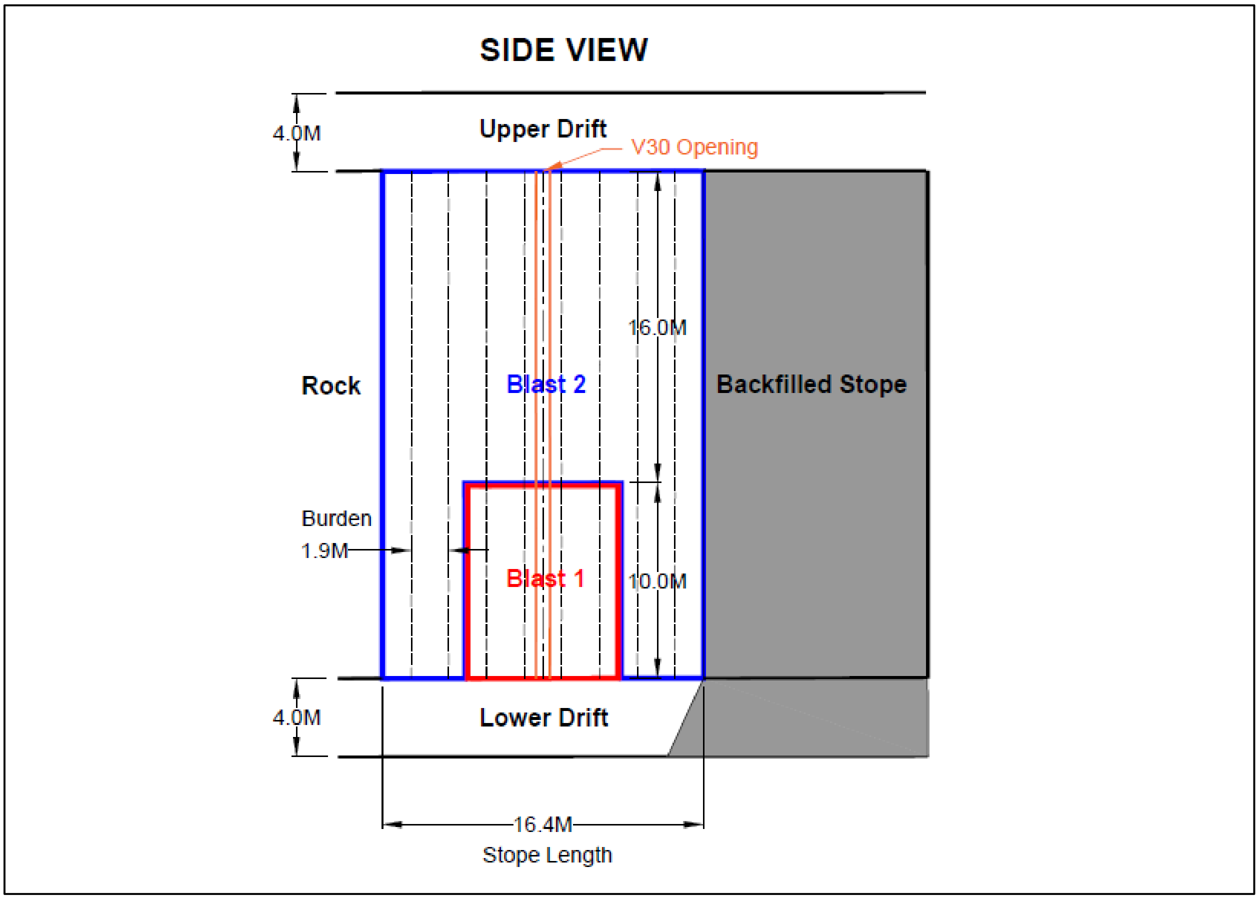


Figure 16-12: Typical drilling configuration for Valley Zone, side view

16.5.5 Shaft Zone

The largest zone of the Project (by inventory tonnage) is the Shaft Zone. This zone encompasses 21 levels from level 780 to level 1390 at a sublevel spacing of 30 m floor-to-floor, with its lowest level currently reaching a mean sea level ("msl") depth of approximately 780 m. Given the mountainous terrain above the zone, the depth from the surface is highly variable. The zone's horizontal extent stretches approximately 1 km along the strike.

The average stope width in this zone is 4.9 m with a length averaging 17 m along the strike. Stope strike length refers to the length of the stope along the strike of the mineralized zone that can remain open for a certain period before being backfilled, due to geotechnical considerations. This is most often due to maximum hydraulic radius dictated by local ground conditions surrounding the stopes.

Shaft Zone is expected to contribute 8.5 Mt at an average grade of 3.71 g/t to the mine production over the life of mine. Additional information on stope dimensions can be found in Section 16.2. A longitudinal view of the zone is included in Figure 16-13. The Shaft Zone is intersected along strike by the Aurum Fault dipping approximately 50 degrees northeast, flanked by the Shaft Zone Fault 1 to the east, and the Jack of Clubs Fault to the southeast, as shown in Figure 16-14.

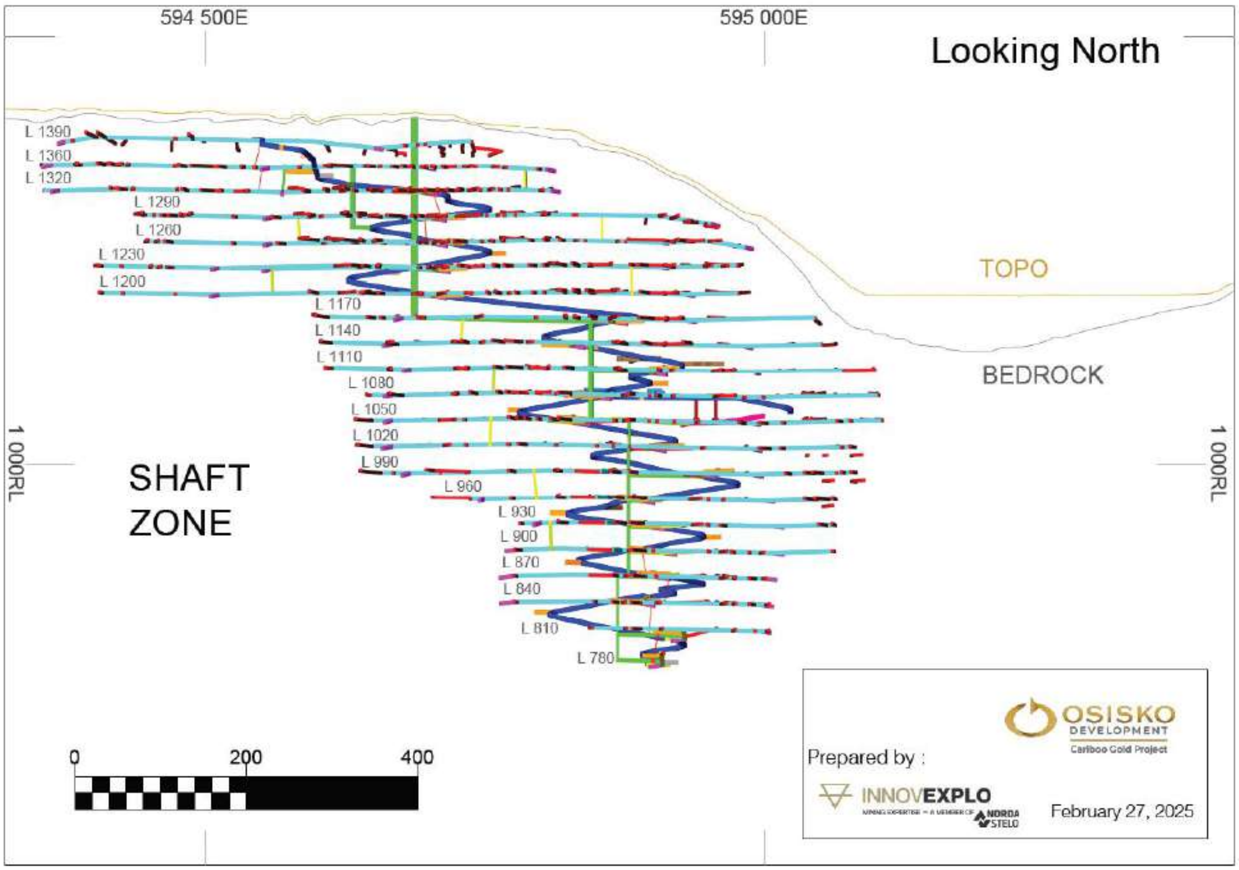


Figure 16-13: Longitudinal section of Shaft Zone looking north

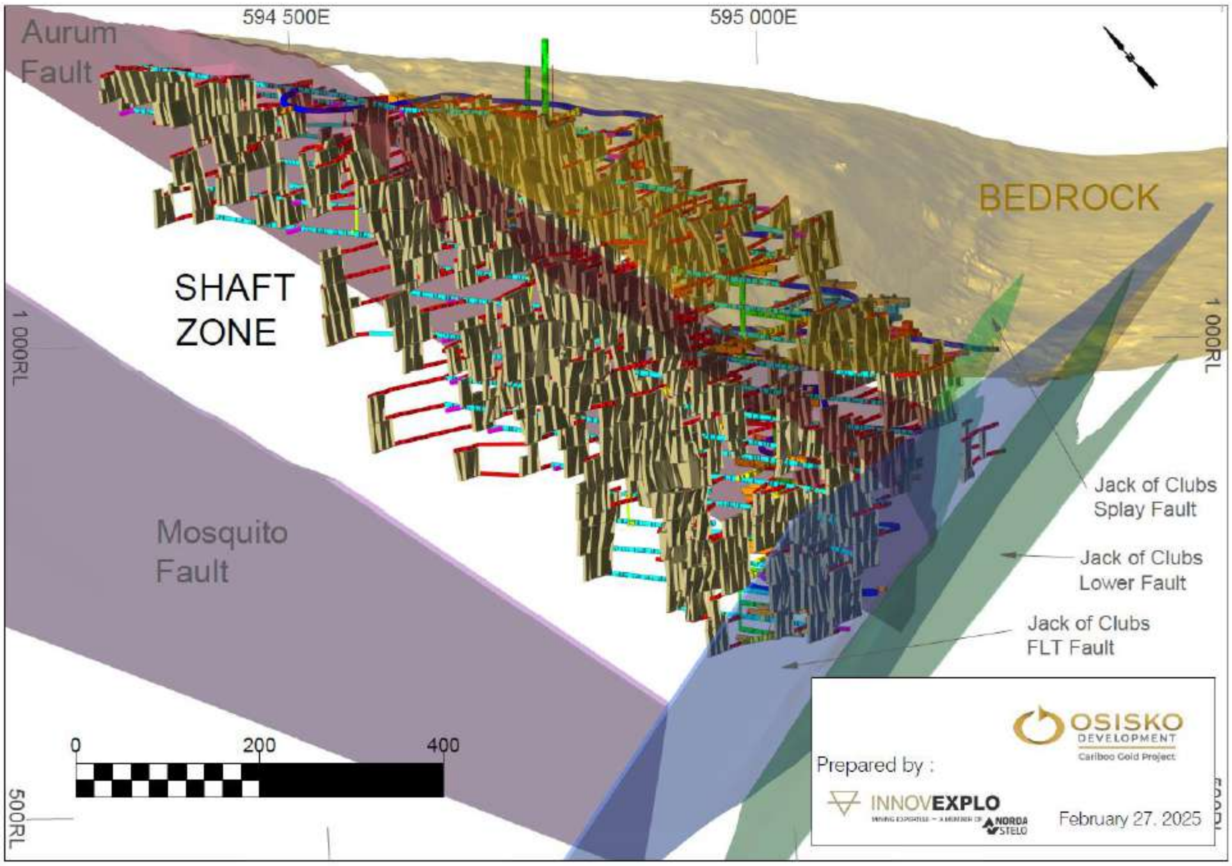


Figure 16-14: Perspective view of Shaft Zone showing traversing fault structures, looking north

16.5.6 Valley Zone

The Valley Zone comprises 15 levels from level 750 to level 1170 at 30 m from floor-to-floor and reaches a depth of around 750 m above msl. The Valley Zone spans 570 m along strike. Stope widths in the Valley Zone average 4.9 m with the stope length averaging 20 m along the strike. The Valley Zone is expected to contribute 3.3 Mt at an average grade of 3.7 g/t to production over the life of the mine. A longitudinal view of the zone is included in Figure 16-15.

The Valley Zone is bisected horizontally at its mid-elevation by the Shaft Zone Fault 1 dipping at approximately 75 degrees east, and it has a minor intersection with the Jack of Clubs Fault Damage Zone on the western extent, while the Aurum Fault crosses the lower five levels of the zone. The fault structures are shown in Figure 16-16.

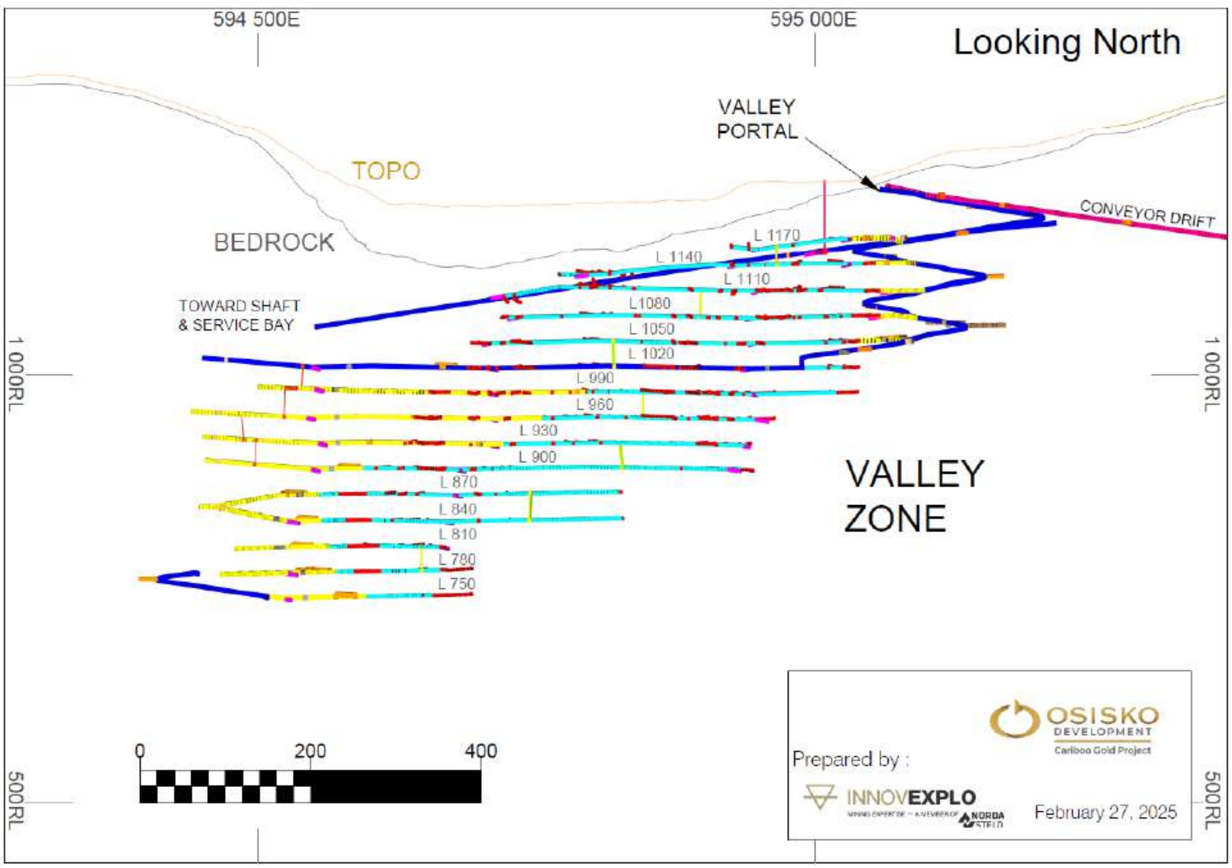


Figure 16-15: Longitudinal section of Valley Zone looking north

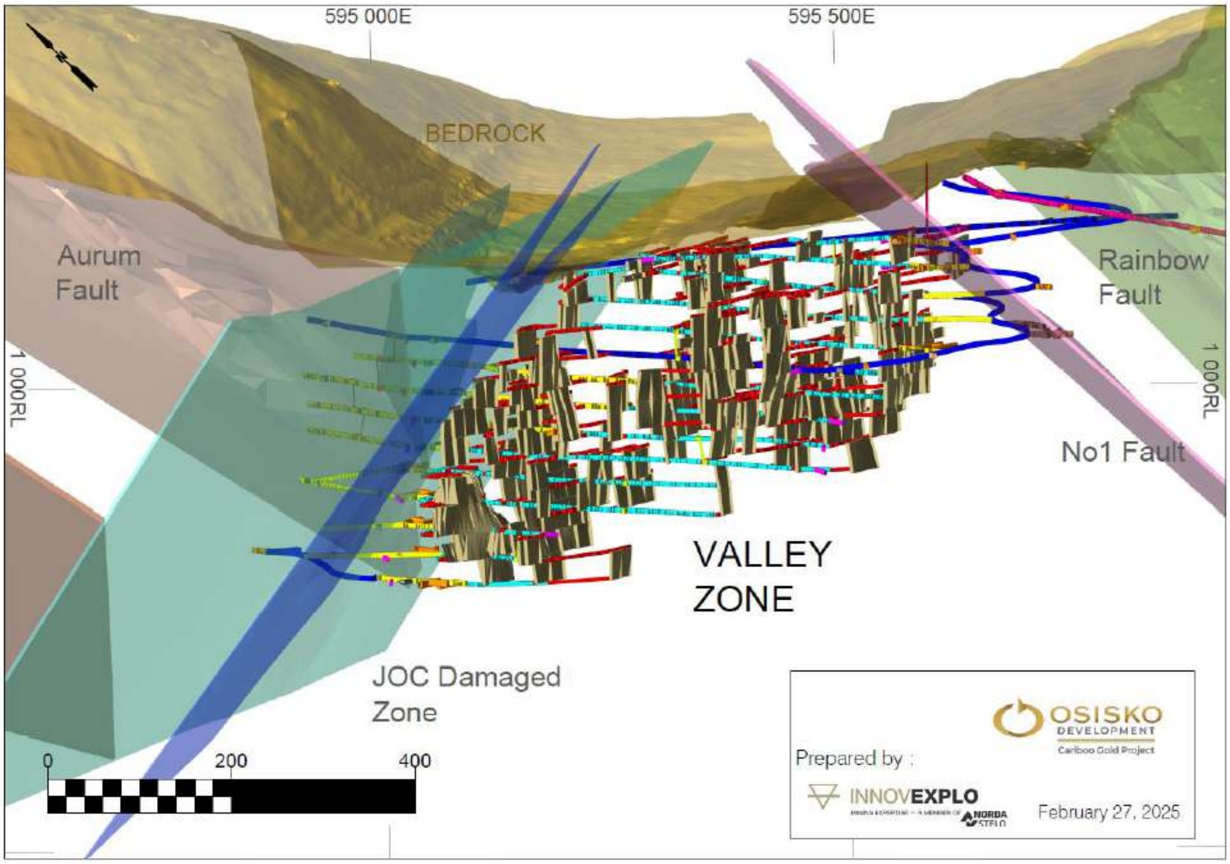


Figure 16-16: View of Valley Zone showing traversing fault structures, looking north

16.5.7 Cow Zone

The Cow Zone comprises 13 levels, ranging from level 1050 to level 1410, spaced at 30 m intervals (floor-to-floor), extending to an approximate elevation of 1,050 metres above msl. The zone spans nearly 1 km along strike, with an average stope width of 4.8 m. Typical stope lengths along strike average 20 m across all veins. Over the LOM, the Cow Zone is projected to contribute approximately 4.0 Mt of ore at an average grade of 3.35 g/t Au. A longitudinal section of the zone is presented in Figure 16-17.

The levels are intersected by four distinct faults striking offset by about 25 to 35 degrees from the zone axis as shown in Figure 16-18. The No. 1 Fault cuts across the northwest corner of the zone, intersecting the six lower levels of Cow North and creating the least amount of contact out of the four traversing faults. The Lowhee Fault, Sanders Fault, and Rainbow Fault cut across most of the zone and access ramp.

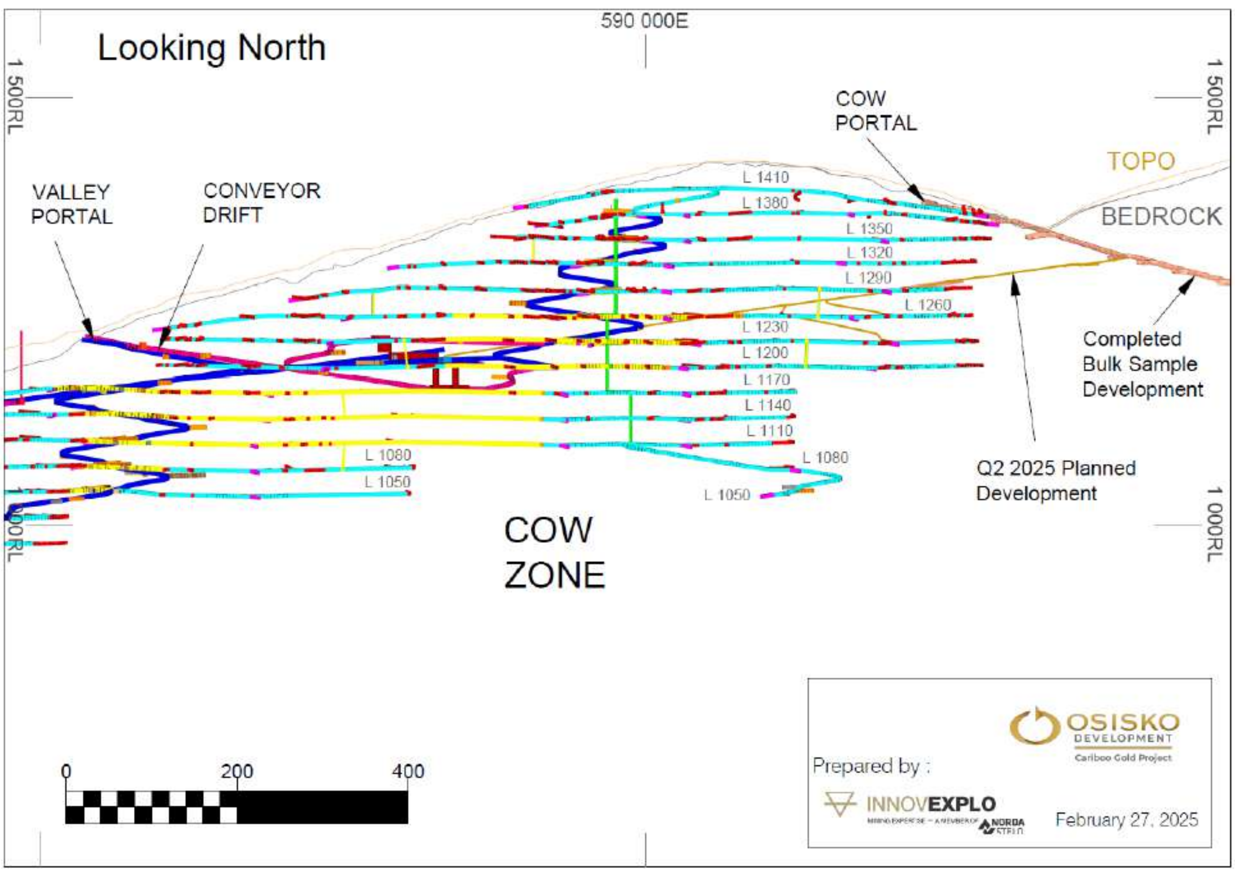


Figure 16-17: Longitudinal section of Cow Zone looking north

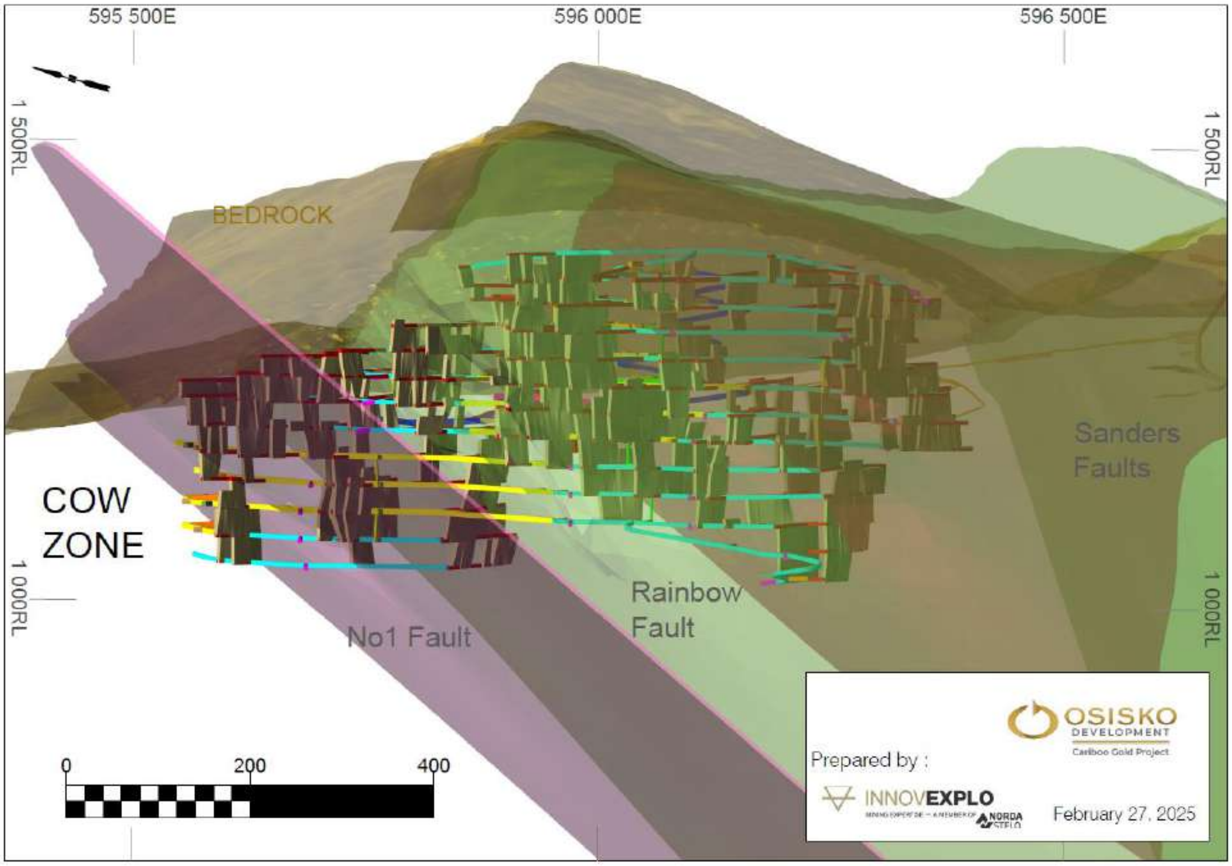


Figure 16-18: Perspective view of Cow Zone looking northeast showing fault structures

16.5.8 Lowhee Zone

The Lowhee Zone encompasses nine levels from level 1200 to level 1440 at 30 m spacing floor-to-floor, to a depth of approximately 1,200 m above msl. The zone spans almost a kilometre along the strike, with stope widths averaging 4.5 m. The stope length on strike averages 21 m for all veins. The Lowhee Zone is expected to contribute 0.9 Mt at an average grade of 3.52 g/t to production over the life of mine (Figure 16-19 and Figure 16-20).

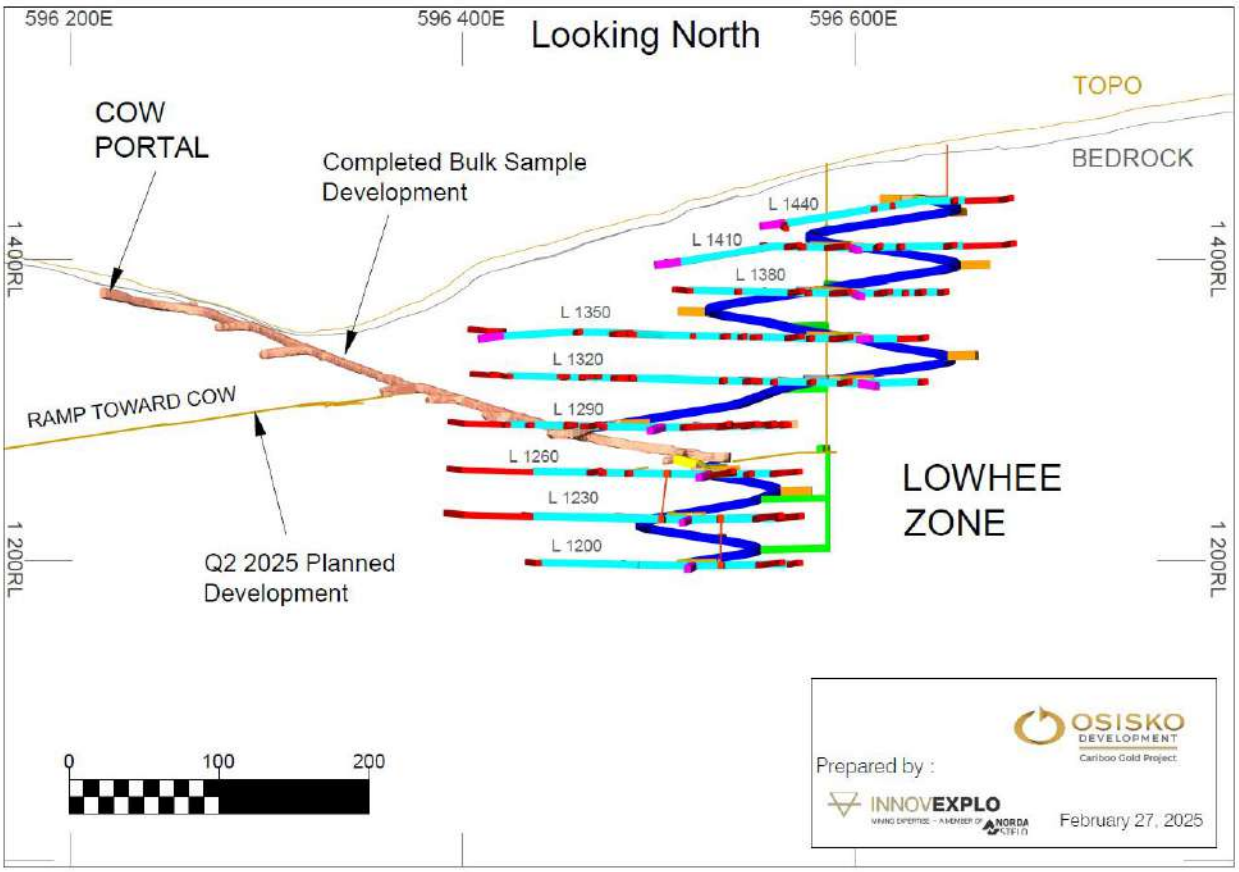


Figure 16-19: Longitudinal section of Lowhee Zone looking north

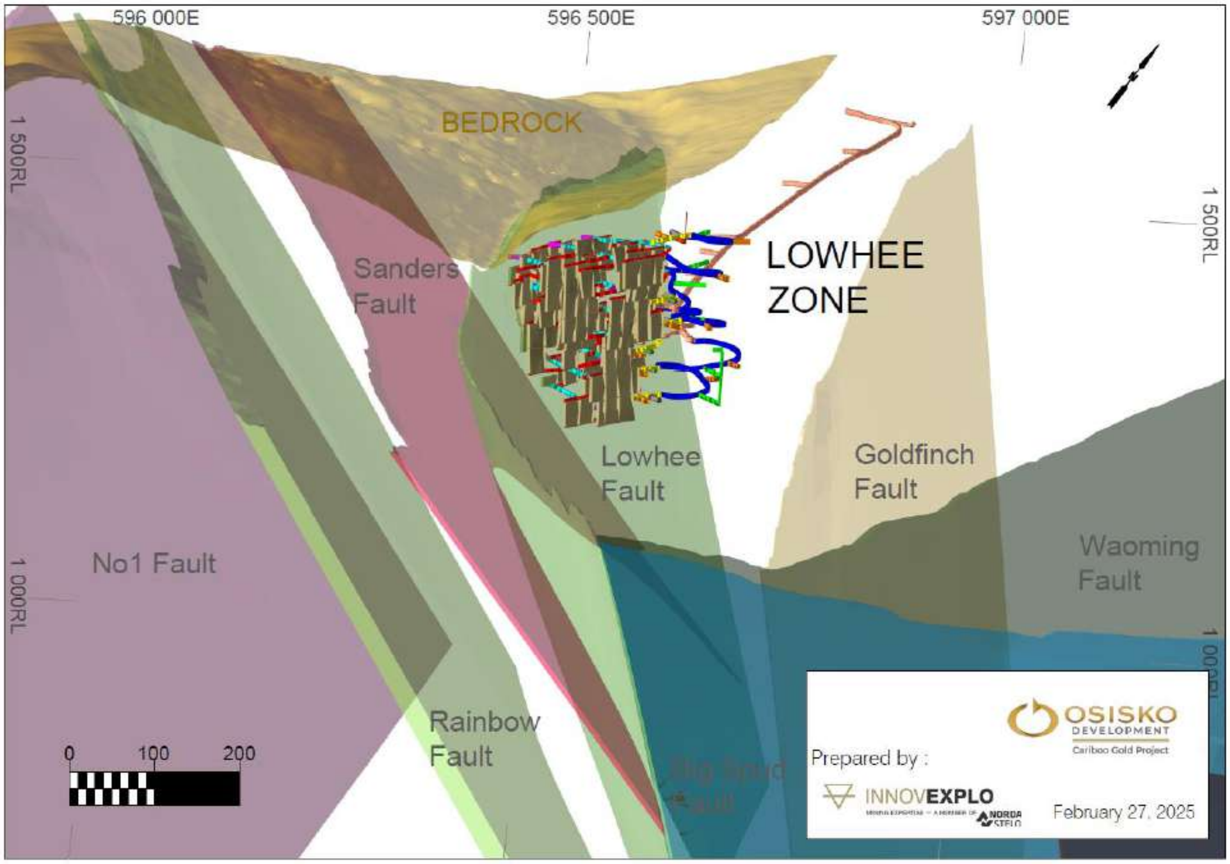


Figure 16-20: Perspective view of Lowhee Zone looking northeast showing fault structures

16.5.9 Mosquito Zone

The Mosquito Zone encompasses eight levels, from level 1140 to level 1350 at 30 m spacing floor-to-floor, to a depth of approximately 1,140 m above msl. The zone spans over 700 m along the strike. Stope length on strike averages 17 m for all veins. The Mosquito Zone is expected to contribute 1.1 Mt at an average grade of 3.94 g/t to production over the life of mine. A longitudinal view of the zone is included in Figure 16-21. The zone is traversed diagonally along the strike by the Mosquito Fault running northwest to southeast. The fault dips approximately 45 degrees northeast as shown in Figure 16-22.

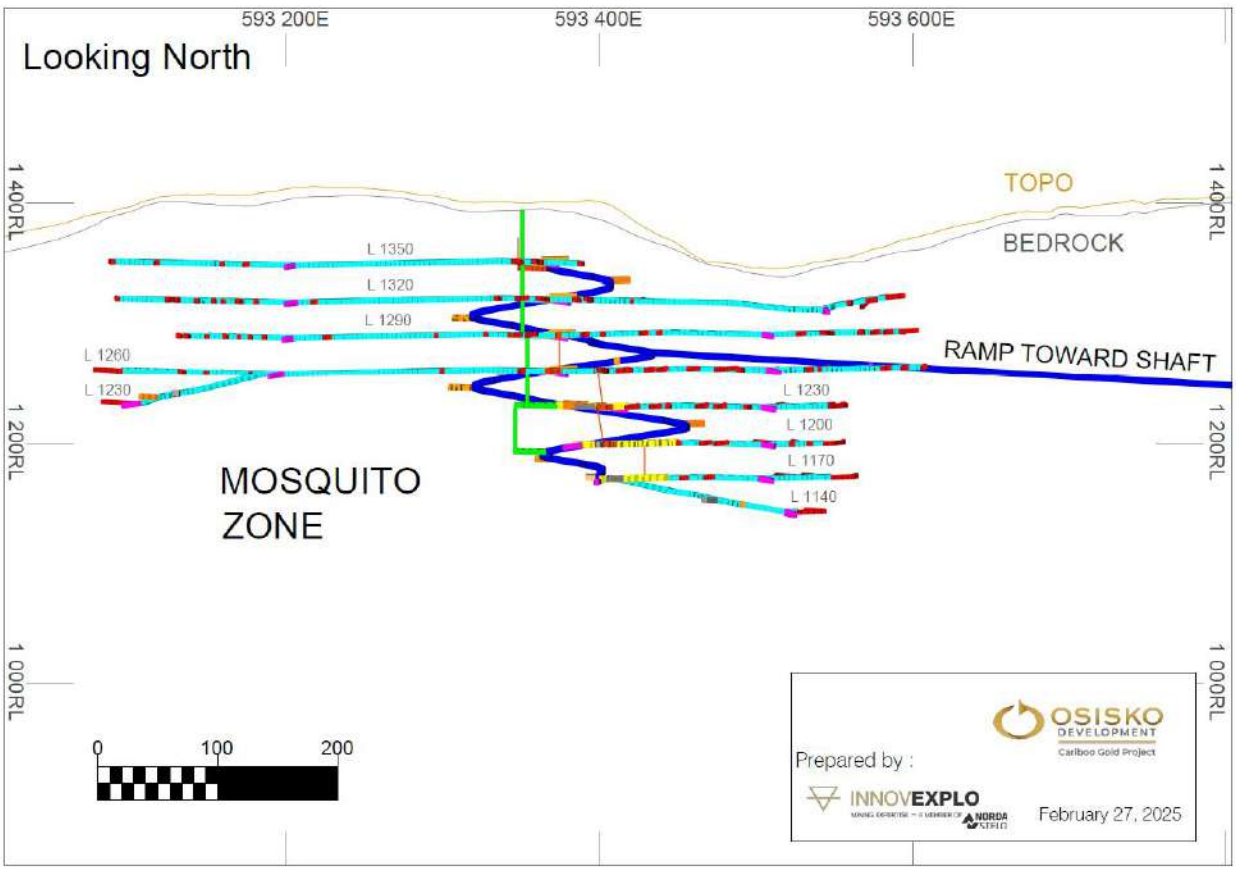


Figure 16-21: Longitudinal section of Mosquito Zone looking north

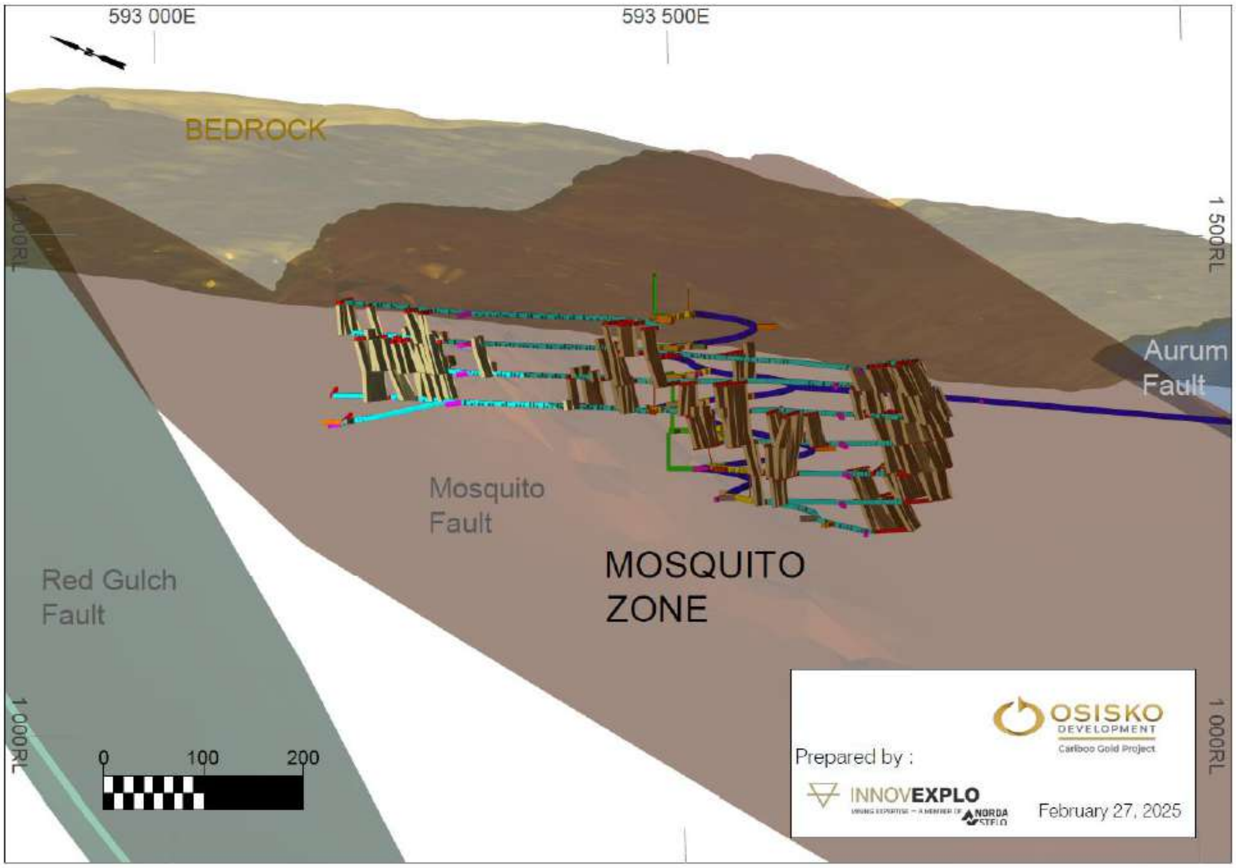


Figure 16-22: Perspective view of Mosquito Zone looking northeast showing fault structure

16.5.10 Mine Dilution and Recovery

In accordance with the geotechnical guidance developed by Alius (see Section 16.2), a strategy of under-drilling narrow stopes to experience "internal" dilution within mineralized zones (sloughage will be mineralized) as part of the "total" dilution will be pursued. External mining dilution has been evaluated for each zone and considered by adding a specific ELOS distance in metres on the hanging wall and footwall. This strategy can be seen in Figure 16-23.

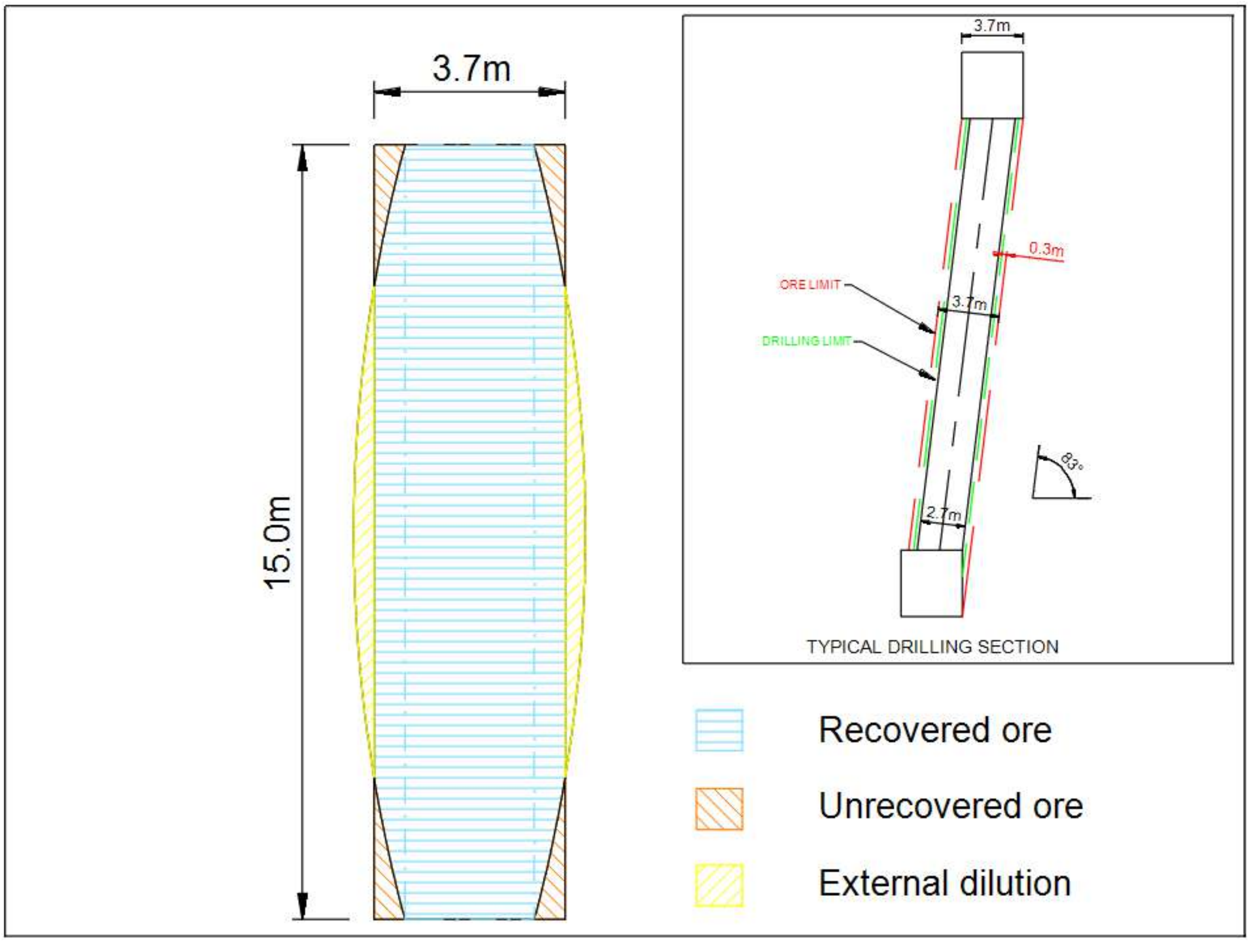


Figure 16-23: Internal dilution strategy for stopes

Mining recovery varies across the different stopes and is primarily influenced by the width of the mineralized zones. Recovery values have been established based on two principal factors:

1. Ore loss along stope walls, which is associated with the internal dilution strategy illustrated in Figure 16-23. This loss is expressed as a percentage and varies according to the stope width. Narrower stopes typically result in higher relative ore losses due to the fixed equipment size and required stope geometries.
2. A global ore loss factor of 3% has been applied to all stopes to account for draw-related losses during extraction. This includes potential material loss due to stope wall collapse, backfill interaction, or other operational challenges inherent to the selected mining method.

In addition, mining recovery has been further adjusted for specific stope configurations:

- For stopes mined using uphole longhole stoping, recovery has been reduced in relation to expected drill hole lengths and accuracy.
- Sill stopes have been limited to a maximum height of 20 m, leaving a 10 m sill pillar between levels to ensure geotechnical stability.
- For stopes utilizing the two-pass variant of longitudinal longhole stoping (commonly referred to as the "Doyon method") included in Geotechnical Class 4, an additional 15% recovery loss has been applied. This adjustment reflects geotechnical recommendations provided by Alius and considers potential paste infiltration through the ore muck prior to the second mucking pass, which may result in material losses due to fill-related limitations.

These recovery assumptions are consistent with observed performance in similar mining environments and have been used to define mineable tonnage for the Project.

16.5.11 Mine Physicals

The Project requires approximately 179 km of development, including 2.78 km of vertical development. Of this development, 106 km will be operational and distributed within the strike of the different veins of all zones and 73 km will be capitalized to sustain the production all along the Project. Overall waste lateral development metres by zone are shown in Table 16-15, as well as the lateral development metres occurring in material above cut-off grade shown in Table 16-16.

Table 16-15: Lateral development of waste by zone

Zone	Metres	Tonnes
Cow	29,001	1,832,099
Valley	25,393	1,606,982
Shaft	54,448	3,388,985
Mosquito	10,267	686,843
Lowhee	7,616	499,698
Total	**126,725**	**8,014,607**

Table 16-16: Summary of total lateral development in ore

Zone	Metres	Tonnes	g/t Au
Cow	13,674	562,098	3.85
Valley	8,800	358,328	3.82
Shaft	24,196	1,014,756	4.20
Mosquito	3,052	124,605	4.41
Lowhee	2,982	122,715	4.09
Total	**52,703**	**2,182,502**	**4.05**

The Project has approximately 17.8 Mt of ore. Of this material, approximately 15.6 Mt are from long hole production. The production distribution is illustrated in Table 16-17.

Table 16-17: Summary of total recovered production tonnes by zone

Zone	Tonnes	g/t Au
Cow	3,437,874	3.27
Valley	2,880,308	3.57
Shaft	7,533,539	3.65
Mosquito	980,765	3.88
Lowhee	800,447	3.43
Total	**15,632,933**	**3.55**

16.6 Underground Material Handling

A fleet of 51 t trucks and 10 t LHD will handle ore and waste rock material from stopes and development headings to surface. A truck loading station will be established on each level to facilitate material storage and transfer.

Production from Mosquito, Shaft zones and the lower part of Valley Zone will be trucked to the Shaft rock breaker station on level 1080. From there, a truck will haul ore on the Cariboo ramp to the underground crushing facilities. The upper part of Valley and Cow ore zones will be hauled directly to the crushing facilities. Figure 16-24 illustrates the underground ore handing for the production. The crushing facilities will be described in the following subsection.

The concentration process, which is detailed in Chapter 17, will consist of an ore sorter that will generate waste. The waste generated will be redirected underground through to a waste pass inside the treatment plant from surface down to level 1170 at proximity of the Cariboo ramp. Finally, a fleet of 51 t trucks will haul the waste to the WRSF. Figure 16-24 shows the ore and waste handling flow of the Project.

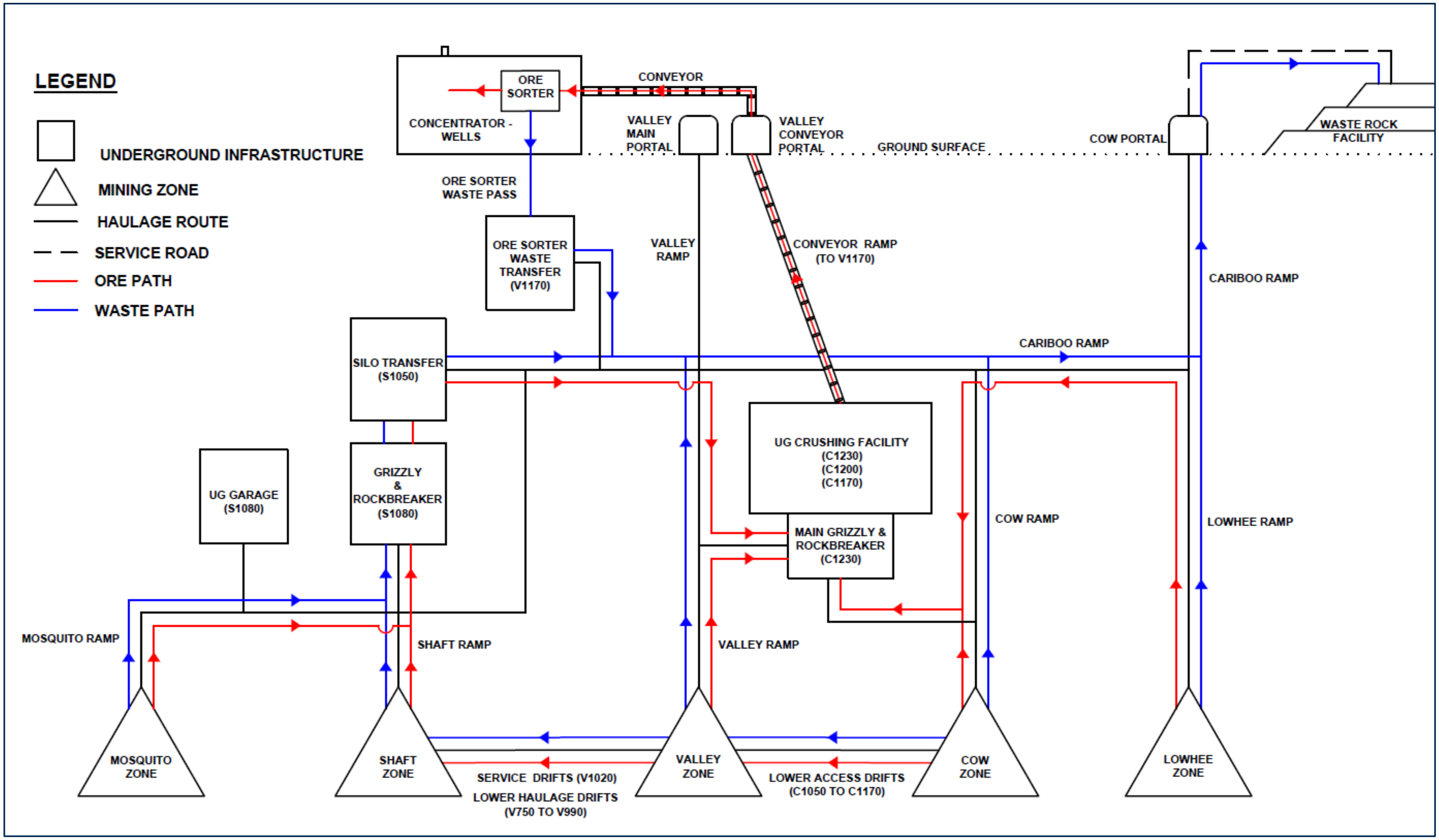


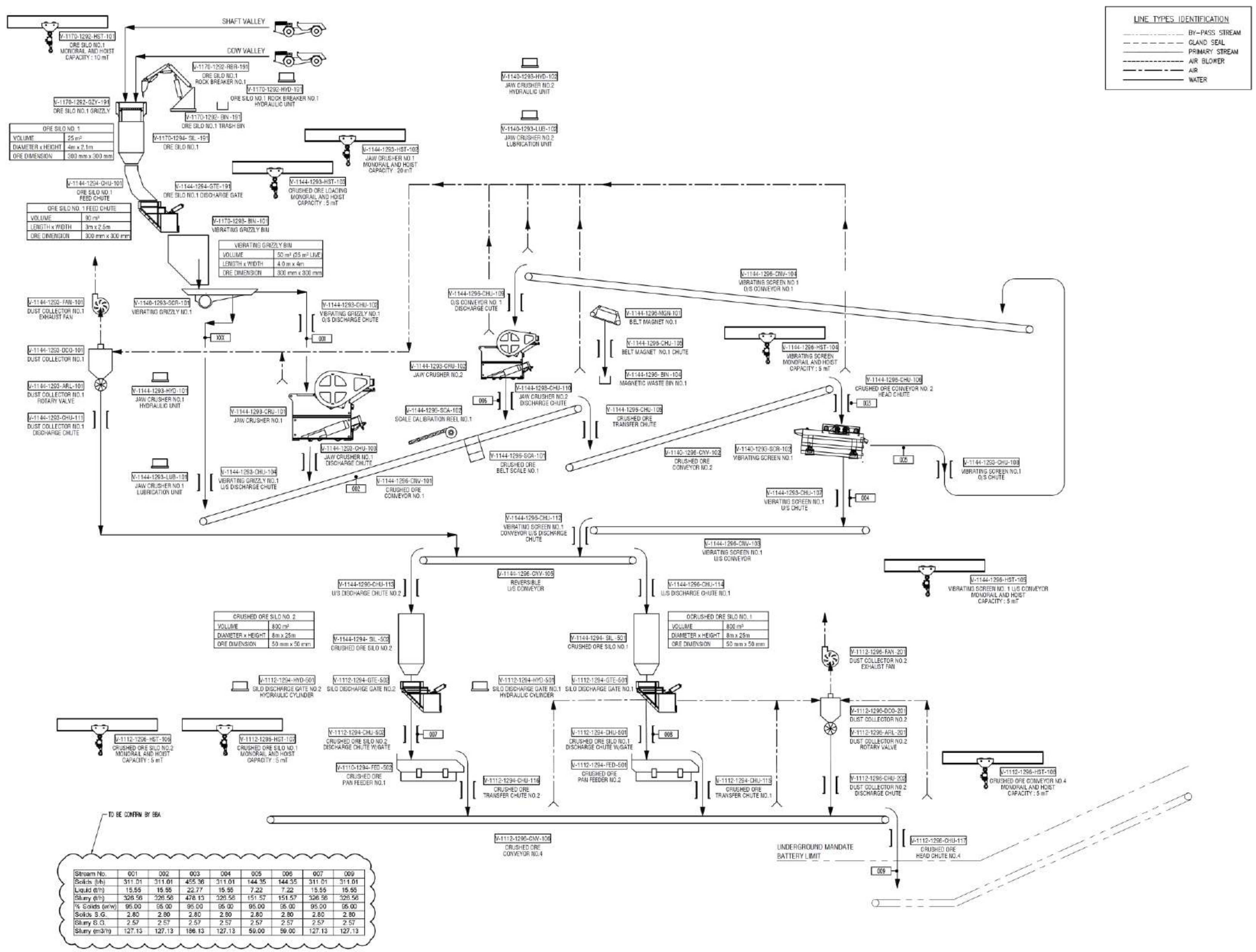
Figure 16-24: Ore and waste handling flowsheet

16.6.1 Material Handling Infrastructure

The haulage distances between zones and crushing facilities are long, and autonomous truck haulage will be used. Ore passes will store the feed for the crushing circuit. This system is designed to convey a nominal capacity of 4,900 tpd of ore to the long-distance belt conveyor. The infrastructure required to support the processing rate, and the overall material handling includes, but is not limited to:

- Grizzly and rock breaker station;
- Mineralized material silos;
- Mineralized material chutes;
- Waste pass;
- Waste pass chute;
- Vibrating grizzly;
- Two pan feeders;
- Belt magnet and belt scale;
- Dust collectors;
- Electrical distribution and communication;
- One primary fixed jaw crusher;
- One secondary fixed jaw crusher;
- One vibrating screen;
- Six belt conveyors;
- One long distance conveyor belt.

Figure 16-25 illustrates the flowsheet of the underground crushing systems.



Stream No.	001	002	003	004	005	006	007	009
Solids (t/h)	311.01	311.01	455.36	311.01	144.35	144.35	311.01	311.01
Liquid (t/h)	15.55	15.55	22.77	15.55	7.22	7.22	15.55	15.55
Slurry (t/h)	326.56	326.56	478.13	326.56	151.57	151.57	326.56	326.56
% Solids (w/w)	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
Solids S.G.	2.80	2.80	2.80	2.80	2.80	2.80	2.80	2.80
Slurry S.G.	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57
Slurry (m3/h)	127.13	127.13	186.13	127.13	59.00	59.00	127.13	127.13

Figure 16-25: Underground crushing facilities flowsheet

Waste generated from the surface sorting process will be returned underground via a waste pass. This material will then be hauled either to stopes for backfilling or to the Bonanza Ledge WRSF using the fleet of 51 t trucks. Figure 16-26 provides an elevation view of the underground crushing facilities.

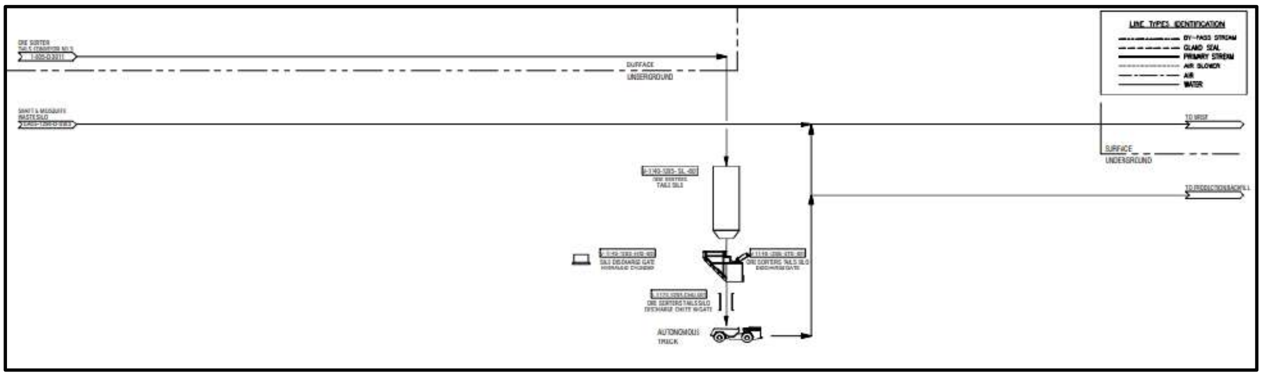


Figure 16-26: Underground waste circuit flowsheet

16.6.2 Grizzly and Rock Breaker Stations

The material handling infrastructure includes grizzly and rock breaker stations with a capacity of 4,900 tpd. A 4 m diameter ore silo under the grizzly will feed the fixed jaw crusher on the lower level. The grizzly and the rock breaker station will handle ore from both Shaft, Cow and Valley.

The grizzly and the rock breaker station are designed for simultaneously dumping two trucks. The grizzly openings have dimensions of 300 mm x 300 mm. The station is equipped with a hydraulic hammer designed to provide a full coverage of the grizzly. An operator cabin will be installed to ensure a clear, unobstructed view of the entire grizzly, as shown in Figure 16-27.

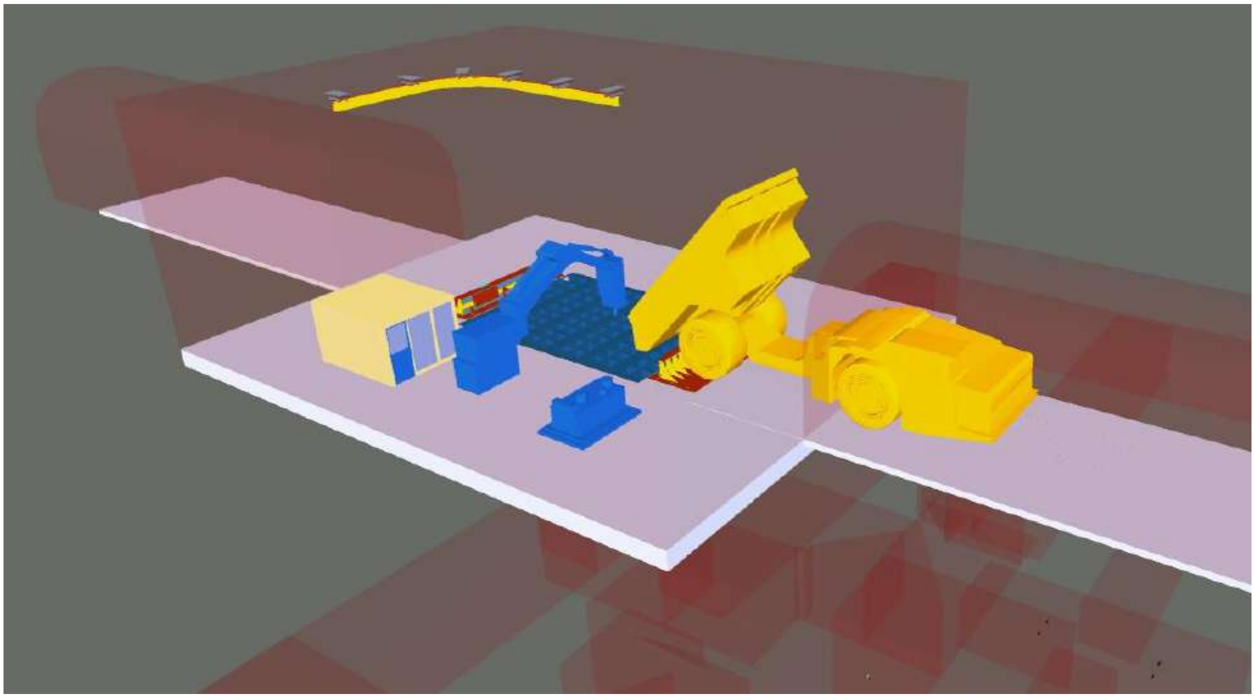


Figure 16-27: Underground grizzly and rock breaker station

The rock breaker power unit is fed by a 600 volt ("V") power cable from the crusher electrical substation via boreholes. All electrical and control equipment will be in the workplace. The local loads are fed from a 400 ampere ("A") distribution panel. The electrical loads in the area will be comprised of lighting, welding plugs and 120 V outlets. The programmable logic controller ("PLC") control system has a local human-machine interface ("HMI"), instrumentation, and fibre optic communication. A radar level transmitter provides the actual level of mineralized material to the control system and operator. The communication infrastructure will provide sufficient bandwidth to enable remote teleoperation and fully autonomous operation of the rock breaker.

16.6.3 Crushing Circuit

The ore crushing system consists of a primary crushing station, followed by ore classification using a vibrating screen. Oversized ore is processed through a closed-circuit secondary crushing system to achieve further size reduction. Ore of the desired size is then transferred to the crushed ore silos, which are connected to the loading station. Figure 16-28 shows the crushing system circuit.

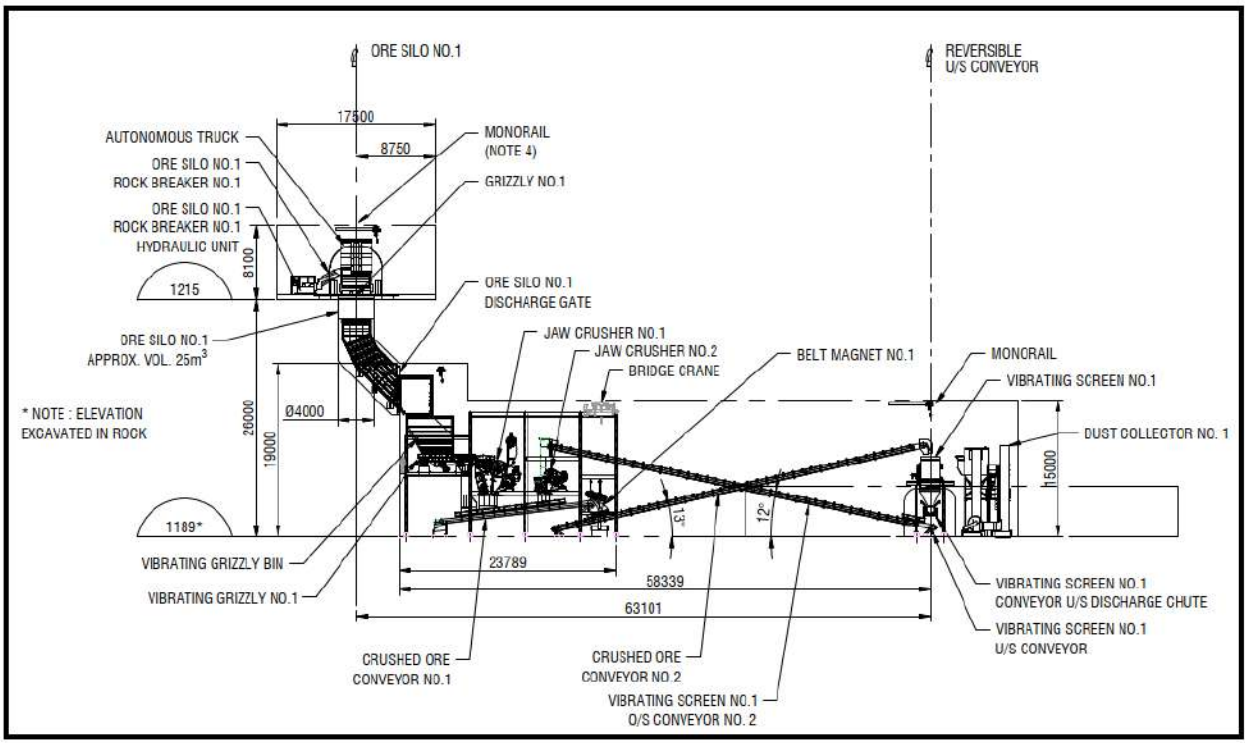


Figure 16-28: Underground crushing system circuit

16.6.4 Ore Feed Chute

The ore is fed by a chute located below the ore silo and ahead of the comminution circuits. A steel collar with a "finger" is planned downstream to the choke gate to prevent premature wear of the press frame. The choke gates control the flow rate from the ore silo to the vibrating grizzly bin.

16.6.5 Primary Crusher Station

The Primary Crusher is a Jaw Crusher designed to reduce ore to a size less than 100 mm. The system is designed for 284 tonnes per hour ("tph") to achieve an average daily production of 4,900 tpd. The planned crusher utilization rate is 75% for a 24 h/day operation.

The crushed material is discharged onto a crushed ore conveyor that delivers it to the vibrating screen decks. The material passes under a belt magnet to remove tramp steel before reaching the vibrating screen deck.

16.6.6 Sizing Station

After passing through the primary crushing station, the ore enters a closed-circuit system, as shown in Figure 16-29. A vibrating multi-deck screen separates the mineralized material into oversized ("O/S") and undersized ("U/S") fractions. The U/S fraction discharges into the top of the vibrating screen U/S conveyor. The O/S stream is conveyed from the vibrating screen through the vibrating screen O/S conveyor to the secondary crusher for further size reduction. The O/S stream flow is shown in Figure 16-29.

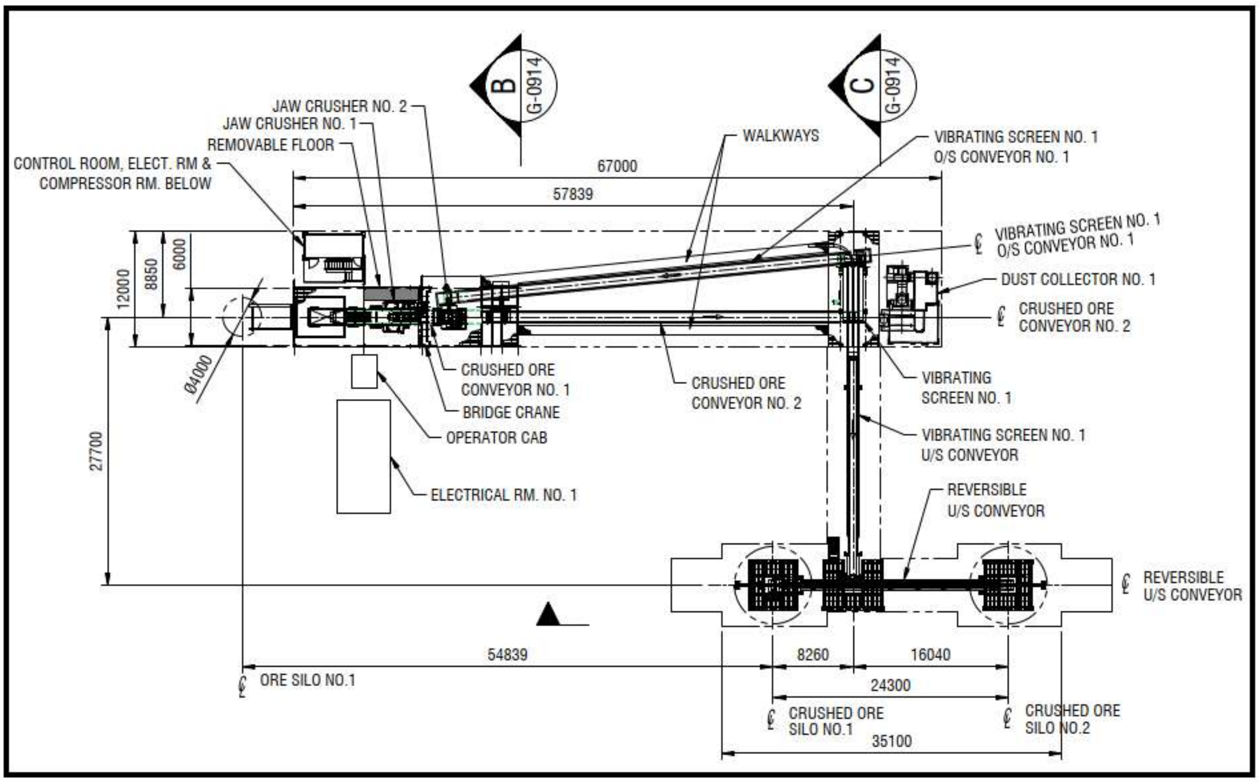


Figure 16-29: Plan view underground closed loop crushing station

16.6.7 Secondary Crushing Station

The secondary crushing station includes a fixed jaw crusher, reducing the material size to 22 mm or less. The secondary crusher products discharge onto the crushed ore conveyor and undergo further size reduction at the vibrating screen station.

16.6.8 Crushed Ore Silos

Once the required size reduction is achieved via the primary and secondary crushing systems, the material is conveyed on a reversible conveyor feeding two 8 m diameter crushed ore silos.

16.6.9 Loading Station

From the Crushed Ore Silos, ore is transferred to the loading circuit, which feeds a conveyor long-distance belt connected to the surface plant. Figure 16-30 illustrates the Crushed Ore Conveyor discharging onto the long-distance belt conveyor.

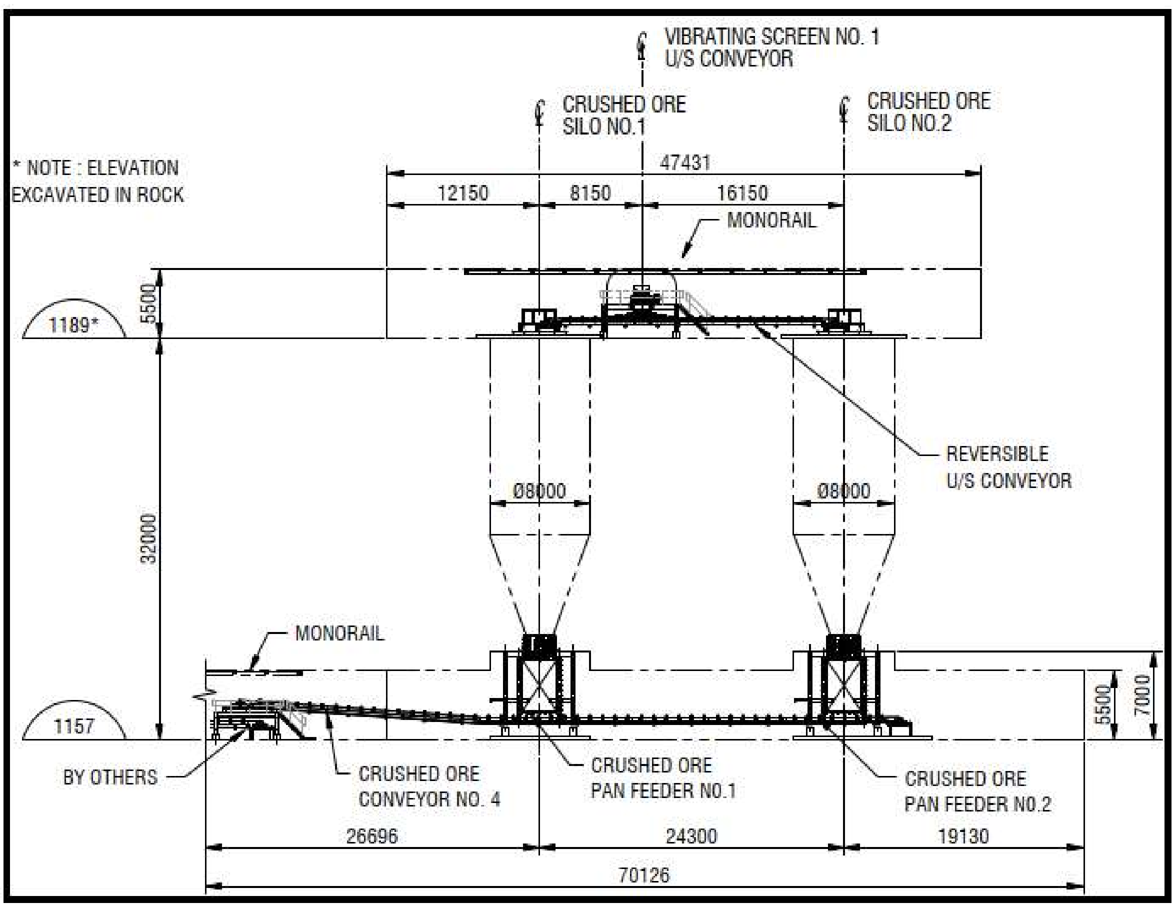


Figure 16-30: Underground loading station

16.6.10 Chutes Under the Silos

Chutes under the crushed ore silos will feed a conveyor that transfers the material to a transfer point, as illustrated in Figure 16-31. A steel collar will be installed at the bottom of each silo.

The press frame gate controls the material flow rate from the silo to the vibrating pan feeder. The vibrating pan feeder controls the feed rate onto the crushed ore conveyor. A trolley and a hoist will be available at the location of the chutes for maintenance.

16.6.11 Transfer Point and Transfer Conveyor

As illustrated in Figure 16-31, the material on the crushed ore conveyor will be fed onto the long-distance belt conveyor at the transfer point.

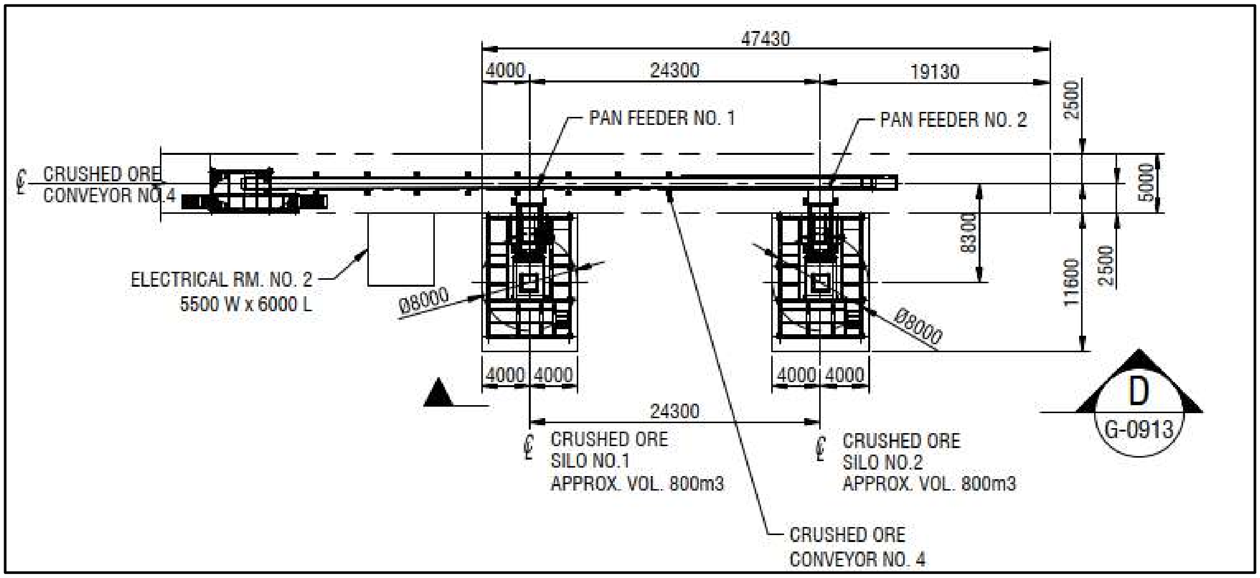


Figure 16-31: Transfer point and transfer conveyor plan view

16.6.12 Dust Collection

Dust Collection and suction points will be strategically located along the system to effectively limit airborne dust contaminants and maintain a clean and safe working environment.

16.6.13 Crushing Control System

The crushing system can be operated either manually (start- stop) or remotely in automated mode. The underground crushing system will be integrated into the mine's main automated network, allowing seamless communication and control across the entire operation.

16.6.14 Underground Waste Truck Chute

The truck chute is located at the bottom of the waste silo and is used to load trucks that transport waste from underground to WRSF for final disposal. Figure 16-32 shows the general arrangement at the bottom of the waste silo.

The truck chute will reduce the need for an LHD to load trucks, thereby increasing waste haulage efficiency. The chute's flow is regulated by a press frame with an arc gate. The press frame is mounted on the excavation roof to provide easy access to the loading station.

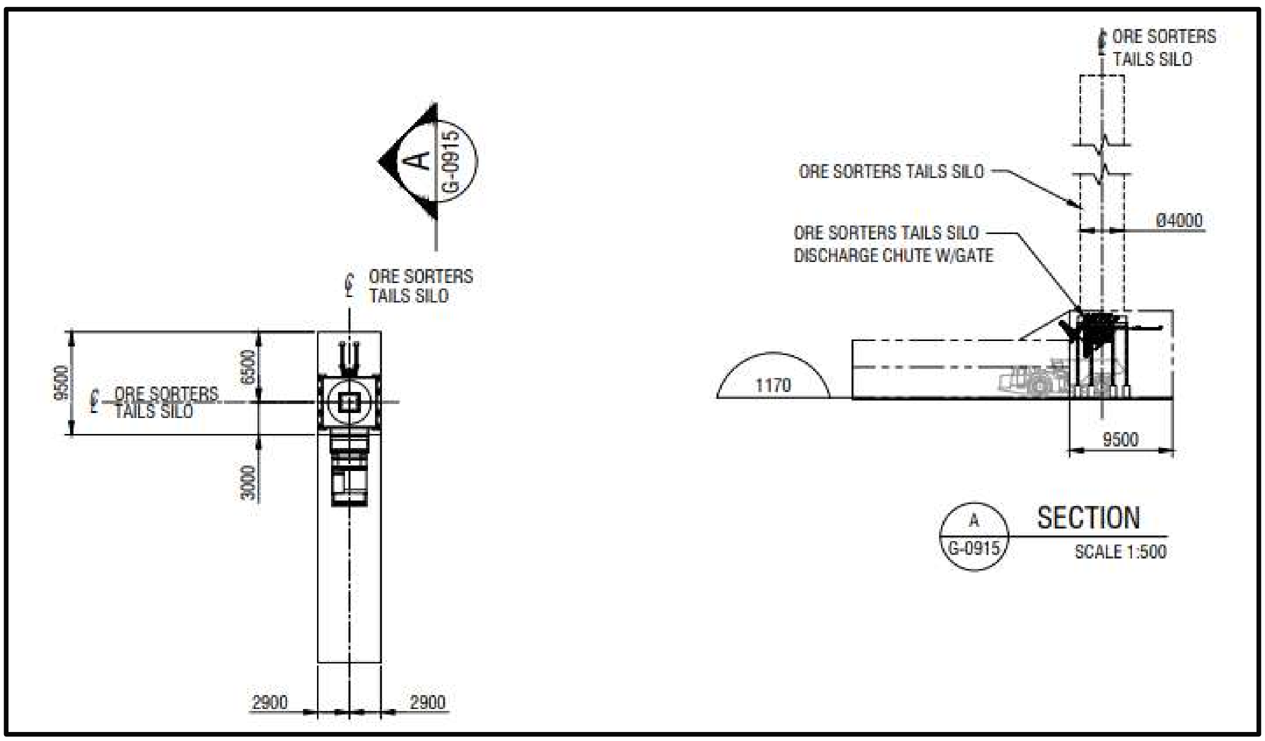


Figure 16-32: Underground ore sorter waste truck chute

The waste chute is powered by a 600 V power pack from the local substation. The electrical loads in the area include lighting, welding plugs, and 120 V outlets. A PLC-based control system will be integrated with local HMI communication through fibre optic cables and instrumentation. The HMI provides the truck operator with essential information, enabling efficient chute control and ensuring smooth operations.

16.6.15 Underground Crushing Electrical Distribution and Communication

A 13.8 kV feeder and a fibre optic communication cable will be required. Communication between the process plant and the underground ore handling system is required to avoid spillage along the entire crushing network. It is assumed that a 13.8 kV feeder cable and a fibre optic cable will be extended to the first of the two electrical rooms.

The first electrical room will be located at level 1189 near the control room, jaw crushers, conveyors, and other equipment. It will be equipped with a 600 A, 13.8 kV Load Break Switch, 2 MVA, 13.8 kV to 600 V transformer, a 600 V distribution panel, a 600 V motor control centre (“MCC”), a 120/208 V distribution panel, a PLC cabinet, a communication cabinet, and a small UPS. Refer to Section 16.6.6 (Sizing Station) for the for the location of Electrical Room No. 1.

The second electrical room will be located at the bottom of the two crushed ore silos at level 1157 and will be fed from the first one at 600 V. A fibre optic communication cable will also be extended from the first electrical substation. The second electrical room will be equipped with a 600 V MCC, a 120/208 V distribution panel, a remote input/output (“I/O”) cabinet and a communication cabinet. Refer to Transfer Point and Transfer Conveyor section for the location of Electrical Room No. 2.

The control room will be equipped with two human-machine interface computers.

The two electrical substations and control rooms will provide the required electrical infrastructure to support the ore handling system and the communication system between the process plant and the underground crushing facilities.

General lighting, 600 V Welding outlets and 120 V service outlets will be available around the equipment to facilitate operations and maintenance.

A provision for instrumentation has been included in the estimate. Each chute or silo will have a high/low level. All equipment feeding the conveyors will be equipped with side travel, speed, and emergency pull cord switches. Cameras will allow the operators to view the equipment in operation remotely.

16.6.16 Fire Detection and Suppression

Fire protection and suppression systems will be installed at critical points, such as at the head and tail pulleys of each conveyor and in the crushing station. The fire protection system will be integrated with the main automated control system. In the event of an emergency, the fire protection system can be manually operated.

16.7 Backfill Strategy

The design of the UDS is directly influenced by the locations of the paste plant and the booster stations. A booster station is used when greater than 120 bar of pumping pressure is required to deliver paste to the target stope locations. As a part of this analysis, a hydraulic flow model was developed by WSP to examine the paste distribution to following underground zones; Mosquito, Shaft, Valley, Cow, and Lowhee. The flow model examined seven scenarios that covered the entirety of the target paste delivery zones and analyzed the achievable delivery extents of some of the high-pressure levels. The UDS has been aligned with the surface paste plant design. It is noted that there is no tailings storage facility (“TSF”) on surface, therefore all tailings will report to underground. As the mill is designed to operate 24 hours per day, the tailings will be pumped underground continuously.

16.7.1 Underground Distribution System Design Criteria and Mass Balance

The design is based on T Engineering’s laboratory rheology test work and the information provided by ODV from the 2023 FS (Hardie et al., 2023). Table 16-18 and Table 16-19 show the design parameters used for the backfill strategy.

Table 16-18: Underground distribution system design criteria

Parameter	Value	Unit	Source
Flow Model Design Inputs:			PMID – Typical Design Properties
Pipe Friction (Roughness)			
▪ Carbon Steel:	5.08E-05	m	
▪ Target Velocities:	0.8– 1.25	m/s	
▪ Friction Calculation:	Empirical	-	
▪ Friction Safety Factor:	10	%	
▪ Flow Rate:	100	m^3/h	
Paste Plant Pumping System			PMID, Proposed
Station Piping:			
▪ Type/Specification:	ASTM A106 GR. B, SCH 80, Class 1500	-	
▪ Pipe SYMS:	240	mPa	
▪ Size:	200	DN - nom	

Parameter	Value	Unit	Source
Mosquito Booster Pumping System Station Piping: ▪ Type/Specification: ▪ Pipe SYMS: ▪ Size:	ASTM A106 GR. B, SCH 80, Class 1500 240 200	- mPa DN - nom	PMID, Proposed
Lowhee Booster Pumping System Station Piping: ▪ Type/Specification: ▪ Pipe SYMS: ▪ Size:	ASTM A106 GR. B, SCH 80, Class 1500 240 200	- mPa DN - nom	PMID, Proposed

Table 16-19: Mass balance

Description	Unit	Material	178 mm Slump (7")	203 mm Slump (8")	229 mm Slump (9")	254 mm Slump (10")
Mass	tpd	solids	3,094.0	3,094.0	3,094.0	3,094.0
	tph	solids	128.9	128.9	128.9	128.9
	tph	water	39.6	42.8	46.1	49.8
	tph	slurry	168.5	171.7	175.0	178.7
Percent Solids	**%**		**76.5**	**75.1**	**73.7**	**72.2**
Flow	m^3/h	solids	46.2	46.2	46.2	46.2
	m^3/h	water	39.6	42.8	46.1	49.8
	m^3/h	slurry	85.8	89.0	92.3	96.0
Specific Gravity	-	solids	2.79	2.79	2.79	2.79
	-	water	1.00	1.00	1.00	1.00
	-	slurry	1.96	1.93	1.90	1.86
Pipeline Size	200 mm (8")	area (m^2)	0.0295	0.0295	0.0295	0.0295
200 mm (8")	Sch 80	velocity m/s	0.81	0.84	0.87	0.90
Pressure Loss	-	**kPa/m**	**7.1**	**4.9**	**3.4**	**2.3**
Pipeline Size	150 mm (6")	area (m^2)	0.0168	0.0168	0.0168	0.0168
150 mm (6")	Sch 80	velocity m/s	1.42	1.47	1.52	1.59
Pressure Loss	-	**kPa/m**	**9.8**	**6.8**	**4.7**	**3.2**

16.7.2 Underground Paste Fill Network Distribution Description

As the tailing disposal relies exclusively on paste underground, the entire mine will be fitted with paste network, as shown in Figure 16-33. The paste fill origination is located just above the Valley Zone in the mill. There are a total three surface to underground boreholes, one operating and two standbys.

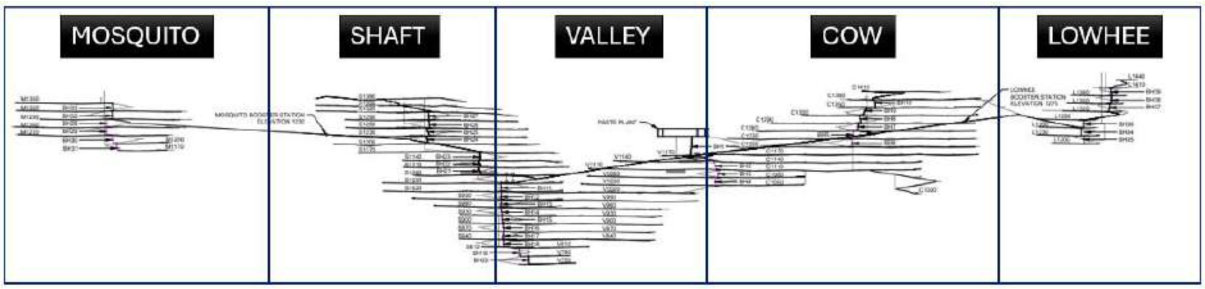


Figure 16-33: Underground paste fill route

16.7.3 Valley Paste Fill Distribution Network

The Valley Zone will be filled from two different locations. Levels 990-750 will employ the same initial routing and interlevel boreholes as the lower Shaft Zone, starting with BH11 and ending with BH20 at level 750. Levels 1170-1050 will be supplied from the paste plant directly. The paste will be routed through the surface borehole and will descend via a short ramp to the level V1140. From there, BH2/3/4 are used to fill V1110/V1080/V1050 respectively. This is illustrated in Figure 16-34. The Valley will be the underground central point for the distribution of paste fill for Shaft and Cow.

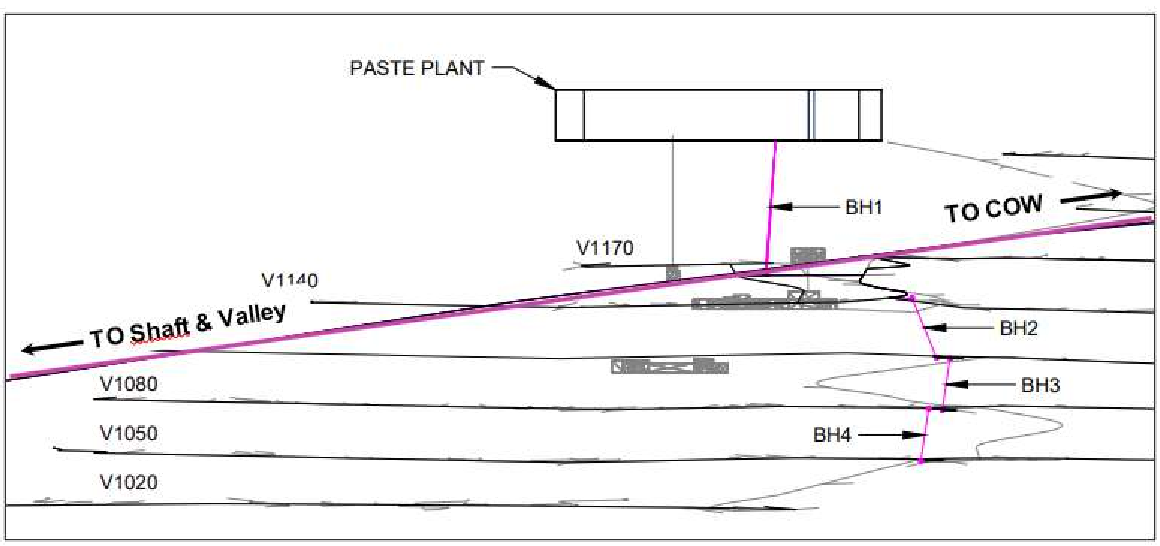


Figure 16-34: Paste Fill distribution network for upper part of Valley and in route for Shaft and Cow

16.7.4 Shaft Paste Fill Distribution Network

The desired extents of the Shaft Zone can be reached by delivering the paste from surface borehole (BH1), towards level S1015 using the ramp that connects all mine zones, Mosquito, Shaft, Valley, Cow and Lowhee. The paste pipe routing will then split; the upper portion will be fed from the Mosquito Zone booster station at the 1230 ramp elevation as shown in Figure 16-35, using BH21 and successive interval boreholes to reach the extends of level 1380. The lower portions of Shaft Zone will be reached using BH11 as a starting point through a series of interlevel boreholes to finally intersect level S810. The Shaft Zone pipe routing is illustrated in Figure 16-35.

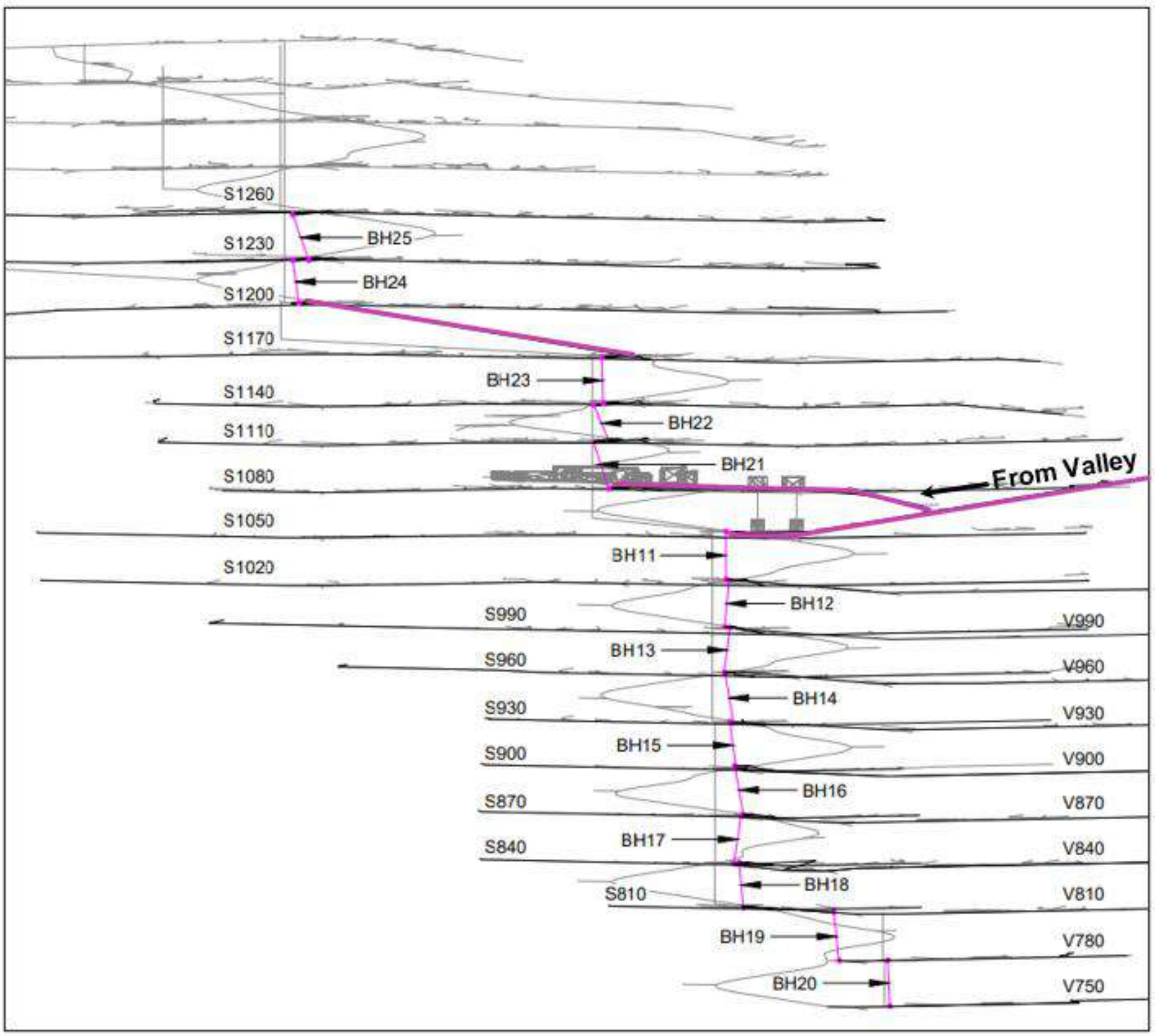


Figure 16-35: Pipe routing for upper and lower part of Shaft and lower part of Valley

16.7.5 Cow Paste Fill Distribution Network

Cow Zone will also be supplied through two different routes. Levels C1170-C1050 will be filled by using BH2/3/4 (like Valley Zone). The remainder of the Cow Zone will be filled from the Lowhee booster station located at the 1275 ramp elevation shown in Figure 16-36, owing to the long lateral expanse at the Cow Zone. From the Lowhee booster station, there will be a split with paste delivered to some upper and lower levels. Upper levels will use boreholes BH7 through BH10 to target levels C1290-C1410. Lower levels will use boreholes BH5 and BH6 to target levels C1230 and C1200.

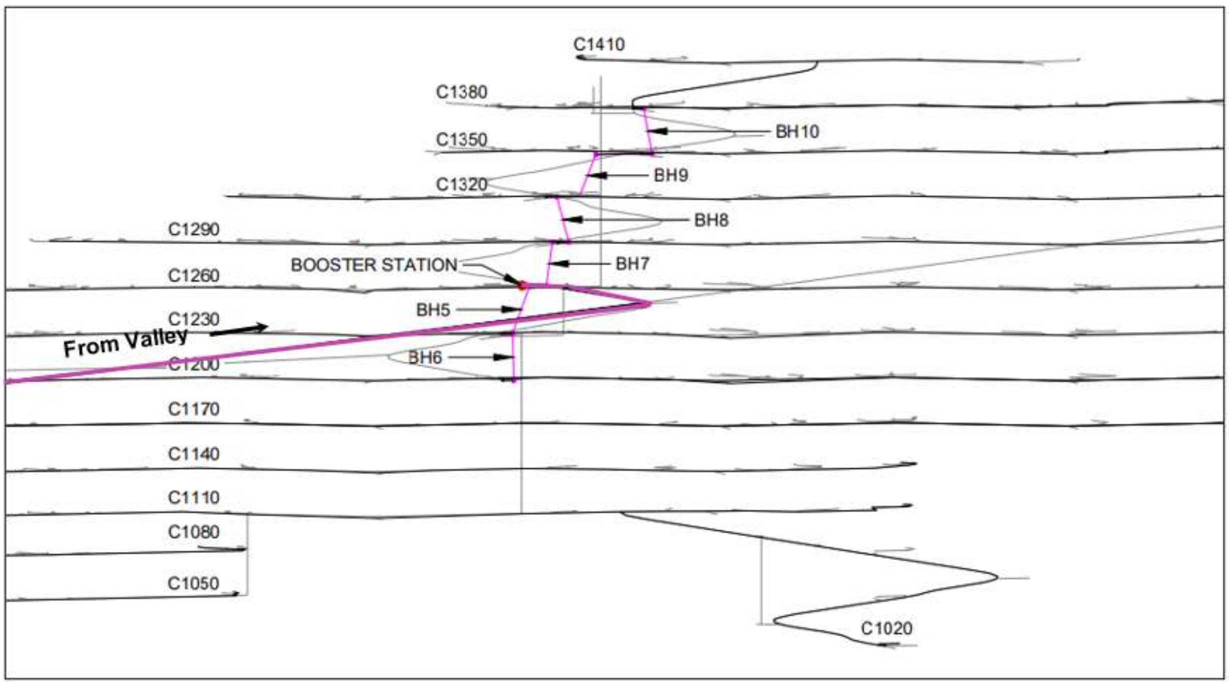


Figure 16-36: Cow paste fill network and booster station location

16.7.6 Mosquito Paste Fill Distribution Network

The Mosquito Zone will be supplied via the Mosquito booster pump to M1290. The lower Mosquito levels, M1260 to M1170, will be supplied using BH28 through BH31. The upper Mosquito levels, M1320 and M1350, will use boreholes BH32 and BH33 as illustrated in Figure 16-37.

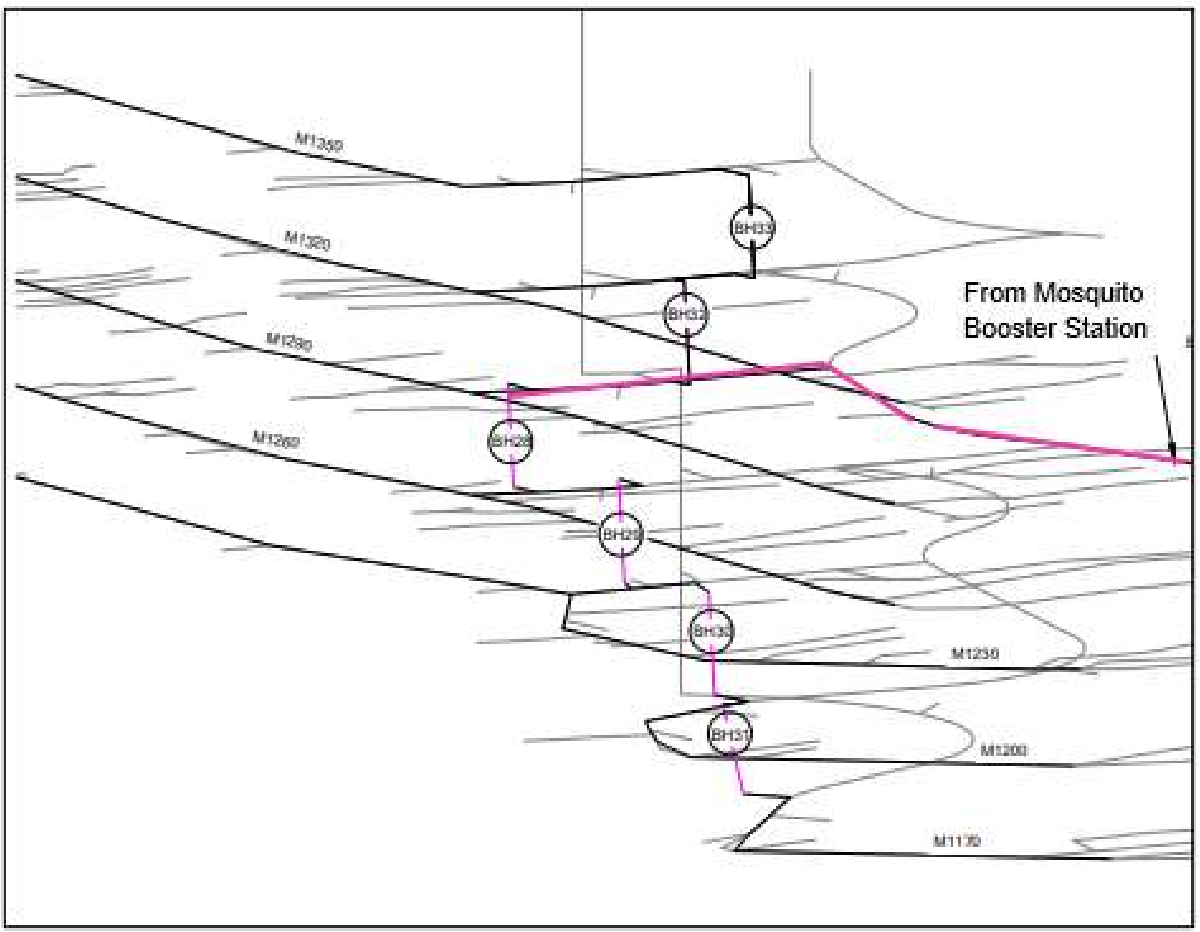


Figure 16-37: Mosquito paste fill network distribution

16.7.7 Lowhee Paste Fill Network Distribution

The Lowhee Zone will be supplied via the Lowhee booster pump to level 1260. The lower Lowhee levels 1230, 1230 and 1200 will be supplied using boreholes BH34 and BH35. The upper Lowhee levels 1290 to 1440 will use boreholes BH36 through BH39.

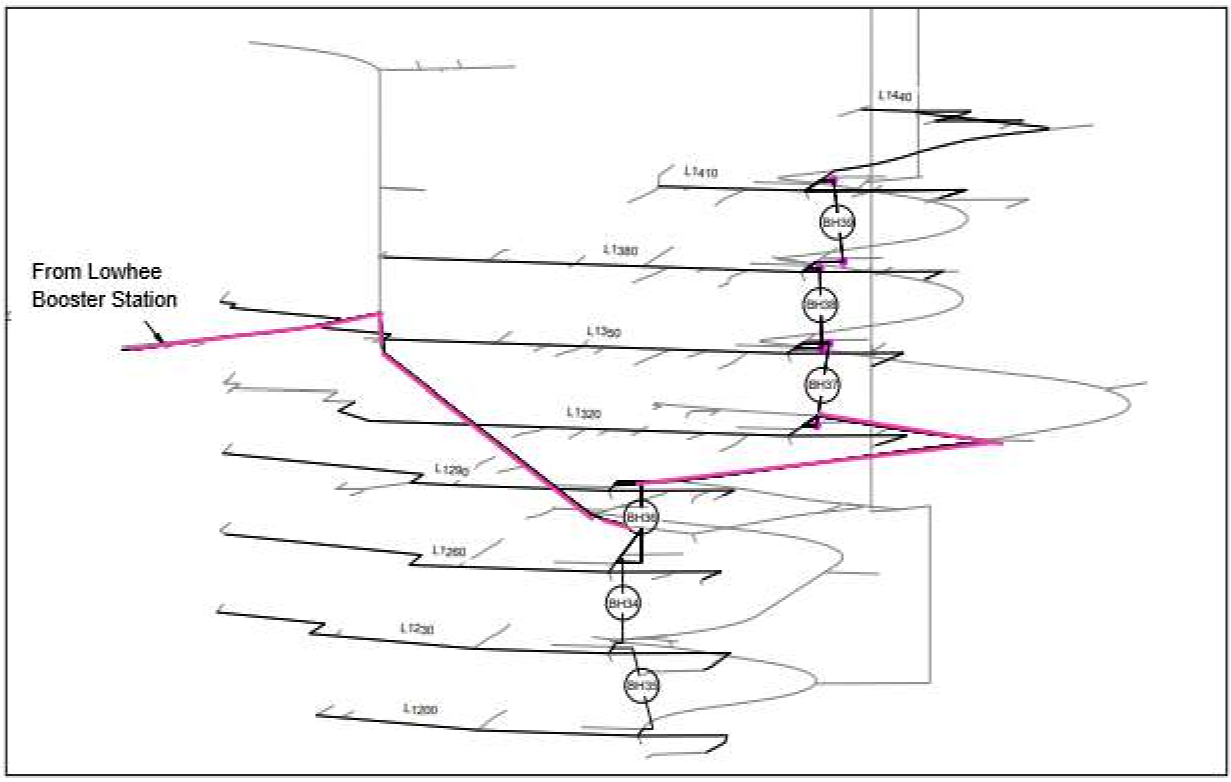


Figure 16-38: Lowhee paste fill network distribution

16.7.8 Typical Level Paste Fill Distribution Network

The piping system underground is comprised of 200 mm (8") Schedule 80 piping for the primary network and 200 mm (8") Schedule 80 piping for the secondary network, whereas the tertiary network (final pipe runs to stopes) will use 200 mm (8") HDPE DR9 pipe. To facilitate paste fill operation readiness, the tertiary network will consist of HDPE DR9 pipes with Victaulic couplings. These pipes are easy to move and reinstall in the next sequenced stopes.

It is recommended that a rupture spool, a pressure relief tee, and a pressure transducer be installed at the breakthrough of each borehole as these locations are more susceptible to pressure build-up should a downstream blockage occur. These items should be installed within 5 m of the transition between vertical pipe and the level piping. Pressure relief tees should be installed every 200 m to 250 m from the downhole breakthrough along the level piping.

Figure 16-39 shows a plan view of typical level paste line configuration with the Vertical Primary Network in green and red, the Secondary Network in cyan, and the Tertiary Network in magenta. Table 16-20 illustrates the quantity of paste fill pipes to be installed during the life of mine.

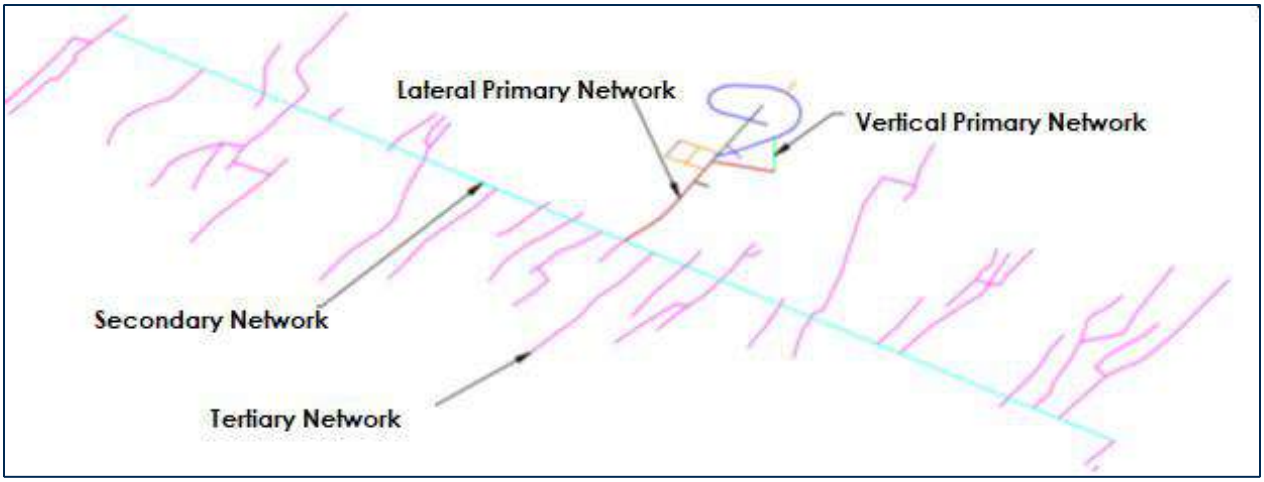


Figure 16-39: Typical paste fill-level distribution network

Table 16-20: Summary of the pipe lengths by zone in metres

Paste Fill Network	Type	Mosquito	Valley	Shaft	Cow	Lowhee	Total
Principal Paste Fill Network – Vertical	200 mm Schedule 80	252	375	800	590	233	2,250
Principal Paste fill Network – Lateral	200 mm Schedule 80	1,300	654	9,958	415	1,190	13,517
Secondary Paste Fill Network	200 mm Schedule 80	3,489	6,324	7,985	8,663	1,903	28,364
Tertiary Paste Fill Network (in sills)	200 mm Schedule 80	5,699	20,812	33,646	26,916	5,310	92,383

16.7.9 Flow Model Analysis

16.7.9.1 Flow Model Inputs

The parameters used to conduct the flow modelling are summarized in Table 16-18 and Table 16-19 in Section 16.7.1. The flow models presented are calculated under the assumption that the throughput is at the design mass flow rate of 121 tph of paste solids with a tailings solids specific gravity of 2.76. The mass flow rate is inclusive of binder.

The weight % ("wt%") solids content changes slightly at different slumps. A 178 mm (7") slump has a higher wt% solids (76.5 wt%) and a slightly slower velocity, whereas a 254 mm (10") slump has a lower wt% solids (72.2 wt%) and faster velocity. The weight percent solids at the various slumps were taken from "Appendix B.2 Uncemented Rheology" in the T Engineering lab report (Cariboo Gold Project Laboratory Report – Rev B, Dec 6, 2024).

Borehole and pipeline diameters have been selected to maintain as low a flow velocity as possible to reduce wear and decrease the friction losses which will keep the number of booster stations to a minimum. The 200 mm (8") diameter pipeline provides a flow velocity of 0.79 m/s to 0.89 m/s, which is lower than optimum 1 m/s, but still within the acceptable operating range for paste fill.

The flow model analysis is based on the 3D model provided by ODV on December 18, 2024, which included the Mosquito and Lowhee Mining zones. These two zones have been added to the mine plan since the original study was undertaken in 2022. Seven distribution locations were selected for flow modelling within the study. Chainage for various locations were obtained through the 3D model of the mine. The worst cases distribution are at the top of the orebody for Cow, Lowhee, Mosquito, and Shaft zones, and the bottom of the Valley Zone.

The friction factor range used for the 178 mm to 254 mm slumps (7" to 10" slumps) is 9.3 kPa/m to 2.1 kPa/m for unlined DN200 (8") schedule 80 pipe, and 12.5 kPa/m to 2.8 kPa/m for unlined DN150 (6") schedule 80 pipe. The pipeline friction loss for the DN 150 (6") pipe was estimated from the data presented in the T Engineering laboratory report (Ting and Pascual, 2024).

16.7.9.2 Flow Model Analysis

The flow models examined the worst-case scenario at the extents of high-pressure levels. The flow model examined pipeline the routes presented in Figure 16-39.

The flow model results presented in Table 16-21, indicate the lowest slump the paste plant can pump to still reach that area and level of the mine; and the pressure that will be needed to reach it.

The analysis shows that:

- The entire mine is reachable with a slump range of 203 mm to 254 mm (8" to 10");
- Booster stations are required to reach the Mosquito and Lowhee mine areas;
- Shaft level 1380 can be reached with 229 mm slump (9") if first routed to Mosquito station;
- Cow level 1410 can be reached with 203 mm slump (8") if first routed to Lowhee booster;
- Lowhee level 1440 can be reached with 203 mm slump (8") if paste pump operates at 126 bar without having to install another booster station.

Table 16-21: Slump and pumping summary

Originating Location	Discharge Area	Mine Level	Required Slump mm (inch)	Required Pumping Pressure Bar
Paste Plant	Mosquito Booster Station	1230	229 (9)	87
Mosquito Booster Station	Mosquito	1350	229 (9)	85
Mosquito Booster Station	Shaft	1380	229 [9]	92
Paste Plant	Shaft	1380	254 (10)	90
Paste Plant	Shaft	1260	229 (9)	100
Paste Plant	Valley	750	203 (8)	77
Paste Plant	Cow	1410	229 (9)	115
Paste Plant	Lowhee Booster Station	1275	203 (8)	111
Lowhee Booster Station	Lowhee	1440	203 (8)	126(1)
Lowhee Booster Station	Lowhee	1410	203 (8)	105
Lowhee Booster Station	Cow	1410	203 (8)	117

(1) Paste pump operating pressure is rated for 128 bar, potential to consider 229 mm slump for level 1440.

16.7.10 Paste Pumps

16.7.10.1 Paste Pump Selection

A Geho DHC-21250 positive displacement pump has been selected for this duty. The following design criteria were used in the pump selection:

- Slurry to be pumped fine-grained, pumpable cemented tailings;
- Slurry density: 189 kg/m^3;
- Solid density: 3,200 kg/m^3;
- Solid concentration: 75.4%;
- Particle size distribution: d80 = 60; d50 = 33; d30 = 20;
- Flow rate each pump: 100 m^3/h operating;
- Pump discharge pressure: 120 bar (design operating);
- Installed power of main motors (2x): 450 kW.

16.7.10.2 Underground Booster Stations

The current design calls for two underground booster stations, one for Mosquito Zone, and one for Lowhee Zone. The design is for two booster pumps per pump station, one operating and one standby. Figure 16-40 illustrates a typical booster pump station. The following points are noted:

- A 120 bar pump has been selected;
- The pumps have been positioned to allow access to their cylinders for removal;
- The total span is below 12 m including the standard 5 m drift;
- The E-cutout can be moved closer to the pump if a rock mechanics evaluation deems if safe;
- The station cutout slashes can be squared at the ends if needed. The current angled design makes it easy for pipe installation and for access and ventilation;
- The booster station floor is sloped from right to left and to back of excavation for cleaning;
- The pump station can be installed in a separate drift, but this decreases heat dissipation, complicates pipe layout, and requires additional excavation. The slashes drift assists with ventilation/cooling and ease of movement for maintenance;
- The second pump is on standby.

It is normal practice to have one operating and one standby pump, especially when a pump fails, and the pipeline is full of cemented paste. Alternate methods of clearing the distribution system of cemented paste can be introduced without the use of a standby pump. This will include a small positive displacement ("PD") pump with standby power being placed in a suitable location, which can be used to flush any cemented paste from a line when a pump failure occurs.

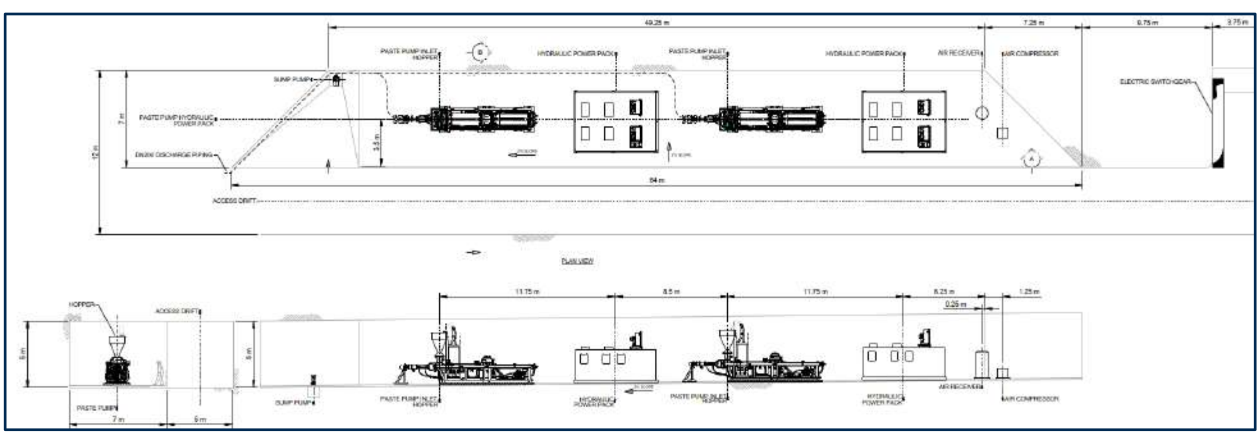


Figure 16-40: Booster station (two pumps shown)

16.8 Mine Schedule

16.8.1 Mine Sequence Methodology

The strategy associated with drawing up the infrastructure development sequence and the production plan has been to limit the ramp-up period while ensuring that production remains sustainable over time. To limit the risk of disruption, provide maximum flexibility and allow maximum recovery of reserves, production was achieved by creating three distinct sectors of production: Cariboo North, South, and Deep. As noted in Figure 16-41, each area is expected to operate independently of one another and provide a maximum ore feed of 2,455 tpd from Cariboo North, 2,740 tpd from Cariboo South, and 2,645 tpd from Cariboo Deep, such that at any given time an aggregate of 4,900 tpd is mined across all deposit areas.

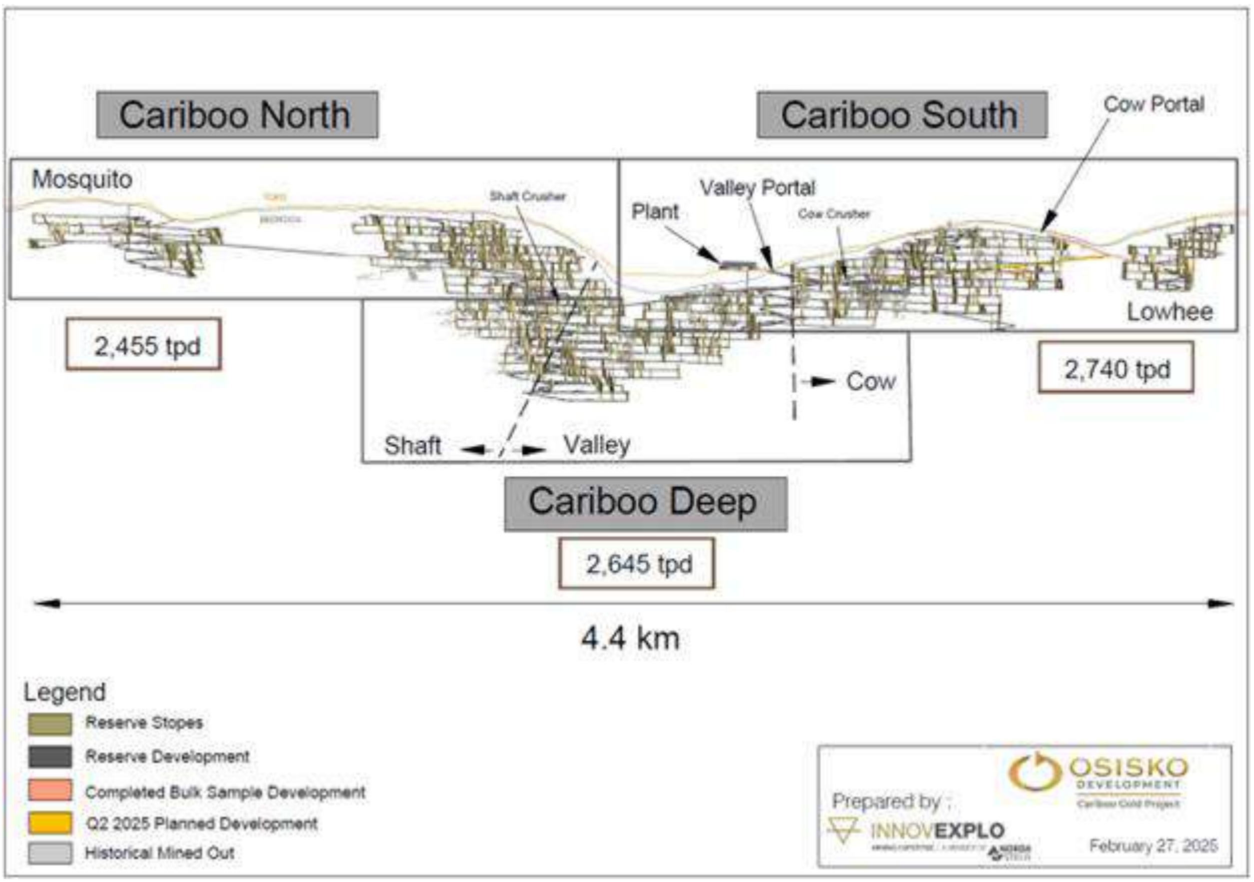


Figure 16-41: Mining plan by areas long section

In the early stages of development, the focus will be on reaching the main ventilation raise and being in a position to start the production of the Upper Shaft and Lowhee Zone, while maintaining a high development priority of the down Ramp of the Shaft Zone.

All zones include multiple veins that extend to the surface, though the highly uneven topography causes this to be variable between and within zones. Veins do not reliably extend through the entire height of a zone. When a vein extends more than five sublevels, they are interrupted with a 10 m pillar for geotechnical stability that was considered in the mining recovery of sill stopes. The mining sequence within a vein is bottom-up, though along veins with pillars it is possible to open multiple mining fronts. Stopes along a vein on a level are universally mined in the retreat direction toward the main access and then retreat to the level access. Sill levels are mined with blind uppers on retreat after the stopes above and below have been mined, leaving a 10 m skin.

Stope sequencing per level is controlled by access constraints between veins. As far as possible, respecting the various constraints, veins with a higher grade were assigned a correspondingly higher priority.

Stopes are to be drilled from the top access, except for pillars, which applies to both production drilling and V30 slot raise. Therefore, the development on the top and bottom access is required to be completed before the initiation of production drilling tasks. For automation purposes, the development and production activities were not allowed in the same level at the same time.

16.8.2 Scheduling Rates

The annual production schedule is based on a targeted average throughput of 4,900 tonnes per day. Therefore, the total economic material tonnage is targeted to satisfy this daily production rate. All scheduling rates are based on experienced mining contractor feedback or typical rates for similar operations. Task rates referred to the productivity rate at which any given task can complete its operational scenario. Table 16-22 summarizes the development task rates applied to the schedule.

Table 16-22: Schedule development rates

Development Type	Development Profile (width x height)	Task Rate
Lateral Jumbo Development Multi Heading	(3.7 m x 4.0 m)	9.6 m/d
Lateral Jumbo Development Multi Heading	(5.0 m x 4.3 m)	9.6 m/d
Lateral Jumbo Development Multi Heading	(5.4 m x 5.8 m)	8.0 m/d
Lateral Roadheader Development Single Heading	(5.4 m x 5.8 m)	6.6 m/d
Vertical Development	(average)	2.5 m/d

All ramp decline is planned to be excavated with Roadheader or Jumbo equipment. Level access is planned to be developed mostly by Jumbo equipment. All multi-heading development is planned to be excavated with Jumbos at a total rate of 244 m per month per crew with a maximum of 61 m per headings for ramps, level access and infrastructure. Development of the haulage and ore drift was planned a rate of 292 m with a maximum of 73 m per headings.

Tests conducted by the manufacturer have successfully demonstrated that the rock units associated with the excavations developed by the Roadheader are adequate when using the right type of cutter (P. Cyr, personnel communication, March 8, 2019). In addition, a Roadheader was employed for the development of certain sections during operations at the Bonanza Ledge Mine. It was also used to assess its operational viability during the development of the ramp from the Cow portal, which led to the bulk sampling.

The first 6 months of pre-production development will be carried out entirely by the contractor, after which the in-house team will gradually come in with project owned equipment and start supplanting the contractor to carry out the development. During the pre-production period, a maximum of four standard Jumbo teams and two Roadheaders teams per day will be required. After this period and considering that the bulk of the ramps will be developed, the Roadheader equipment will be withdrawn and the Jumbo teams increased to six to ensure development for the subsequent three years and progressively reduced thereafter.

Production tasks involving mucking, such as backfilling or mucking stopes, are based on the maximum rate a loader can achieve in a day depending on the size of the equipment, the hauling distance and the effective hours per day, which vary depending on the activity performed. In addition, for stope mucking activity, the effective hours vary considering the different mucking modes (manual, manual and automated or fully automated). The rate is based on an LHD being assigned the singular task. It has been presumed that the entire fleet of LHD loaders will be equipped with options enabling them to be automated. It has been planned that all LHD loaders associated with production mucking activities will operate entirely in 12 hours manual mode per shift until Year 2. Thereafter, A 6-month transition period for implementation from which it has been assumed that 30% of stopes loading will be carried out manually over a period of 10 hours, with an additional 2 hours in automated mode. Following this period, 30% of production will be carried out entirely in automated mode over a period of 12 hours per shift.

Production drilling and V30 slot raise are similarly based on the assignment of a single resource to complete a single task. The production rates are shown in Table 16-23.

Table 16-23: Summary of production rate tasks

Production Task	Unit	Rate
Production Drilling	m/d	194
Slot Raising	m/d	10.9
Mucking (manual mode) – (min. max. range)	tpd	824–945
Mucking (manual and automated mode) - (min. max. range)	tpd	845–1,037
Mucking (automated mode) - (min. max. range)	tpd	897–1,100
Uncemented Rockfill (min. max. range)	tpd	962–1,243
Paste Fill Backfill	tpd	4,095
Backfill Curing Time (paste fill)	day	7

16.8.3 Mine Production Schedule

The LOM production plan represents a 10-year mine life. The production ramp-up to a steady state of 4,900 tpd is achievable by second half of Year 1. The average head grade for the LOM averages 3.62 g/t Au. All scheduled physicals and summary data presented in this section represent the mined and recovered values. Figure 16-42 shows mined and recovered economic material tonnage and grade on an annual basis and the Figure 16-43 show the tonnage distribution in the three mining sectors.

Figure 16-42: Annual mined ore tonnag e and grade

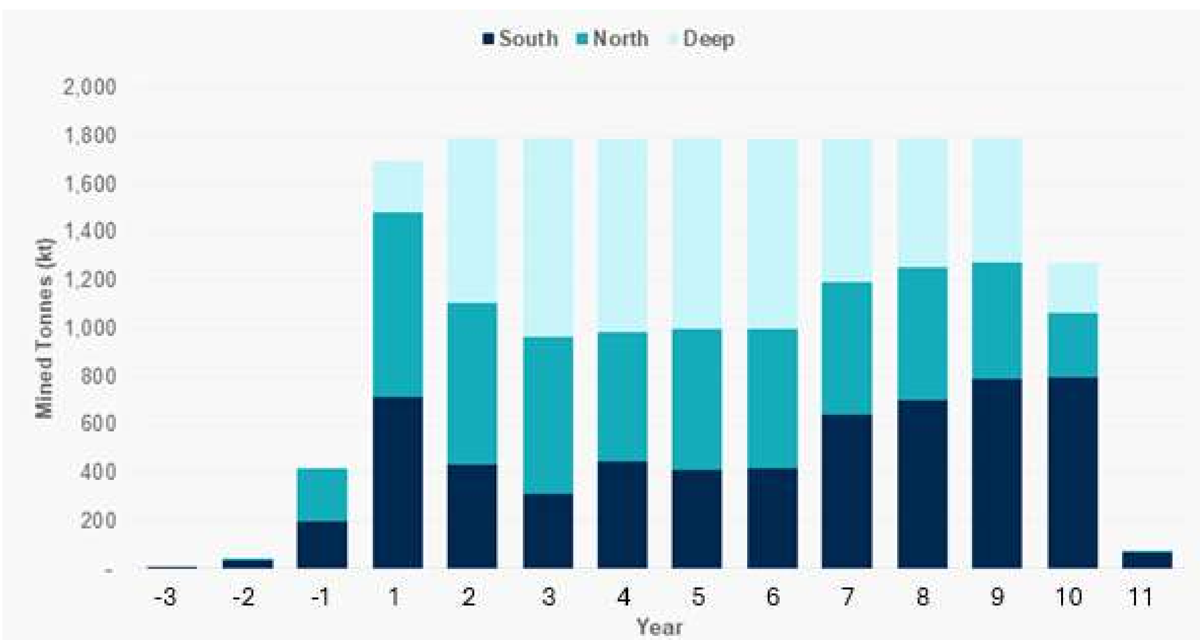


Figure 16-43: Mine plan by sector

Table 16-24 presents a summary of ore tonnage and grade by zone by year.

Table 16-24: Annual mine production plan by zone

Zone	Unit	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4
Lowhee	t	1,662	32,101	133,676	527,845	195,803	32,498	-
	g/t	1,86	4,31	3,47	3,72	3,02	2,73	-
Cow	t	-	-	7,453	38,694	271,509	343,679	304,212
	g/t	-	-	3,81	4,32	4,26	3,78	3,49
Valley Upper	t	-	2,007	43,327	141,794	4,568	8,323	100,212
	g/t	-	2,90	3,20	2,81	3,09	5,16	3,37
Valley Lower	t	-	-	-	60,995	214,797	180,383	327,497
	g/t	-	-	-	4,65	3,92	3,90	4,00
Shaft	t	-	7,123	235,028	927,503	1,103,993	1,224,076	1,056,684
	g/t	-	2,28	4,11	3,96	4,38	3,83	4,23
Mosquito	t	-	-	-	-	-	-	-
	g/t	-	-	-	-	-	-	-
Zone	**Unit**	**Year 5**	**Year 6**	**Year 7**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
Lowhee	t	-	-	-	-	-	-	-
	g/t	-	-	-	-	-	-	-
Cow	t	440,423	423,188	601,324	511,376	436,815	586,204	37,153
	g/t	3,20	3,34	3,37	3,15	3,10	2,90	4,46
Valley Upper	t	81,938	25,427	120,399	34,267	289,273	168,154	23,874
	g/t	3,86	3,64	3,30	3,21	3,78	2,91	2,51
Valley Lower	t	170,066	364,500	307,704	351,910	209,272	10,232	-
	g/t	3,28	3,34	4,28	3,40	3,29	2,10	-
Shaft	t	1,091,803	697,910	490,047	559,352	643,580	504,172	13,626
	g/t	3,52	3,23	3,26	3,05	3,25	3,14	3,59
Mosquito	t	9,149	276,957	268,751	331,549	214,285	5,495	-
	g/t	3,63	4,31	3,96	3,47	4,20	2,68	-

Figure 16-44 shows the annual ore tonnage extracted per zone by year.

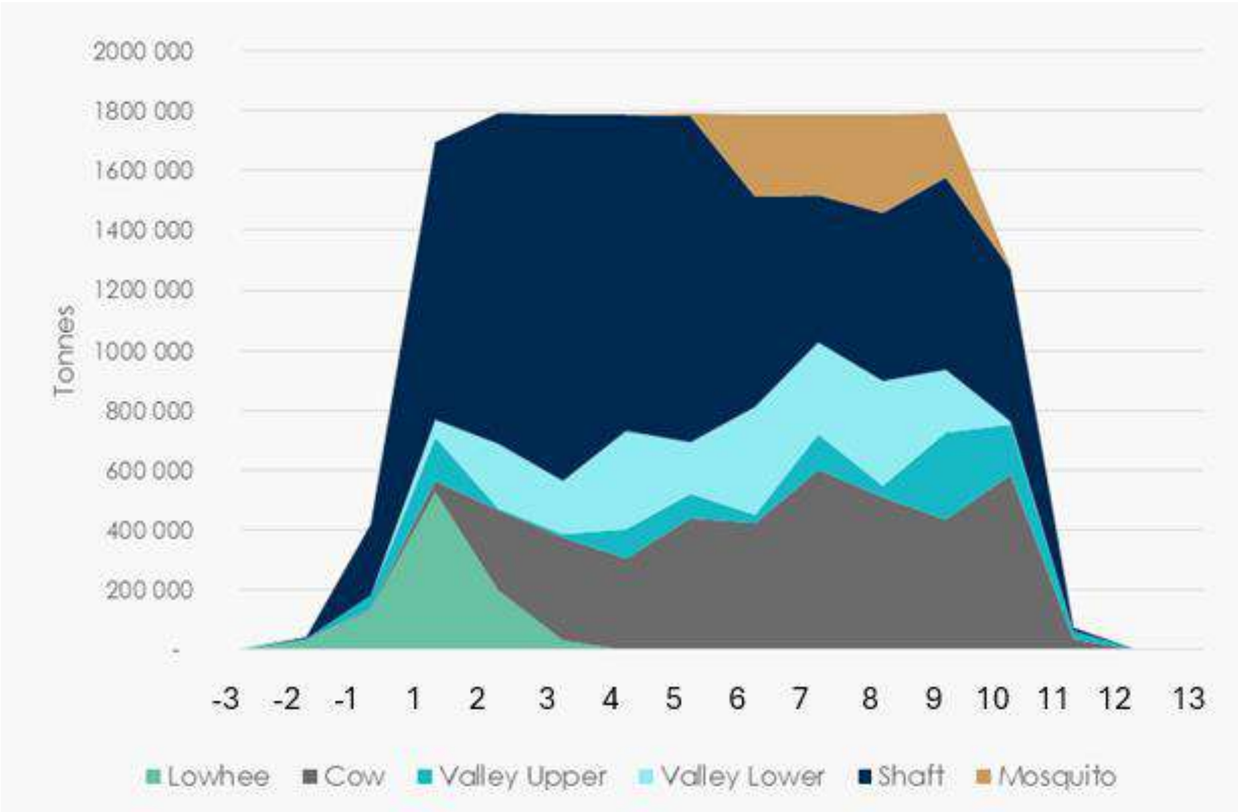


Figure 16-44: Annual ore mined by zone

Approximately 15.6 Mt of ore is derived from the stoping activity, with the remaining 2.2 Mt is derived from the development activity (12% of material generated). Figure 16-45 shows the annual potentially economic material tonnage production versus development. Lateral development averages 1,230 m per month mine wide for the LOM with peak development in Year -1 with an average of 1,790 m. Figure 16-45 shows annual development per zone per annum for the LOM. Development metres per zone per time span changes throughout the LOM. Table 16-25 shows the development metre breakdown per zone from pre-production over the life of the mine.

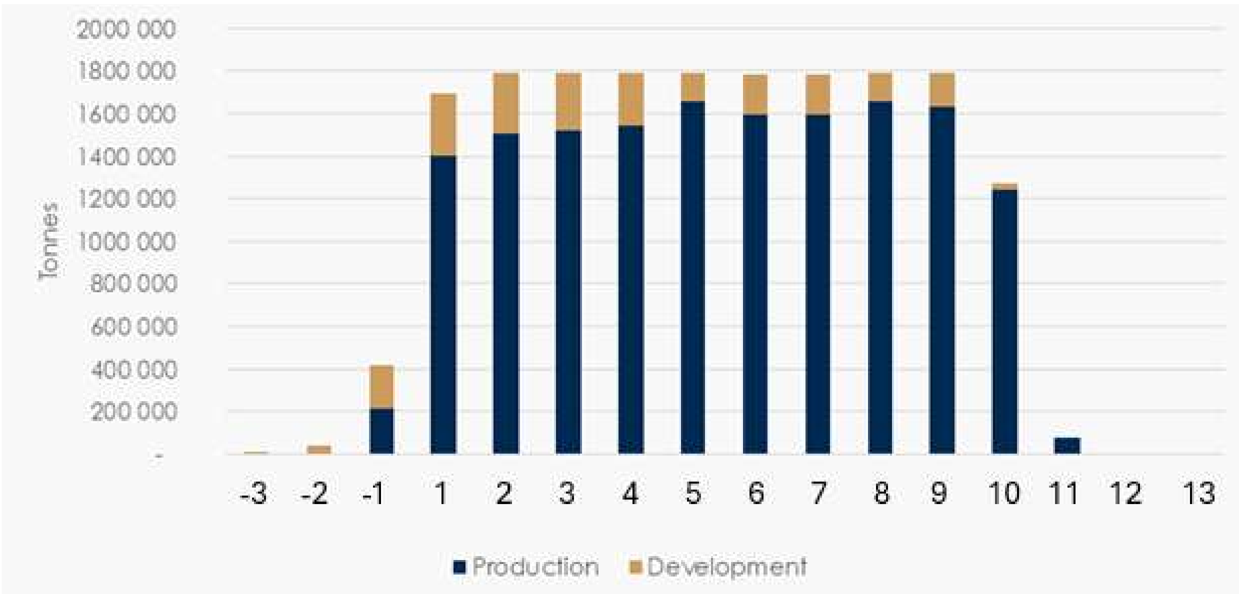


Figure 16-45: Distribution of ore tonnage between development and production

Table 16-25: Annual lateral development by zone (metres per year)

Zone	Unit	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4
Lowhee	m	992	3,289	3,817	2,499	-	-	-
Cow	m	1,588	1,593	1,804	1,360	4,308	3,885	3,864
Valley Upper	m	1,916	2,958	2,071	174	36	607	1,736
Valley Lower	m	-	-	777	2,880	2,611	4,213	2,595
Shaft	m	108	8,176	13,580	13,353	12,776	10,210	7,025
Mosquito	m	-	13	-	-	-	702	1,479
Zone	**Unit**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**	**Year 11**
Lowhee	m	-	-	-	-	-	-	-
Cow	m	5,055	5,609	3,882	2,890	5,623	1,212	-
Valley Upper	m	143	1,071	1,275	1,744	2,329	-	-
Valley Lower	m	924	1,193	2,179	761	2	-	-
Shaft	m	4,215	2,291	3,758	1,558	1,593	-	-
Mosquito	m	2,867	3,104	2,125	2,974	55	-	-

Table 16-26 provides an overview of the consolidated LOM production schedule for the Project.

Table 16-26: Consolidated mine plan overview – Cariboo Gold Project

Item	Unit	Total	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Production																
Tonnes Stopes	t	15,632,933	0	0	207,600	1,408,953	1,506,844	1,509,190	1,553,767	1,651,736	1,609,602	1,589,302	1,654,238	1,626,981	1,243,206	71,515
Grade	g/t	3.55	0.00	0.00	3.96	3.64	4.14	3.88	3.93	3.30	3.49	3.46	3.37	3.27	2.98	3.55
Ounces	oz.	1,786,524	0	0	26,403	164,718	200,528	188,068	196,401	175,123	180,772	176,876	179,305	170,960	119,206	8,163
# Stopes		2,803	0	0	34	231	239	241	260	340	281	274	297	327	263	16
Development Ore																
Metres	m	52,703	20	921	5,088	6,779	6,767	6,738	5,717	3,459	4,232	4,870	3,294	4,094	724	0
Tonnes	t	2,182,502	1,662	43,216	212,198	286,112	281,761	279,809	233,160	141,639	173,527	199,178	134,334	166,406	29,500	0
Grade	g/t	4.05	1.86	3.92	3.85	4.63	4.30	4.07	4.16	4.10	3.78	3.84	3.79	3.51	3.76	0.00
Ounces	oz.	284,275	100	5,443	26,298	42,612	38,964	36,576	31,205	18,664	21,074	24,605	16,374	18,793	3,567	0
Development Waste																
Metres	m	126,725	4,487	15,016	16,877	13,546	13,092	12,912	10,898	9,678	9,179	8,411	6,548	5,546	535	0
Tonnes	t	8,014,607	397,782	1,296,073	1,164,112	796,662	791,454	776,233	631,938	594,020	483,929	432,940	344,753	278,810	25,903	0
Total Development	m	179,428	4,507	15,937	21,966	20,325	19,858	19,650	16,615	13,137	13,411	13,281	9,842	9,640	1,259	0
Backfill																
Paste fill	t	13,609,555	0	0	345,050	1,442,550	1,481,116	1,361,504	1,265,701	1,384,217	1,231,636	1,332,864	1,375,406	1,247,921	1,075,434	66,156
Rockfill	t	1,037,110	0	0	12,580	83,620	89,540	88,430	97,680	125,060	103,600	102,490	109,890	117,474	100,086	6,660
Total Ore Mined																
Tonnes	t	17,815,435	1,662	43,216	419,798	1,695,065	1,788,605	1,788,999	1,786,926	1,793,375	1,783,128	1,788,480	1,788,572	1,793,387	1,272,706	71,515
Daily Tonnage	tpd		9	118	1,150	4,631	4,900	4,901	4,896	4,900	4,885	4,900	4,900	4,900	3,487	795
Grade	g/tm	3.62	1.86	3.92	3.90	3.80	4.16	3.91	3.96	3.36	3.52	3.50	3.40	3.29	3.00	3.55
Ounces	**oz.**	**2,070,799**	**100**	**5,443**	**52,701**	**207,330**	**239,492**	**224,644**	**227,605**	**193,788**	**201,846**	**201,481**	**195,680**	**189,754**	**122,773**	**8,163**

16.9 Mine Services

16.9.1 Ventilation

InnovExplo, in collaboration with ODV, was responsible for developing the strategy and for estimating the associated costs for an underground ("U/G") ventilation system. Dello Ventilation were engaged to assist InnovExplo with the ventilation design work.

The software VentSim was used to simulate and estimate the fresh air requirements for the mine. The fresh air requirement has been established for each of the mining zones: Cow, Valley, Shaft, Mosquito, and Lowhee. The air requirement complies with the Canadian Standards Association ("CSA") prescribed ventilation rate. The minimum requirement to dilute emissions from the mobile machinery listed in Table 16-27 is 0.06 cubic metres per second per kilowatt ("$m^3/s/kW$") of diesel-powered equipment. The table shows the quantity of equipment required for LOM. In estimating the aggregate rate of fresh airflow for the entire mine, a utilization rate has been applied to account when machines may be mechanically unavailable, or simply not in use. The mine uses a full diesel fleet.

Table 16-27: List of mobile equipment

Equipment Type	Diesel Engine Power		Quantity Max(1)
	(kW)	(hp)	
Roadheader	Electric	Electric	2
Jumbo 2 Booms	110	147	6
Bolter Type 1	93	125	4
Bolter Type 2	110	147	3
Scissor Lift	110	147	6
Loading Unit	110	147	3
LHD 10 t	235	315	11
Truck 51 t	515	690	17
Production Drill	74	99	5
Boom Truck	160	214	5
Personnel Carrier	170	228	2
Maintenance Truck	170	228	2
Service Truck	170	228	2

Equipment Type	Diesel Engine Power		Quantity Max[1]
	(kW)	(hp)	
Fuel Lube Truck	110	147	2
Water Cannon Truck	110	147	1
Grader	168	225	1
Light Truck	126	169	6
Tractor	78	105	4

(1) Represents the number of units when the fleet is fully deployed.

The utilization rates are 75% for production equipment, 30% for most service equipment, and 10% for machinery that operates primarily with electricity. Based on these utilization rates, the fresh air requirement for LOM has been established at 592 m^3/s (1.26 million cubic feet per minute ("M CFM")). The required airflow capacity for each of the zones has been determined based on the production rate. The Lowhee and Mosquito zones will share the same fans and heaters. Once Lowhee is mined out, the fan will be moved to Mosquito.

All main fans and heaters will be installed on surface. All will be installed in a horizontal parallel arrangement. The heaters and fans for Lowhee and Mosquito will be the one that was initially purchased for the ramp development and for Bonanza Ledge. Required ducting and accessories will be purchased to accommodate the dual parallel arrangement. All fans and heaters are equipped with the appropriate sound attenuation to maintain the adequate standards for the workers and nearby community.

The different fan operating points, nominal motor power, and heater power for each zone are shown in Table 16-28.

Table 16-28: Main fans and heaters specifications

Zone	Max Fresh Air Requirement	Total Fan Pressure Requirement	Fan Motor Nominal Power	Heaters Capacity
	m^3/s (kcfm)	Pa (in. w.g.)	kW (hp)	MW (Mbtu/h)
Shaft/Valley	519 (1,100)	3,975 (19.3)	2 x 1,567 (2,100)	21.1 (72)
Cow	265 (561)	3,250 (13)	2 x 672 (900)	12.3 (42)
Lowhee and Mosquito	175 (372)	775 (3.1)	2 x 149 (200)	5.1 (17.5)

The ventilation system layout consists of four independent air intakes for the five mining zones: Cow, Shaft and Valley, Mosquito, and Lowhee. An exhaust air raise will also be constructed in the Shaft Zone to avoid excessive airspeed in the ramp towards the Valley portal. The exhaust raise is left open and is not equipped with any fans. Each zone is supplied with fresh air through a raise, breaking through each production level. Bulkheads with drop board regulators will control the fresh air entering the production levels. In addition to the exhaust raise in Shaft, the exhaust air will be directed towards the Cow and Valley portals. The Valley portal will be equipped with a double automatic door. It will only be closed prior to blasts in order to direct the fumes towards the Cow portal to avoid contaminating the ambient air at proximity of the community and mine surface installations.

Figure 16-46 shows a longitudinal view of the ventilation layout for LOM.

The ventilation raises have been sized as follows:

- Shaft fresh air raise from surface to level S1170, 7.5 m (24.6 ft). The excavation method is pilot slashed.
- Shaft fresh air raise from level S1170 to S1020, 5.8 m (19 ft) diameter. The excavation method is pilot slashed.
- Shaft fresh air raise from level S1020 to S0870, 3.5 m (11.5 ft) diameter. The excavation method is raisebore.
- Shaft fresh air raise from level S0870 to bottom, 3 m (9.8 ft) diameter. The excavation method is raisebore.
- Shaft return air raise from level S1260 to surface, 6.0 m (20 ft) diameter. The excavation method is pilot slashed.
- Cow fresh air raise from surface to level C1260, 4.5 m (14.8 ft) diameter. The excavation method is pilot slashed.
- Cow fresh air raise from level C1260 to level C1170, 3.5 m (11.5 ft) diameter. The excavation method is raisebore.
- Cow fresh air raise from level C1170 to level bottom, 3 m (9.8 ft) diameter. The excavation method is raisebore.
- Lowhee and Mosquito fresh air raise have all been sized at 3.5 m (11.5 ft) diameter. The excavation method is raisebore.

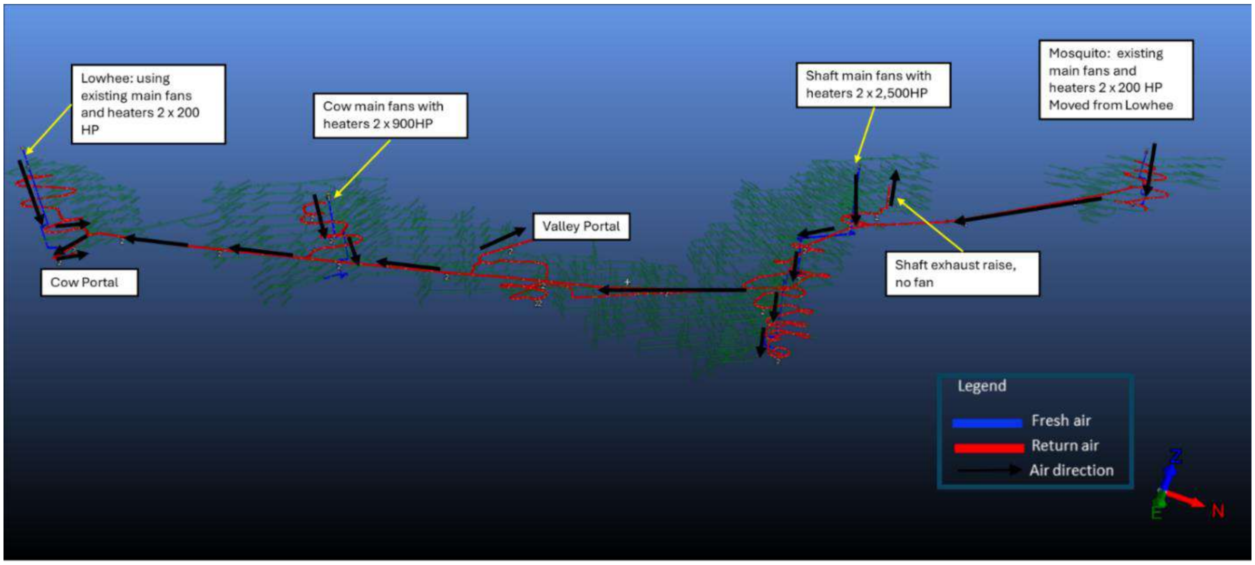


Figure 16-46: Ventilation layout LOM

16.9.1.1 Production Level and Development Ventilation Layout

The network was created to meet the total fresh air requirement. Given the shifting production profile from each zone, the total required airflow in each zone changes over time. Main fans will therefore be equipped with variable speed drives to be able to accommodate advanced ventilation controls to optimize its speed and consequently reduce energy costs.

The ramp will be developed with the Roadheader from the Cow portal to Shaft level S1170 to access the initial ventilation raise. Two 250 hp auxiliary fans will push air in a twin 60-inch semi-rigid plastic duct system. The system will provide enough air for two trucks and an LHD. Auxiliary booster fans will be installed at every kilometre to supply the required amount of air at the working face and minimize leakage. For the Roadheader ventilation, a third duct in negative pressure is installed at the working face to extract the dust generated. The dusty air is carried to a scrubber unit to remove the dust and discharged back in the ramp. The scrubber unit will be moved closer to working face as required to avoid long runs of negative pressure duct. Once the Valley portal will be developed, the fans that were planned for Cow portal will be installed as exhaust in the Valley portal with double doors and two ducts to carry the air between the two doors. The fans will be used until the Shaft intake raise fans are installed to create the ventilation circuit between the portals and Shaft. At that point the doors will remain opened. The air intake will be performed from the Lowhee intake raise and the Cow portal. During winter, the current installation of the Cow portal heater and fans will be used to heat the air. The duct will be installed at 30 m inside the portal to discharge the warm air. For the Lowhee intake raise, the main fans and heaters will also be installed to supply the heated towards the Valley portal. The Cow portal fan will not be operational during the warm months of the year. The layout of the installation is shown in Figure 16-47.

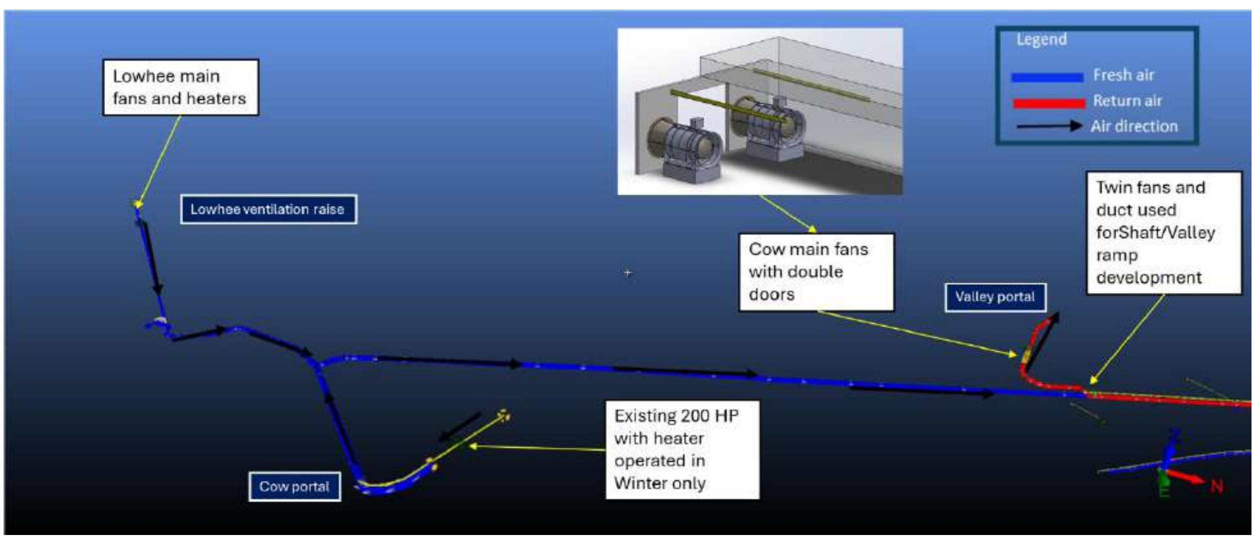


Figure 16-47: Ramp development Shaft/Valley layout

Most of the production levels will be ventilated with the internal drop raises that will create a ventilation circuit to reduce the amount of auxiliary ducting required as shown in Figure 16-48.

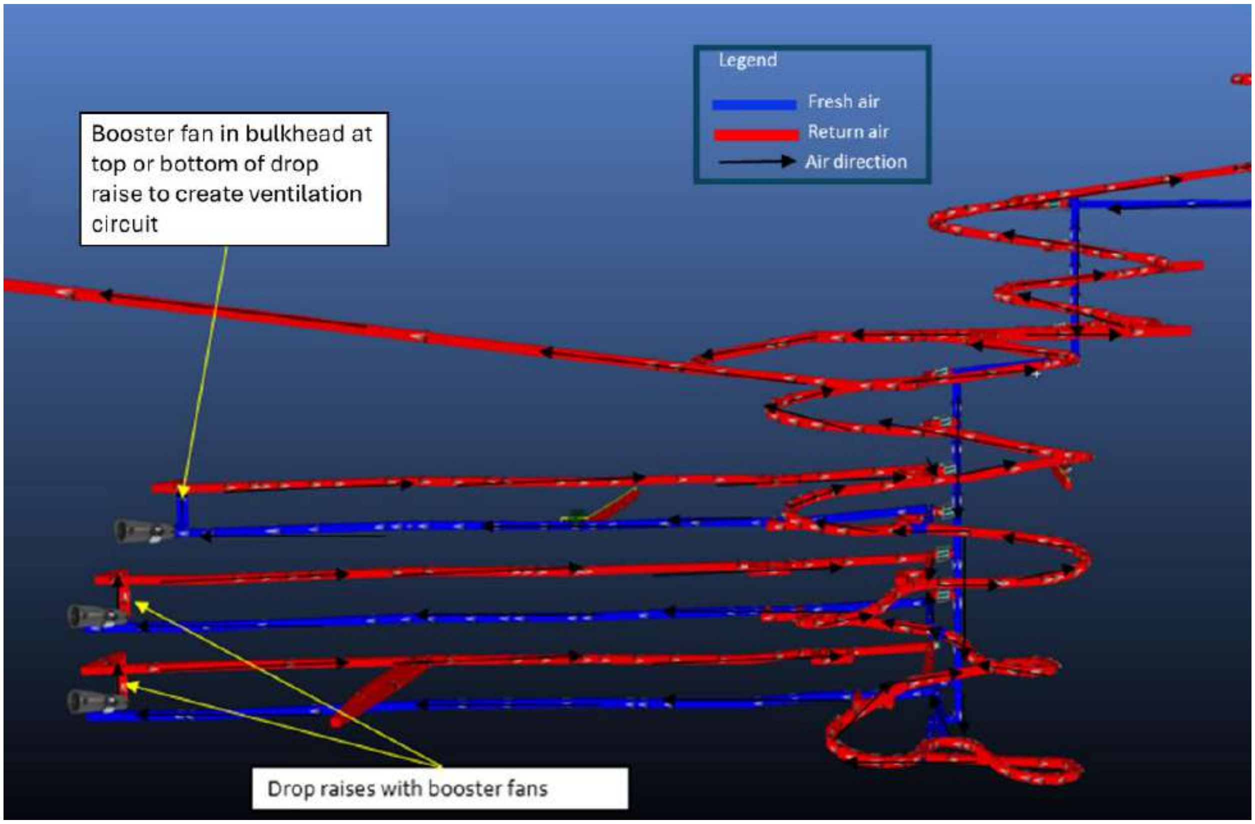


Figure 16-48: Drop raise ventilation on levels

Auxiliary fans of 100 hp will supply the fresh air at the extremity of the level for an LHD. Smaller auxiliary fans (50 hp) will be used, as needed, to ventilate each heading again to supply enough air for an LHD. The drop raises are equipped with a bulkhead and a 100 hp fan supplying 170 thousand of cubic feet per minute ("kcfm") for the two levels. The layout of the production level ventilation system with drop raises is shown in Figure 16-49. The ventilation design with the drop raises will enable the operation to have trucks being loaded up to the drop raise and the possibility to have multiple LHDs on a given level.

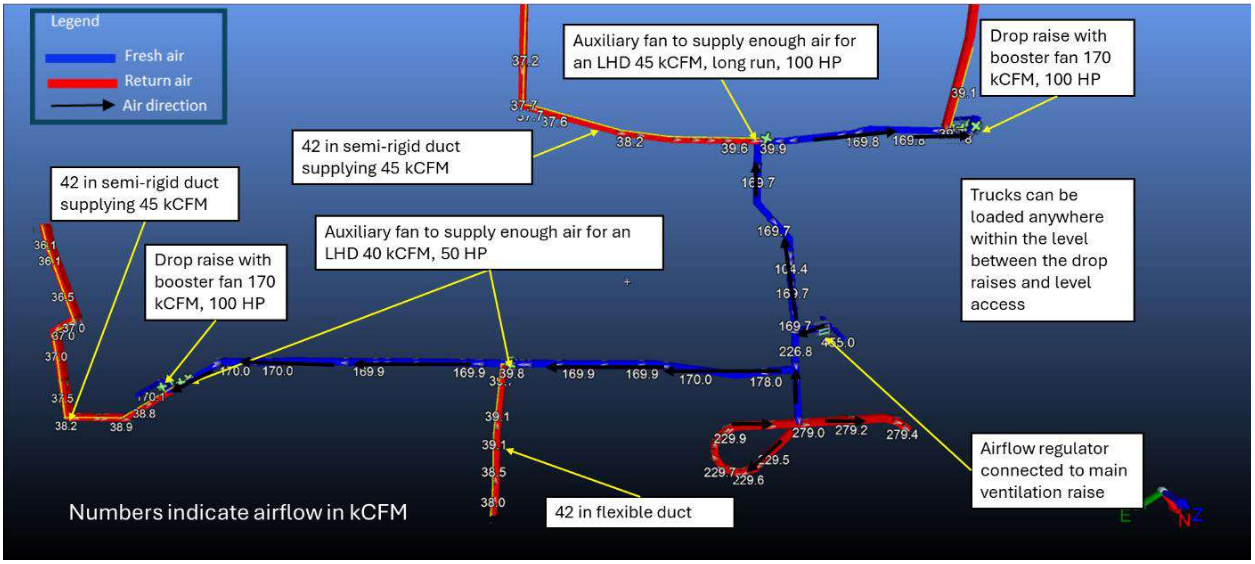


Figure 16-49: Production level auxiliary ventilation with drop raises

For the levels without drop raises, an auxiliary fan downstream of the regulator pushes 100 kcfm in a 54-inch semi-rigid duct plastic duct to discharge 60 kcfm at the truck loading station with the use of a manual damper. The remaining airflow is carried at the extremity of the level to supply enough air for an LHD. The ventilation layout of a typical production level is shown in Figure 16-50.

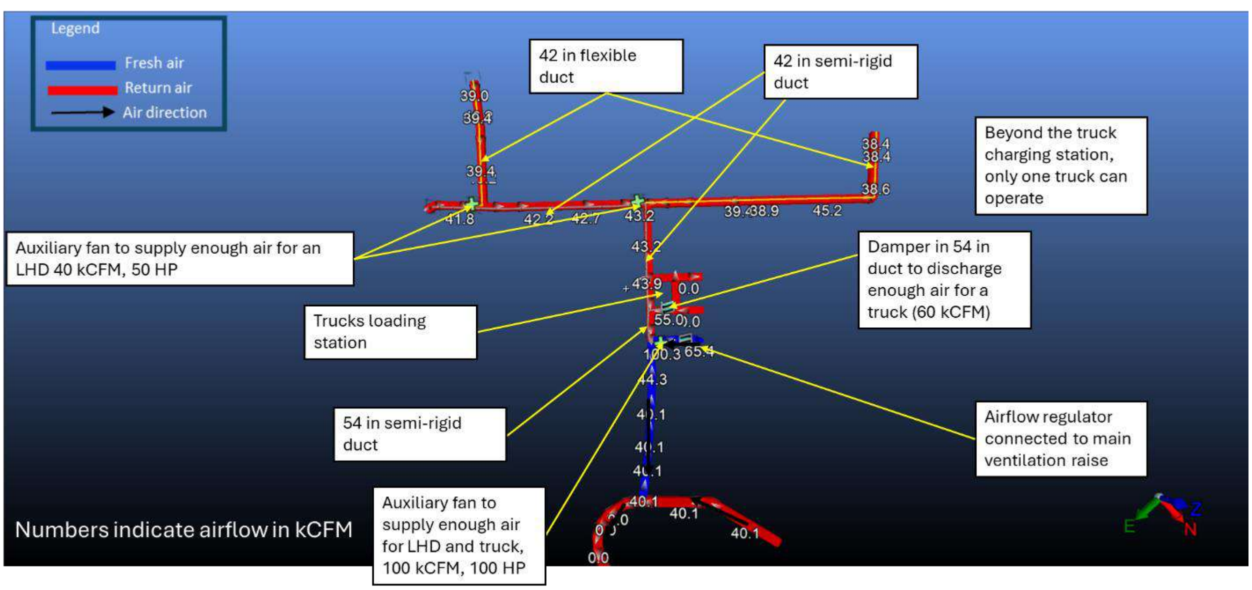


Figure 16-50: Production level ventilation layout without drop raises

16.9.2 Dewatering

InnovExplo, in collaboration with the pump distributor Technosub, and ODV, was responsible for establishing a dewatering strategy for the Project.

The design basis, assumptions, and work performed by InnovExplo as it relates to dewatering operations has been summarized below. The dewatering solution must incorporate strategies for management of all sources of water:

- Flooded historic workings – It is assumed that all old workings are flooded below 1,226 m elevation ("EL"). It is estimated to contain a total of approximately 1,090,000 m^3 of water based on water levels observed on the field (Figure 16-51).

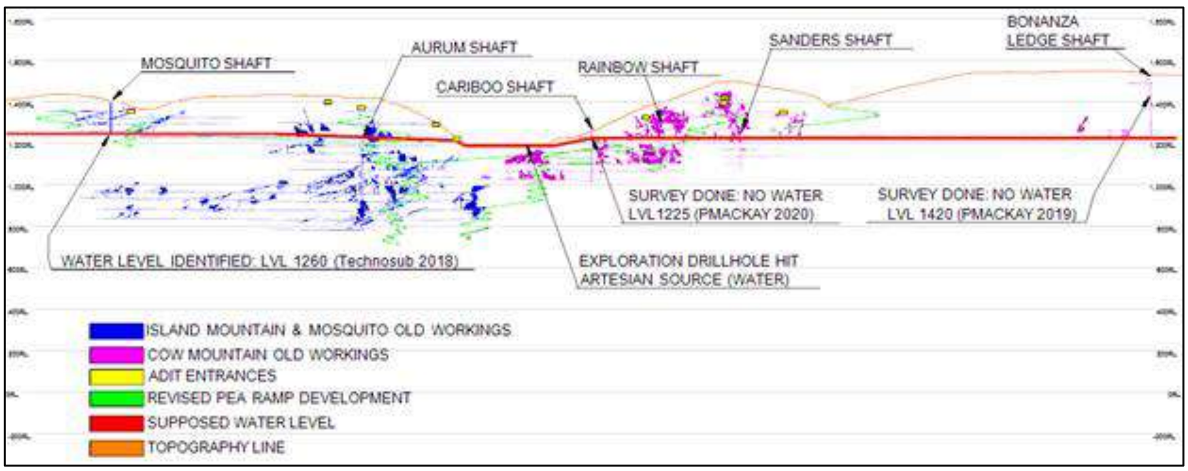


Figure 16-51: Flooded historic workings and estimated water level

Technosub, in collaboration with ODV, conducted a water level measurement in the historic Mosquito shaft (WSP, 2019a) and InnovExplo revised old working excavation volumes. InnovExplo assessed the excavation volumes of the old workings on the basis of the revised 3D model developed by ODV following a digitization by InnovExplo in 2016 of the old excavation plans provided by ODV. The model was subsequently enhanced with work done by ODV and with information gathered from the entire ODV DDH drilling database. Although the total volume associated with the 3D model is close to the reconciliation of the historical volumes mined, uncertainty remains as to the total volume of the actual voids.

- Groundwater inflow – All existing and new excavations are assumed to be drain cells into which groundwater can flow. These numbers are explained in detail in Section 16.3 of this Report.
- Process water – It includes all water required for mine operations, including water requirements for mobile equipment, backfilling, U/G crushing, and mineral sorting, dust suppression, etc.

16.9.3 Historical Working Dewatering

Historical workings are embedded within the various zones of the Project, positioned between and around the different mineralized lenses. Below 1,226 m EL, they are assumed to be completely flooded. In order to backfill them safely and work close to them, starting in Q4 Year -3, they will be gradually dewatered prior to the advance of development heading at depth until water is completely removed.

As the main ramp progresses downwards below 1,226 m EL, level accesses will be opened, remaining a safe distance away from the flooded workings. From there, specialty boreholes with pre-installed valve casings will be drilled to connect to the historical workings and allow for controlled pumping using the pressure from the water head. Water will be managed through the mine pumping network but will bypass the water clarification system (Mudwizard) and will be directly brought to the water treatment plant on surface.

Dewatering operations are expected to run at a limited pumping flow rate during the period leading up to the commissioning of the MSC water treatment plant scheduled for Q4 Year -2. It is estimated that the dewatering operation will span approximately three years, with a maximum considered pumping rate of 125 m^3/h. This rate is expected to decrease in the second half of Year -1 as dewatering progresses to the lower levels of the mine, specifically within the Shaft and Valley zones, once those areas are reached.

16.9.4 General Dewatering Design

16.9.4.1 Dewatering Requirements

Dewatering flow estimates were established based on projected groundwater infiltration rates and the anticipated water consumption associated with the equipment fleet required to implement the mine plan. The dewatering system was sized with sufficient capacity to accommodate peak inflows and provide operational redundancy. The design was based on the base case infiltration rate projected for the period Year -1 to Year 10, estimated at 6,000 m^3/day (250 m^3/h) (see Section 16.3.2), with an added 50% contingency. This margin is adequate to support the alternative scenario involving higher bedrock hydraulic conductivity, corresponding to an estimated 8,700 m^3/day (363 m^3/h).

The total estimated flow was distributed across individual zones proportionally, based on their relative size and geometry. Zone-specific dewatering needs were compiled by summing the estimated water volumes generated per zone, considering both infiltration rates and the average number of operating equipment units expected, aligned with each zone's contribution to the production plan (Table 16-29).

Table 16-29: Estimated specific dewatering requirements per zone

Mining Zone	Average Equipment Fleet (units)	Estimated Infiltration Rate(1) (m³/h)	Estimated Operational Water Use(2) (m³/h)	Contingency for peak flow (m³/h)	Total Dewatering Volume (m³/h)
Lowhee(3)	-	23	-	12	35
Cow	9	57	26	29	112
Valley	9	41	26	20	86
Shaft	13	100	37	50	187
Mosquito	6	29	16	14	59
Total	**37**	**250**	**104**	**125**	**479**

(1). The infiltration rate was estimated for the entire sector as a whole, rather than on a zone-by-zone basis. It should be noted that significant variability in infiltration rates between zones is possible.

(2). Operational water use estimates include drilling, dust control, pipelines leak, backfill and washing.

(3). Equipment count and estimated operational water use for the Lowhee Zone are not listed, as this zone will be mined using the same equipment fleet allocated to the Mosquito Zone.

16.9.4.2 Dewatering Strategy

The following is the general plan for managing water from both infiltration and operational activities. Depending on the ramp configuration, certain levels are equipped with drain holes to minimize reliance on pumping. Where drain holes are not feasible, water will be managed using submersible pumps installed in a Wilson sump configuration, allowing transfer to another sump via the ramp system (Figure 16-52).

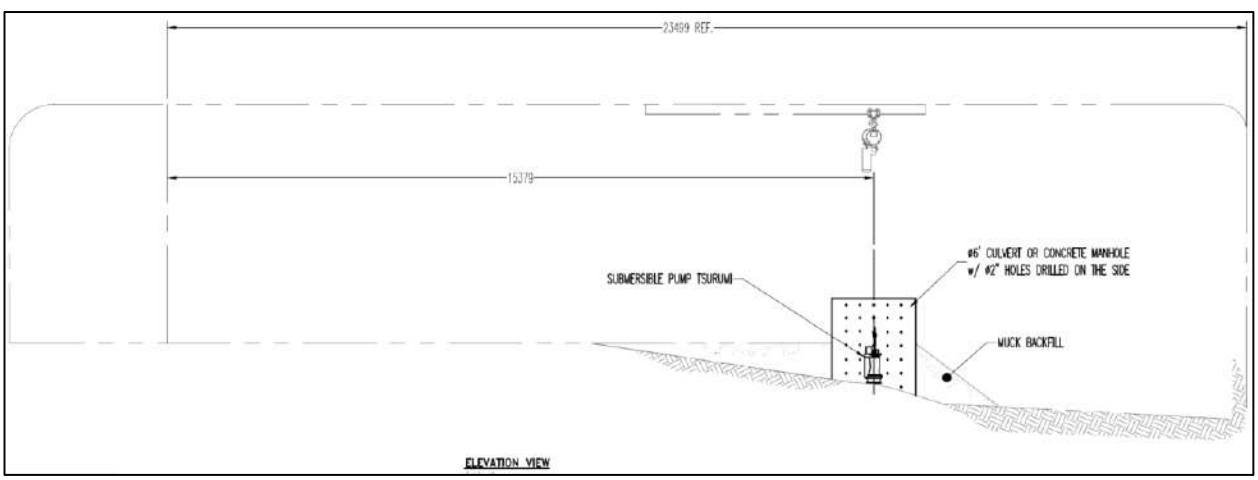


Figure 16-52: Typical sump using the Wilson sump principle

At the start of the Project, and until the water clarification systems in the Shaft and Valley zones (Shaft Mudwizard and Valley Mudwizard) become fully operational, water from mining operations will be pumped to a temporary surface water clarification system located near the Cow portal entrance. Treatment will be carried out using portable sump units, each consisting of a tank, a skid-mounted system, and two 60 hp Technoprocess pumps (Figure 16-53).

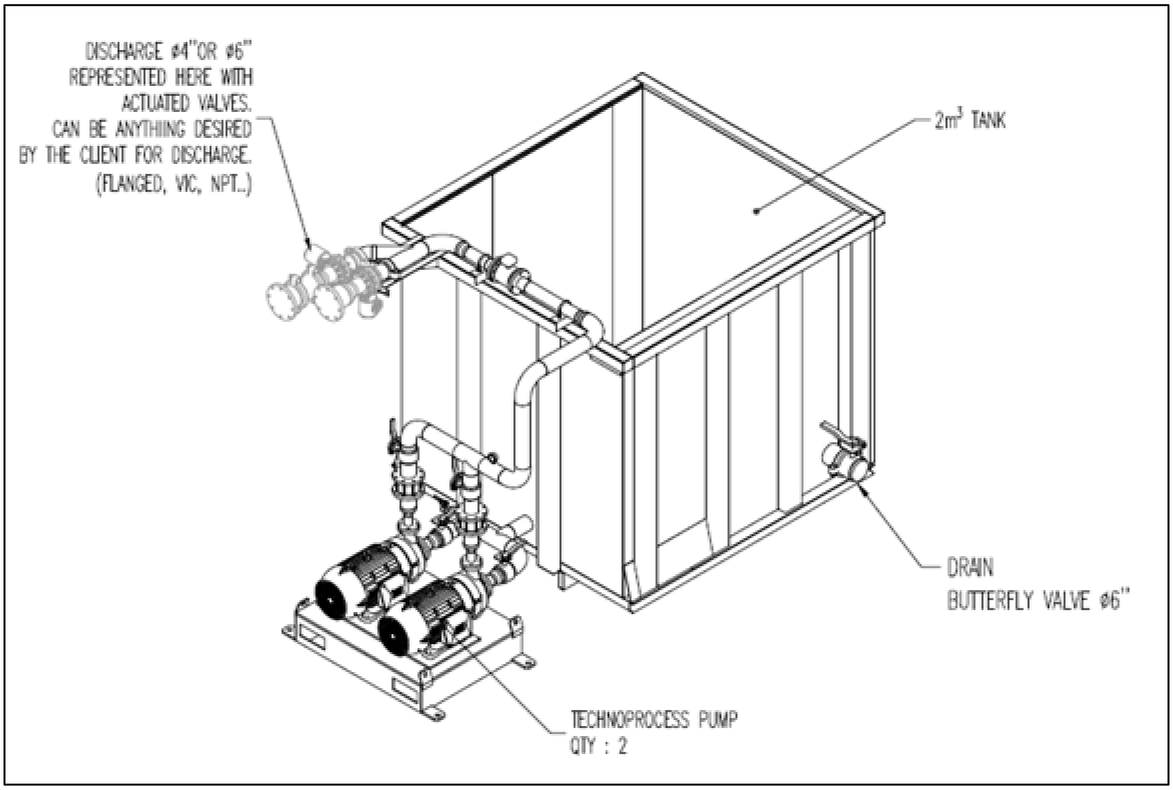


Figure 16-53: Typical drawing for the tank on skid and technoprocess pump

Once the water clarification systems are operational, collected water will be pumped to the Mudwizard units, where it will be treated and the clarified water redistributed within the mine to support ongoing operations. To supply operational areas with clean water, Tsurumi LH series submersible pumps installed in tanks will feed the mine service water line, distributing water to various levels.

At each water clarification station, one pump will deliver water to lower levels, while another will supply higher levels. The system is designed to pump water to the highest practical level, maintaining a target pressure of approximately 100 psi. Once water reaches the uppermost distribution point, it will be directed into another tank equipped with a secondary Tsurumi LH series submersible pump for further distribution.

Any clarified water not used in operations will be pumped back to surface using high-pressure stationary Technojet pumps. A typical water management flow sheet is illustrated in the Figure 16-54.

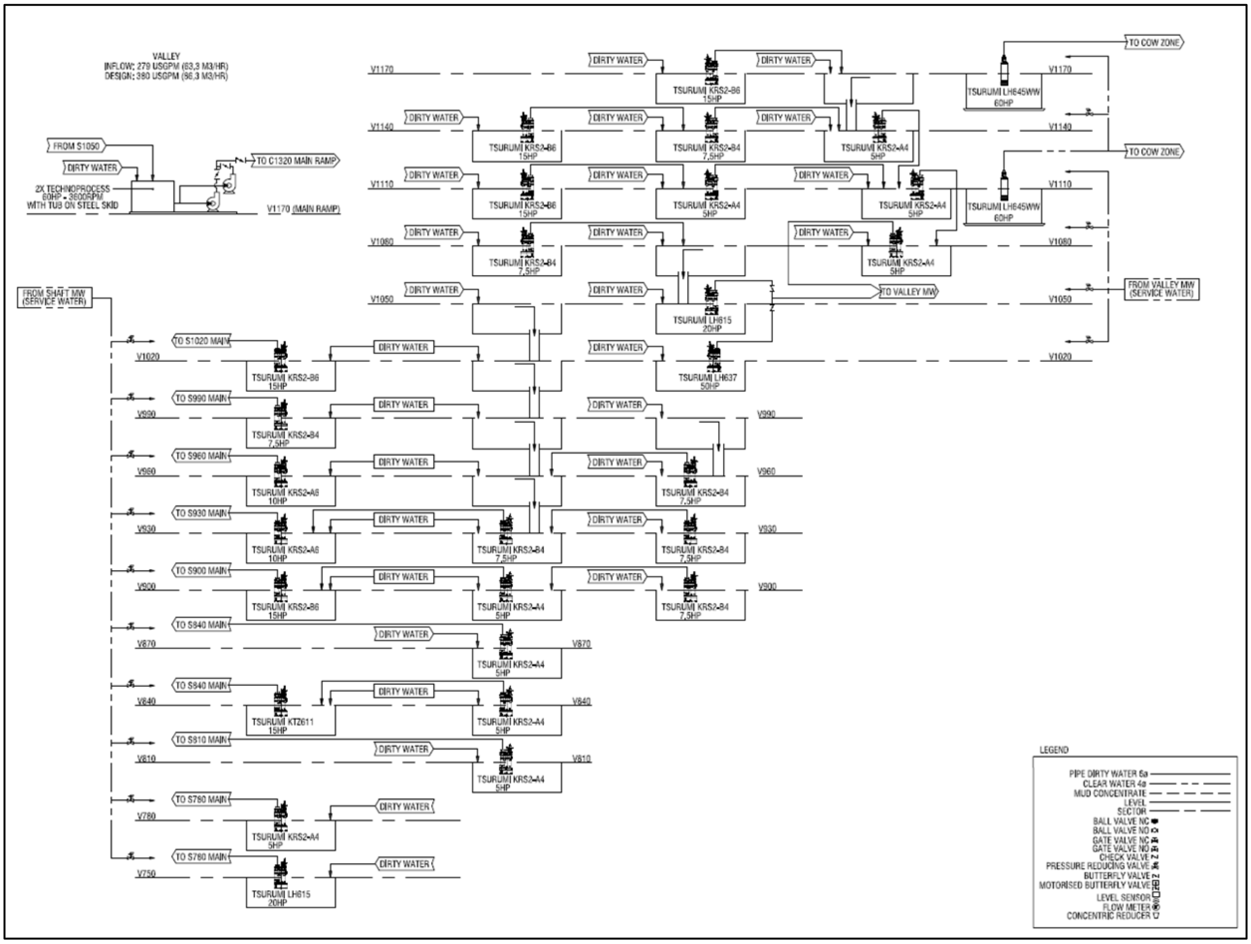


Figure 16-54: Typical water management flow sheet (Valley Zone)

16.9.5 Water Clarification System

Contaminated water from various areas of the mine is first directed to a conditioning sump, where it is agitated to maintain solids in suspension. A heavy-duty submersible pump, capable of handling coarse particles, transfers the slurry to a Mudwizard polymer dosing system, where polymer pucks are used to initiate flocculation.

The flocculated water then flows to a series of settling cones, where solid-liquid separation occurs. This system is engineered to reduce the concentration of suspended mine sludge by a factor of 10:1, significantly improving water clarity and enabling reuse of the treated water in mine operations.

The resulting clear water is collected in a clean water sump, where Tsurumi LH submersible pumps distribute it to both upper and lower operational levels. Any excess water not required for operations is pumped to surface using a multistage centrifugal pump.

Meanwhile, the underflow from the settling cones—managed by peristaltic pumps—is directed to the slurry discharge system. At the end of the process, decantation sumps are used to thicken the slurry, making it suitable for handling by LHD units. The thickened material is then transported and disposed under control in empty stopes as backfill.

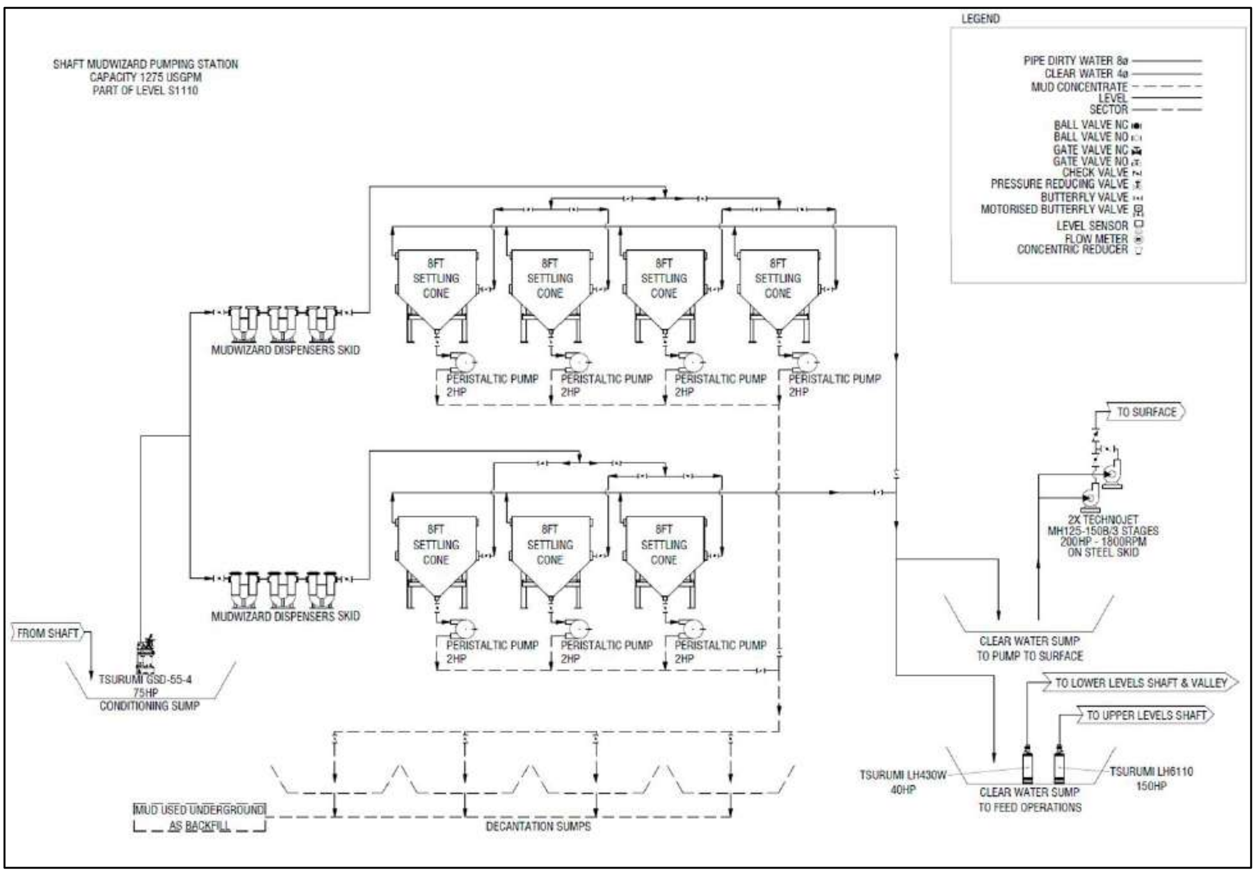


Figure 16-55: Mudwizard system schematic

16.9.6 Underground Electrical Distribution

InnovExplo was responsible for developing the strategy for the underground electrical distribution system. Meglab Electronique oversaw the design and assessment of the complete underground electrical infrastructure.

The Project site power distribution input voltage is 13.8 kV, that is step down to 600 V and 1,000 V with dual output voltage electrical substations. Two feeders will be deployed from Valley portal and Cow portal at surface to underground levels. Each zone can be powered from either Valley portal leg or Cow portal leg to allow redundancy and load balancing.

Fixed loads like fans and pumps will be fed from 600 V grid and mobile equipment like Jumbos, bolters etc. will be fed from 1,000 V grid. In summary, the electrical distribution will be done as follows:

- Underground main distribution voltage: 13.8 kV equipment;
- Underground fixed equipment (pumps, fans, battery chargers etc.): 600 V;
- Underground mobile equipment (Jumbos, bolters etc.): 1,000 V;
- Underground services (lighting, heating, ventilation, and air conditioning ("HVAC"), outlets, controls etc.): 120/208 V;

The Project scope for this Study includes high-level single line diagrams, load list, and bill of material ("BOM") listing the major equipment and major cabling fittings with their associated costs.

The design of the electrical distribution complies to all applicable codes, standards, and regulations.

All the electrical equipment electrical loads are assembled into the electrical load list, assuming a reasonable amount of mining activity in all zones and most levels. The actual mining activity will be better defined as the mine production plan is developed and this will affect the load list moving forward to the next design stage. The current electrical load list reflects a high, but not excessive, activity level and it is a suitable model for moving forward with the design. Switchgears on surface and on levels were estimated. The FS design includes 13.8 kV-600/1,000 V, 1 MVA, 1.5 MVA or 2 MVA mobile substations allocated for each level. As the mine development and production plan is further developed, the quantity and arrangement of the unit substations can be better defined. The reuse of mobile substations will also be possible depending on the progress of the mine development.

16.9.7 Underground Mine Equipment

Equipment selection was carried out based on the following criteria:

- Suitability for the planned size of the excavations;
- Ability to automate;
- Power output (kW) and associated ventilation requirements;
- Productivity;
- Average Mechanical Availability (%);
- Capital and operating costs.

InnovExplo, in collaboration with an independent, external consultant, Mr. Robert Hamilton, worked on the equipment selection. Mr. Hamilton has a background in maintenance and equipment supply.

A list detailing the equipment selected can be found in Table 16-27 in Section 16.8.1. Equipment quantities have been estimated to achieve the steady state mining rate of 4,900 tpd with allowances for spares of critical equipment types.

Six Jumbos with two-booms will be used to drill all rounds, which will be mainly related to the level access, haulage drift and ore access drift. Decline development, for main haulage and level access will be handled mostly by two Sandvik Roadheaders that will excavate at an average rate of 200 m/month, as provided by the contractor and equipment supplier quotations. Samples of different lithologies were sent to Sandvik laboratory in Austria to test and validate rock cutting performance with the road header. On that base, a conservative performance of 200 m per month was assumed for the Project, considering mucking, hauling, and ground support cycle.

Ore and waste material will be hauled using 51 t diesel trucks to fulfill the Project production. A fleet totalling 17 trucks, including 2 rentals trucks during peak period from Year 2 to Year 4, will be required to satisfy material movement requirements. Four trucks will be used for development, four for production and nine for transfer at the peak demand.

Given the size of the ore drifts, 10 t LHD units, which will be ready to be operated in a fully automated mode by Year 2, were selected to perform all mucking and backfilling tasks related to the stoping activities and the management of the waste material from the development heading. A total of 11 units are planned during the period of highest demand, including six units for development work, five units for stopes mucking, re-handling and backfilling activities.

Stopes will be drilled using three top hammer longhole drills suitable for drilling 89 mm blastholes up to 30 m and three down the hole ("DTH") drills that will be used for V30 slot raises drilling as well as production drilling.

An effective productivity of 61% over a 12-hour shift was considered for the performance of equipment associated with the development activities. An effective productivity of 54% over a 12-hour shift was considered for LHD and trucks in manual mode, and a productivity of 60% and 66% over a 12-hour shift was considered for LHD unit for the addition of tele-remote between shifts and fully automated mode, respectively.

16.9.8 Communication Network Automation

As the Project includes a significant automation component, the communication network is very important. A complete long-term evolution ("LTE") network will be deployed from the surface by the Valley and Cow portals to every underground level. This network will support voice and data communication and will be deployed everywhere in the mine.

Fiber-optic network who will be brought in every electrical substation, pumping stations, crushing stations, and conveying site. Each level will have LTE distribution, with LTE radio head connected to high quality radiating cable (supporting till 2 gigahertz ("GHz") radio frequency). This one can support Channel Aggregation ("CA") LTE exceeding 40 megabits per second ("Mbps") upstream bitrate for data and voice communication. Many options can be deployed, such as cameras, tracking, blasting with "SMART BLAST", telemetry of heavy equipment and production, autonomous vehicles, teleoperated equipment, automation, and others. This could provide a full control of pump stations, ventilation on demand, electrical station remote control operation (LHD, drill, haul trucks, etc.), and monitoring.

In addition, the security asset will be higher, with a tagging system that can provide the position of every equipment, worker, and visitor underground.

The main data network combined with the PLC and the LTE system brings all the information and control signals in both ways from the surface to everywhere underground. This can be realized to optimize the operation and cost.

The envisioned automation strategy for LHD units at the mine encompasses teleoperated mucking from the stopes and level loading bay that includes a re-muck as transitional ore storage. The concept of the loading bay located in the access level separates the teleoperated equipment from the man operated equipment, thus respecting regulation and permitting teleoperation for extraction and the loading of trucks at the load-out bays. On levels without a loading bay, fully automated stope mucking operations will be secured by physical gates restricting access to all other vehicles in the section associated with the mucking operation and will be limited to ore storage in designated ore re-muck drifts.

Based on discussions between equipment suppliers, ODV, and InnovExplo on the automated mode capabilities as well as based on automated mode operations currently underway in some operations, the operation's schedule was built around a production capacity averaging 4,900 tpd, out of which an average of 30%, starting in Year 2, is attributed to autonomous mucking over a 12-hour shift period assuming optimal setup conditions.

The basis for automation places strict demands on a robust communications network. A sample mine communications system is shown in Figure 16-56.

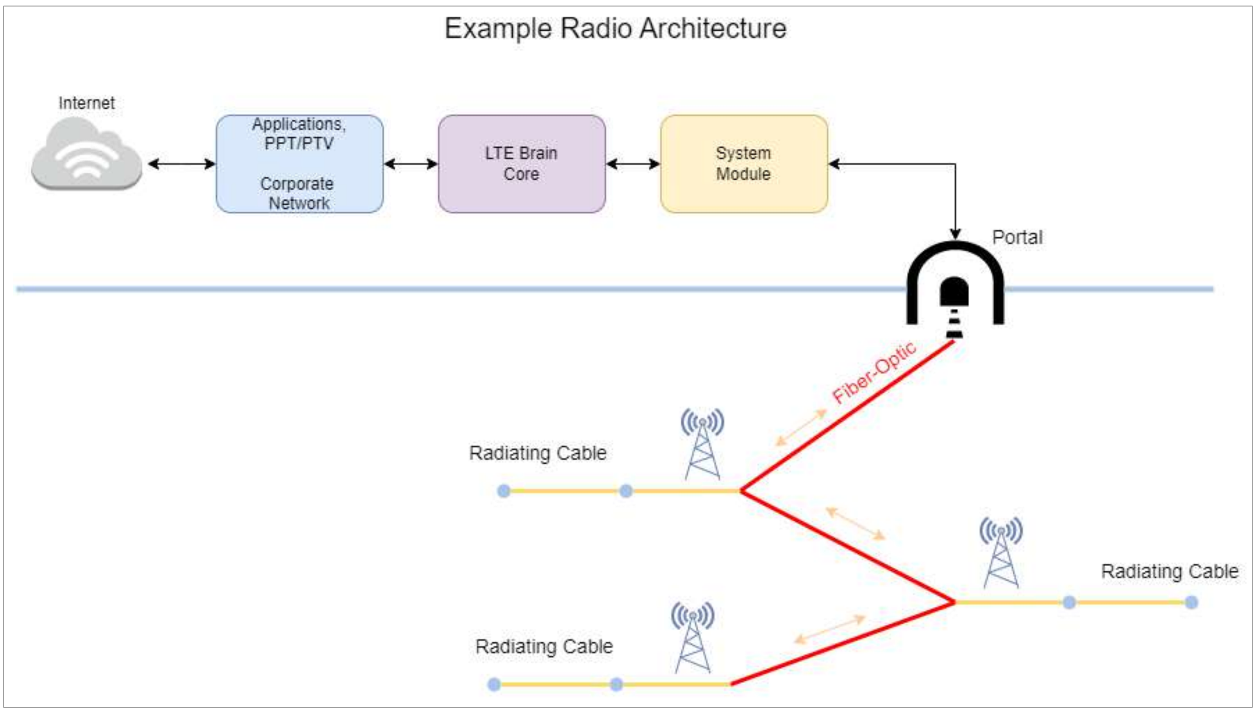


Figure 16-56: Schematic of a standard mine communications system

16.10 Mine Personnel

The underground mine personnel will operate on two 12-hour shifts per day for underground activities. Operations will be carried through 7 days a week, two shifts per day. It was assumed that the mine will operate 365 days per year.

The mine will be operated using three different rosters. A combination of a 4/3 and 5/2 (days working/days off) will be used for salaried personnel. Hourly employees are scheduled on the basis of 14 days on, 14 days off roster on a fly-in fly-out ("FIFO") schedule. The workforce will consist of maintenance crews, operating personnel, and contractor personnel.

The salaried staff during the production period will consist of an average of 169 people per rotation, including 25 office personnel, 110 operators, and 34 maintenance personnel. At the peak point in the life of mine, this results in 26 office personnel, 137 operators, and 39 maintenance personnel.

Table 16-30: Underground workforce per rotation - Distribution in time

U/G Workforce per Rotation	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4
Mine Services Office Personnel	6	6	10	10	10	10	10
Development Operators	14	28	39	39	39	39	34
Drilling and Blasting Operators	0	0	2	15	17	17	17
Mucking and Blasting Operators	11	21	33	49	53	55	50
Services and Construction Operators	9	13	20	21	20	15	17
Shotcrete (Contractors)	0	0	2	2	2	0	0
Diamond Drilling (Contractors)	0	4	6	6	6	6	6
Total U/G Mine Services	**40**	**70**	**113**	**143**	**147**	**141**	**134**
U/G Maintenance Office Personnel	12	9	16	16	16	16	16
Mobile Mechanics	3	4	14	20	22	22	16
Fixed Mechanics	0	1	1	2	2	3	3
Electrics	2	2	2	2	2	2	3
Electro Mechanics	1	2	2	3	3	4	4
Welders	2	7	7	6	7	5	7
Automation & Communication	1	1	1	1	1	1	1
Fuel & Lube Attendant	1	1	2	2	2	1	4
Total U/G Maintenance	**21**	**26**	**44**	**51**	**55**	**54**	**54**
Total U/G (for Year -3 to Year 4)	**61**	**96**	**157**	**194**	**201**	**195**	**189**

U/G workforce per rotation	Year 5	Year 6	Year 7	Year 7	Year 8	Year 9	Year 10
Mine Services Office Personnel	10	10	10	10	10	8	3
Development Operators	28	28	28	23	22	7	0
Drilling and Blasting Operators	18	18	17	18	18	14	1
Mucking and Blasting Operators	48	48	45	42	40	23	3
Services and Construction Operators	15	14	14	14	14	11	4
Swatcrete (Backfill) (Contractors)	0	0	0	0	0	0	0
Diamond Drilling (Contractors)	6	6	6	6	6	2	0
Total U/G Mine Services	**69**	**66**	**65**	**62**	**60**	**35**	**6**
U/G Maintenance Office Personnel	16	16	16	16	16	13	5
Mobile Mechanics	15	15	14	13	12	5	2
Fixed Mechanics	3	3	3	3	3	3	0
Electrics	3	3	3	3	3	3	3
Electro Mechanics	4	4	4	4	4	2	2
Welders	6	4	4	4	4	4	3
Automation & Communication	1	1	1	1	1	1	1
Fuel & Lube Attendant	4	4	4	4	4	4	4
Total U/G Maintenance	**53**	**50**	**50**	**49**	**48**	**36**	**20**
Total U/G (for Year 5 to Year 10)	**178**	**174**	**170**	**161**	**158**	**101**	**31**

17. Recovery Methods

17.1 Introduction

The Cariboo Gold Project will ramp up to a processing capacity of 4,900 tpd at the MSC, located in the town of Wells.

The processing flowsheet includes the following unit operations: underground crushing and conveying to the surface, screening, ore sorting and tertiary crushing, grinding and gravity concentration, and flotation and tailings dewatering. All mill tailings are returned underground as paste. The flotation concentrate is trucked offsite for sale and the gravity concentrate undergoes further processing on a shaking table, followed by refining to produce doré bars.

17.2 Concentrator Process Design Criteria

The process design criteria are presented in Table 17-1.

Table 17-1: Process design criteria

Process Design Criteria	Unit	Value
Average Feed Grade	g Au/t	3.6
ROM Tonnage	tpd	4,900
Availabilities		
▪ Underground crushing	%	65.0
▪ Crushed ore reclaim and ore sorting	%	73.0
▪ Grinding to paste plant	%	92.0
Fine Ore Abrasion Index	g	0.26
Ore Sorter Concentrate Abrasion Index	g	0.34
Solids Specific Gravities		
▪ ROM	-	2.84
▪ Ore Sorter Concentrate	-	2.87
▪ Ore Sorter Tailings Specific Gravity	-	2.80
▪ Flotation Concentrate Specific Gravity	-	3.6
▪ Flotation Tailings Specific Gravity	-	2.9

Process Design Criteria	Unit	Value
Mass Pulls		
▪ Underground Crushing Fines (screening U/S)	%	30.0
▪ Coarse Fraction to Ore Sorting	%	70.0
▪ Fine Fraction Bypassing Ore Sorting	%	30.0
▪ Ore Sorting Concentrate (combined)	%	50.0
▪ Primary & Secondary Gravity Concentration	%	0.037
▪ Rougher Flotation	%	19.0
▪ 1st and 2nd Cleaner Flotation	%	50.0
▪ Cleaner-scavenger Flotation	%	10.0
▪ Flotation Concentrate (from rougher feed)	%	4.0
Gold Recoveries		
▪ Crushing and Ore Sorting Circuit	%	97.0
▪ Primary & Secondary Gravity Concentrate	%	49.0
▪ Rougher Flotation	%	99.0
▪ Cleaner Flotation	%	94.0
▪ Overall	%	93.0
Grind Size to Rougher Flotation	µm	190
Grind Size to Cleaner Flotation	µm	25

17.3 Simplified Flowsheet and General Arrangement

The following images show the simplified flowsheet (Figure 17-1) and the overall general arrangement ("GA") (Figure 17-2 to Figure 17-4) of the Project.

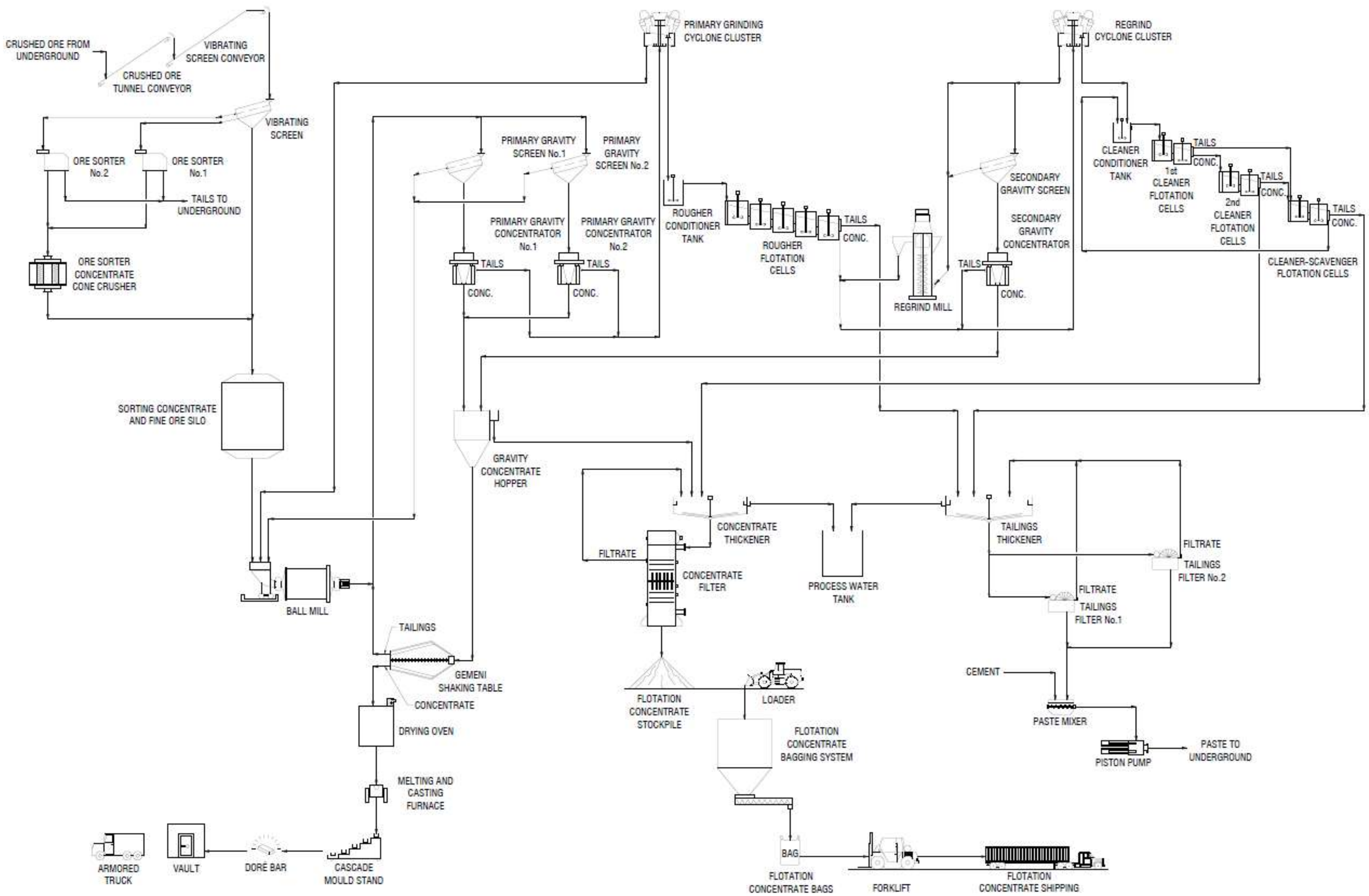


Figure 17-1: Process simplified flowsheet

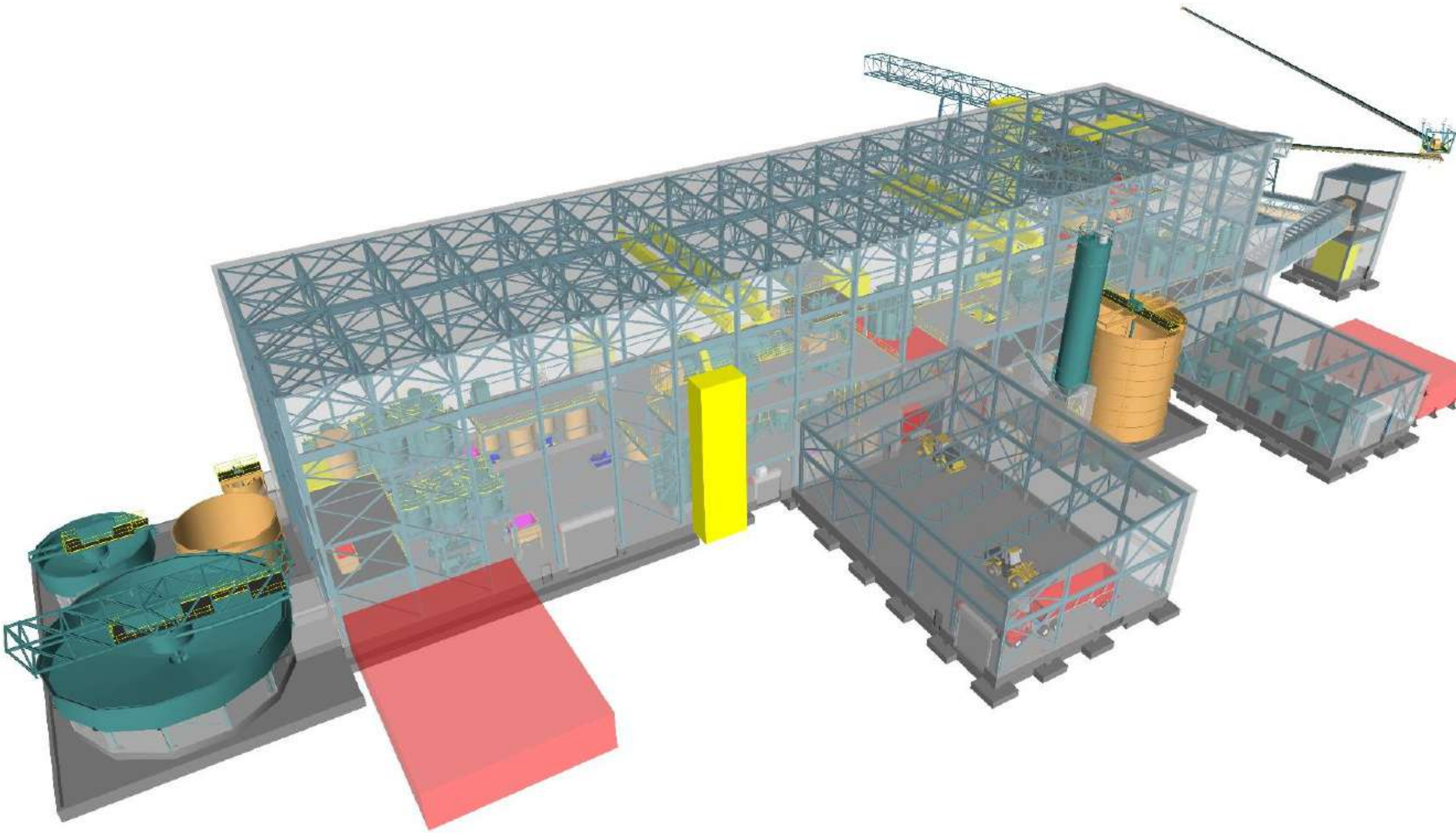


Figure 17-2: Cariboo Project GA (western view)

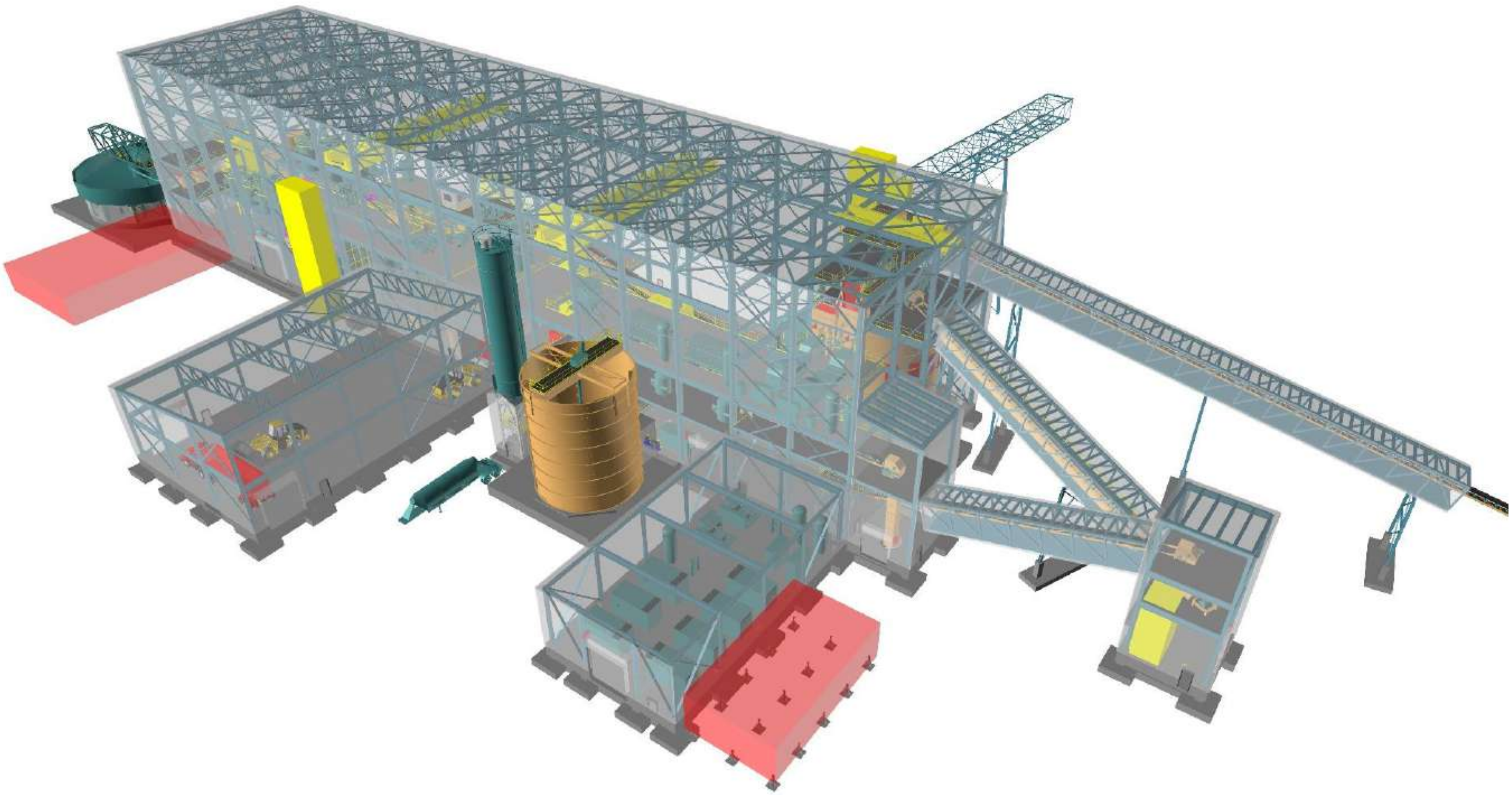


Figure 17-3: Cariboo Project GA (southern view)

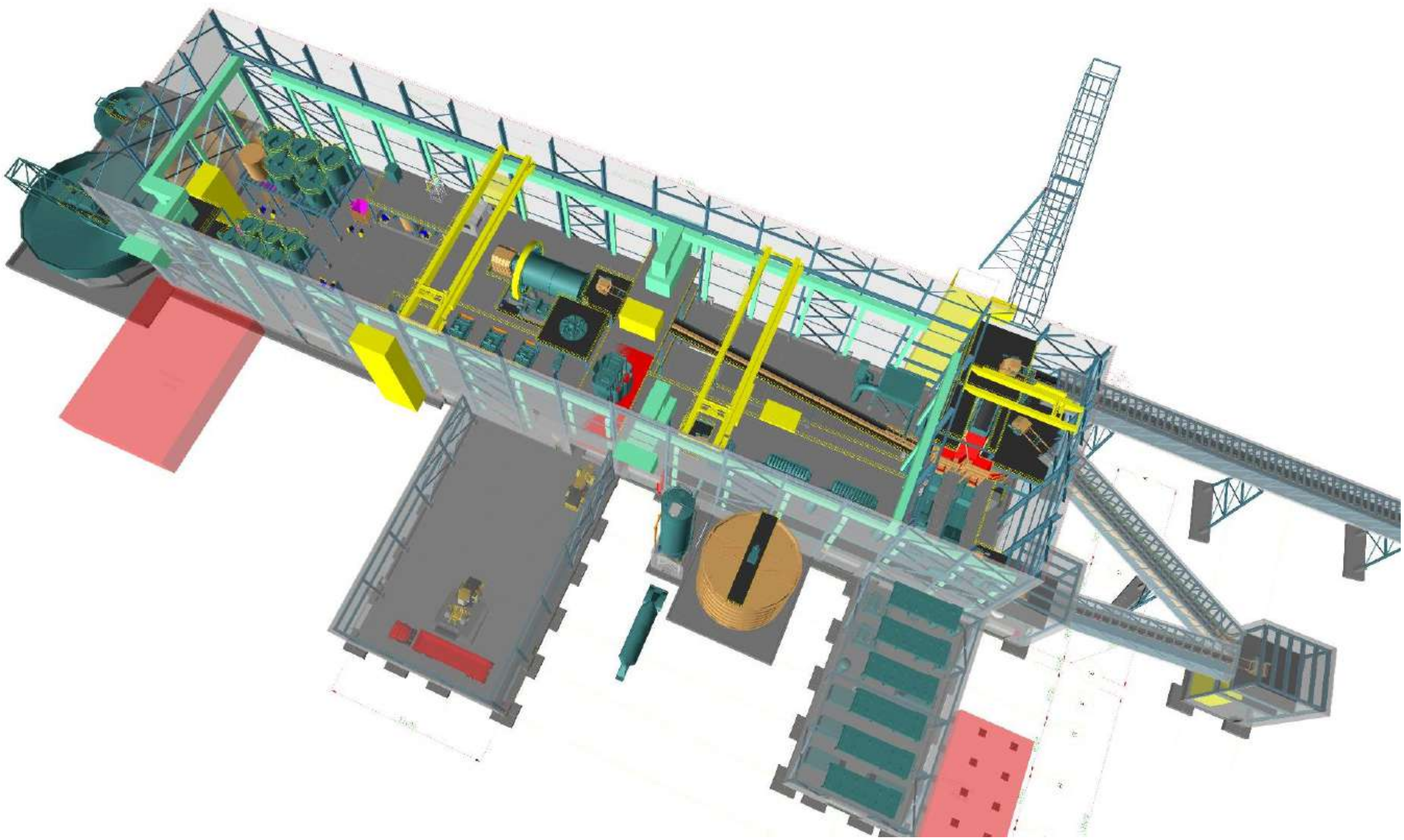


Figure 17-4: Cariboo Project GA (top view)

17.4 Underground Crushing and Screening

17.4.1 Underground Crushing

Underground crushing is discussed in Section 16.7 as part of the underground infrastructure scope. Crushed ore, with a P80 of 127 mm, will be delivered to the surface by a long-distance belt conveyor at a throughput of 4,900 tpd. The conveying system operates 17.5 hours per day, equivalent to 280 tph at 73% availability.

17.4.2 Vibrating Screen

The run of mine material will be fed to a double-deck vibrating screen with a top screen aperture of 35 mm and a bottom screen aperture of 17 mm. The screen undersize, referred to as "crushing fines" and representing 30% (84 tph) of the ROM, will bypass ore sorting and be sent directly to the sorting concentrate and fine ore silo. The coarser material retained on the top deck will be directed to Ore Sorter No.1, while the finer material retained on the second deck will be sent to Ore Sorter No.2. Overall, 70% (134 tph) of the retained material will be classified as "coarse fraction" and sent to Ore Sorter No.1, while 30% (62 tph) will be classified as "fine fraction" and sent to Ore Sorter No.2.

17.5 Ore Sorting and Tertiary Crushing

17.5.1 Ore Sorting Circuit

Two ore sorters will be used upstream of the mill to reduce the volume of material processed at the plant. Both will operate at 73% availability, handling a combined feed of 3,430 tpd.

Ore Sorter No.1, equipped with a combined sensor system featuring dual-energy X-ray transmission sensors, will process the coarse fraction (134 tph) from the vibrating screen. Ore Sorter No.2, using dual-energy XRT technology, will process the fine fraction (62 tph).

The ore sorting circuit will achieve a combined mass pull rate of 50%, recovering 98 tph of ore sorting concentrate. The concentrate will be conveyed to tertiary crushing via the ore sorters concentrate discharge conveyor. This conveyor will be equipped with a belt scale. The crushing fines, particles too small to be effectively sorted, will bypass the sorters and report directly to the fine or silo.

The 98 tph of ore sorter tails will be transported back underground via the ore sorter tails conveyor to a mine raise and will be disposed of as waste rock. This conveyor will be equipped with a belt scale.

The ore sorting area is serviced by the ore sorting area overhead crane.

17.5.2 Tertiary Crushing

The combined ore sorter concentrate, with a P80 of 46 mm, will be transported to the ore sorter concentrate cone crusher via the ore sorters concentrate discharge conveyor. This conveyor will be equipped with a belt scale. The crusher, set with a closed side setting of 13 mm, will produce material with a P80 of 10.6 mm. The crusher discharge will be conveyed to the concentrate and fine ore sorting silo by two conveyors, where it will be combined with the crushing fines from the vibrating screen undersize.

17.6 Grinding and Primary Gravity Concentration Circuit

17.6.1 Sorting Concentrate and Fine Ore Silo

The sorting concentrate and fine ore silo will receive crushed ore sorter concentrate (98 tph) and crushing fines from the vibrating screen undersize (84 tph). Material stored in the silo will be discharged onto the silo discharge belt feeder, which will transfer it to the ball mill feed conveyor for delivery to the ball mill for grinding.

The silo will discharge 3,185 tpd of material, equivalent to a feed rate of 144 tph at 92% availability. The downstream unit operations, including the paste plant, will operate at 92% availability as well.

The ball mill feed conveyor will be equipped with a ball mill feed belt scale to measure the fresh feed entering the mill. Additionally, grinding media will be fed to the ball mill via the ball mill media feed hopper onto this same conveyor.

17.6.2 Ball Mill

The grinding circuit will consist of a 4.57 m diameter ball mill powered by a 2,450-kW single motor. The ball mill will operate in closed circuit with the primary gravity concentration circuit and the primary grinding cyclone cluster, grinding the material to a P_{80} of 190 µm.

The ball mill will receive material from the sorting and fine ore silo at a rate of 144 tph. Additionally, the ball mill will handle the cyclone underflow (361 tph) and the oversize material from the primary gravity screens.

The grinding area will be serviced by the grinding and flotation area overhead crane, which will also service the flotation area.

17.6.3 Primary Gravity Circuit

The ball mill trommel screen will discharge into the ball mill discharge pump box at a rate of 561 tph, which will feed two gravity parallel circuits, each handling 280 tph.

Each circuit will be composed of a screen and a gravity concentrator, with a capacity of 400 tph, which will operate in batch mode. The concentrators will recover 0.037% of the fresh feed solids as concentrate. The primary gravity concentrate will be sent to the gravity concentrate hopper along with the secondary gravity concentrate (refer to Section 17.11) for further concentration using a shaking table.

17.6.4 Primary Grinding Cyclone Cluster

The primary grinding cyclone cluster will process the tails from the primary gravity concentration at a rate of 505 tph. The cyclone overflow product, designed with an average P80 of 190 µm and a circulating load of 250%, will flow by gravity to the trash screen. The undersize from the trash screen will then feed the rougher conditioner tank, supplying the flotation circuit at a rate of 144 tph. Meanwhile, the cyclone underflow, totalling 361 tph, will be recirculated to the ball mill.

17.7 Flotation, Regrind and Secondary Gravity Concentration

17.7.1 Rougher Flotation

The rougher flotation circuit includes a rougher conditioner tank, providing 4 minutes of conditioning time, and five 40 m³ rougher flotation tanks, offering a total retention time of 18 minutes. Flotation will occur at natural pH levels between 7.5 and 8.5. The flotation area will be serviced by the grinding and flotation area overhead crane, which will also service the grinding area.

Potassium amyl xanthate will be used as a collector, and methyl isobutyl carbinol as a frother.

The trash screen undersize (144 tph) will first enter the rougher conditioner tank, where it will be mixed with reagents before rougher flotation. The conditioned pulp will then proceed to five successive rougher flotation cells. The circuit is designed to recover 19% of the feed mass. The rougher flotation concentrate collected in the cell launders will be sampled by the rougher flotation concentrate sampler and sent to the regrind cyclone feed pump box for further concentration.

The rougher flotation tails, as well as the cleaner-scavenger flotation tails, will flow to the flotation tails pump box. Final tails will be sampled by the final flotation tails sampler before being directed to the tailings thickener feed box for dewatering.

17.7.2 Regrind Cyclone Cluster

The regrind cyclone feed pump box will receive fresh rougher flotation concentrate, as well as regrind mill discharge and tailings from the secondary gravity concentrator. The cyclone overflow product, with an average P80 of 25 µm and a circulating load of 400%, will flow by gravity to the cleaner conditioner tank and will be sampled by the cleaner flotation feed sampler.

The cyclone underflow will be divided into two streams: two-thirds will feed the regrind mill, while the remaining one-third will be directed to the secondary gravity screen.

17.7.3 Secondary Gravity Concentrator

The secondary gravity screen will receive one-third of the regrind cyclone cluster underflow. The screen oversize will be sent to the regrind mill, and the screen undersize will be processed by the secondary gravity concentrator. The gravity concentrator, with a capacity of 150 tph, will operate in batch mode. The secondary gravity concentrate will be combined with the primary gravity concentrate in the gravity concentrate hopper (refer to Section 17.11) and fed to the shaking table and gold room for production of doré bars.

17.7.4 Regrind Mill

The regrind mill, a vertical stirred mill, will receive material from the regrind cyclone cluster underflow. It will reduce the material P80 from 190 µm to 25 µm to liberate the material before the following steps of flotation. The regrind mill will discharge 77 tph of material back into the regrind cyclone feed pump box.

17.8 Cleaner Flotation and Cleaner-scavenger Flotation

17.8.1 Cleaner Flotation

The cleaner flotation circuit will include a cleaner conditioner tank, two 15 m^3 1st cleaner flotation cells, followed by two 2nd cleaner flotation cells. Polyfloat 7040, a gold collector, will be added to the conditioner tank, 1st cleaner flotation and 2nd cleaner flotation. PAX will also be distributed to this circuit and may be added as needed. The MIBC will be used as frother.

The grinding cyclone cluster will feed the cleaner conditioner tank, where it will be mixed with reagents before the first stage of cleaner flotation. The conditioned pulp will then proceed to two successive 1st cleaner flotation cells, along with concentrate from the cleaner-scavenger flotation stage. This step will be designed to recover 50% of the fresh feed mass of concentrate and rejecting the same amount as tails. The floated 1st cleaner concentrate collected in the cell launders will be sent to the 2nd cleaner flotation stage, while the tails will be sent to cleaner-scavenger flotation stage, along with 2nd cleaner tails.

The 2nd cleaner flotation will consist of two successive cells and receive the 1st cleaner flotation stage's concentrate. This second stage will be designed to recover 50% of the feed mass, yielding concentrate and rejecting the same amount as tails. The floated 2nd cleaner concentrate collected in the cell launders will be sent to the final concentrate pump box for dewatering, and sampled by the cleaner flotation concentrate sampler. The tails will be sent to cleaner-scavenger flotation stage, along with 1st cleaner tails.

17.8.2 Cleaner-Scavenger Flotation

The cleaner-scavenger flotation circuit will feature two 15 m^3 cleaner-scavenger cells, operating at natural pH levels using Polyfloat 704 and PAX collector and MIBC frother. The concentrate collected in the cell launders will be recirculated to the 1st cleaner flotation stage.

The cleaner-scavenger tails will be sampled by the cleaner-scavenger flotation tails sampler and directed to the flotation tails pump box, along with rougher flotation tails. These final tails will be sampled by the final flotation tails sampler before being transferred to the tailings thickener feed box for dewatering.

17.8.3 Onstream and Particle Size Analysis

The flotation circuit will be monitored using an Onstream Analyzer and a Particle Size Analyzer, which will provide results at predetermined intervals to facilitate real-time operation of the process. The following flotation streams will be analyzed as specified:

- Rougher flotation feed: Onstream and particle size analysis.
- Rougher flotation concentrate: Onstream analysis.
- 1st cleaner flotation feed: Onstream and particle size analysis.
- Final flotation concentrate: Onstream and particle size analysis.
- Final flotation tails: Onstream analysis.
- Cleaner-scavenger flotation tails: Onstream analysis.

The streams will continuously flow through a multiplexer, which immediately returns them to the process, unless samples are retained for analysis. At scheduled intervals, the multiplexer will divert a specific stream to either the Onstream Analyzer or the Particle Size Analyzer. After analysis, the demultiplexer will retrieve the samples and reintroduce them into the process at appropriate locations in the system.

17.9 Concentrate Dewatering

The flotation concentrate will undergo a two-stage dewatering process. The first stage will use a high-rate concentrate thickener to thicken the concentrate to 62% solids by weight in the underflow. This will be followed by dewatering in the concentrate filter before stockpiling and shipment via trucks.

The process begins with the final concentrate, entering the concentrate thickener feed box. The material is then fed into the concentrate thickener. Flocculant will be added to aid thickening.

The thickener underflow will then be pumped to the concentrate filter feed tank and subsequently fed to the vertical concentrate filter (a filter press) for further dewatering. The filtrate is collected in the concentrate filtrate tank and returned to the concentrate thickener feed box. The dewatered concentrate cake is stockpiled, bagged using the Flotation Concentrate Bagging System, and loaded into trucks for shipment.

17.10 Paste Plant

17.10.1 Flotation Tailings Dewatering

The flotation tailings, consisting of combined rougher and cleaner-scavenger tails, will undergo a two-stage dewatering process. The first stage involves thickening the tails to 62% solids by weight in the underflow using a high-rate tailings thickener. This will be followed by further dewatering through two tailings filters before the material is processed into paste backfill.

The combined rougher tailings and cleaner-scavenger tailings from the flotation tails pump box will be directed to the tailings thickener feed box and then into the tailings thickener. Flocculant will be added to enhance thickening. The thickener overflow will be sent to the process water tank for reuse.

The thickener underflow will be pumped to the tailings filter tank and subsequently fed to two tailings filters operating in parallel. Filtrate from the filters will be collected in two tailings filtrate receivers and returned to the tailings thickener feed box. The dewatered tailings cake will be discharged onto the tailings tilter cake conveyor, where it will be weighed by the tailings filter cake belt scale. The dewatered tailings will either be directed to the paste mixer or deposited onto an emergency dry storage stockpile.

17.10.2 Paste Production and Distribution

The dewatered tailings produced by the tailings filters will be mixed with cement and water in a high-intensity paste mixer, forming a paste that will then be pumped to underground stopes using a piston pump. The paste plant is serviced by the paste plant area overhead crane.

Dry cement will be stored in an outdoor cement silo and conveyed to the paste mixer via the cement silo screw feeder and the cement scale belt conveyor. The prepared paste will then be pumped underground by the piston pump, with a spare pump available as a backup.

17.11 Gravity Concentrate Refinery

The gravity concentrate hopper receives the primary gravity concentrate and secondary gravity concentrate from the gravity concentration circuits.

The combined gravity concentrate will first be processed through the shaking table magnetic separator before being fed to the table for further gold concentration. Middlings will be directed to the final concentrate pump box, while the tailings will be sent to the ball mill discharge pump box. The concentrate from the table will be dried in an oven and melted with flux in an induction furnace to produce doré.

17.12 Water and Air Services

17.12.1 Fresh Water Distribution

The fresh water tank will receive water from the treated underground mine water to supply various operations. Fresh water will be used for the concentrate filter cloth wash, manifold wash, and pressing water, as well as for the gland seal water pump, reagent preparation and paste density control.

17.12.2 Process Water Distribution

The process water tank will receive water from the overflows of the concentrate and tailings thickeners, along with make-up water from the fresh water tank. Process water is to be used in the mill unit operations. Any excess process water will be directed to the water treatment plant.

17.12.3 Air Distribution

The plant will be equipped with one duty and one standby high-pressure plant air compressor, along with a plant air receiver, to supply air throughout the facility. Instrumentation air will also be sourced from this compressor and receiver, but also passing through a plant air dryer and a plant dry air receiver.

Compressed air for the two ore sorters will be provided by a dedicated ore sorter air compressor (with a standby unit), an ore sorter air dryer (also with a standby unit), and a separate ore sorter air receiver for each sorter.

Flotation air will be supplied by one duty and one standby air blower. The rougher flotation circuit will use one blower set, while the 1st cleaner, 2nd cleaner, and cleaner-scavenger flotation cells will share a second set.

Compressed air for the concentrate filter will come from a dedicated filter press air compressor (with a standby unit) and a filter press air receiver. Compressed air for the tailings filter will come from a dedicated tailings dewatering air compressor (with a standby unit), which will supply the two disc filter air receivers, one for each filter.

17.13 Reagents Preparation and Distribution Systems

The PAX and flocculant systems will include preparation units comprising a bagged reagent addition system (for solid form reagents), an agitated mixing tank, a transfer pump, a distribution tank, and metering pumps. The PAX distribution system will feature three operating pumps and one standby pump, while the flocculant distribution system will have two operating pumps and one standby pump. The flocculant system will also include two flocculant static mixers to complete the dilution process before delivering the solution to the concentrate and tailings thickeners.

The MIBC and Polyfloat 7040 reagents will be received in totes and distributed to the flotation circuit using metering pumps. The MIBC distribution system will consist of six operating pumps and two standby pumps, while the Polyfloat 7040 system will consist of four operating pumps and two standby pumps.

17.14 Concentrator Personnel

A list of the planned concentrator personnel for the concentrators is provided in Table 17-2.

Table 17-2: Concentrator personnel

Description	Mill
Mill Superintendent	1
Maintenance Superintendent	1
Production Supervisor	4
Metallurgist	2
Metallurgical Technician	2
Supervisor Operation and Maintenance	2
Mechanical Planner	2
Automation and Control Technician	2
Subtotal Staff	**16**
Solution Operator	4
Refiner	2
Ore Sorter Operator	4
Grinding Operator	4
Flotation Operator	4
Dewatering and Paste Plant Operator	4
Control Room Operator	4
Mill Helper	6
Loading Station Operator	8
Subtotal Operations	**40**
Millwright & Stationary Equipment Mechanic	20
Mechanic - Apprentice	4
Electrician	4
Electrician - Apprentice	4
Subtotal Maintenance	**32**
Total	**88**

17.15 Power, Reagents and Consumables

17.15.1 Propane

The process plant uses propane for heating. The estimated annual propane consumption is approximately 1.2 million litres. This estimate is based on the operational heating requirements, expected runtime of heating systems, and the efficiency of propane combustion equipment.

17.15.2 Power

Power requirements for the process plant were derived from the equipment list in which expected motor sizes for all equipment and ancillaries have been provided. Each motorized item of equipment was assigned utilization, efficiency and load factors to obtain the data presented using the load list and the expected utilization factors. The power demand of 8.2 megawatts ("MW") is estimated.

17.15.3 Reagents, Cement, and Consumables

Estimated consumption rates of reagents and consumables are listed in Table 17-3. It should be noted that the consumption has been estimated based on laboratory test work.

Table 17-3: Consumption of reagents and consumables

Reagent or Consumable	Unit	Consumption
MIBC (Frother)	kg/t	0.24
PAX (Collector)	kg/t	0.05
PF 7040 (Collector)	kg/t	0.03
Flocculant	kg/t	0.03
Cement	%	3.7
Grinding Media (3 in)	kg/t	0.55
Grinding Media (0.75 in)	kg/t	0.18

18. Project Infrastructure

The Project's surface infrastructure and services are designed to support the operations at the MSC and Bonanza Ledge Site. The Cariboo Gold Project also includes offsite infrastructure, such as a new 69 kV transmission line ("TL") between the Barlow substation, near Quesnel, BC, and the MSC.

The Project will be comprised of three different areas, together referred to as the Mine Site:

1. The Mine Site Complex, near the District of Wells, BC. Close-up image shown in Figure 18-2.
2. The Bonanza Ledge Site.
3. Offsite infrastructure to support the operations of the Project.

A distance of 3.5 km separates the MSC from the Bonanza Ledge site.

Figure 18-1 shows the Mine Site definition, including the underground mine area, Mine Site surface footprint, Barkerville historic town and park, the District of Wells boundary, as well as important routes and corridors.

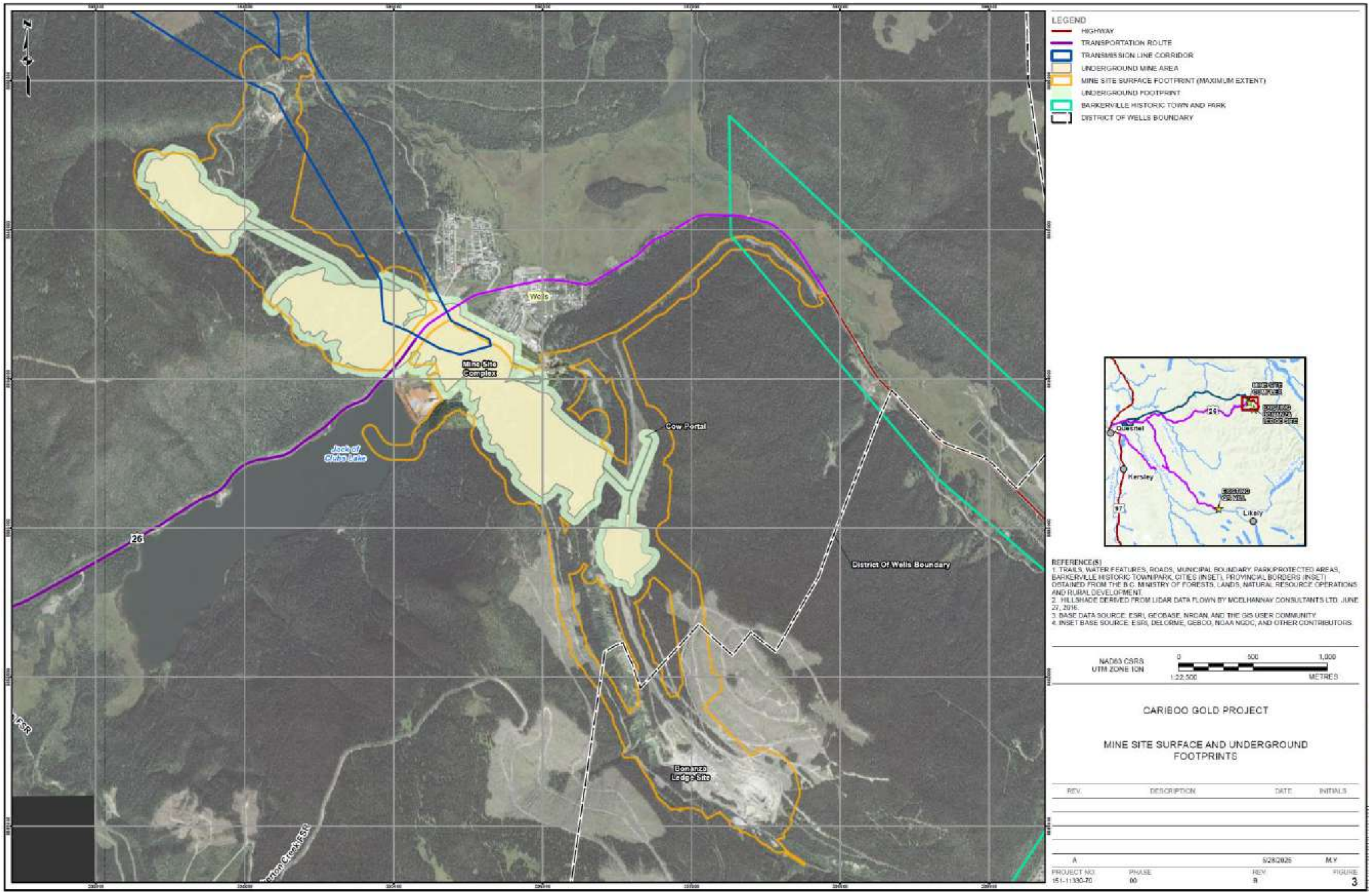


Figure 18-1: Mine Site surface and underground footprints

18.1 Overview Description

The Project envisions the construction and upgrades of the following key infrastructure items:

Bonanza Ledge Site:

- Full waste rock storage facility;
- Water management infrastructure – flood management reservoir ("FMR"), surface water channels and culverts, sumps and ponds, pumping stations, and pipelines;
- Water treatment systems and revised water management plan ("WMP") to sustain operations until Year 3 (at which point water treatment is moved to the MSC);
- Diesel fuel storage and distribution;
- Ore crushing and sorting facility;
- Overburden storage facility;
- Existing warehouse, workshop, and electrical distribution.

Mine Site Complex (Wells):

- Access roads and parking areas;
- A concentrator building area, summarized in Chapter 17, which includes:
  - Inclined conveyor moving material from the underground crusher to surface;
  - Ore sorting and tertiary crushing;
  - Grinding;
  - Gravity circuit with a gold room capable of producing doré bars;
  - Beneficiation circuit capable of producing a gold flotation concentrate;
  - Paste backfill;
  - Secondary electrical room for paste backfill.
- Diesel fuel storage and handling facilities;
- 69 kV / 13.8 kV electrical substation;
- Security facilities and access gates;
- Firewater pumping station and firewater distribution piping system;
- Treated effluent discharge line from the Mine Site water treatment system ("WTS"), connecting to a diffuser in Jack of Clubs Lake;
- New bridge over the Willow River ("Willow River Bridge");
- Fiber optic network interconnecting the main areas of the MSC;

- New potable water well and associated potable water treatment and distribution system;
- Sewage treatment system;
- Surface water channels and culverts, French drains, sumps and ponds, pumping stations, and pipelines;
- Mine water treatment plant ("WTP");
- Site electrical distribution and lighting.

Offsite Infrastructure:

- The construction of a 69 kV power line connecting BC Hydro's Barlow substation and the site's 69 kV / 13.8 kV substation;
- Ballarat camp facility expansion, expanding capacity of 76 to 264 occupants;
- Mine ventilation and heating infrastructure.

Figure 18-2: Cariboo Gold Project Mine Site Complex general arrangement

18.2 Geotechnical Investigations

Geotechnical investigations were performed at the MSC and Bonanza Ledge. The investigations helped to inform the design of the following facilities:

- Site infrastructure;
- Water management structures;
- Waste rock storage.

The respective QPs for this section deem that the studies listed below were carried out in a professional manner to acceptable standards and are suitable for use in this Study.

18.2.1 Mine Site Complex

18.2.1.1 Infrastructure

At the MSC, a geotechnical site investigation was conducted, including a desktop study, and intrusive drilling and test pitting. Interpretation of results focused on overburden characterization and depth to bedrock to determine suitability as foundation material, and stability of both excavated and fill slopes. Geotechnical drilling and test pitting generally confirmed in situ surficial sediments are till. Historic waste rock is piled near the planned tunnel portal elevation. Beyond the toe of the pile, the low wetland area consists of deposited historic mill tailings.

18.2.1.2 Water Management Structure

Golder (now WSP) completed a geotechnical site investigation at the MSC in 2021 following a scope of work developed as part of a gap analysis completed for the feasibility design of the proposed bulk fill area and MSC sediment pond. The site investigation was conducted to collect additional information on the existing foundation conditions for the MSC sediment pond. The investigation included ten cone penetration tests, drilling 23 sonic boreholes, and carrying out large penetration testing, and excavating test pits. Samples were collected for laboratory testing. Standpipe piezometers and vibrating wire piezometers ("VWP") were installed in select boreholes. Based on the information collected, Golder (now WSP) completed a design for the water management infrastructure in 2023 (WSP, 2023). Subsequently, Okane reviewed and updated the design of the MSC water management infrastructure to reflect changes at the MSC. Section 18.3.4 provides a summary of the updated MSC water management infrastructure.

18.2.2 Bonanza Ledge

Golder completed a geotechnical site investigation at the Bonanza Ledge Site in 2021 (Golder, 2022), to address a gap analysis completed for the feasibility design of the WRSF. The site investigation was conducted to collect additional information on the existing foundation conditions of the WRSF. The investigation included drilling 13 boreholes, carrying out large penetration testing ("LPT"), cone penetration tests ("CPT"), shear vane tests and excavating 15 test pits. Samples were collected for laboratory testing, and standpipe piezometers and vibrating wire piezometers ("VWP") were installed in selected boreholes.

18.3 On-site Infrastructure

The following subsections outline the existing infrastructure that will be essential for the full-scale development of the Cariboo Gold Project.

18.3.1 Surface Mobile Equipment

The Project operations will require a select fleet of surface mobile equipment throughout construction for the general maintenance of the site roads and operating areas. Material handling equipment will be used to transport equipment and materials to work fronts and utilized for rigging support as required. Personnel lifts and heating / light plants will be used to execute final installation in a safe manner for the workers and those in the surrounding areas. The proper selection of surface equipment is responsible for ensuring construction activities are completed as per schedule. Table 18-1 lists the rental equipment that will be required for the construction period.

Table 18-1: Rental equipment to support construction

Construction Equipment Rentals	Description
Cranes	230 t Crawler or AT
	100 t Rough-terrain
	20 t Boom Truck
Material Handling - Surface	12,000 lb Telehandler
	5,000 lb Telehandler
	Large Tool Carrier (966 or equivalent)
	Tractor and Float
	Rigging

Construction Equipment Rentals	Description
Site Services Including Road Maintenance	Grader – 140 Class
	Dozer – D6 Class
	Loader – 950 Class
	Excavator – 336
	Skid Steer
	Water Truck
	Roll-off Truck
Personnel Lifts	125 ft Aerial Work Platform
	85 ft Aerial Work Platform
	50 ft Aerial Work Platform
	45 ft Aerial Work Platform
	40 ft Scissor Lift
	35 ft Scissor Lift
Heaters and Light Plants	350,000 BTU Diesel Heater
	8 kW Light Plant

Once construction is completed the operation will require fewer surface mobile equipment to operate as most of the activities will occur underground. Support equipment will be required mainly for consumable receiving, site maintenance and waste placement. See Table 18-2 for a list of equipment that will be required for the Project.

Table 18-2: List of Equipment for Operations

Operation Surface Equipment	Description	Status
Material Handling - Surface	Dozer - D8 Class	Rental
	Loader – 644 Class	Owned
Site Services	Grader – 872 Class	Owned
	12,000 lb Telehandler	Rental
	Excavator – 250 Class	Owned
	Skid Steer – 330 Class	Owned

18.3.2 Site Water Management

The objective of water management is to meet water supply requirements, protect infrastructure from interruptions and damage from flooding, and ensure that discharge of surplus water to the environment meets regulatory requirements. Water management system components will include:

- Mine dewatering;
- Diversion of non-contact runoff around the Project footprint;
- Collection, storage, treatment and release of surplus contact water;
- Water supply to the mill;
- Erosion protection.

The mine dewatering system will operate continuously to maintain suitable operating conditions in the underground. Water will be pumped from the underground workings to the surface for treatment and release.

To minimize the amount of runoff water requiring collection and treatment, drainage from upslope areas (i.e., non-contact water) will be diverted around the active footprint of the Project and into local watercourses. Runoff from within the active footprint (i.e., contact water) will be collected and treated prior to discharge to the receiving environment.

The Project will have a combined storage and treatment capacity to manage the Environmental Design Flood ("EDF"). The EDF is defined in this assessment as the runoff generated from a 30-day (duration), 200-year (return period) rain plus snowmelt event, adjusted for climate change (Section 20.3.3.1).

Water management will have two distinct stages during operations. Stage 1 is the period when the mine is under development. Stage 2 is when the mine is at full production and the mill is operating. Key components of Stage 1 and Stage 2 water management are as follows:

Water Management Stage 1:

- Ore will be stockpiled at Bonanza Ledge. Waste rock will be placed in the WRSF at Bonanza Ledge. The WRSF will be lined to minimize waste rock seepage to the underlying groundwater system.
- Bonanza Ledge contact water will be collected in the Bonanza Ledge Sediment Control Pond ("SCP"), Pond A, or Pond B, and treated at the Bonanza Ledge WTP. Treated effluent will be discharged to Lowhee Creek.

- The Bonanza Ledge FMR will be available for storage of contact water during extreme runoff events.
- Initially, mine dewatering will be pumped via the Cow portal and treated at the Bonanza Ledge WTP.
- Part-way through Stage 1, the MSC WTP will be commissioned. Mine dewatering will be pumped out via the Valley portal and treated at the MSC WTP from that point forward. The Bonanza Ledge WTP will continue to treat contact water at Bonanza Ledge for the remainder of Stage 1.

Water Management Stage 2:

- Mined rock will be sorted underground. Ore will be transported to the mill and waste rock to the WRSF at Bonanza Ledge.
- The WRSF footprint will be expanded to accommodate the life-of-project waste rock quantity.
- Ore will be processed at the mill and concentrate will be shipped offsite. Tailings paste will be backfilled in the underground. Bleed water from the backfill will be collected with the mine dewatering system.
- Bonanza Ledge WTP will be decommissioned. Contact water from Bonanza Ledge will be piped to the MSC pond for storage and subsequent treatment and released from the MSC WTP.
- MSC WTP effluent will be used for freshwater requirements to the mill to meet gland/seal and reagent mixing demand. Unused effluent will discharge to Jack of Clubs Lake.

Following operations, the WRSF will be reclaimed. Mine dewatering will cease, and the underground will be allowed to flood by natural recharge.

Figure 18-3 (Stage 1) and Figure 18-4 (Stage 2) show flow diagrams depicting the connectivity of the water management system components. Overview maps showing catchment areas and conveyance channels are shown on Figure 18-5 (BL, Stage 1), Figure 18-6 (BL, Stage 2), and Figure 18-7 (MSC, Stage 2).

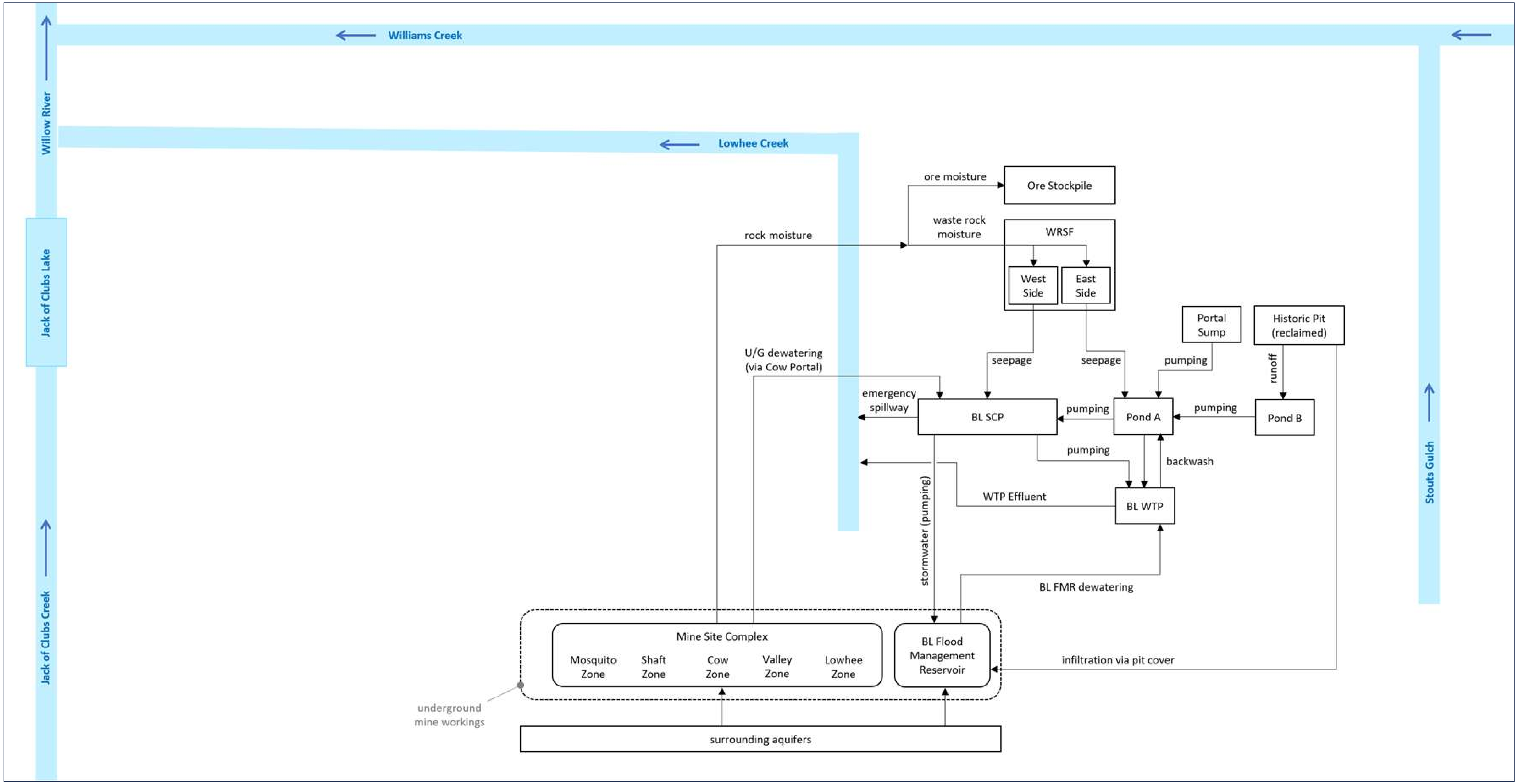


Figure 18-3: Flow Diagram – Water Management Stage 1

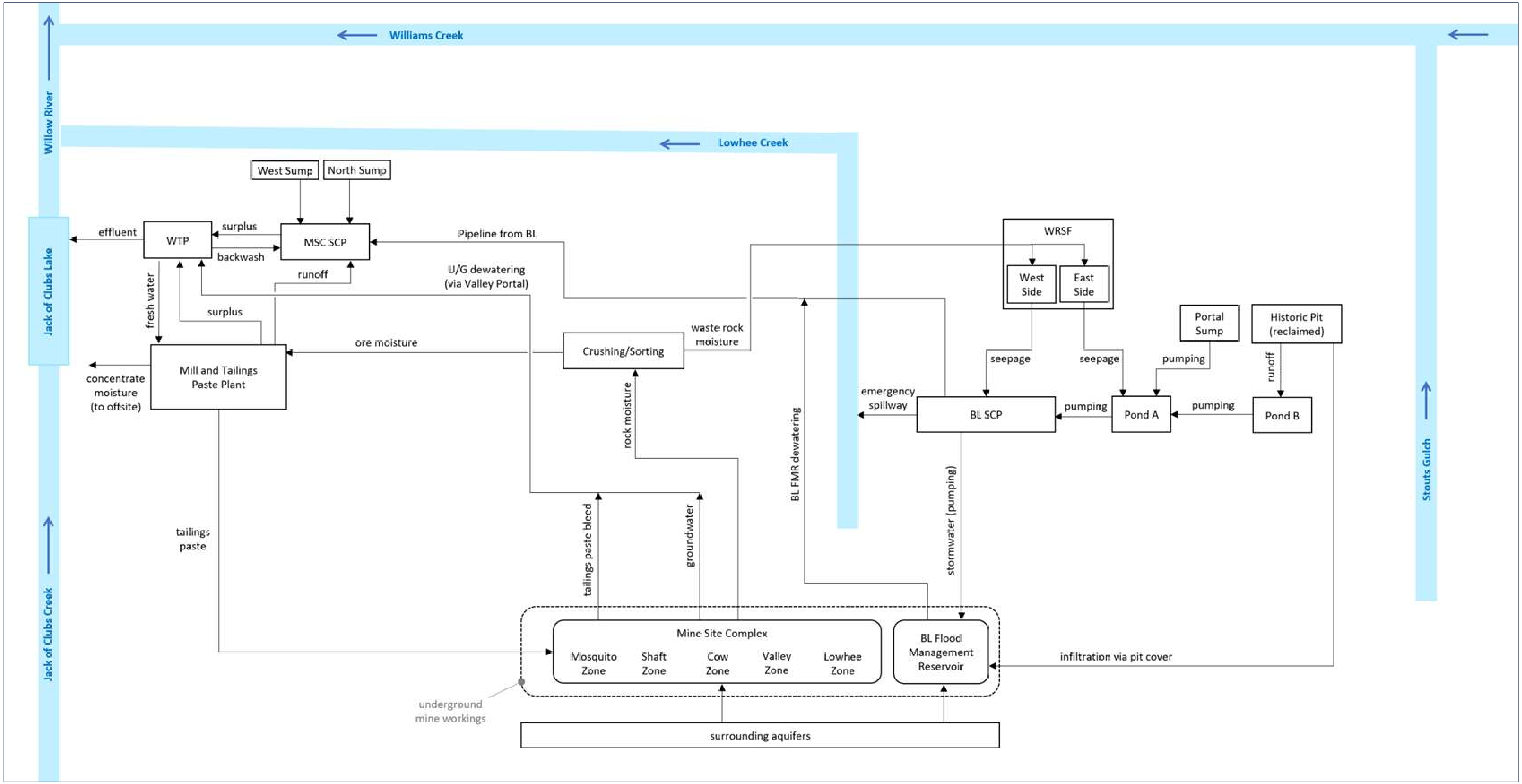


Figure 18-4: Flow Diagram – Water Management Stage 2

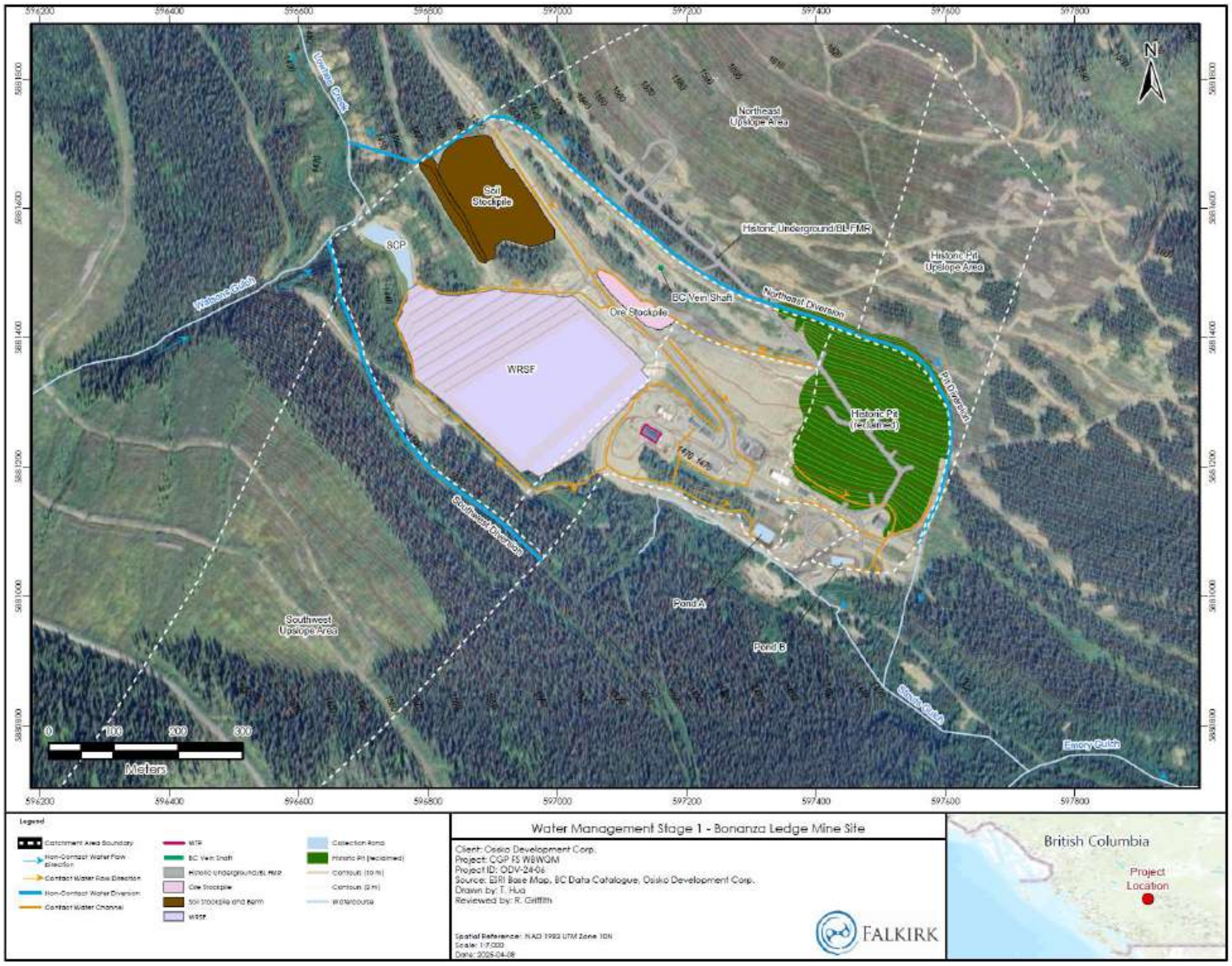


Figure 18-5: Bonanza Ledge – Water Management Stage 1

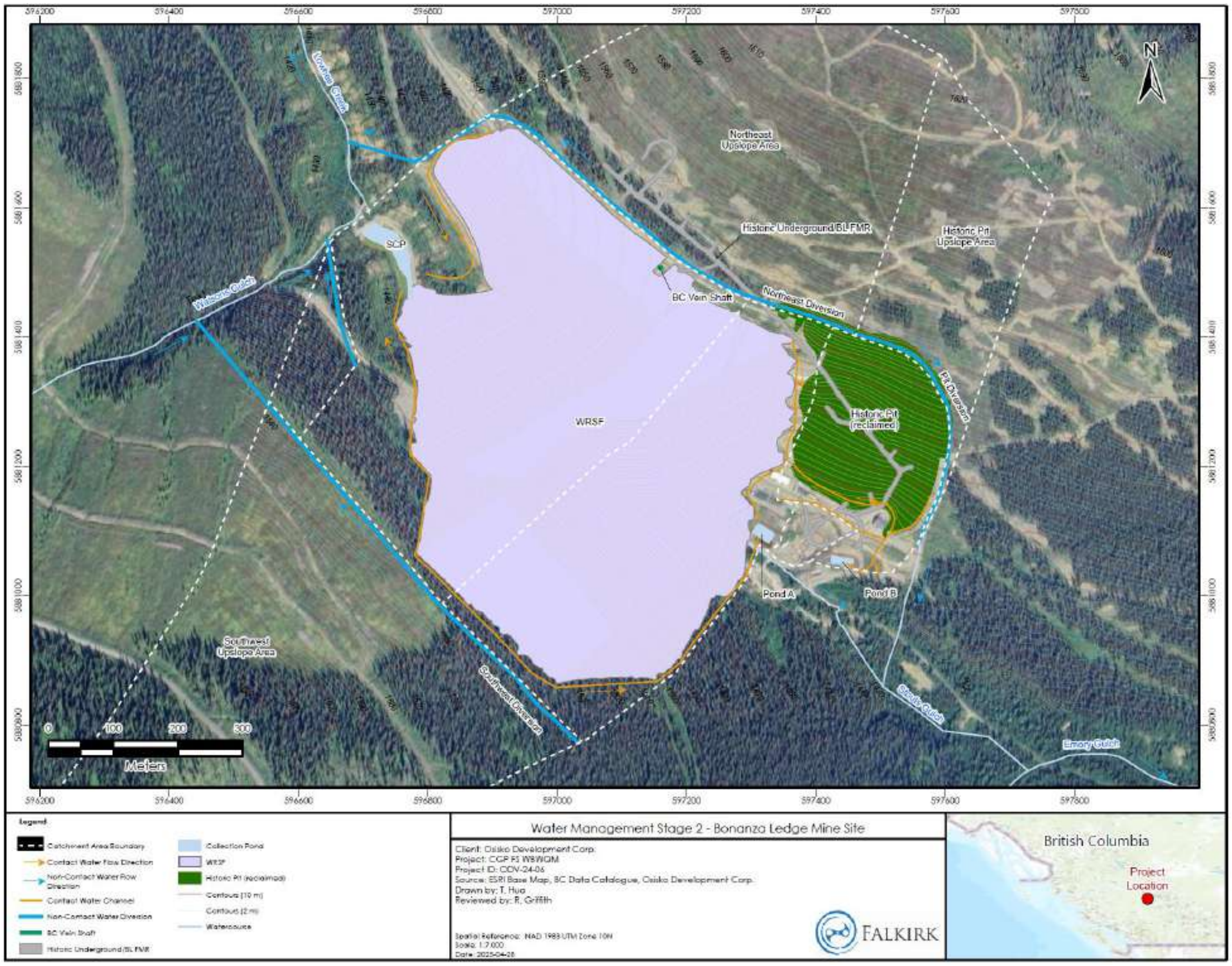


Figure 18-6: Bonanza Ledge – Water Management Stage 2

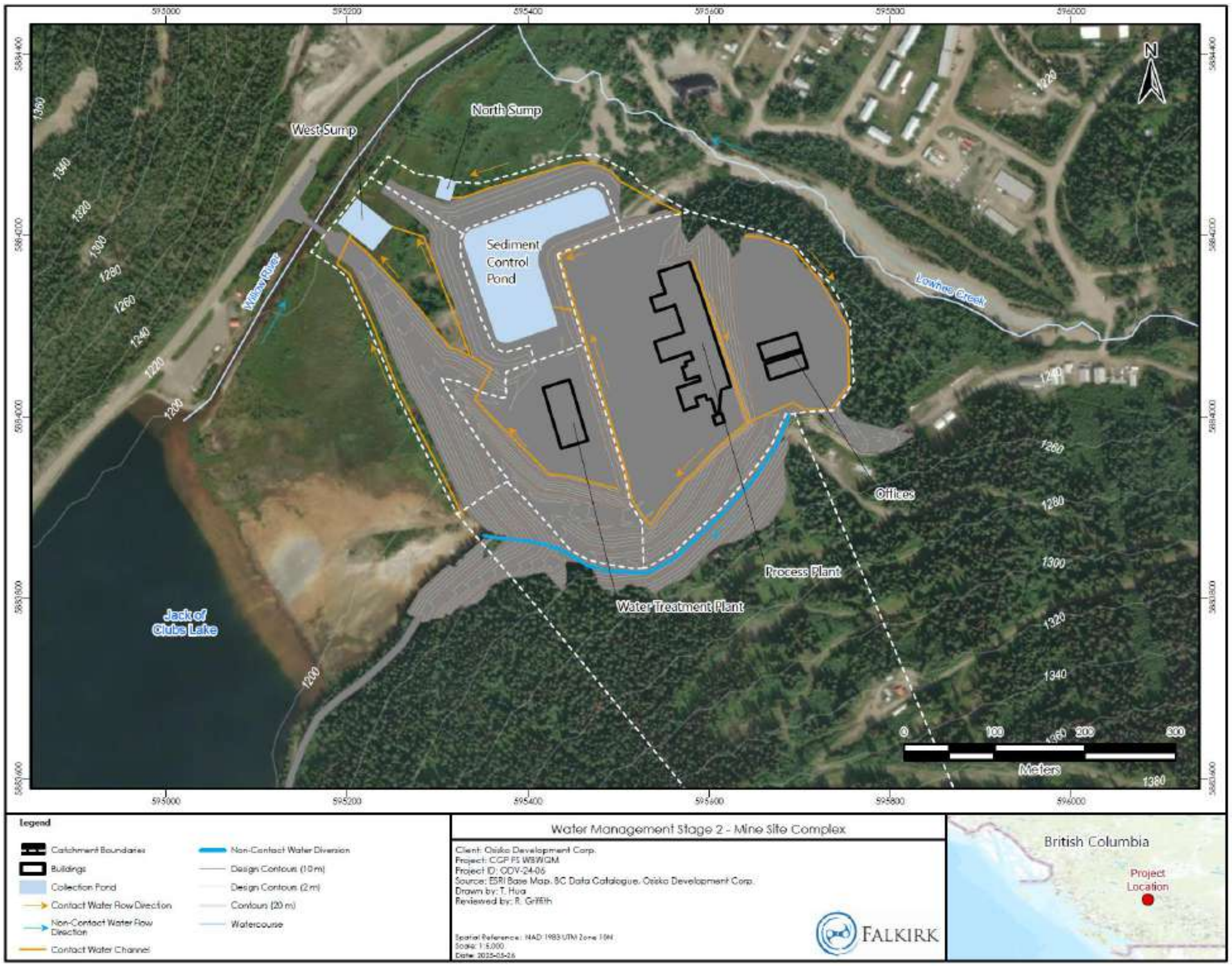


Figure 18-7: Mine Site Complex – Water Management Stage 2

18.3.3 Bonanza Ledge Area Water Management Infrastructure

Existing Infrastructure

The Bonanza Ledge Site is not currently active in mining or material handling but maintains existing operational water management infrastructure, including:

- Contact water collection channels: These channels collect surface water from developed site areas and convey to ponds and, eventually, to the existing water treatment facility at Bonanza Ledge.

- Contact water collection ponds and sumps: These facilities are intended to collect and store contact water temporarily, prior to being conveyed to the water treatment facility located at Bonanza Ledge. The key existing facilities include:
  - Ponds A and B are two smaller ponds, collecting contact water from the partially backfilled open pit and local runoff. Water in Pond B is pumped to Pond A, which is then pumped to the WTP.
- Water treatment plant: Located south of the existing WRSF.

Proposed Infrastructure

For the Project, existing water management infrastructure will be reused and upgraded, as needed, to meet the Project design basis requirements. In particular, the Bonanza Ledge SCP and dam, and the WTP are key components of the water management system and will be upgraded and incorporated into the Project's new WMP.

The proposed water management infrastructure for Bonanza Ledge is designed to support the Project water management strategy and achieve the following objectives:

- Intercept and divert non-contact runoff: Wherever practical, runoff from non-contact drainages will be collected and conveyed downstream of the Project site and discharged downstream of the Bonanza Ledge SCP, in Lowhee Creek. Non-contact diversion channels will either be built (new channels) or existing ones will be upgraded, as required.
- Manage contact water: Contact water will be collected through a system of channels, and ponds. As much as possible, this water will be reused for internal mining and operational purposes. The excess water will be monitored for water quality and will be treated, if necessary, before being discharged to the receiving environment.

The existing water management infrastructure will be reused and upgraded, as needed, to meet the Project design basis requirements. In particular, the SCP and the WTP are key components of the water management system that will be upgraded and incorporated into the Project's new water management system. The existing WTP will be upgraded to process the Bonanza Ledge Site contact water collected at the SCP and Pond A. Contact water drainage from the WRSF will be collected using a system of contact water collection ditches, and will be conveyed to the SCP or Pond A, as illustrated in Figure 18-8. Water from both ponds will be conveyed to the WTP. Treated water will be discharged to the environment. As described in the water management strategy, the existing WTP located within the Bonanza Ledge area will be active during Stage 1 of operations. The discharge from the WTP to the receiving environment is located downstream of the SCP, into Lowhee Creek. During subsequent stages of operations, the water treatment will cease at the Bonanza Ledge Site, and water will be conveyed by pipeline to the MSC WTP that will discharge its treated effluent to Jack of Clubs Lake.

An emergency pumping line will be built between the SCP and the Bonanza Ledge FMR, located underground. This system is anticipated to be activated during extreme storm events, if water levels in the SCP exceed a critical threshold. The system was selected to maintain the safety and integrity of the SCP, and prevent overtopping of the pond's dam. Water will be temporarily stored in the FMR and, following the extreme storm event, it will be pumped to the WTP for treatment and discharge to the receiving environment.

The historic open pit located east of the WRSF will be backfilled, covered and revegetated. Drainage from the reclaimed area will be collected and conveyed to the existing Pond B, pumped to Pond A and then treated at the WTP. The water quality from the reclaimed historic open pit runoff will be monitored and when it meets the criteria to be classified as "non-contact" water, the collection channel will be redirected to discharge to the receiving environment, into Stouts Gulch.

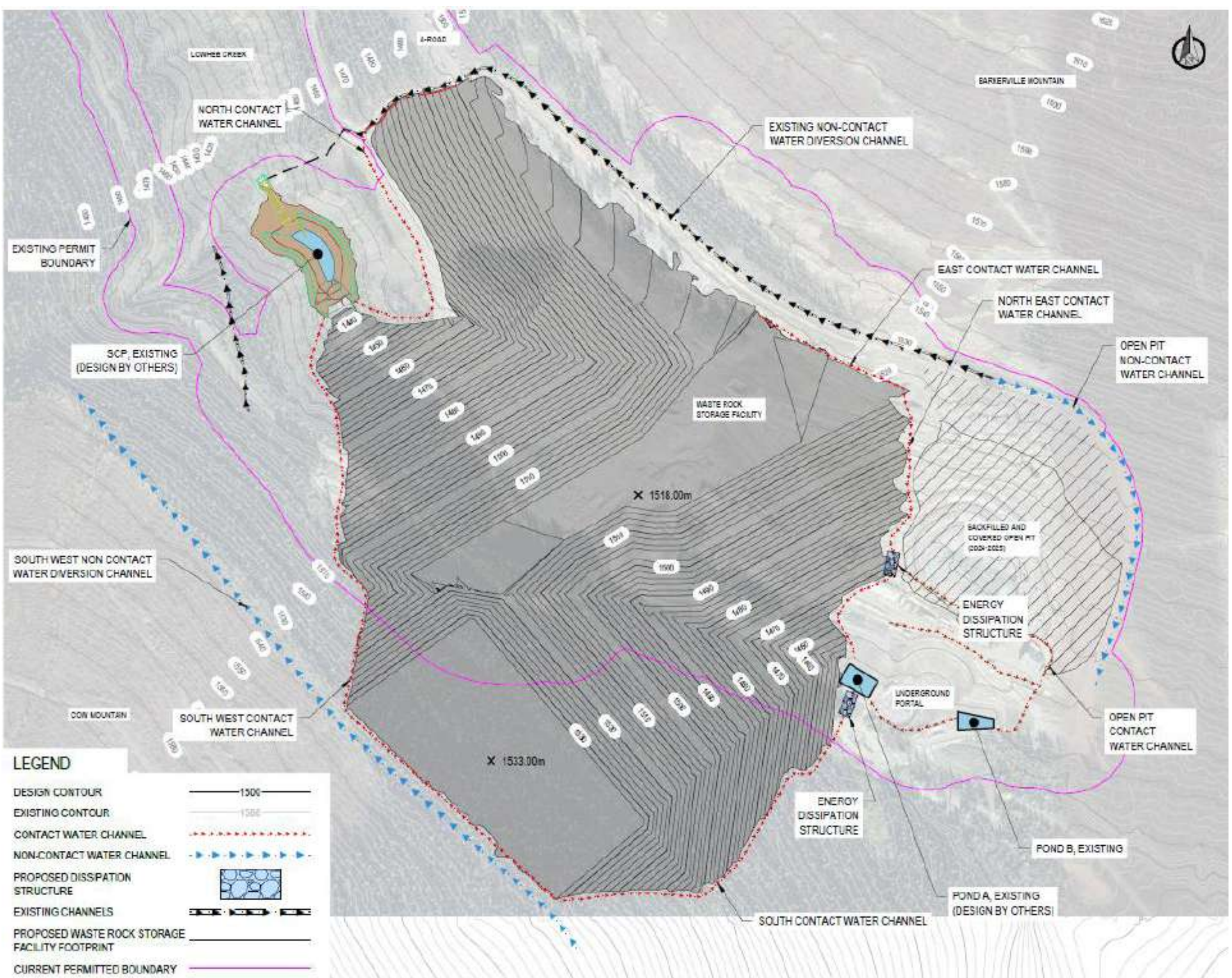


Figure 18-8: Bonanza Ledge Site water management infrastructure layout

Summary of Key Water Management Infrastructure

Non-contact water diversion:

- Southwest non-contact diversion channel: Collects non-contact runoff from the southwest catchment area, above the WRSF, and conveys it northward, toward Watson's Gulch, which connects to the Lowhee Creek, downstream of the SCP.
- Existing non-contact water diversion channel: This channel, located north of the WRSF collects non-contact runoff from the Barkerville Mountain (north of the Bonanza Ledge Site) and conveys it towards the northwest, along the A Road. At the northern edge of the Bonanza Ledge Site, the channel crosses A Road through a culvert and follows the edge of the property, conveying water down to Lowhee Creek. The channel outlet will be located downstream of the SCP.
- Open pit non-contact water channel: This channel will collect the non-contact runoff from the Barkerville mountain (north of the reclaimed open pit) and convey it around the open pit footprint, on the eastern edge, and discharge towards Stouts Gulch.

Contact water collection channels:

- East and northeast contact water channels: Collects the contact water runoff from the northeastern area of the WRSF footprint and conveys it to the Bonanza Ledge Pond A.
- North contact water channel: Collects the contact water runoff from the northwestern area of the WRSF footprint and conveys it to the SCP.
- South contact water channel: Collects the contact water runoff from the southeastern area of the WRSF footprint and conveys it to the Bonanza Ledge Pond A.
- Southwest contact water channel: Collects water from the southwestern WRSF footprint to route it to the SCP.

Emergency flood management system:

- Flood management reservoir: Using existing underground openings, the FMR will have a storage capacity of up to 84,000 m³. It is intended to remain empty, filling only during flood events when the SCP is overwhelmed.
- Pumps and pipelines:
  - A set of pumps and pipeline will connect the SCP to the FMR. This system will be operational only when water levels in the SCP reach a pre-determined threshold.
  - A set of pumps and pipeline will connect the FMR to the water treatment facility. This system will start operating following a flood event that triggers the emergency pumping system. The water will be pumped from the FMR to the WTP.
  - A set of pumps and pipeline will connect the SCP to the WTP.
  - A set of pumps and pipeline will connect Pond B to Pond A, and Pond A to the SCP.

Water storage infrastructure:

- Sediment Control Pond: The SCP is the main contact water collection pond, receiving the majority of contact water from the waste storage facility. Its storage capacity is designed to safely manage water from extreme storm events. The existing SCP will be completely rebuilt as a lined facility that will connect to the WRSF liner. Additional upgrades include the addition of a pump station and pipelines for transferring to the WTP and the FMR. The primary pond outlet is to the WTP, via pumping. During an extreme storm event, a secondary pond outlet will be the FMR, via emergency pumping. A third outlet is an emergency outlet structure, designed to safely manage flows associated with the Inflow Design Flood ("IDF") and discharge downstream of the SCP, into Lowhee Creek in a controlled manner. The emergency overflow spillway consists of outlet pipes securely anchored to the embankment.
- Pond A: Located at the southeastern edge of the WRSF, the existing Pond A is intended as a temporary storage for non-contact water from the waste rock facility to be collected prior to being pumped to the WTP via the SCP.
- Pond B: Located near Pond A and south of the backfilled open pit, Pond B is intended as a temporary storage for non-contact water, from the backfilled and reclaimed historic open pit, to be collected and pumped to Pond A.

18.3.4 Mine Site Complex Area Water Management Infrastructure

The water management infrastructure for the MSC is designed to support the Project's water management strategy and achieve the following objectives:

- Intercept and divert non-contact runoff: Wherever practical, non-contact water will be collected and conveyed for discharge downstream of the MSC area, to the Willow River.
- Manage contact water: The MSC contact water will be collected through a system of channels, culverts, French drains and sumps, and conveyed to the MSC SCP. The MSC SCP will also receive contact water from the Bonanza Ledge SCP, as described in the site water management section (Section 18.3.2). As much as possible, contact water will be reused for the mining process and operational purposes.
- The MSC WTP: Treats contact water from mine dewatering activities and the MSC SCP. The treated effluent will be used to supply freshwater at the mill, and the remaining unused treated effluent will be discharged to Jack of Clubs Lake via a diffuser.

Figure 18-9 shows the layout of the MSC water management infrastructure. Contact water collection channels and French drains are designed to collect contact water that would accumulate on the MSC pad areas where the offices, process plant concentrator and WTP are located. These channels are located at the periphery of the MSC pad areas.

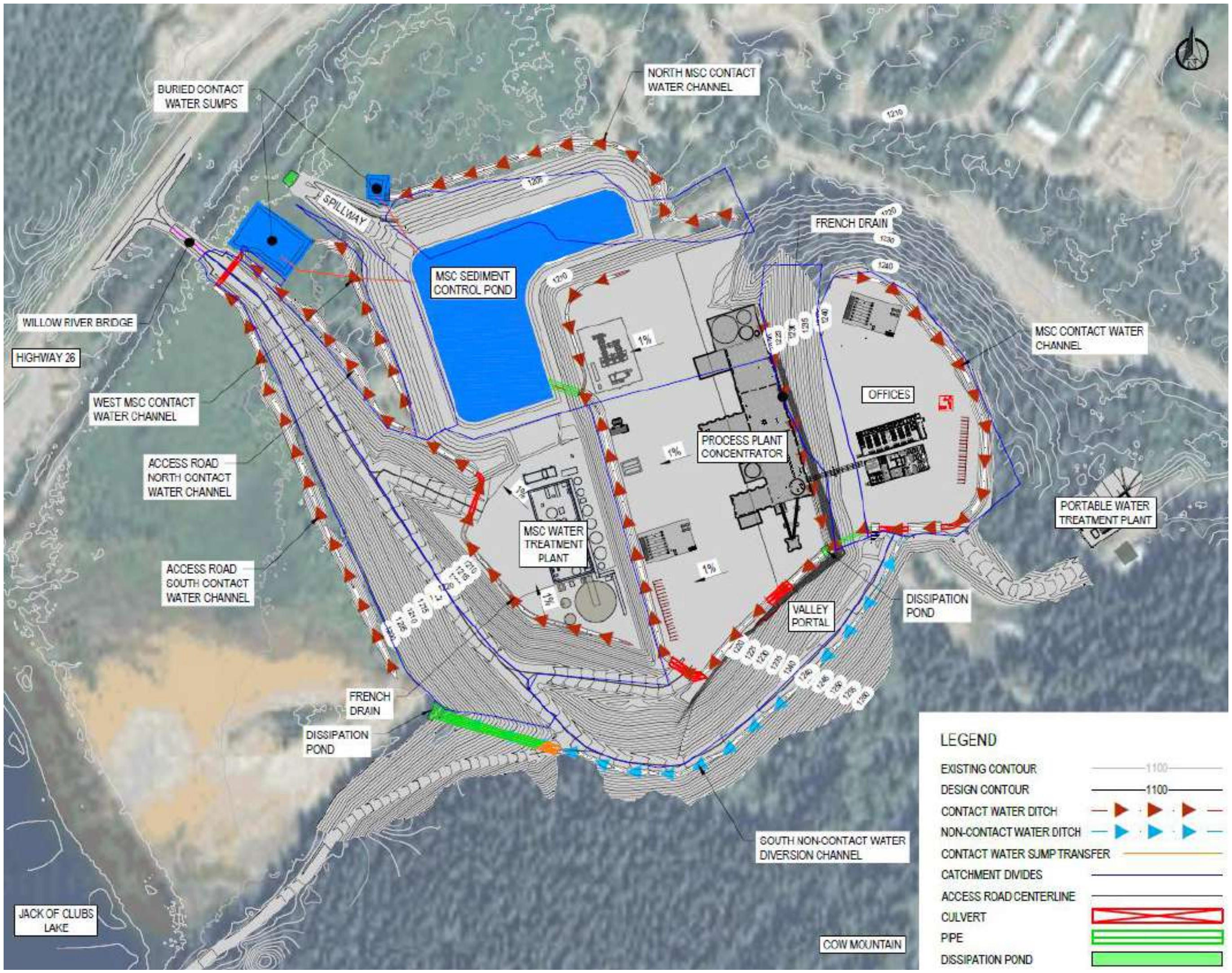


Figure 18-9: Mine Site Complex water management infrastructure layout

Summary of Key Water Management Infrastructure

Non-contact water diversion:

- South non-contact diversion channel: Collects non-contact runoff from the south catchment area, above the MSC area, and conveys it westward, toward the Jack of Clubs Lake.

Contact water collection channels:

- MSC contact water channel: Collects the contact water that accumulates on the MSC pad areas where the offices and process plant are located. The channel is located at the periphery of the pads and conveys water directly to the MSC SCP. A French drain, located behind the process plant concentrator, collects contact water from the plant and the upstream slope leading to the offices pad. It connects to the MSC contact water channel.
- North and west MSC contact water channels: Collect the contact runoff from the MSC SCP embankments. The channels convey contact water to two sumps that are operated to remain empty by pumping the stored water to the MSC SCP.
- Access road north and south contact water channels: The access road connecting the MSC site to Highway 26 is flanked with north and south contact water channels to collect contact runoff and convey it to a sump that is operated to remain empty by pumping the stored water to the MSC SCP. A French drain at the western edge of the MSC WTP pad area will collect contact runoff accumulating on the pad and the portion of the access road that is located immediately above the pad. Water collected in the French drain will be conveyed to the access road north contact water channel.

Water storage infrastructure:

- Mine Site Complex Sediment Control Pond: The MSC SCP is the main contact water collection pond, receiving water from the MSC area. It will also receive water from the Bonanza Ledge SCP during Stage 2 of operations, as defined in Section 18.3.2. The pond is designed to safely manage the EDF without overflowing into the environment. The primary pond outlet is to the WTP, via pumping. The pond has an emergency spillway designed to safely manage flows associated with the IDF and discharge into Willow River.
- Contact water sumps: Located at the northwestern edge of the MSC area, on either side of the MSC SCP spillway, the two sumps are operated to remain empty by pumping the stored water to the MSC SCP.

Diffuser and pipeline:

- Diffuser pipeline: A pipeline will connect the MSC WTP to a diffuser to be located on the Jack of Clubs lakebed.

- Diffuser: Located approximately 240 m from the southern shoreline, in the northeast portion of the Jack of Clubs Lake, a diffuser will be installed on the bottom of the lake in about 15 m of water depth. The diffuser will be 189 m long, orientated perpendicular to the lake long axis, and composed of eight 3" DR9 HDPE nozzles for all seasons. The diffuser system is designed to meet regulatory guidelines for dilution of the effluent.

18.3.5 Bonanza Ledge Site

Infrastructure at the Bonanza Ledge Site will consist of a WRSF, associated water management, water treatment infrastructure (for the first 3 years of the life).

18.3.5.1 Waste Management

Existing Infrastructure

The Bonanza Ledge Site has an existing overburden stockpile that will be used in support of the closure plan for the previous operations, prior to the Project. The site also has an existing WRSF that contains PAG waste rock from previous operations. In preparing for the foundation and liner system for the Bonanza Ledge WRSF, the design assumes that both the existing overburden stockpile and the PAG waste rock will be removed prior to construction.

Proposed Infrastructure

A WRSF with an elevation of 1,533 m and a capacity for approximately 7,940,000 m^3 (15,880,000 t, assuming a density of 2.0 t/m^3) of waste rock storage, will be built in the northern limits of the Bonanza Ledge property, located approximately 3.5 km from the MSC to the southeast. The WRSF is situated within a valley northwest of the WTP and southeast of the Bonanza Ledge SCP. The WRSF is designed to have slopes of 3H:1V with inclusion of working benches to manage erosion. This results in an overall slope of 3.3H:1V. The proposed slopes and construction method will allow for lower bench slopes to be progressively reclaimed while upper lifts of the WRSF are being built. This will reduce the need for rehandling at closure to accommodate the closure design of the WRSF.

Prior to construction, removal of existing PAG waste rock and overburden stockpiled materials will be carried out. Foundation preparation activities include removal of vegetation and organic material, as well as re-sloping of the overburden materials to support the installation of a liner system up to elevation 1,470 m to cover the final WRSF footprint. The design of the underdrain and liner system has been completed by Knight Piésold.

A geotechnical slope stability assessment was conducted on the proposed WRSF. Stability analyses were performed for the base case representing long-term conditions, as well as sensitivities considering seismic loading conditions and an increased water table. Geotechnical acceptance criteria selected for the WRSF are based on those recommended by the British Columbia Mine Waste Rock Pile Research Committee (BCMWRPRC, 1991). Modelling inputs were determined based on previous investigations, laboratory testing, instrumentation data and experience. Based on modelling results, the stability of the proposed WRSF meets the minimum factor of safety ("FoS") requirements for all scenarios.

A layout plan showing the WRSF location is shown in Figure 18-10.

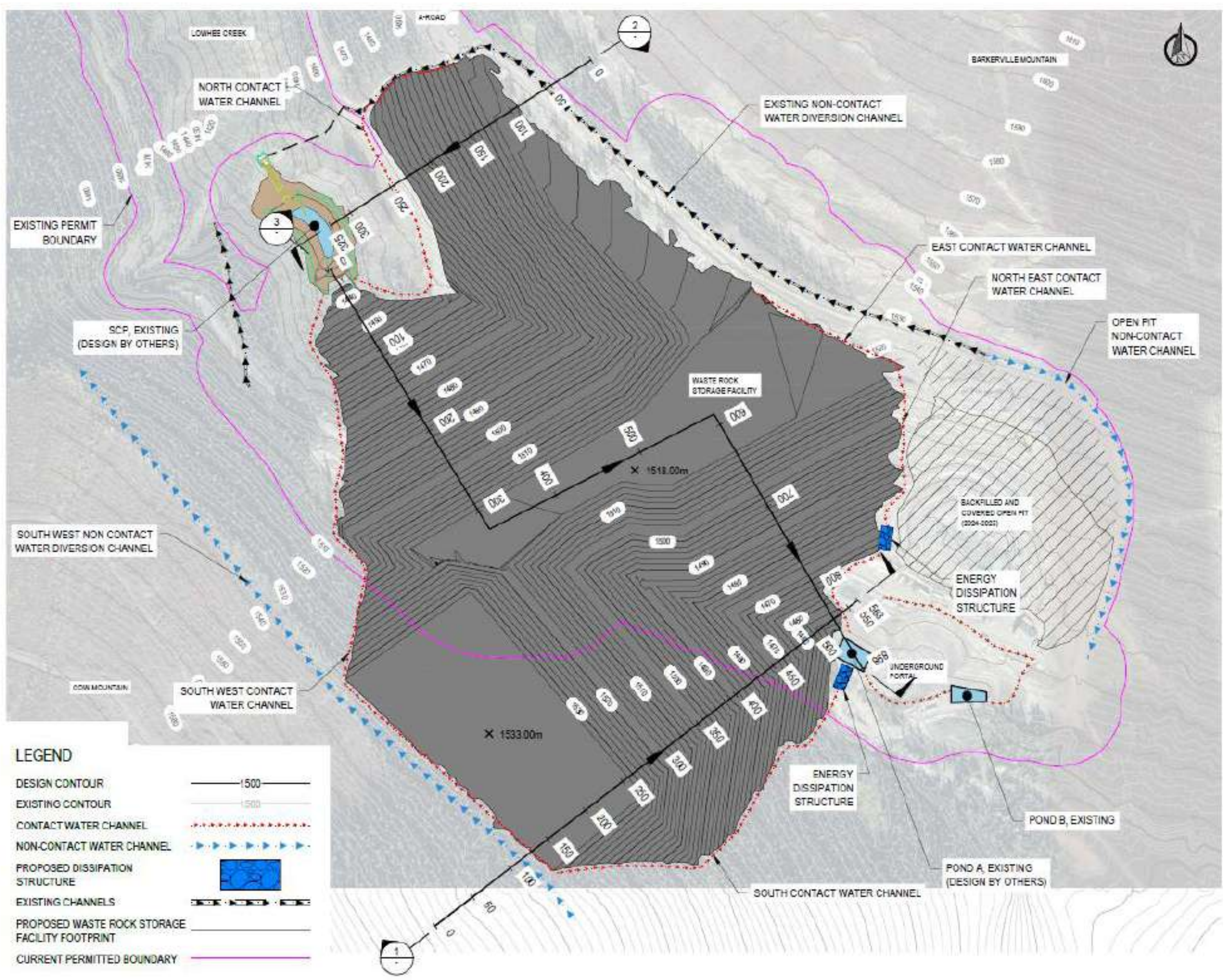


Figure 18-10: Layout plan showing the WRSF location

18.3.5.2 Water Treatment

Existing Infrastructure

The Bonanza Ledge WTP is configured to treat contact and surface runoff water via two primary treatment systems: one for sulphate and metals removal, and a second for nitrogen species. The sulphate/metals train consists of a four-chamber reactor tank and barium chloride system, followed by a clarifier for solids separation. Downstream of the clarifier, treatment continues through multimedia and bag filters operated in series, with pH adjustment completed prior to final discharge.

The nitrogen removal system is based on a Moving Bed Biofilm Reactor ("MBBR") to manage nitrate using denitrification. Sludge generated in the process is dewatered using geotubes. Chemical dosing systems are used for pH adjustment, coagulant addition, sulphate precipitation, and metals treatment.

Proposed Infrastructure

As part of the Project, two water treatment plants were proposed and permitted, one for the MSC and another at Bonanza Ledge. An opportunity was identified to build a combined WTP as a more efficient way to treat mine impacted water. Due to the proximity and similar water characteristics, it was decided to expand the design of the MSC WTP to treat water from both the MSC and Bonanza Ledge.

Prior to constructing the MSC, the Bonanza Ledge WTP will be upgraded to treat a total discharge flow of 200 m^3/h. The upgrade will also include adding a barium hydroxide chemical treatment system as well as additional polishing filtration. Ultrafiltration ("UF") and reverse osmosis or nanofiltration ("RO" or "NF") will be installed at the back end of the WTP for advanced filtration. While both RO and NF technologies remain under consideration, the current design favors NF to reduce operational complexity and avoid the need for post-treatment remineralization. These upgrades will allow the treatment of water from the different project components during the construction phase and align with the newly permitted discharge limits. The Bonanza Ledge WTP is meant to operate until the MSC WTP is constructed and operational.

18.3.5.3 Water Treatment Conveyance Infrastructure (Pumping and Pipelines)

Existing Infrastructure

Prior to the start of the Project, Bonanza Ledge will be equipped with pump stations and pipe systems to meet the water treatment conveyance requirements of the Project. The pumping stations and pipeline systems are designed to transfer water directly, or indirectly, to the water treatment plants from the Bonanza Ledge SCP and the FMR.

Proposed Infrastructure

Two pumping stations will be installed at Bonanza Ledge prior to the start of the Project. A 1,100 m^3/h (200 m^3/h from the FMR) capacity pump station having 2x 50% configuration will be installed to transfer water from the Bonanza Ledge FMR to the Bonanza Ledge SCP. An existing 200 m^3/h capacity pump station having 1x 100% configuration is used to transfer water from the Bonanza Ledge SCP to the Bonanza Ledge WTP.

Two water pipeline systems will be installed at the site, one for each pumping station described earlier. The water pipelines will be of high-density polyethylene ("HDPE") material of construction and will be installed above grade.

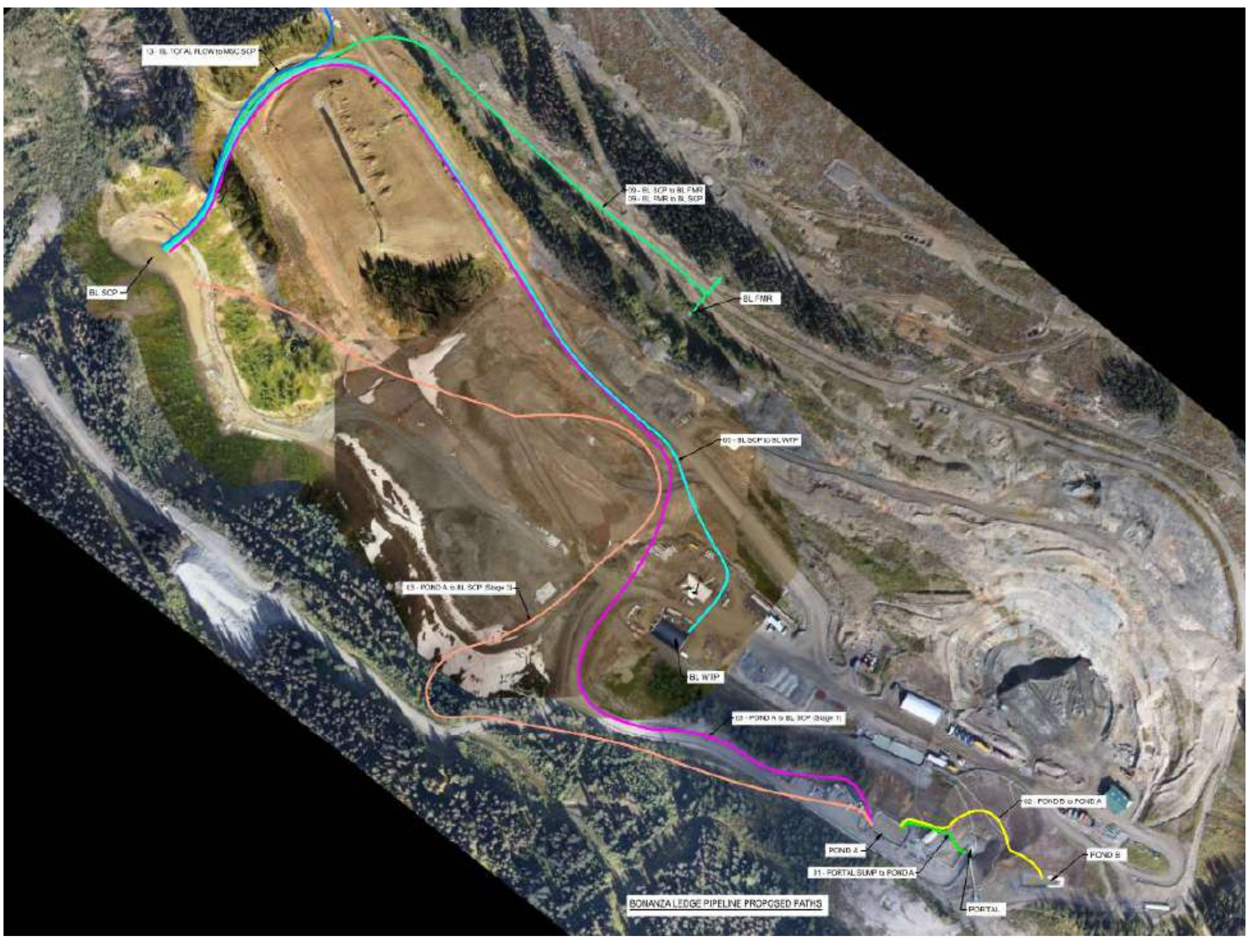


Figure 18-11: Proposed Bonanza Ledge pipeline pathways

18.3.5.4 Surface Support Infrastructure

An existing modular office building will be reused for the operation at Bonanza Ledge. Additionally, the existing workshop, warehouse, electrical distribution infrastructure, and fuel storages (diesel and propane) will be reused for the Project.

18.3.5.5 Fuel Storage and Distribution

The Bonanza Ledge site will be serviced by three 10,000 L diesel fuel tanks and a 10,000 L gasoline fuel tank, all previously existing infrastructure. The tanks are double-walled and distribution will consist of fuel dispensing systems, pumps, filtration units, and spill containment measures. Safety features include fire suppression systems, containment areas, and emergency shutoff controls. Service and filling of storage tanks will be completed by tanker trucks.

Arrangement of fuel storage considers applicable regulations, such as required offsets.

18.3.6 Mine Site Complex

ODV has an office complex at the MSC across Lowhee Creek from the District of Wells. The facility was used in the past to support the previous operations at Bonanza Ledge and various exploration programs.

Existing infrastructure related to the MSC includes:

- Access Road: In general, access to the site is from A Road, which is accessed from Highway 26 and located between the District of Wells and the Ballarat Camp.
- First Aid/Emergency Service: The existing first aid/emergency services office is located on Ski Hill Road in Wells.
- Bulk Explosive Storage and Magazines: ODV has an existing explosive storage with adequate capacity to support pre-production. Once the underground storage is built, the existing explosive storage area will no longer be used for operations.
- IT and Telecommunication Services: ODV's Bonanza Ledge Mine operations have existing IT and telecommunication services available to support the activities at Bonanza Ledge during the life of the Project, including internet, telephone, and fibre optic. Mine operating requirements and capacity have been defined and staged and will require new communications services as described in Section 18.3.6.9

18.3.6.1 Site Preparation at the Mine Site Complex

It is proposed to build the MSC on the site of the historical Cariboo Gold Quartz Mine. All infrastructure will be new and will require clearing to establish the MSC footprint. The site is covered by vegetation with limited immature coniferous and deciduous trees. A clearing of 100,000 m^2 will be required. Upon completion of clearing, 57,000 m^3 will require stripping and grubbing. Where possible, excavated material from the concentrator building, Valley portal, and MSC WTP pad will be placed as backfill for civil works, including the site access roads, concentrator building and water management infrastructure. Additional engineered fill will be generated from a mobile jaw crusher fed by waste rock generated from the underground mining development.

18.3.6.2 Roads

Permanent Bridge

The Willow River Bridge is designed as a bridge consisting of steel girders with a concrete deck. The deck will be flared to accommodate the additional width required for the vehicles turning off and on from Highway 26. The bridge will span 21.4 m.

The Lowhee Creek Bridge was confirmed to be 100 t rated, which will not require upgrades to the structure in the future. Upgrades to the approaches will be performed.

Main Access Road

Vehicles and visitors will go through a security check point before being granted access to the premises. Following the Willow River Bridge and security check point, the main access road will be capped with gravel and will span to reach the security check point. Design of the main access road will account for on-highway rated traffic only; no off-road vehicle loading is expected. Additionally, access to the MSC will also be possible to the east by the Lowhee Creek Bridge, at a crossing right next to the existing office complex.

The approximate total length of the main access road is approximately 1.1 km, from Highway 26 through the concentrator building area and ending at the MSC WTP.

Access Gates

One access gate will be required to manage incoming and outgoing traffic from the MSC. This gate will be located at the toe of the access ramp to the MSC across the Willow River Bridge.

Light Vehicle Roads

The WTP effluent discharge access road will branch from the main MSC access road. This portion of road will be for light vehicle traffic only.

Parking Area

Development of the mill process plant and office complex/mine dry will include provision for parking of personnel vehicles. This will allow for parking spaces to accommodate up to 20 light vehicles. The parking area will be built according to applicable BC provincial regulation and safety standards.

18.3.6.3 Mine Site Complex Operation Infrastructure

Office Complex and Mine Dry

The office complex will consist of two single-storey, pre-engineered, and prefabricated modular buildings, each comprising 12 modules of 3.8 m x 18.3 m.

The first building, with a total surface area of approximately 800 m², will house the administrative offices, including Process and Mining Operations, as well as support departments such as Health and Safety, Maintenance, and Security.

The second building, also approximately 800 m², will contain the mine dry facilities, which include men's and women's dry areas (clean and dirty sides), lockers, showers, a lunchroom, janitor space, mechanical room, and mine dispatch.

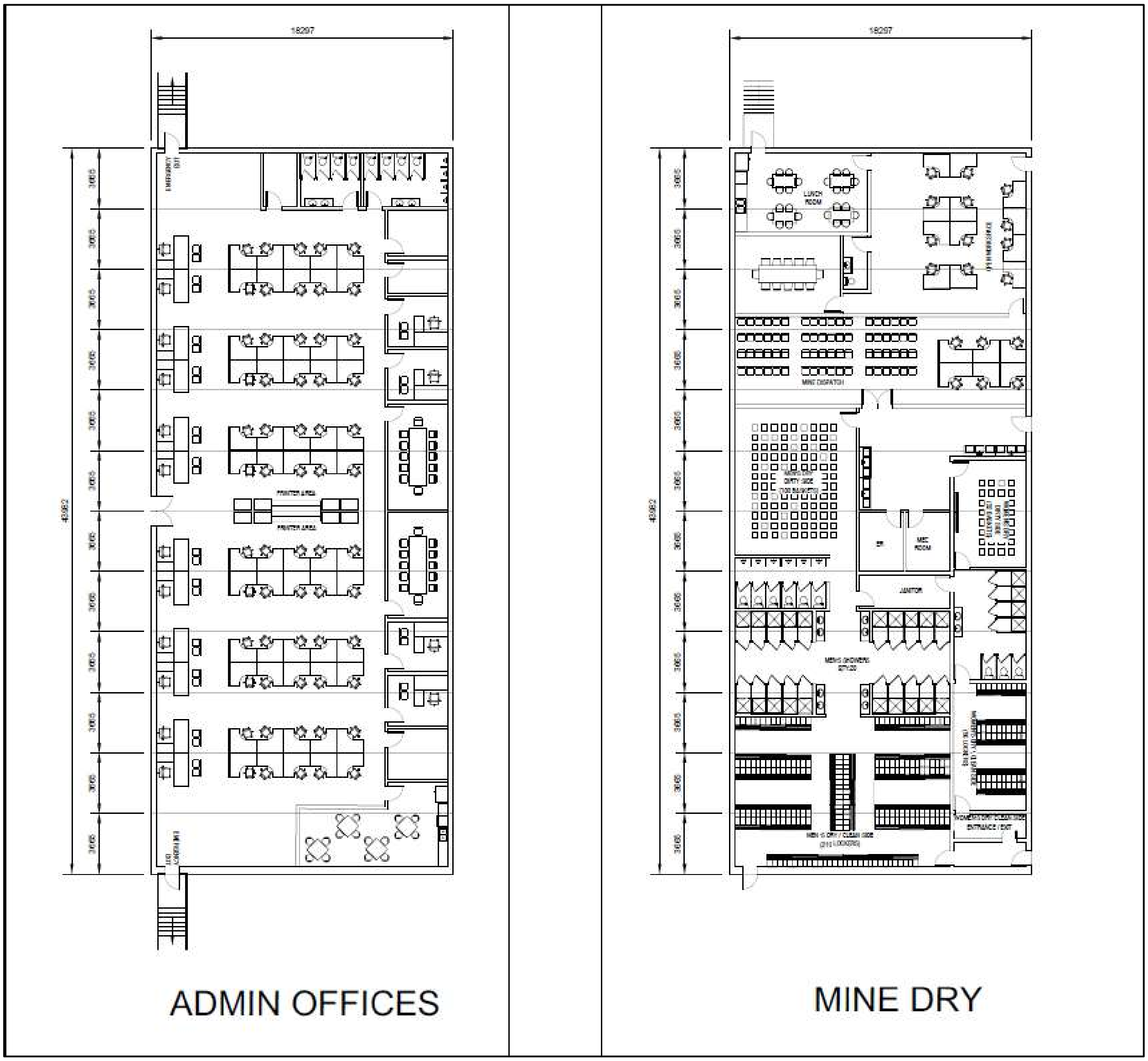


Figure 18-12: Preliminary office and mine dry layouts

Emergency Response Team Garage

The Emergency Response Team ("ERT") garage will be located at 4270 Sanders Ave in Wells, BC. This is an existing building owned by ODV, currently in use as a community relations office. There are two existing roll up doors at the back of the building on the southern side, providing access to the garage. Upgrades will be made to the building to accommodate storage of a fire truck and an ERT truck. Equipment and tooling will be purchased to support the mine rescue team. Within the interior of the garage, shelving and general storage will be installed to aid in gear and equipment organization not limited to the following subareas:

- ERT call out crew personal protective equipment ("PPE");
- Detection and monitoring instruments;
- Rescue tools and devices;
- Medical and first aid equipment;
- Fire, hazmat, and utility equipment;
- Administrative and support materials.

Air Intake Raises

Ventilation raises will be installed for each of the underground zones. They will be built to follow the underground mine development schedule as they become required. Each raise will consist of cut/fill excavation inclusive of a fresh air intake fan and heater, a concrete slab, and a connection to an underground natural gas pipeline, with the exception of the Lowhee air intake, which will use propane with the appropriate propane storage and distribution facilities.

Each ventilation raise area will be fenced for safety purposes. The respective pads will also serve for alternate emergency egresses for the underground mine. Existing access roads will be used to access the ventilation raises.

Air Intake raises planned:

- 1553 – Lowhee
- 1554 – Cow
- 1556 – Shaft
- 1557 – Mosquito

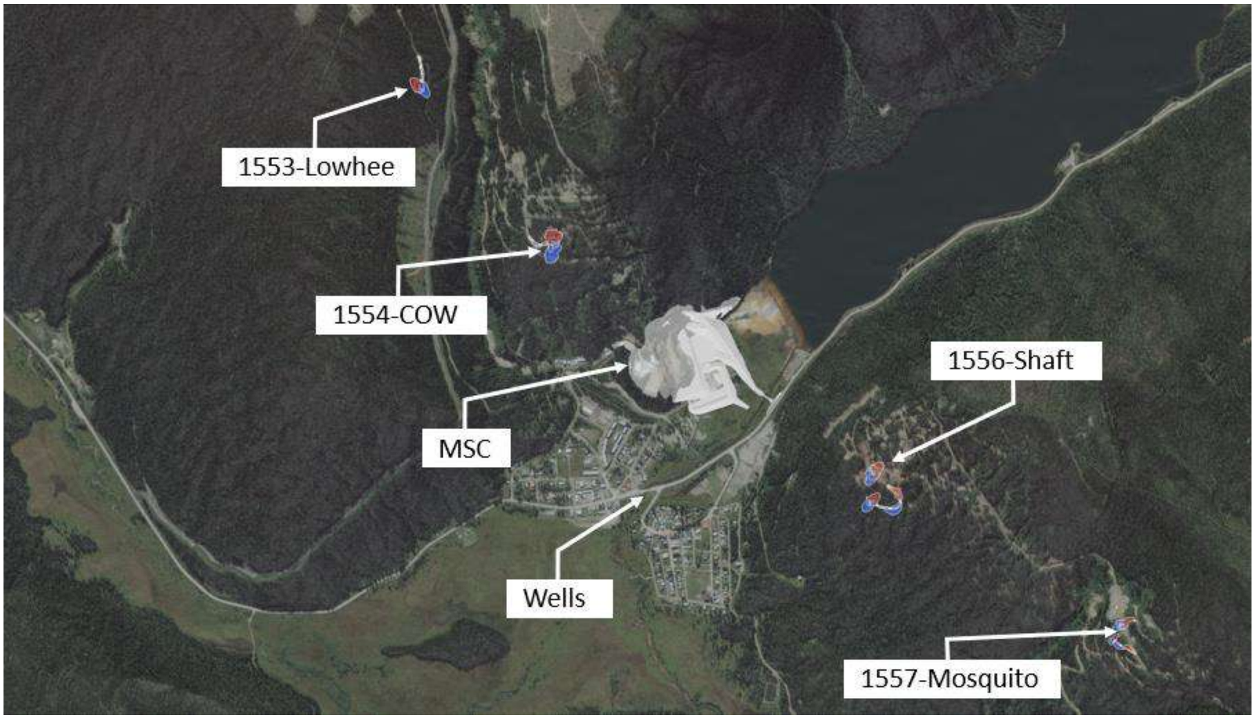


Figure 18-13: Preliminary air intake locations

Fuel Storage and Distribution

The MSC will be serviced by a 70,000 L diesel fuel tank and a 10,000 L gasoline fuel tank. The tanks will be double-walled and distribution will consist of fuel dispensing systems, pumps, filtration units, and spill containment measures. Safety features to include fire suppression systems, containment areas, and emergency shutoff controls. Service and filling of storage tanks to be completed by tanker trucks.

Liquefied Petroleum Gas ("LPG") will be stored in a 10,000 United States Water Gallon ("USWG") tank and distributed through an underground distribution network. The surrounding infrastructure of the MSC will be tied into this distribution network.

Arrangement of fuel storage will consider applicable regulations, such as required offsets, tertiary containment, and be covered by a prefabricated structure to mitigate the accumulation of snow.

Firewater

A fire pump station will be located near the MSC WTP building. The water source for the fire water protection system will be the effluent of the MSC WTP, feeding a 900 m^3 steel tank equipped with a mechanical overfill to ensure the tank is always full. The tank will be connected to an enclosed pumping system comprised of an electrical fire pump, and a diesel fire pump. A buried pipeline will distribute water to all main buildings.

Sewage Treatment

The sewage treatment system will be located northeast of the mill process building area. An underground sewage piping system will be established to collect sewage wastewater from the mill process building, the admin offices and mine dry building for treatment. A buried equalization tank, next to the modularized sewage treatment system, will collect wastewater from the underground piping system as well as from a vacuum truck. A feed pump will then pump the contents of the equalization tank to the sewage treatment plant, which will employ the membrane biological reactor ("MBR") technology with submerged UF membranes. The effluent will meet the effluent standard limits of British Columbia.

Potable Water Treatment and Distribution

The MSC will be serviced through an underground potable water distribution system. Raw water from a well located adjacent to the Lowhee Creek Bridge will feed to the Potable WTP. Water is fed through a filtering system where it is dosed with coagulant. Then the water will be pumped to a U/F unit where the total suspended solids and turbidity are removed. The U/F permeate water will be sent to a granular activated carbon ("GAC") filter and then disinfected with ultraviolet and a hypochlorite dose to maintain residual chlorine in the water to prevent any potential regrowth.

18.3.6.4 Water Treatment

The proposed MSC WTP and associated infrastructure will be located on the north side of the mine site, close to Jack of Clubs Lake. The water from the Bonanza Ledge Site will be conveyed to the MSC SCP via a designated pipeline (by others), for redistribution to the MSC WTP.

The MSC WTP will support the mining efforts during operation, active closure, and post closure active care phases of the Project. The MSC WTP will be designed to treat and discharge 800 m^3/h of mine-impacted water. Treatment objectives will include metals, nitrogen species such as ammonia, nitrite and nitrate, and suspended solids. The MSC WTP design includes a High-Density Sludge ("HDS") system that provides the bulk removal of metals and solids, nitrification and denitrification MBBR for nitrogen species removal, and post-filtration prior to discharge. Treated water will be discharged to Jack of Clubs Lake. Solid waste streams (recovered sludge) will be dewatered and disposed.

HDS is a proven method for metals and metalloids removal from mine-impacted water. Recirculation of generated sludge in the lime treatment process allows for a denser sludge, which enhances the removal of contaminants. Hydroxide, sulphide, and iron co-precipitation is achieved via dosing reagents such as lime, sulphide, and coagulant. A conventional clarifier is designed to remove the generated suspended solids from the process water.

Treatment for some nitrogen species is achieved with biological treatment in MBBR tanks, a nitrifying step for ammonia and nitrite conversion to nitrate followed by a denitrifying step for nitrate conversion to inert nitrogen gas. Biosolids are removed by way of a downstream clarifier. MBBRs are widely used in water treatment for nitrogen species attenuation.

An oxidation reactor is included to ensure preferable oxidation potential of the clarifier overflow prior to filtration. The final filtration and polishing stage is included to help ensure sufficient removal of suspended solids, including precipitated metals and residual biomass from the biological treatment systems. The filtration system uses anthracite sand filtration media. The treated effluent will be discharged to the environment.

The MSC WTP will be housed within a centralized WTP building with the majority of equipment located inside. Large tanks and clarifiers will be located outside and designed for the climate conditions.

18.3.6.5 Water Treatment Conveyance Infrastructure (Pumping and Piping Systems)

The surface water handling system for the Project is designed to manage a wide range of flow rates using a combination of submersible and centrifugal pumps using HDPE pipelines, heat traced and/or insulated when required, to circulate water between infrastructures as defined in the flow diagram. The system supports both low-flow and high-capacity applications across multiple surface infrastructure components including underground dewatering reporting to surface for treatment.

Submersible pumps are proposed for localized dewatering and utility water services. These units are selected for their reliability and adaptability across voltage requirements with single- and three-phase configurations, depending on the application. Pump selection is based on required flow and head conditions, with rotational speeds typically ranging between 1,700 rpm and 3,500 rpm.

For higher flow applications, such as bulk water transfer or process water return, high-head pumps and centrifugal pumps are utilized. These pumps are configured in both single-line and parallel-line arrangements to optimize flow distribution and system redundancy.

The system is designed for contingency capacity to account for seasonal variations and maintenance flexibility. Overall, the pumping system is modular, scalable, and designed to accommodate the operational and environmental conditions expected on site.

Surplus Treated water that cannot be recirculated in the process will be subsequently discharged into Jack of Clubs Lake. Surface contact water runoff will be collected from a ditching network.

The MSC pumping and pipeline infrastructures pathways are shown in Figure 18-14 and summarized in Table 18-3.

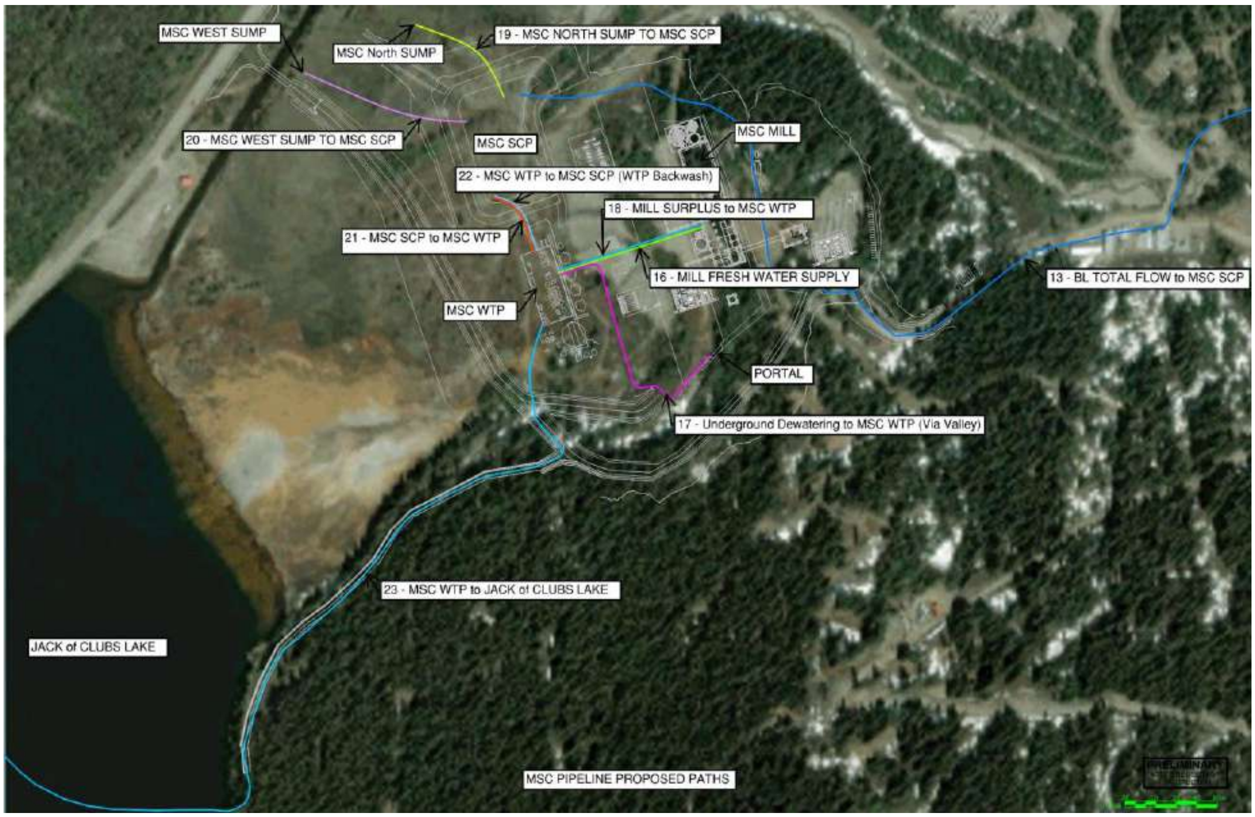


Figure 18-14: MSC pipeline pathways

Table 18-3: MSC pipeline pathways summary

Pipeline No.	Flow Path	Pumping Capacity	Pump(s) Configuration
16	Fresh Water Supply: WTP MSC to MSC Mill	56 m^3/h	Single
17	Underground Dewatering to MSC WTP	480 m^3/h	Single
18	MSC Mill Surplus Water to MSC WTP	21 m^3/h	Single
19	MSC north sump contact water from mill pad runoff to MSC SCP	51 m^3/h	Parallel
20	MSC West sump contact water from mill pad runoff to MSC SCP	172 m^3/h	Parallel
21	MSC SCP to MSC WTP	920 m^3/h	Parallel
22	MSC WTP backwash to MSC SCP	104 m^3/h	Parallel
23	MSC WTP treated effluent to Jack of Clubs through a diffuser	1440 m^3/h	Parallel

18.3.6.6 Power Supply

The power demand at the MSC and Bonanza Ledge is approximately 20 MW on average, peaking at 21.4 MW.

Table 18-4: Peak power demand by area

Area	Peak Power Demand (MW)
Underground Mine	10.8
Processing Plant	8.1
Ancillary Infrastructure	2.5

Substation Power Distribution

The incoming TL will terminate on a gantry structure in the main substation, which will be designed to accommodate 138 kV and 69 kV terminations as well as a fibre incoming. The outdoor substation will initially house parallel 69 kV to 13.8 kV transformers rated to 18/24 MVA, 22 MW (ONAN/ONAF). The substation could be upgraded with parallel 138 kV to 13.8 kV transformers rated to 30/40/50 MVA (ONAN/ONAF1/ONAF2) to handle an increase in site loads. The substation will be designed for both 69 kV and 138 kV scenarios. Inrush current mitigation is assumed to be required for these transformers, and independent-pole-operated breakers with point-on-wave controllers will be included to minimize the inrush current of energization. During normal operation, both transformers will share the load, but during maintenance or repair, one transformer will be capable of supplying the entire load of the MSC.

Electrical Room

From the secondary electrical room of the main power transformers, 13.8 kV air-insulated switchgear ("AIS") will distribute the medium voltage to the MSC loads including the 600 V switchgear located within the Substation Electrical Building. This 600 V switchgear will distribute power to the local MCCs to cover the process plants as well as the substation protection and control systems within the electrical room.

Emergency Power

Emergency power generators are planned to supply the critical equipment and installations when BC Hydro power is unavailable. BC Hydro does not allow parallel operation of diesel generators, so the critical loads will be supplied with two diesel generators during these conditions. These generators are currently located at Bonanza Ledge and will be integrated into the system distribution through the underground with communication assisted lockouts to prevent paralleling the generators during utility operation.

18.3.6.7 Process Plant Power

Site Power Distribution

The main electrical room, described within Section 18.3.6.6, will have 13.8 kV and 600 V electrical distribution gear that will provide power to key operational loads within the concentrator plant.

Two 13.8 kV power feeds from the main electrical room shall feed two 13.8 kV-600 V dry transformers and electrical distribution gear, located in the paste plant electrical room. This room is located beside the concentrator building and shall provide power to key operational loads within the concentrator plant.

18.3.6.8 Temporary Power

Construction Power

Temporary construction power will be supplied at the MSC via one 600 kW generator with a 450 kW backup generator. The generators will supply 20 ft long insulated high cube shipping containers. Within the shipping container will be a manual transfer switch between the 600 kW and 450 kW generators. Provision for 600 A, 600 V distribution with a 600 A main breaker before stepping down to breakers ranging from 150 A to 15 A.

18.3.6.9 Telecommunication and IT Infrastructure

Public Internet access and telephony services will be provided to the MSC via a primary wide area network ("WAN") link composed of an aerial fibre optic cable running between Quesnel and the new Telus Telecommunication tower, which is situated near the MSC WTP.

For redundancy, a secondary WAN link will be implemented using a fibre optic cable running from Quesnel to BC Hydro Barlow substation (aerial on Highway 97, then buried on Highway 26) and then over the new 69 kV powerline that will be built between Barlow and the MSC in Wells.

A redundant fibre optic campus area network will interconnect all facilities of the MSC, including:

- Security gate;
- Telecom tower;
- Main electrical substation;
- Concentrator building area;
- U/G networks;
- Portals, exhaust raise and main intake raises;
- Water treatment plant and pumping stations;
- Fire water pumping station.

The fibre optic campus area network will be shared between the following systems:

- Process and electrical grid industrial control system;
- Corporate network (administration, maintenance, and telephony);
- Fire detection;
- Security video surveillance and access control system.

Remote areas on the site could be serviced via Point-to-Multipoint microwave links when more cost effective than through fibre optic.

IT and networking equipment and software required for the Project will be deployed to service the different areas via wired or wireless networks, where appropriate, for administrative and industrial systems.

The network architecture of the Telecom and IT infrastructure will be designed with resilience and cybersecurity in mind.

An underground private 4G/5G LTE and fibre optic network will be deployed to service the mine personnel and vehicles. Supported applications should include personnel and equipment geolocation for safety and ventilation on demand, remote operation, two-way radio communication, mining equipment predictive maintenance, pumps, and electrical distribution network control.

A Digital Mobile Radio ("DMR") system will provide two-way radio service for surface communications. To complement the DMR, a Push-to-Talk over Cellular ("PoC"), that can be used also over Wi-Fi, will be deployed to allow authorized workers, consultants and contractors to communicate with each other and with the DMR system users.

The telecom and IT infrastructure have been designed to allow for the potential future implementation of remote-control operation with a low latency communication connection.

18.4 Off-site Infrastructure

ODV owns various lodging facilities, including an existing camp at Ballarat (detailed below).

The company also owns the following lodging facilities in the District of Wells:

- The Hubs Motel: 23 rooms; and,
- Various houses and apartments: 27 rooms.

18.4.1 Ballarat Camp

The existing Ballarat Camp will undergo a significant expansion to increase its capacity from 76 to 264 occupants, directly supporting the Project.

The current Ballarat Camp includes detailed infrastructure listed below:

- Two 38-person dormitories with private washroom (with toilet, sink, and shower), bed with premium mattress, wardrobe, desk, television, chair, and blackout window blinds;
- Three-unit mine dry facility with lockers and hanging baskets for drying;
- Eight-unit kitchen and diner facility;
- The camp is currently powered with diesel gensets;
- Propane storage tank and distribution line;
- Communications (Pole Fiber Drop) – Buried fiber line to central communications room;
- Sewage Collection – 63.6 m^3 Sewage tank and underground pumping and conveyance system;
- Water treatment plant – Capacity of producing 27 m^3/day potable water;
- Water supply well – Producing ~46 m^3/day freshwater.

The Phase 2 development includes comprehensive accommodation, facility upgrades, utility expansions, and essential infrastructure enhancements.

Accommodation Facilities

- Addition of five dormitory wings, each providing 36–40 single-occupancy rooms, totalling at least 182 additional rooms.
- Each accommodation room will include a private washroom (with toilet, sink, and shower), bed with premium mattress, wardrobe, desk, television, chair, and blackout window blinds.
- All dormitory wings will include centralized or zoned HVAC systems for heating and air conditioning and dedicated laundry areas equipped with commercial-grade washers and dryers.
- Accommodation modules will primarily comprise lightly used, prefabricated units.
- One 38-person dormitory will be relocated from the currently existing QR Camp, involving disassembly, transportation, and reassembly.
- Four 38-person lightly used dormitory facilities will be sourced from a specialty camp supplier.

Kitchen and Dining Facility Upgrades

- Existing kitchen and dining facilities will undergo renovations, including wall removals and spatial reconfiguration, to expand dining capacity to accommodate 266-person capacity.
- Modifications include relocation of lunch areas, boot rooms, janitorial spaces, and handwashing facilities to improve operational efficiency.

Recreation Facility

- A new modular recreation facility consisting of prefabricated modules will be installed.
- This facility will include dedicated spaces for exercise and recreation, equipped with fitness equipment, entertainment amenities (including a 65-inch TV), and accessible washroom facilities.

Arctic Corridors

- The addition of enclosed, prefabricated modular corridors will interconnect existing and new dormitory wings, kitchen and dining areas, new recreation facilities, and the existing mine dry building.

Utilities and Infrastructure Enhancements

- Electrical Supply: Expansion and upgrades to existing power distribution, including transformers, distribution panels and infrastructure and addition of exterior lighting to encompass additional dormitory expansion. The kitchen will be powered from the line power and the remainder of the camp power will be supplied via the camp generator.
- Communication Networks: Installation of comprehensive networking infrastructure, including Wi-Fi access points, routers, and cabling, delivering high-quality connectivity to all facilities.
- Water Treatment and Distribution: Expansion of potable water capacity from 27 m^3/day by additional 30 m^3/day, including new water distribution systems connected to accommodations, kitchen, and recreation facilities. Upgraded potable water capacity ~57 m^3/day.
- Propane System: Evaluation and potential upgrades to propane storage and distribution infrastructure to supply expanded HVAC, hot water, and kitchen needs.

Sewage Management

- Installation of expanded sewage collection infrastructure, incorporating a new lift station and associated piping to transport wastewater to an existing 400-barrel holding tank.
- Development of an on-site septic lagoon system and seepage bed, as per Radloff engineering designs, to treat sewage efficiently. The septic system is designed to treat, at minimum, the existing 76-person capacity of the current Ballarat Camp. Any wastewater generated above this treatment capacity will be managed by regular pump-and-haul operations off-site.

Life Safety Infrastructure

- Comprehensive life safety systems, including centralized fire detection, alarms, emergency exits, and lighting, compliant with BC Building Code standards.
- Installation of dedicated fire water storage, pumping facilities, and strategically-placed fire hose stations to support effective emergency response.

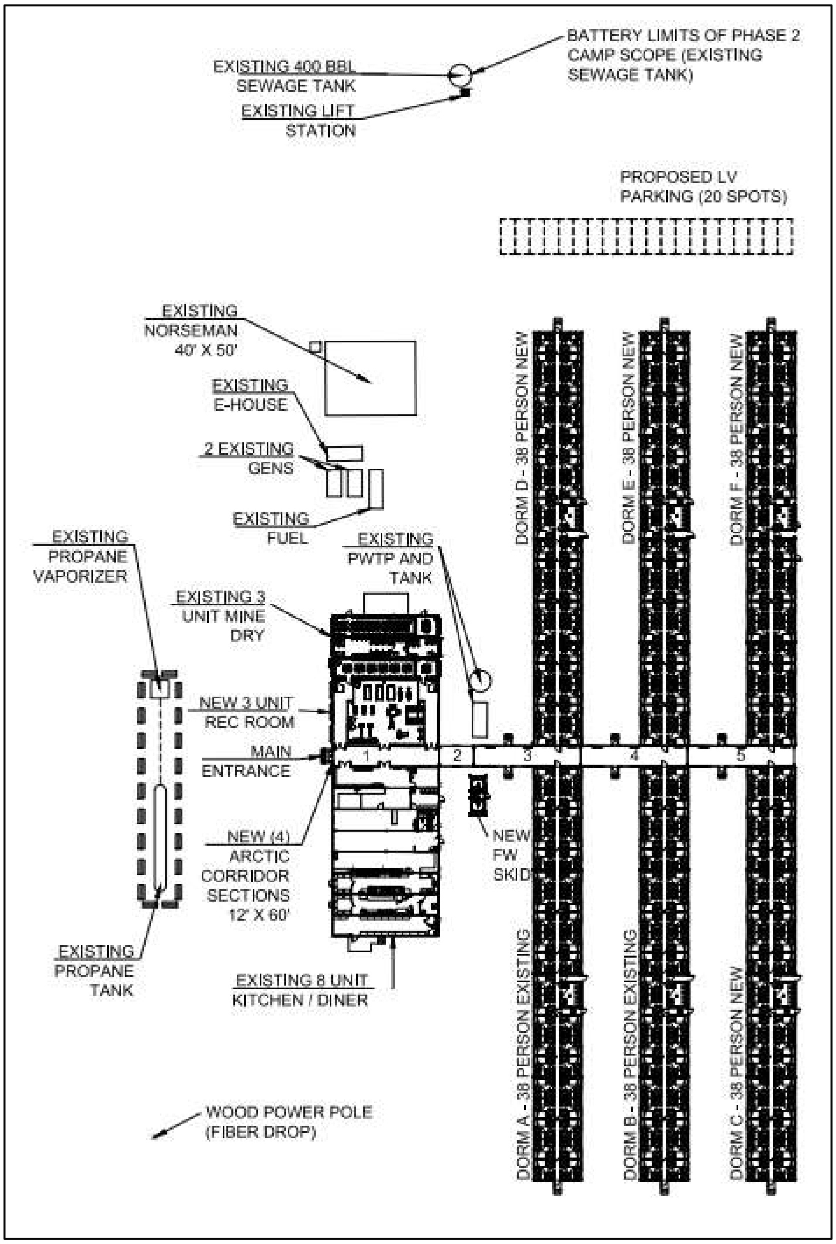


Figure 18-15: Proposed Ballarat camp expansion

18.4.2 Transmission Line

The TL will initially operate at 69 kV from Barlow Substation to the mine-end substation, but will be built to 138 kV standards after the proposed step-up substation, for future electrification opportunities. The TL will also accommodate an underbuilt 24-fibre all-dielectric self-supporting ("ADSS") cable.

The line will originate from Barlow Substation, which is located approximately 5 km northeast of Quesnel, off Highway 26. After exiting Barlow Substation, the line will run parallel to the existing BC Hydro lines 2L354, 5L011, 5L012, and 5L013 for just over 1 km until crossing the 500 kV TL corridor underground (see Section 5.7 for more information on the underground crossing). The line will then run east for approximately 4.5 km until crossing Highway 26. Shortly after crossing the highway, the line will switch to 138 kV structure type and framing as it passes the proposed step-up substation location. The line will then continue northeast before reaching the mine-end substation in Wells.

The terrain is variable throughout the transmission alignment. The 69 kV portion before the step-up substation is relatively flat, with some wetland presence. After the step-up substation, the terrain becomes more mountainous with varying elevation. The TL follows nearby forestry service roads ("FSR") when available but, in some cases, it is not possible due to right-of-way constraints.

19. Market Studies and Contracts

It was assumed in this FS and Technical Report that the Cariboo Gold Project will produce two saleable gold products: gold doré bars (produced from the gravity concentrate) and a high-grade flotation concentrate from a single processing facility in Wells, at the MSC. Doré bars will be sold and refined through a certified North American refinery, with numerous options available in both Canada and the United States.

In parallel, a high-grade flotation concentrate (110–150 g/t Au), estimated at approximately 65 tpd to 70 tpd, will also be produced. A preliminary off-take agreement has been established with a well-known international metals trading firm for the sale of this concentrate. The flotation concentrate will be bagged and transported by truck from the MSC in Wells to the Port of Vancouver, where it will be shipped via ocean freight to a smelting partner, based in Asia.

19.1 Market Studies

No market studies have been conducted by ODV or its consultants in relation to the gold doré and flotation concentrate that will be produced by the Project. The QP has reviewed the prevailing market context, taken into account the absence of formal market studies, and has validated the reasonableness and appropriateness of the commodity price assumptions utilized in the economic analysis.

Global demand for gold remains strong, driven by both industrial use and investment demand. Gold continues to trade with high liquidity on global markets, and there is robust capacity among refiners and smelters to process doré and gold concentrates. The Project is, therefore, not exposed to material market risk in terms of its ability to place products or receive competitive terms.

No material long-term contracts (e.g., hedging, streaming, or fixed pricing) are currently in place for either doré or concentrate sales. This allows the Project to benefit from spot market pricing and maintain commercial flexibility.

19.2 Gold Price and Exchange Rate

The long-term price of gold and CAD:USD exchange rates were estimated on the basis of discussions with experts, trailing averages, consensus analyst estimates, and recently published economic studies that were deemed to be credible. For this Report, a gold price of USD 2,400/oz and a CAD:USD exchange rate of 1.00:0.74 was used. Table 19-1 outlines the pricing and exchange rate assumptions used in the economic analysis, as described in Chapter 22.

Table 19-1: Pricing and exchange rate assumptions

Assumption	Unit	Value
Gold Price	USD/oz	2,400
Exchange Rate	USD:CAD (CAD:USD)	1.35 (0.74)

Figure 19-1 show the historical monthly gold price (end of Month) since April 2022. As of April 30, 2025, the 3-year trailing average is USD 2,161/oz.

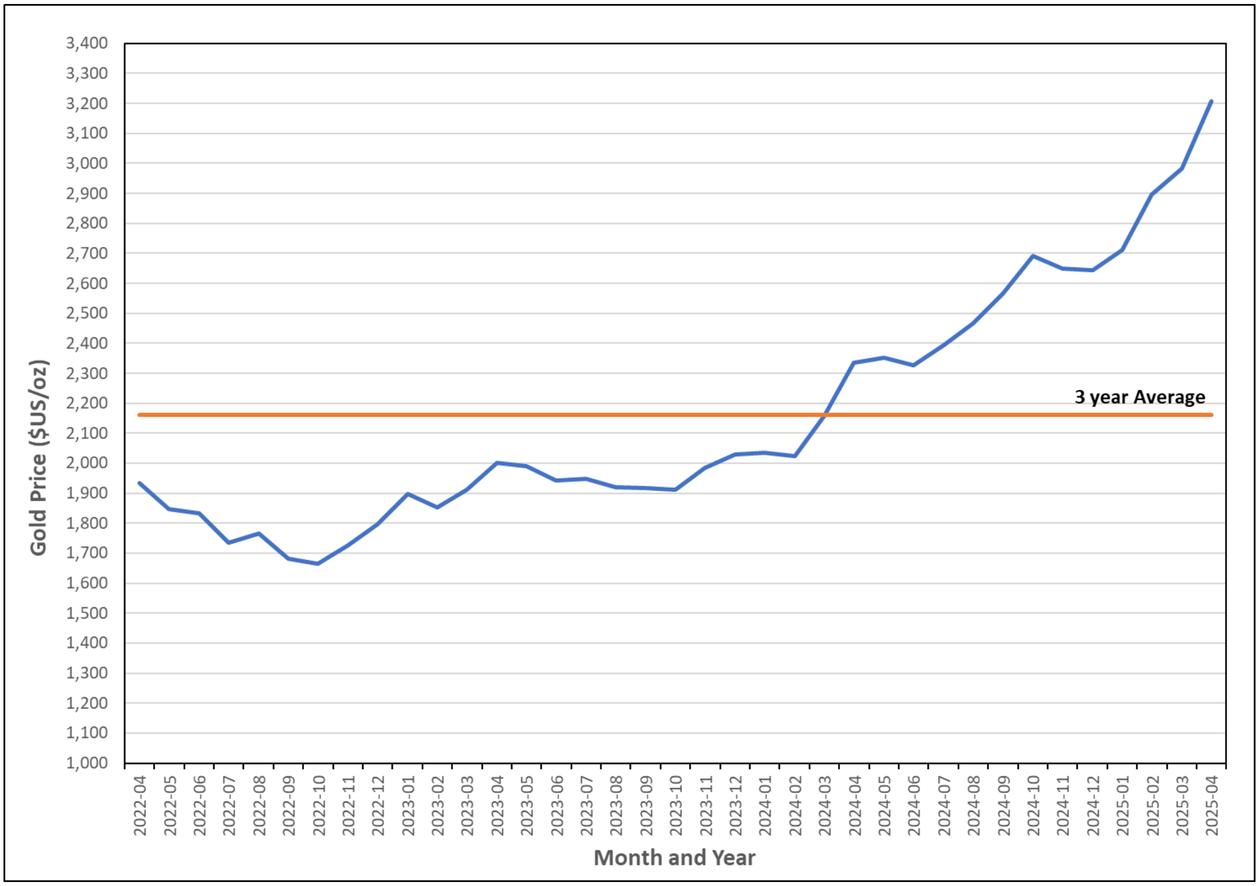


Figure 19-1: Historical monthly gold price (USD/oz)

As of the effective date of this Report, the gold price has been considerably higher than the 3-year trailing average (USD 2,161/oz) and the assumed FS gold price (USD 2,400/oz) over the past year. The forecasted and assumed exchange rate and precious metal prices have been kept constant and are meant to reflect long-term expectations over the life of the Project. It should be noted that the exchange rate and precious metal prices can be volatile and that there is the potential for deviation from the LOM forecasts.

19.3 Gold Sales

The Project will produce two saleable gold products: gold doré bars and a high-grade flotation concentrate from a single processing facility.

19.3.1 Gold Doré

Gold doré bars will be produced on site via gravity recovery and smelting of high-grade gravity concentrate. The doré will typically contain gold and silver, with minor base metal impurities. These bars will be shipped to a certified North American precious metals refinery for recovery of the gold into high purity bars meeting the minimum London Bullion Market Association ("LBMA") delivery standards for sale into the open market. Refining terms for doré are standardized and favorable to producers. Under current market conditions, the following terms for gold doré refining have been assumed based on a budgetary quotation received from a North American-based refinery:

- Payable Gold: 99.97% of contained gold;
- Transport and Refining Charges: USD 2.56 per ounce of gold;
- Settlement Timing: five business days from receipt of doré and assay confirmation.

Given the robust gold market and multiple refining options in both Canada and the United States, doré sales are not expected to encounter any logistical or market-related constraints. No offtake agreement is required for doré sales, and the Project will retain flexibility to negotiate terms with refiners based on prevailing conditions.

19.3.2 Gold Concentrate

In addition to doré, the Project will produce a high-grade flotation concentrate containing significant gold values, as well as minor quantities of silver, copper, and other trace elements. The concentrate is expected to average approximately 110–150 g/t Au, with an estimated production rate of 65 tpd to 70 tpd. The concentrate will be bagged and trucked from the process plant to the Port of Vancouver for ocean shipment to a third-party smelter. ODV will be responsible for transporting the concentrate from the processing facility at the MSC (in Wells) to the Port of Vancouver, which is located approximately 750 km via road from the Project site. A local transport provider has provided a transport cost of $93.10/t. Storage, handling, loading and ocean shipping costs from the port of Vancouver to Qingdao, China, have been estimated to total USD 125.00/t.

A preliminary purchase offer agreement has been established between ODV and a well-known international metals trading firm for the purchase and marketing of the gold concentrate. The trading firm will determine the destination smelter for the concentrate. Under standard terms, the concentrate is expected to be sold to a smelter or refinery under the following indicative conditions:

The main terms of the agreement are the following:

- Gold payable is equal to the lower of 97.75% or a 2 g/t deduction;
- Payable Gold: 97.75%, subject to final assay and contract terms;
- Treatment Charges (TCs): USD 195.00 per dry tonne of concentrate;
- Refining Charges (RCs): USD 10.00 per payable ounce;
- Penalty Elements: Arsenic USD 2.00 for each 0.1% over 0.2%.

The metallurgical test work indicates that the concentrate is not expected to contain deleterious elements (e.g., arsenic, antimony, mercury) above penalty thresholds.

19.4 Royalties

On February 5, 2016, OGR completed the acquisition of a 1.5% NSR royalty on the Project for a cash consideration of $25M, with an option for OGR to purchase an additional 0.75% NSR royalty for $12.5M. On April 19, 2017, OGR exercised the option, bringing its total NSR royalty on the Project to 2.25%. On September 5, 2018, OGR announced the purchase of an additional 1.75% NSR royalty on the Project for a cash consideration of $20M, with an option for OGR to purchase an additional 1.0% NSR royalty for $13M. OGR announced it would exercise the option on October 5, 2020, bringing its NSR for the Project to 5.0%. OGR's 5.0% NSR royalty is the only royalty that currently applies to the Project.

19.5 Contracts

19.5.1 Gold Doré

In the past, ODV's Barkerville Gold Mines was working with an American refiner; there are no refining agreements, sales contracts or other contracts currently in place for the gold doré. The doré to be eventually produced by the Project will be shipped to a North American precious-metals refinery for recovery of the gold into high purity bars meeting the minimum LBMA delivery standards.

19.5.2 Flotation Concentrate

ODV has a preliminary offer in place to purchase the gold concentrate. The general terms and conditions were previously described in Section 19.3.2.

19.5.3 Other Contracts

As of the effective date of this Report, ODV has signed agreements and awarded several equipment and service contracts as part of its operation of the Bonanza Ledge Mine, as well as for pre-construction activities for the Project. The significant contracts and agreements are summarized in Table 19-2.

Table 19-2: Significant project contracts and agreements

Contract/Agreement	Supplier
Roadheader Capital Lease	Sandvik Financial Services Canada

20. Environmental Studies, Permitting, and Social or Community Impact

This section summarizes the environmental studies conducted in support of the Cariboo Gold Project, the environmental management and monitoring efforts that may be required throughout the life of mine, as well as regulatory requirements and status.

20.1 Environmental Studies

20.1.1 Introduction

The Project area is composed of three main components:

- Mine Site including the Mine Site Complex and the Bonanza Ledge Site;
- Transportation Route;
- Transmission Line.

The majority of the Project infrastructure at the Mine Site, including the MSC, and the Bonanza Ledge WRSF, will be located on brownfield sites and lands previously disturbed by historical mining and recent mining at the Bonanza Ledge Mine (Morgan et al., 2019).

The development of a mining project in British Columbia requires various regulatory approvals. Project permitting is generally split into two phases, the EA phase followed by the permitting phase. Any major changes to the Project require amendments to authorizations as the Project evolves.

Osisko Development Corp. has undertaken EA and permitting processes for the Project, which have been supported by studies on the technical, environmental, and socio-economic components of the Project. Since 2016, through ongoing consultation and engagement, ODV has informed Indigenous nations, provincial government representatives and agencies, local and regional government representatives, community and economic organizations, adjacent permit/authorization holders, non-government organizations, local and regional businesses, and residents about the Project, and has considered their feedback throughout Project planning. Studies continued throughout the EA process and permitting stages of the Project and into pre-construction.

The Project received an Environmental Assessment Certificate, Certificate #M23-01, on October 10, 2023, and Schedule B of the certificate lays out the conditions of the approval under 22 separate sections. ODV also submitted the Joint Permit Application to the BC Major Mines Office to advance permitting of the *Mines Act and Environmental Management Act* on May 31, 2023, and the decision package was referred to the Statutory Decision Maker ("SDM") on November 12, 2024. The *Mines Act* permit, M-247, was received on November 20, 2024. The *Environmental Management Act* permits (PE-17876 for Bonanza Ledge and PE-111511 for the Mine Site Complex) were received on December 11, 2024.

The permitting process for the Transmission Line is being overseen by the Ministry of Water, Land and Resource Stewardship who is running a coordinated process for all authorizations required for the TL. The License of Occupation ("LOO") to authorize the construction of the TL under the *Forest Act* was submitted in July 2021, with updated documents for the Decommissioning and Closure Plan ("DRP"), LOO Management Plan, and TL Construction Environmental Management Plan ("CEMP") provided on May 26, 2025. and is anticipated to be in hand in Q3 2025.

Amendments to the EAC and other permits will be required to address changes in the Project described in Chapter 1.

The following sections describe the environmental effects that the Project is expected to have on the area and the mitigation measures proposed to control those impacts.

20.1.2 Climate

The Cariboo Region experiences a dry continental climate due to the coastal mountains influencing the westerly flow of winds and moisture coming from the Pacific Ocean. The climate at the sites is characterized by relatively cold winters and mild summers. The annual precipitation is moderate and there is comparatively little variation over the year in monthly precipitation.

Historical trend analysis and climate change predictions were used to evaluate the likelihood of the historical measurements to represent future climate conditions. Climate existing condition studies for the Project were conducted by Golder (now WSP). Table 20-1 consolidates the main climate statistics obtained from the Mine Site existing conditions report (Golder, 2022a).

Table 20-1: Summary of climate statistics

Variable	Unit	Mine Site (Golder, 2022a)
Mean Annual Total Precipitation	mm	1,034
Mean Annual Rainfall	mm	530
Mean Annual Snowfall	mm	504
Mean Annual Temperature for the LSA and RSA (1,460 m mean elevation)	°C	1.7
Mean Annual Temperature Lapse Rate (°C change per 100 m altitude increase)	°C	-0.38
Average Winter Season (sub-zero mean monthly temperatures)		November to March
Mean Annual Relative Humidity	%	72
Mean Annual Solar Radiation	W/m^2	130
Mean Annual Shallow Lake Evaporation for the LSA	mm	630
Mean Annual Potential Evapotranspiration for the LSA	mm	737
Difference in Mean Annual Shallow Evaporation and Potential Evapotranspiration Between the LSA and RSA	%	2% to 3%
Mean Snow Depth for the Month of March	cm	96
Mean Snow Density for the Month of March	g/cm^3	0.29

Notes:

- Statistics are based on reviewed historical records from multiple climate stations and measured and derived data (where applicable);
- LSA: Local study area;
- RSA: Regional study area.

Historical trends (trends in the data over the period of historical record) and available future climate change predictions were analyzed to predict future regional climate changes (Golder, 2022). Climate predictions for future time periods are available from Environment and Climate Change Canada's Coupled Model Intercomparison Project Phase 5 multi-model ensemble database with 1 × 1 degree grid resolution (ECCC, 2019). The ECCC climate change projection data are presented for the entire province and do not provide locally downscaled outputs. To predict site-specific effects for the local study area ("LSA"), a locally downscaled model (ClimateBC) with higher grid resolution was used for the climate change projections (Wang et al., 2016). The University of British Columbia (Morgan and Wright, 2020) uses the same climate change multi-model ensemble output to extract climate change predictions for a particular location.

Table 20-2 summarizes the predicted climate changes from Morgan & Wright (2020) for the Project (ODV, 2023):

Table 20-2: Summary of climate change predictions

Climate Factor	Predicted Changes
Precipitation	Projected median increases relative to 1981 to 2010 in total annual precipitation normals of 3%, 10%, and 12% for 2025, 2055, and 2085, respectively. Projected median decreases relative to 1981 to 2010 in precipitation as snowfall normals of 4%, 17%, and 22% for 2025, 2055, and 2085, respectively.
Temperature	Projected median increases in annual mean temperature relative to 1981 to 2010 are 1.3 °C, 2.6 °C, and 3.8 °C for 2025, 2055, and 2085, respectively.
Humidity	Projected median increases in annual relative humidity relative to 1981 to 2010 are 1%, 2%, and 3% for 2025, 2055, and 2085, respectively.
Solar Radiation	Historical trend analysis of the derived solar radiation records for the LSA and RSA indicate a historical decreasing trend of mean annual solar radiation of approximately 14 W/m^2 over 100 years (or 0.14 W/m^2/year).
Snow Cover	Climate change model data indicate an overall decrease in snow depth moving into the future. For RCP4.5, for the 50^{th} percentile of the multi-model ensemble, and the 2046 to 2065 horizon, snow depth is predicted to decrease by 8.05 cm annually, relative to the 1986 to 2005 reference normals.

The climate resilience of the Project has been addressed by developing detailed, site-specific climate change projections for the Project (Golder, 2022h). At this stage of the Project, the potential climate change impact on the design event for the Mine Site water conveyance structures was assessed by developing a series of site-specific deterministic climate projection timeseries for the Project (Golder, 2022i). A total of 72 climate scenarios resulting from different climate models and carbon emission profiles were generated for use at the feasibility and permitting stage.

20.1.3 Air Quality

Golder completed ambient air quality modelling for the Project and used Quesnel, British Columbia, as a conservative baseline. The primary Project effect on Air Quality is the potential for an increase in ambient Criteria Air Contaminants ("CACs") due to Project sources and activities, most notably nitrogen dioxide ("NO_2") and particulate matter.

To mitigate expected effects, a Waste (Refuse and Emissions) Management Plan, which includes a Fugitive Dust Control Plan have been included in the CEMP for the MSC, Bonanza Ledge, and the TL, and will be implemented prior to the start of construction to ensure that measures are in place to minimize air contaminant emissions (ODV, 2023). ODV will consider approaches for reducing emissions of air contaminants, with a focus on dust emissions from surface activities at the Mine Site and the TL, as well as road dust and fugitive dust mitigation and its impacts on air quality. Two air quality stations have been installed in Wells.

20.1.4 Land Capability and Use

An assessment of contemporary land and resources uses was completed by WSP in 2022 in support of the Project (WSP, 2022a). A summary of project overlaps is provided below:

- The Project does not overlap any protected areas or parks.
- The Project overlaps a few mineral occurrences (“MINFILE”) with overlapping mining and exploration interests including tenure holders of mineral claims, client holdings, placer claims, and placer leases. ODV owns all 16 mineral claims within the Mine Site area as well as 17 of the 31 placer claims and nine of the ten placer leases.
- The Project site also overlaps forestry and timber resources interests, including old-growth management areas, Tree Farm Licenses, and different tenures (active, pending, and retired) such as Occupant Licenses to Cut, and numerous forest sector resources roads.
- The MSC’s LSA does not overlap any Agricultural Land Reserve (“ALR”) areas. The TL route overlaps some ALR lands.
- The Mine Site LSA and Transmission Line LSA do not overlap any range tenures.

Recreation and tourism are important activities for the area from both a recreational and economic perspective. In the winter, local residents enjoy snowmobiling, snowshoeing, cross-country skiing, back country skiing, and dog sledding opportunities. In summer, ATV use, mountain biking, hiking, canoeing, fishing, gold panning, wildlife viewing, and bird-watching are popular activities. Wells, Barkerville, and the neighbouring Bowron Lakes are popular tourist destinations. The Wells and Area Visitor Centre, located on Jack of Clubs Lake, provides tourists information about the area.

Hunting, trapping, and fishing is another land use in the Project area and is reflected in five guide outfitter certificate areas that overlap with one or more Project Study Areas. Resident and non-resident anglers are provided with the opportunity to go fishing where and when they desire as long as they follow current fishing regulations. Regulations for Region 5 – Cariboo indicate that Lake trout over 45 cm in Jack of Clubs Lake may contain elevated mercury levels, and consumption should be limited (Government of BC, 2021).

The RSA of the Project for the Mine Site and TL overlaps:

- Two Agricultural Land Reserve areas;
- Several agricultural Crown tenures;
- Eight range tenures.

Both the RSA and LSA display parcels with different owner types, tenures, and licenses (private and Crown).

20.1.5 Terrain and Soils

Soil characterization of existing conditions for the Mine Site was conducted by WSP-Golder (Golder, 2022a) including field studies between 2016 and 2020 for the MSC, where information was collected from 740 sites regarding location, site characterization, and bioterrain information within the LSA. Of these sites, 490 included, at a minimum, a soil subgroup assignment.

Soil characterization of existing conditions for the TL was conducted by Falkirk Environmental Consulting ("FEC") in 2024. Information was collected regarding the soil characteristics along sections of the TL that fall within the ALR pond will require the importation of fill to complete the underground vault crossing of the BC Hydro right-of-way.

The majority of project infrastructure for the Mine Site will be located on brownfield sites that have been previously disturbed by historical mining operations that were not reclaimed after the closure of those mines. The Project is committed to minimization of surface disturbance and utilization of existing disturbed areas. ODV's Soil Management Plan, the Reclamation and Closure Plan ("RCP") for the MSC, the DRP for the Transmission Line, the MSC Remediation Plan, and industry standard Best Management Practices ("BMPs") for soil management will be implemented prior to the start of construction and throughout the Operation Phase of the Project to ensure that measures are in place to minimize loss and alteration of soil quantity and quality.

Efforts to conserve soil quality during stripping, transport, storage, and redistribution over reclaimed areas are discussed in a Soil Management Plan, the Mine Site RCP, and the TL DRP and specify the volumes and types of salvaged soil and describe recommended procedures to decommission, reclaim, and remediate mine components during the Closure Phase.

A Mine Emergency Response Plan, Chemical and Materials Storage, Transfer and Handling Plan, and Fuel Management and Spill Control Plan provide the management of hazardous materials and regulate prevention and response actions in the event of a release. Prevention of soil contamination by effective management of waste generated by Project employees are described in a Waste (Refuse and Emission) Management Plan.

20.1.6 Vegetation

The Project spans two biogeoclimactic zones:

- Sub-Boreal Spruce: occurs throughout the lower elevations at the MSC, and large portions of the TL route;
- Engelmann Spruce-Subalpine Fir: occurs the higher elevations along the TL route, and at the Mine Site.

Due to historical anthropogenic use, much of the MSC and Bonanza Ledge Site are not vegetated and consist of anthropogenic infrastructure such as road surfaces, mine spoils, and historic mines (Morgan et al., 2019).

The TL follows existing transmission line corridors, highways and forest service roads wherever possible. The TL corridor alignment occurs within the ALR between km 0.2 and km 3.8, and the remaining alignment is in generally forested areas that have anthropomorphic features such as road surfaces and clear-cuts from previous logging activities, and residential development. Undisturbed forested area within the TL corridor includes old-growth forest and caribou habitat.

WSP-Golder investigated vegetation existing conditions. During 2016, 2018, 2019, and 2020, Golder (2021b) conducted ecosystem-based subcomponent-field studies including Terrestrial Ecosystem Mapping, identification of listed species, traditional use plants, invasive and non-native plant species, and forage species for wildlife. The more recent studies carried out by WSP-Golder do not affect the existing conditions described in this section.

Efforts to minimize impacts to vegetation during construction are discussed in the Vegetation Management Plan and the Invasive Plants Management Plan. Additional measures are detailed in the Construction Environmental Management Plans for both the Mine Site and the TL. The Mine Site RCP and the TL DRP outline protocol for revegetation reclamation prescriptions.

20.1.7 Wildlife and Wildlife Habitat

Existing conditions data for wildlife and wildlife habitat was collected through background information review and field data collection. Six field study programs were completed by WSP-Golder from 2016 to 2020: amphibian breeding surveys, breeding bird surveys, northern goshawk surveys, winter tracking surveys, bat summer foraging and winter hibernacula acoustic surveys, and remote camera surveys. The Project area provides suitable habitat for several reptiles, birds, mammals, and invertebrate species, including federally and/or provincially listed species.

Waterbodies throughout the Project area provide suitable amphibian breeding habitat including Columbia spotted frog (*Rana luteiventris*), wood frog (*Lithobates sylvaticus*), western toad, and long-toed salamander (*Ambystoma macrodactylum*), while upland forested areas provide habitat for terrestrial amphibians.

Birds, such as passerines, raptors, and waterfowl, may utilize a variety of habitat types throughout the Project area, including forested habitat, riparian areas, clear-cuts, wetlands, and open waterbodies.

Shrub, forest, and wetland habitat provide suitable habitat for small mammals, ungulates, and small to large carnivores. Open waterbodies, wetlands, and rights-of-way throughout the Project area provide suitable foraging habitat for bats, while abandoned mine shafts and adits provide potential bat winter hibernacula. Suitable invertebrate habitat occurs throughout the Project area and includes wetlands, riparian areas, watercourses, forested habitat, and clear-cuts (Morgan et al., 2019).

Important Wildlife Areas ("IWAs") are defined geographical areas recognized as being important to wildlife and biodiversity on a regional, national, or international scale. Five IWAs overlap the Terrestrial LSA:

- **The Project Caribou Assessment Area ("CAA"**) is entirely within southern mountain caribou critical habitat (provincial and federal) and covers 334,322.3 ha. The CAA is defined by the boundaries of the Barkerville herd boundary obtained from WLRS on May 17, 2024, plus an additional area of federally designated 'unmapped range' caribou critical habitat west of the Barkerville herd boundary, which includes a 2 km buffer around the Transmission Line ROW, 3.6 km buffer around QR Mill, and 0.8 km buffer around the Transportation Route and access roads. The CAA is divided into approximately 156,137.8 ha of core all-season caribou critical habitat, 149,632.2 ha of matrix habitat, and 28,552.3 ha of unmapped federal critical habitat.
- **Provincial Parks and Protected Areas** Barkerville Park, Wendle Park, Bowron Lake Park, Mount Tinsdale Ecological Reserve, Cariboo River Park, Cariboo Mountains Park, Long Creek Park, Quesnel Lake Park, Cedar Point Park, Dragon Mountain Park, and Beaver Valley Park.
- **Ungulate Winter Ranges** ("UWRs") are mapped areas that contain habitat that is necessary to meet the winter habitat requirements of an ungulate species (Paige and Darling, 2009). Approximately 1,035 ha and 45,216 ha of the Terrestrial RSA is designated as caribou and mule deer UWR, respectively.
- **Wildlife Habitat Areas** ("WHAs") (caribou and grizzly bear) are mapped areas that are deemed necessary to meet the habitat requirements of an Identified Wildlife species under the Identified Wildlife Management Strategy (Page and Darling, 2009). Approximately 190,234 ha of designated WHAs for southern mountain caribou are located in the Terrestrial RSA, including 862 ha within the Terrestrial LSA boundary. Approximately 787 ha of designated WHAs for grizzly bear are located in the Terrestrial RSA. No grizzly bear WHAs are designated within the Terrestrial LSA.

- **High Value Wetlands and W1, W3, and W5 Wetlands for Moose in the Cariboo Region** are mapped areas that have been deemed necessary to meet objectives stated in the Cariboo Chilcotin Land Use Plan ("CCLUP") (Government of BC, 1996) and the Quesnel Sustainable Resource Management Plan ("QSRMP") from the Ministry of FLNRORD, (Province of BC, 2007) to retain vegetation for security and thermal cover for wintering moose. Approximately 2,971 ha of identified high value wetlands overlap the Terrestrial RSA, including 95.9 ha that overlap the Terrestrial LSA.

The Project has committed to mitigation measures to reduce the impacts to wildlife. Project infrastructure will be designed to reduce the potential wildlife impacts, such as prevention measures to limit bat access to underground mine portals and reducing light pollution. The Project has also developed four management plans associated with wildlife:

- Wildlife Management Plan applicable for all wildlife;
- Caribou Mitigation and Management Plan applicable to caribou-specific management;
- Bat Mitigation and Monitoring Plan applicable to bat-specific management;
- Wildlife Access Management Plan applicable to access management for wildlife.

The above plans are living documents and will be updated as new information becomes available and each apply to the Project's Construction, Operations, and Closure Phases.

The Mine Site RCP and the TL DRP detail prescribed habitat targets for planning revegetation of Project components.

20.1.8 Fisheries and Aquatic Resources

Most of the recent fish and fish habitat surveys conducted between 2020 and 2021 by Golder include habitat reconnaissance for the TL, fish sampling and hydroacoustic survey on Jack of Clubs Lake, and review of Resources Information Standards Committee for the TL and Jack of Clubs Lake, and a fish community survey in Jack of Clubs Lake (Golder, 2021a).

Fish populations and fish habitat are found throughout the Project area, with fish distribution typically limited by gradient, barriers and obstructions, flows, and habitat quality. The MSC and Bonanza Ledge Site are located within the Willow River watershed and contain several tributaries, including Slough Creek, Mosquito Creek, Lowhee Creek, Williams Creek, and Jack of Clubs Creek. Twelve fish species have been recorded in watercourses within the Willow River watershed, including Bull Trout, which is a provincially blue-listed species (Fisheries Information Data Queries "FIDQ", 2020; BC CDC, 2011).

Implementation of BMPs and management plans during Construction and Operations are expected to be effective at avoiding instream and riparian habitat at the Mine Site. Therefore, effects on fish and fish habitat are not expected.

The Willow River watercourse crossing that will be constructed for the new Mine Site Road will be a clear span bridge, which has no infrastructure in the watercourse, and has been designed to avoid impacts to instream fish habitat.

The diffuser pipeline and installation of the Jack of Clubs Lake diffuser will follow standard mitigation measures and best management practices. The diffuser pipeline and diffuser have been designed to avoid sensitive fish and fish habitat along the shoreline and within the lake, as well as littoral areas and river habitat that support spawning or rearing fish.

20.2 Environmental Liabilities

The Project has been designed with input from Indigenous nations, local communities, and other stakeholders to limit potential impacts on water, land, and biodiversity during both construction and operation. ODV aims to integrate and implement relevant technologies and recognized industry practices to address environmental considerations throughout the Project's lifecycle, while supporting short- and long-term social and economic benefits for Indigenous nations, local communities, employees, and shareholders.

The Government of BC requires that a security bond be provided to address expected environmental liabilities for the Project. The security bond for the Transmission Line will be determined by the Ministry of Water, Land and resource Stewardship and the Reclamation Liability Cost Estimate.

ODV is not aware of any significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the Project Study Area.

20.3 Environmental Management and Monitoring

ODV has established environmental monitoring plans for a suite of valued components to respond to regulatory requirements and best management practices for the Project. The following subsections present management and monitoring activities connected to some of the key aspects of the Project such as waste rock, tailings, water, and other wastes.

20.3.1 Ore Sorter Waste and Waste Rock Geochemistry

The ore sorter waste and waste rock geochemical characterization program included static testing and kinetic testing of representative samples collected from drill cores. The geochemical testing program is discussed in detail in the Geochemical Existing Conditions Report (Golder, 2022f and WSP, 2023a).

The objective of the geochemical characterization program was to determine the acid rock drainage ("ARD") and metal leaching ("ML") potential of each material type. The results of acid-base accounting ("ABA") and mine plan tonnages for lithologies were used to quantify the proportion of potentially acid generating ("PAG"), uncertain and non-potentially acid generating ("NPAG") samples. Humidity cell tests ("HCT") were used assess ML material/lithology by screening for constituent of potential concern ("COPC"). Screening included comparison of 95th percentile leachate concentrations from HCTs to permit discharge limits.

The results of the geochemical tests outlined above were used to interpret ARD / ML potential by material type:

- Waste Rock:

  Based on ABA results from Table 15 in Golder (2022f) and fractions of lithologies in development waste reported by ODV, up to 5% of the waste is classified as PAG, up to 18% are classified as uncertain, and the remainder is classified as NPAG. Although some rock has potential to generate localized acidic conditions, there is sufficient neutralization potential within the bulk waste rock material to prevent acidic drainage. Leachates from HCTs representing future PAG waste have not generated acidic leachates (with pH<4.5) even after 200 weeks of testing. Arsenic and copper were screened as COPC in HCT leachates from waste rock.

- Ore Sorter Waste:

  According to the results of ABA, 18% of the ore sorter waste samples are classified as PAG, 12% are classified as uncertain, and 70% are classified as NPAG (Table 2 in WSP, 2023b). In one of the four HCTs with uncemented ore sorter waste, arsenic was screened as COPC. Copper and chromium were identified as COPCs in leachates from HCTs with cemented ore sorter waste.

Quantitative effects of metal leaching from waste rock and ore sorter waste were evaluated with the integrated water balance and quality model (Section 20.3.3).

The ore material handling strategy can be found in Section 16.6, and the waste rock management strategy can be found in Section 18.3.5.1.

20.3.2 Tailings Geochemistry

Rougher and cleaner flotation tailings will be produced in ratios of 5:1 (rougher:cleaner). Preliminary data indicate that rougher tailings will be NPAG, while cleaner tailings will likely be PAG with elevated arsenic content. Rougher tailings and cleaner tailings will be combined and sent to the paste plant to be returned underground as paste backfill. Paste backfill is classified as NPAG based on static and kinetic tests (WSP, 2023b). Leachates from kinetic tests are alkaline and with 95th percentile concentrations of chromium, copper and arsenic exceeding the respective discharge limits for the MSC. During mining, these elements will be leached into mine water. Excess mine water will be collected as part of mine dewatering and treated below the discharge limits before being discharged into the environment.

The paste fill criteria, infrastructure and distribution can be found in Sections 13.8 and 16.7.

20.3.3 Water Quantity and Quality

20.3.3.1 Water Balance

A water balance model ("WBM") was developed by Falkirk (2025) to simulate the proposed water management system. Flow diagrams showing project components and their connectivity within the water management system are presented on Figure 18-4 (Stage 1) and Figure 18-5 (Stage 2). Stage 1 is the mine development period prior to mine start-up and Stage 2 is when the mine is in full production.

The WBM was run with daily timesteps for the timeframe covering Stage 1, Stage 2, a two-year closure/reclamation period after operations, followed by post-closure. Table 20-3 summarizes water balance input assumptions.

Ore processing at the mill will start at the beginning of Stage 2. Mill inflows and outflow estimates were provided by ODV (Table 20-4) and incorporated into the site-wide water balance.

A version of the Monte-Carlo method was implemented to evaluate a realistic range of environmental flow conditions. The model was run using a 123-year long record (1900-2023) of daily temperature and precipitation from the Barkerville weather station. 123 unique versions of the input dataset were run through the model, generating 123 unique sets of results (i.e., model realizations). For example, the first realization was run using Year 1 of the input dataset at the beginning of the simulation. The model was run a second time using Year 2 of the input dataset at the beginning of the simulation, and so on. Model output presented herein is a statistical summary in terms of average and 95th percentile (P95) of the model of the realizations.

Table 20-5 shows average monthly treatment rates for each project stage. The Bonanza Ledge WTP and MSC WTP will operate concurrently for about the second half of Stage 1. ODV is authorized under the EMA Permit PE-111511 to discharge up to 480 m^3/h to Jack of Clubs Lake from the proposed MSC WTP. ODV plans to amend the permit to 800 m^3/h. To account for the time required for permit amendment, ODV assumed the MSC WTP will treat mine dewatering at a maximum rate of 480 m^3/h in Stage 1 while the Bonanza Ledge WTP continues to treat Bonanza Ledge contact water. Once the permit is amended, the MSC WTP will treat with capacity of 800 m^3/h, Bonanza Ledge WTP will be decommissioned, and Bonanza Ledge contact water will be piped to MSC for treatment at the MSC WTP.

Figure 20-1 is a plot of daily treatment rate at Bonanza Ledge WTP and MSC WTP. On average, the treatment rate is greatest during spring snowmelt. However, summer and fall storm events can occur, requiring the WTP to operate at maximum capacity, demonstrated by the P95 statistic. Treatment rate remains relatively steady through winter months when runoff is minimal and inflow primarily comes from mine dewatering.

Table 20-3: Water balance model input assumptions

Model Component	Input Assumption	Source
Hydrology / Drainage		
Catchment Areas	Figure 18-5 (Stage 1 Bonanza Ledge) Figure 18-6 (Stage 2 Bonanza Ledge) Figure 18-7 (Stage 2 Mine Site Complex)	Measured by Falkirk from contour mapping.
Temperature and Precipitation	123-year long record of daily data from Barkerville.	ECCC climate station at Barkerville (ID 1090660).
Runoff Rate	Calculated from the temperature and precipitation dataset with a runoff model. Calibrated using historical Bonanza Ledge WTP records.	Runoff model developed by Falkirk.
Non-contact Diversion Channel Efficiency	90%	Assumed by Falkirk.
Environmental Design Flood	30-day (duration), 200-year (return period) rainfall plus snowmelt, adjusted for climate change. Total depth = 701 mm.	Figure 20-2
Storage Capacity		
Bonanza Ledge SCP	10,600 m^3	KP, 2024
Bonanza Ledge FMR	84,000 m^3	WSP, 2023
MSC SCP	50,600 m^3	ODV, 2025
Pond A	710 m^3	Golder, 2021
Pond B	390 m^3	Golder, 2021

Model Component	Input Assumption	Source
Mine Dewatering		
Stage 1 Groundwater Inflow. Pump out via Cow Portal to Bonanza Ledge.	Base case: 800 m^3/day (33 m^3/h) Upper bound: 1,300 m^3/day (54 m^3/h)	WSP, 2023d
Stage 1 Mine Pool Dewatering Volume.	Initial volume of water in the underground requiring pump out prior to full mine production = 1,090,000 m^3.	ODV, 2024b
Stage 2 Groundwater Inflow Pump out via Valley Portal to MSC.	Base case: 6,000 m^3/day (250 m^3/h) Upper bound: 8,700 m^3/day (363 m^3/h)	WSP, 2023d
Tailings Paste Bleed Water	20% of initial water content of tailings paste backfill.	Interpretation of results from paste fill testing (WSP, 2023a)
Water Treatment		
Bonanza Ledge WTP Capacity (Stage 1)	Maximum treatment rate = 279 m^3/h total 28.3% reclaimed for backwash, net treatment = 200 m^3/h	Section 18.3.5.2
MSC WTP Capacity (Stage 1)	Maximum treatment rate = 480 m^3/h 6.8% reclaimed for backwash, net treatment = 447 m^3/h	ODV, 2024c
MSC WTP Capacity (Stage 2)	Maximum treatment rate = 800 m^3/h 6.8% reclaimed for backwash, net treatment = 746 m^3/h	Section 18.3.6.4

Table 20-4: Mill water balance

Flow Component	Flow Rate	
	(m^3/day)	(m^3/h)
Inflow		
Reagent mixing (from MSC WTP effluent)	148	6.2
Gland seal water (from MSC WTP effluent)	1,194	49.8
Ore feed moisture content	258	10.8
Total	**1,600**	**66.7**
Outflow		
Ore reject moisture content (to WRSF)	94	3.9
Concentrate moisture content (to offsite)	84	3.5
Paste backfill moisture content (to underground)	910	37.9
Surplus (to MSC WTP)	512	21.3
Total	**1,600**	**66.7**

Table 20-5: Water balance model results for water treatment plants

Month	Average Treatment Rate (m^3/h)[(1) (2)]			
	Stage 1		Stage 2	Closure
	BL WTP	MSC WTP	MSC WTP	MSC WTP
Jan	8	330	253	21
Feb	19	348	319	26
Mar	28	354	330	32
Apr	57	375	402	104
May	109	402	508	209
Jun	118	377	475	177
Jul	50	359	370	78
Aug	53	362	355	53
Sep	52	364	377	79
Oct	52	381	378	86
Nov	27	369	336	53
Dec	21	365	319	37
Annual	**49**	**365**	**368**	**80**

(1) Results represent total inflow to water treatment plants.

(2) Average of 123 model realizations.

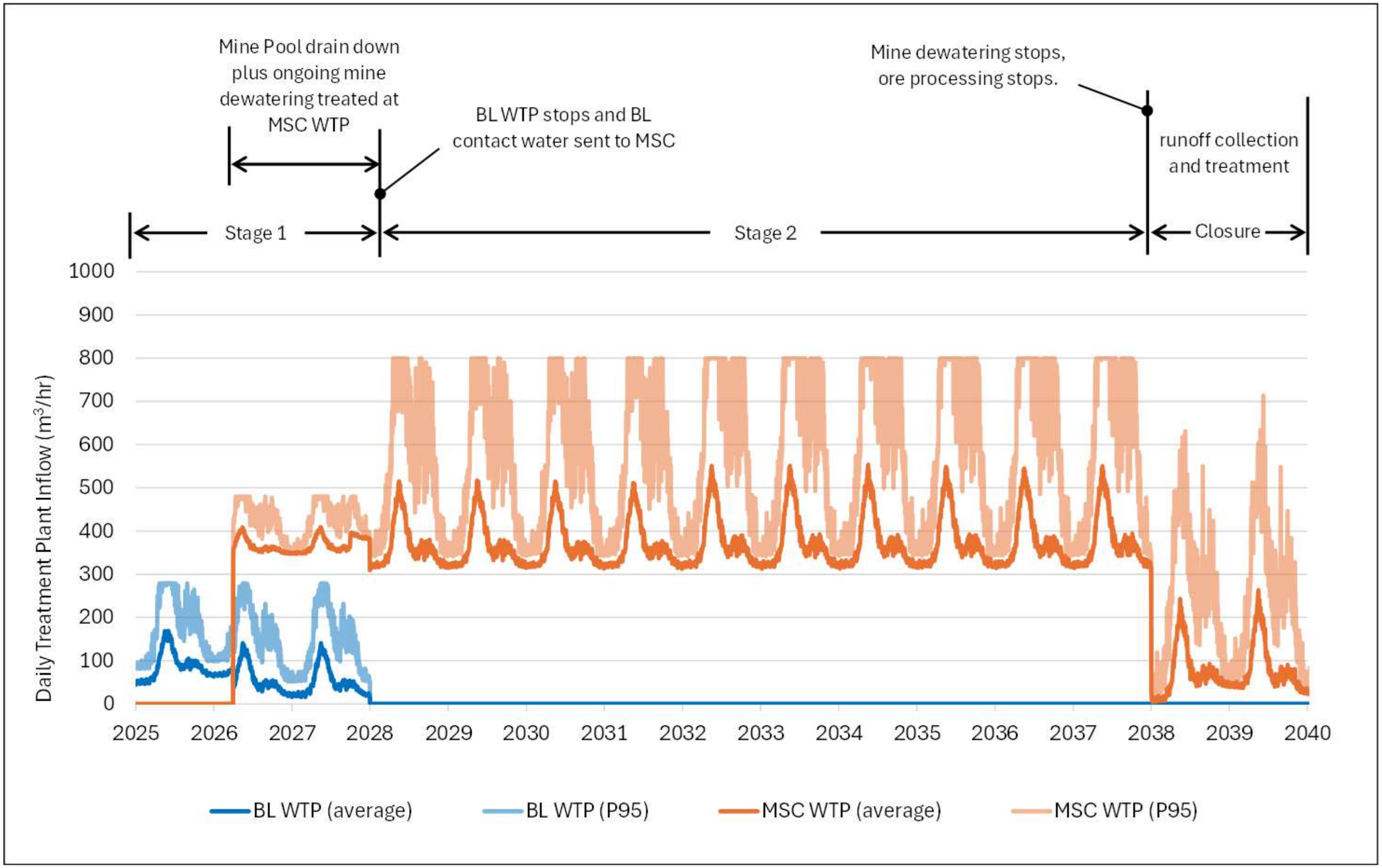


Figure 20-1: WBM results for Bonanza Ledge WTP and Mine Site Complex WTP daily statistics from 123 unique model realizations

The Project will have a combined storage and treatment capacity to manage the Environmental Design Flood ("EDF") without uncontrolled release to the environment. The EDF was defined in this assessment as the runoff generated from a 30-day (duration), 200-year (return period) rain plus snowmelt event, adjusted for climate change (Figure 20-2).

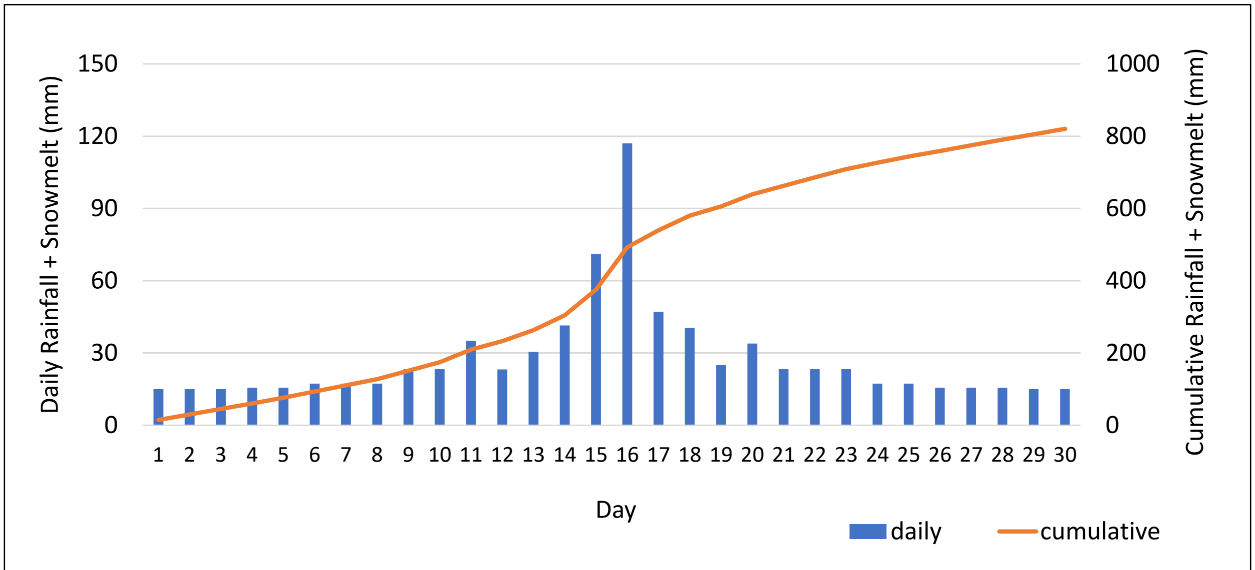


Figure 20-2: Environmental design storm event: rainfall + snowmelt adjusted for climate change

During the EDF, runoff will be stored in the Bonanza Ledge SCP, MSC SCP, and Bonanza Ledge Flood Management Reservoir while the MSC WTP treats at its assumed capacity of 800 m^3/h. When the combined storage exceeds a threshold volume, dewatering from the MSC underground ceases until storage volume in the MSC Pond and Bonanza Ledge Pond can be drawn down. The built-up water in the MSC underground will be drained down following the EDF when MSC WTP capacity becomes available.

Figure 20-3 shows results for the base case groundwater inflow scenario and results in a maximum volume of about 80,000 m^3 retained in the MSC underground. If the upper bound groundwater inflow rate is assumed, the maximum storage volume in the underground during the EDF would be about 150,000 m^3.

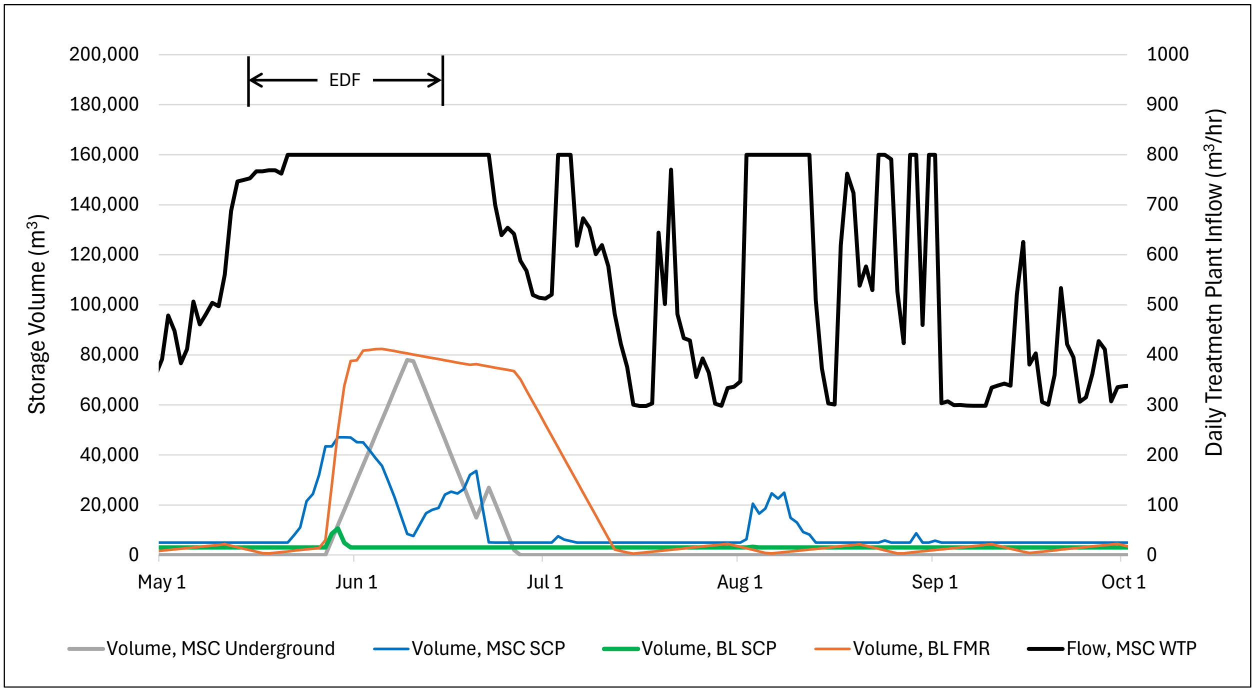


Figure 20-3: WBM results for the EDF, base case mine groundwater inflow single model realization

20.3.3.2 Water Quality

The Mine Site water quality model was integrated with the WBM described above. Water quality modelling approach was generally based on historical water monitoring at the Bonanza Ledge Mine (Falkirk, 2025). Monitoring datasets used as concentration inputs to represent major sources as follows (with data source referenced in brackets):

- Dewatering of flooded historical workings: mine pool dataset (WSP, 2023c)
- Mine water from Bonanza Ledge and future underground workings: 1400 level sump monitoring location (ODV, 2024a)
- Paste backfills contact water: kinetic tests on cemented kinetic paste (WSP, 2023c)
- Waste rock storage facility water: PAG WRSF seeps scaled for increase in pile height (ODV, 2024a)
- Ore stockpile runoff/seepage: dataset of all seeps from WRSFs and the ore stockpile seep (ODV, 2024a)
- Runoff from reclaimed areas: a sample from reclaimed open pit cover at Bonanza Ledge (ODV, 2024a)
- Mill effluent (if any): process water from laboratory flotation tests (WSP, 2023c)

- Runoff from developed areas (excluding areas noted above): monthly distribution from the Bonanza Ledge SCP (ODV, 2024a)
- Runoff from undeveloped areas: monthly distribution from EG-0.25 monitoring location (ODV, 2024a).

Nitrogen loading in mine water was predicted from nominal blasting inputs from mine plan and historical dewatering flows rates and concentrations at 1400 level sump. Nitrogen speciation was predicted from temperatures and concentrations of nitrate, nitrite, and ammonia at 1400 level sump.

A probabilistic approach, via Monte Carlo simulations, was used to incorporate uncertainty into the water quality model. Statistical inputs (e.g., 10th, 50th and 90th percentiles) and associated probability distributions were derived from the datasets for each source, where possible. Multiple realizations were run on a daily timestep to generate concentration statistics during mine operations, closure and post-closure phases. Daily 95th percentile concentrations predicted for untreated discharges from Bonanza Ledge and MSC sites were compared to respective permit limits to inform Bonanza Ledge WTP upgrade and MSC WTP design (Falkirk, 2025). The predicted exceedances of the limits can be summarized for mine phases as follows:

- In first years of operation, Bonanza Ledge WTP influent was predicted to exceed the Bonanza Ledge discharge permit limits for total suspended solids, sulphate, total and un-ionized ammonia, nitrate nitrogen, nitrite nitrogen, total aluminum, total arsenic, total chromium, total cobalt, total iron, total lead, total manganese, total nickel, total silver, total uranium, total zinc, dissolved cadmium, dissolved copper and dissolved iron.
- During subsequent operations, MSC WTP influent was predicted to exceed the MSC discharge permit limits for total suspended solids, un-ionized ammonia, nitrate nitrogen, nitrite nitrogen, total aluminum, total arsenic, total chromium, total cobalt, total iron, total lead, total manganese, total mercury, total nickel, total phosphorous, dissolved copper dissolved iron and dissolved zinc.
- During closure, MSC WTP influent was predicted to exceed the MSC discharge permit limits for total suspended solids, chloride, sulphate, nitrite nitrogen, total aluminum, total arsenic, total chromium, total cobalt, total iron, total lead, total manganese, total mercury, total nickel, total phosphorous, dissolved copper and dissolved iron.
- In post-closure, MSC WTP influent was predicted to exceed the MSC discharge permit limits for total suspended solids, total aluminum, total chromium, total cobalt, total iron, total manganese, total mercury, total nickel, total phosphorous, dissolved copper and dissolved iron.

Details of proposed water treatment methods are summarized in Sections 18.3.5.2 and 18.3.6.4.

Ongoing monitoring will be used to update water quality model predictions and inform water quality mitigations, particularly for closure and post-closure phases.

20.4 Considerations of Social and Community Impacts

ODV is committed to meaningful and transparent engagement with Indigenous nations, the public, local community members, and other stakeholders. ODV has cultivated positive relationships with the three Participating Indigenous nations, within whose traditional territory the Project is located. ODV intends to maintain these relationships through all phases of the Project.

The nearest community to the Project is the District of Wells, where the MSC is located. Other stakeholders include tenure holders (such as trapline holders, guide outfitters, and forestry proponents), local and regional governments, health authorities, and government regulatory agencies.

20.4.1 Social Setting

The Project is in the Wells-Barkerville area of the Cariboo Regional District ("CRD") in British Columbia, with the nearest communities to the Project being the District of Wells, Barkerville Historic Town & Park, and Quesne. A portion of the Mine Site and other Project components are outside of the District of Wells and are located in Electoral Areas C and F of the CRD. There are several unincorporated communities in the area, including New Barkerville and other settlements along Highway 26.

The Participating Indigenous nations for the EA for the Project are Lhtako Dené Nation, Xatśūll First Nation, and Williams Lake First Nation. Both Nazko First Nation and the Tsilhqot'in National Government opted not to participate in the EA for the Project; however, are notified on project activities through the Environmental Assessment Office("EAO").

The primary employment industries in the area closest to the Project are Manufacturing and Construction, Wholesale and Retail Trade, and Accommodation and Food; however, other services (repair and maintenance, personal and laundry services, private households, religious or social organizations, etc.) also comprise a large proportion of employment in the Project area (Statistics Canada, 2021).

Communities in the CRD, and more specifically the communities nearest to the Mine Site and Transmission Line have a history of resource development, and as a result have experienced the positive and negative effects of that development, arising from boom-and-bust cycles that can accompany resource development. Between the 2001 and 2016 censuses, the population in the areas closest to the Project area has seen an overall decrease, distinct from a population increase for the province as a whole.

Land and resource use within the broader Project area includes trapping, guided hunting, commercial recreation, outdoor and adventure tourism, including fishing, hunting, camping, hiking, cross-country skiing, snowmobiling, dog sledding, and all-terrain vehicle ("ATV") riding. There are mineral, water and range tenures, guide outfitters and traplines in the vicinity of the Project. The area is recognized as having visual landscapes associated with tourism, and over the years, Wells has attracted artists of all types and has encouraged arts creativity. The result is that art is now an essential part of Wells' identity and a major attraction to tourists who visit Wells to enjoy visits to art galleries, Island Mountain Arts, Sunset Theatre, community coffee houses, and restaurants/pubs. Wells is known as the Gateway to Barkerville Historic Town, the Bowron Lake Chain, and the Gold Rush Trail. Scenic area management of the landscape surrounding the Project area is identified as an objective in current land and resource planning (i.e., the CCLUP) Integration Report, and the QSRMP (Province of BC, 1998; Province of BC, 2007).

20.4.2 Engagement and Consultation

Consultation with Indigenous nations and the public are components of provincial and federal legislation for both EA processes and permitting activities. As the Province of BC strives to bring all its legislation into alignment with Bill 41 - *Declaration on the Rights of Indigenous Peoples Act* ("*DRIPA*") (Province of BC, 2019), provisions for consultation with Indigenous nations will continue to be supported by proponents. The new *Environmental Assessment Act* (Province of BC, 2018) was revitalized to ensure the provincial government's commitment to *DRIPA* was met, and reconciliation could be advanced. As a result, the EAO seeks consensus with Participating Indigenous nations throughout the process.

ODV prepared and implemented an Indigenous Nation Engagement and Collaboration Plan that details the Company's approach to engagement, capacity funding, protocols, intentions to incorporate Indigenous knowledge through all phases of the Project, and opportunities identified through engagement. This plan, along with ODV's Public Engagement Plan, informed consultation and engagement activities throughout the EA and permitting process.

The definition of measures for engagement by ODV have been developed through collaboration and relationships with the Participating Indigenous nations during the EA, guidance from the EAO, and in response to community and public inquiries. These measures, at a minimum, comply with federal and provincial regulations and requirements for consultation and engagement.

20.4.3 Indigenous Nations

ODV has been actively engaging with Indigenous nations to understand their Indigenous interests in the Project and the areas influenced by the Project. During the Early Engagement Phase of the Environmental Assessment, the EAO confirmed that the Project is in the asserted traditional territory of Lhtako Dené Nation, Xatśūll First Nation, and Williams Lake First Nation, and that each of these nations would be Participating Indigenous nations for the Project, including the Environmental Assessment and permitting processes.

Engagement activities with Lhtako Dené Nation began in 2016, with Xatśūll First Nation in 2017, and with Williams Lake First Nation in 2018. The focus of engagement has been to inform Indigenous nations about the Project and respond meaningfully to questions and concerns raised about the Project and associated studies. ODV is developing an Indigenous Partnership Plan that will guide engagement as we move through all Project phases.

On October 2, 2020, ODV signed a life-of-project agreement to facilitate the development and full build-out of the Project with the ongoing consent and support of Lhtako Dené Nation during all stages of the Project. On June 10, 2022, a participation agreement was signed with Williams Lake First Nation. ODV continues to engage with Xatśūll First Nation on a Project agreement.

20.4.4 Federal, Provincial and Municipal Governments

ODV has engaged with various provincial and local government agencies, to differing degrees and levels of engagement as part of the EA and permitting processes for the Project. The District of Wells, City of Quesnel, City of Prince George, City of Williams Lake, CRD and the Regional District of Fraser Fort George, as well as the North-Central Local Governments Association have been engaged by ODV since 2016, when the Project Planning phase was initiated.

ODV will continue to engage and collaborate with federal, provincial, regional and municipal government bodies and representatives as necessary, with respect to the Project, land and resource management, heritage and protected areas, official community plans and associated priorities, infrastructure, land use and access, employment and training, and any other matters deemed relevant.

20.4.5 Public Stakeholders

Proactive engagement with the public and stakeholders was undertaken beginning in the Project Planning Phase, initiated in 2016, to build awareness about the Project, understand the priorities of stakeholders and current conditions in their communities, and to understand interests and concerns around the Project as a means through which issues could be avoided through design or mitigation.

The following public and stakeholders regularly receive Project information:

- Local Residents;
- Community and Environmental Organizations and Interest Groups;
- Community Service Providers;
- Business and Economic Development Organizations;
- Landowners along the Transmission Line and other Project components;
- Tenure holders, including traplines, guide outfitters, mineral, forestry companies and water license holders;
- Heritage and Cultural Stakeholders;
- Tourism-related and other Businesses;
- ODV Employees; and
- Arts Organizations.

ODV is developing a Community Involvement Plan which will guide engagement with the District of Wells and Community of Wells throughout all phases of the Project. Public and stakeholder engagement to date has included community meetings (in person and virtual), one-on-one meetings with individuals and special interest groups, workshops and technical meetings, surveys and feedback forms, site visits, community events, industry events and public displays. Feedback from the community and stakeholders was sought and obtained throughout the Project planning process.

20.5 Mine Closure Requirements

20.5.1 Mine Reclamation and Closure Plan

ODV has prepared various Reclamation and Closure Plans for elements of the Project to detail how the sites will be reclaimed to a safe, stable, and non-polluting condition. An RCP for the Project was provided as an appendix to the EA Application for the Project and was updated and included in the Joint Application for permitting. A DRP for the Transmission Line was submitted with the application for License of Occupation for the TL. These plans will continue to be updated as mine plans evolve, regulatory guidelines change, and as required by permit conditions. These plans provide the basis to develop an integrated RCP and DRP for the Mine Site and TL, including reclamation cost estimates based on the most current assumptions regarding reclamation and closure of Project facilities and landforms.

20.5.2 Regulatory Framework

The Project mine closure is guided by several provincial acts and regulations:

- British Columbia *Mines Act* (Government of BC, 1996) and Health, Safety, and Reclamation Code for Mines in British Columbia (Government of BC, 2021);
- British Columbia *Environmental Management Act* (Government of BC, 2003);
- British Columbia *Water Sustainability Act* (Government of BC, 2014);
- Regional Regulations – The Project is located within the Cariboo Regional District Electoral Area C (the Mine) and Area F (QR Mill) and is subject to the CCLUP and CRD North Cariboo Area Rural Land Use Bylaw (CRD, 2000);
- Federal Requirements – Federal Acts and Regulations that apply to the Project include the *Fisheries Act* (Government of BC, 1985), the *Migratory Birds Convention Act* (Government of Canada, 1994), the *Seeds Act* (Government of Canada, 1985a), and the Metal and Diamond Mining Effluent Regulations (Government of Canada, 2002) of the *Fisheries Act*.

20.5.3 Mine Closure Planning Approach

The Project footprint at each site has been divided into Master Areas by ODV to reflect disturbance types and proposed end land uses. Master Areas are generally divided by facility/landform types with common approaches to reclamation. Detailed closure and reclamation prescriptions are provided for each Master Area consisting of the following components:

- Scope and Extent: Defines location and extent of the Master Area;
- Current Conditions: Describes the Master Area conditions during operations including progressive reclamation that has already been done;
- Future Conditions: Describes the plan for the Master Area for future development and use prior to closure;
- Closure Design Basis: Lists regulations, permits, and CRP/DRP that should be followed to design the closure activities for the Master Area;
- Closure Design Criteria/Constructability: Presents activities and/or requirements to implement closure such as site preparation, progressive reclamation if applicable, revegetation, and post-closure monitoring/maintenance, as well as infrastructure decommissioning, and equipment/materials removal.

20.6 Permitting and Required Approvals

20.6.1 Regulatory Context

The Project exceeded the threshold for review under the new BC *Environmental Assessment Act* ("*BCEAA*"); (Province of BC, 2018) as per Part 3 (Table Six) of the Reviewable Projects Regulation: "A new mine facility that, during operations, will have a production capacity of > 75,000 tonnes per year of mineral ore" (Government of BC, 2020). The Project also requires several permits, approvals, and authorizations from provincial, federal, and municipal agencies, which are summarized in Sections 20.6.2, 20.6.3, 20.6.4, and 20.6.5, respectively. Further discussion on regulatory requirements is included in the following sections.

20.6.2 BC Environmental Assessment Regulations

The Project completed an EA under the *BCEAA* (2018) (Table 20-6) and was awarded EAC #M23-01 on October 10, 2023.

The assessment of the Project's potential effects specifically targets the valued components ("VCs") of the environment that may be affected by the Project, and the priorities of the participating Indigenous nations, the public, local governments, provincial and federal government agencies, and stakeholders. VCs are defined as fundamental elements of the physical, biological, or socio-economic (human) environment, including the air, water, soil, terrain, vegetation, wildlife, fish, economy, health, heritage, and land use components that may be affected by a proposed project.

Any significant changes in the way the Project will be undertaken will require an amendment to the EAC, which is expected based on the changes described in this study update. Amendments to the EAC are categorized into three categories: simple, typical or complex. It is anticipated that the changes will fall into the typical category, as they are technical in nature and will result in a change to the way the Project will be implemented. This will be confirmed with BC EAO. The amendment application will assess how the proposed changes alter the Project's predicted impacts on the VCs.

Table 20-6: Regulations supporting the BC *Environmental Assessment Act* (2018)[1]

Regulation	Description
Reviewable Project Regulation (2020)	The Reviewable Projects Regulation sets out the criteria and thresholds for projects required to undergo the EA process (Government of BC, [2019b]). Reviewable proposed projects are primarily those with a higher potential for adverse environmental, economic, social, heritage, or health effects. Thresholds for both new projects and modifications to existing projects are provided.
Protected Areas Regulation (2019)	This regulation identifies prescribed protected areas (as defined in other enactments) for the purposes of the Reviewable Projects Regulation, which determines which projects must automatically undergo an EA. This regulation is also related to the Minister of Environment and Climate Change Strategy's authority to terminate a project from the EA process if it had extraordinarily adverse effects on a listed protected area.
Environmental Assessment Fees Regulation (Province of BC, 2019a)	The EAO charges fees for a range of services, from undertaking EAs, through to compliance inspections. The fees provide partial recovery of the costs incurred by the EAO in delivering high-quality and timely EAs. Revenue from fees allows the organization to maintain appropriate staffing levels. The funding is also used to support other provincial agencies in their participation in the EA process.
Violation Ticket Administration and Fines Regulation (Province of BC, 2019b)	This regulation enables EAO Compliance and Enforcement Officers to issue tickets with associated monetary penalties to proponents who are not in compliance with their certificate conditions, or their exemption order conditions.
Administrative Penalties Regulation (Province of BC, 2020a)	Administrative Monetary Penalties are financial penalties that can be issued for prescribed contraventions of the Act or failures to comply with the Act, including failing to comply with the requirements of an EAC or an exemption order made under the Act. Regulated parties will be given prior notice of the EAO's intention to issue an administrative penalty and will be provided with an opportunity to respond before an administrative penalty is issued.

[1] Government of BC (2018).

20.6.3 Federal Permits, Approvals, Licences, and Authorizations

Federal permits, approvals and authorizations that are applicable to the Project are summarized in Table 20-7. Specific permit requirements were determined based on discussions with federal agencies. ODV does not currently hold any federal permits in relation to their operations in the Project area.

Table 20-7: Federal permits and approvals applicable to the proposed Project

Permit / Approval	Responsible Agencies	Federal Statute	Project Activity/Regulatory Context
Fisheries Act Authorization (Government of Canada, 1985b)	Fisheries and Oceans Canada ("DFO")	*Fisheries Act*	No person shall carry on any work, undertaking, or activity other than fishing that results in the death of fish. No person shall carry on any work, undertaking, or activity that results in the harmful alteration, disruption, or destruction ("HADD") of fish habitat. If the death of fish or a HADD cannot be avoided during any part of the Project, an Authorization under Section 35 may be required.
Migratory Birds Convention Act Authorization (Government of Canada, 1994)	Environment and Climate Change Canada ("ECCC")	*Migratory Birds Convention Act*	*Deposit of substances harmful to migratory birds or vegetation clearing for the Project during the migratory bird nesting season as outlined by ECCC (May 1 to July 15, Zone A4).* Permits may be issued to eliminate dangerous conditions or damage to property caused by migratory birds or their nests.
Navigation Protection Program Notification and/or Approval	Transport Canada	*Canadian Navigable Waters Act*	Notification and information to the Minister for works that are in, on, over, under, through, or across any navigable water. Application for approval from the Minister is required for works (other than minor works) that are in, on, over, under, through, or across any navigable water and that may interfere with navigation.
Species at Risk Act Authorizations (if required); (Government of Canada, 2002a)	ECCC, DFO, and Parks Canada	*Species at Risk Act* ("SARA")	The Competent Minister may issue a SARA permit authorizing activity that will affect a listed wildlife species, any part of its critical habitat, or the residences of its individuals.
Explosive Licences and Permits (Government of Canada, 1985)	Natural Resources Canada	*Explosives Act*, and Regulations	Explosive Licence required for factories and magazines. Explosive Permit required for vehicles used for the transportation of explosives.
Transportation of Dangerous Goods Regulation (Government of Canada, 2001)	Transport Canada	*Transportation of Dangerous Goods Act*	This Act addresses the classification, documentation, marking, means of containment, required training, emergency response, accidental release, protective measures and permits required for the transportation of dangerous goods by road, rail or air.

20.6.4 Provincial Permits, Approvals and Licences

Provincial permits, approvals, authorizations, and licences that are applicable to the Project are summarized in Table 20-8. The Project is located on Crown lands as well as on a parcel of private land owned by ODV at the MSC. ODV holds a valid mining lease for the Mine Site.

Table 20-8: Provincial permits and approvals applicable to the proposed Project

Permit / Approval	Responsible Agency	Provincial Statute
Mines Act Permit	Ministry of Mines and Critical Minerals	*Mines Act*
Effluent Discharge Permit	BC Ministry of Environment and Parks	*Environmental Management Act*
Emissions Discharge Permit	BC Ministry of ENV	*Environmental Management Act*
Refuse Permit and Waste Storage Approval	BC Ministry of ENV	*Environmental Management Act*
Heritage Conservation Act Permit	Ministry of Forests ("MOF"), Archaeology Branch	*Heritage Conservation Act* (Government of BC, 1996a)
Heritage Conservation Act Concurrence letters	MOF, Archaeology Branch	*Heritage Conservation Act*
License of Occupation	Ministry of Water, Lands, and Resource Stewardship ("WLRS")	*Land Act* (Government of BC, 1996b)
Statutory Right of Way	Ministry of WLRS, Surveyor Generals Office, Ministry of Transportation and Infrastructure ("MOTI")	*Land Act*
Wildlife Act Permit	Ministry of WLRS, Resource Stewardship Division	*Wildlife Act* (Government of BC, 1996c)
Sewer System Regulation Approval	BC Ministry of Health, Northern Health Authority ("NHA")	*Public Health Act* (Government of BC, 2008)
Construction Permit for a Potable Water Well	BC Ministry of Health, NHA	*Drinking Water Protection Act* (Government of BC, 2001)
Water System Construction Permit	BC Ministry of Health, NHA	*Drinking Water Protection Act*
Drinking Water System Operations Permit	BC Ministry of Health, NHA	*Drinking Water Protection Act*
Short Term Use of Water Permit *Water Sustainability Act* Section 10	Ministry of WLRS, Water Stewardship Branch	*Water Sustainability Act* (Government of BC, 2014)

Permit / Approval	Responsible Agency	Provincial Statute
Change Approval (for changes in and about a stream), *Water Sustainability Act* Section 11	Ministry of WLRS, Water Stewardship Branch	*Water Sustainability Act*
Water Licence (Diversion, storage, and use of water) *Water Sustainability Act* Sections 7 and 9 (Government of BC, 2014)	WLRS, Water Stewardship Branch	*Water Sustainability Act*
Licences to Cut and Special Use Permit	MOF, Forest Tenures Branch	*Forest Act* (Government of BC, 1996d)
Industrial Access Permit	BC MOTI	*Transportation Act* (Government of BC, 2004)
Permit for regulated activities	Ministry of Health	*Public Health Act*
Explosives Magazine Storage and Use Permit	Ministry of MCM	*Mines Act*

A *Mines Act* permit approving the mine plan and reclamation program is required for the Project, as well as amendments to existing provincial permits (e.g., *Mines Act* and *Environmental Management Act*) for the Bonanza Ledge Site. The JPA and ancillary Permit application packages were submitted on May 31, 2023. The *Mines Act* permit was received November 21, 2024, with the *Environmental Management Act* permits received December 11, 2024. Other ancillary authorizations are expected in early 2025.

In addition, two pieces of provincial climate action legislation have direct impacts on the Project and could impact the operation of the Project. The *Climate Change Accountability Act*, 2019 (Government of BC, 2019a) and the Greenhouse Gas *Industrial Reporting and Control Act*, 2016 (Government of BC, 2014) and associated reporting regulations. The Project is expected to have annual direct GHG emissions exceeding 25,000 tonnes of carbon dioxide equivalent (“tCO_2e”), meaning that it would be subject to both the emissions reporting and verification requirements in the above Acts.

20.6.5 Local Government Permits

The Project facilities include areas within the jurisdictions of the CRD and the District of Wells, for the Mine Site specifically. Both jurisdictions have passed bylaws that may pertain to Project activities/operations and property ownership or business operations, including:

- CRD Invasive Plant Management Regulation Bylaw, No. 4949, 2015, regarding the management of invasive plants;
- CRD Untidy and Unsightly Premises Regulatory Bylaw, No. 4628, regarding the management of untidy/unsightly properties;
- District of Wells Noise Control Bylaw, No. 93, 2018 limiting hours of noise during construction; and
- District of Wells Traffic and Streets Bylaw, No. 68, addressing traffic and provides load and size restrictions.

Other Wells bylaws are applicable to utility connections and municipal service fees related to property development (water, sewer, garbage, etc.). These bylaws would be addressed through direct applications with the District of Wells as required.

21. Capital and Operating Costs

The capital and operating cost estimates presented in this Feasibility Study Update for the Cariboo Gold Project are based on the construction of an underground mining operation with an average throughput of 4,900 tpd once commercial production is achieved.

All capital and operating cost estimates cited in this Report are referenced in Canadian dollars ("CAD or $").

21.1 Capital Costs

21.1.1 Summary

The total initial capital costs for the Project are estimated to be $881M. The total sustaining capital cost is estimated to be $525M. These estimates include the addition of certain contingencies and indirect costs. The cumulative life of mine capital expenditure ("CAPEX"), including initial and sustaining capital is estimated to be $1,406M and is summarized in Table 21-1 and in Figure 21-1 on an annual basis. Not included in the LOM capital costs are $39M of pre-final investment decision capital, which is described in Section 21.1.3.

The main capital cost items are the following:

- An underground mine, including a primary and secondary crushing circuit;
- A concentrator consisting of ore sorting, grinding, gravity, flotation, and a paste backfill plant at the Mine Site Complex ("MSC") in Wells;
- Ancillary infrastructure at the MSC to support operations, such as offices, a mine dry, and a water treatment plant;
- Water and waste management infrastructure;
- Capitalized General and Administrative ("G&A") operating costs attributable to the construction and underground development activities and workforce.

Table 21-1: Project capital cost summary [1][2]

Area	Cost Area Description	Initial Capital Cost ($M)	Sustaining Capital Cost ($M)	Total Cost ($M)
000	Surface Mobile Equipment	--	--	--
200	Underground Mine	313	397	710
300	Water and Waste Management	98	24	123
400	Electrical and Communication	19	0	19
500	Surface Infrastructure	42	1	43
600	Process Plant - Wells	180	0	180
700	Construction Indirect Costs	95	0	95
999	Contingency (16.5%)	72	4	76
	Total	819	426	1,246
-	Capitalized Revenue	-150	0	-150
-	Capitalized Operating Costs	212	0	212
-	Salvage Value	0	-36	-36
-	Site Reclamation and Closure	0	135	135
	Project Total	**881**	**525**	**1,406**

(1) Does not include pre-final investment decision capital costs total $38.6M.

(2) Totals may differ slightly due to rounding.

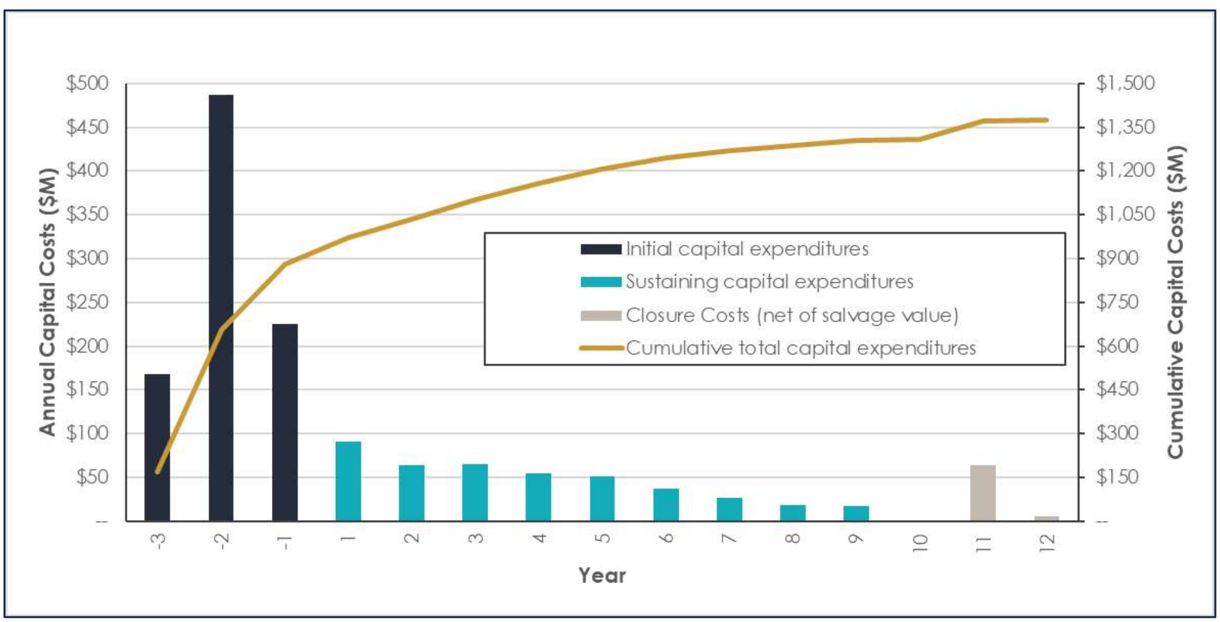


Figure 21-1: Overall Cariboo Gold Project capital cost profile

21.1.2 Scope and Structure of Capital Cost Estimate

The capital cost estimate pertaining to this 2025 FS is meant to form the basis for an overall Project budget authorization and funding, and as such, it forms the "Control Estimate" against which subsequent phases of the Project will be compared and monitored. The estimate generally meets American Association of Cost Engineers ("AACE") International Class 3 requirements and has an accuracy range of between -20% and +30%.

The capital cost estimate abides by the following criteria:

- It is based on a measurable degree of engineering completion;
- It reflects general accepted practices in the cost engineering profession;
- It assumes that contracts will be awarded to reputable contractors on a cost reimbursable basis;
- Its labour costs are based on current British Columbia rates;
- The capital costs are expressed in constant Q2 2025 Canadian dollars;
- All costs in the financial cash flow in US dollars were converted to Canadian using an exchange rate of 0.74 USD/CAD.

The Project schedule, from detailed engineering to start-up, was also used in the estimate preparation; refer to Chapter 24 for the execution plan and schedule. First ore will be achieved after 24 months from start of construction, and full production reached after 34 months from the start of construction. The cost estimate was divided into the following elements:

- Direct costs (Areas 200 to 600): Costs for productive works and permanent infrastructure. It includes production infrastructure, services, and equipment required;
- Construction Indirect costs (Area 700): Costs required to support the construction of the facilities included in the direct costs. It includes engineering, procurement, and construction management ("EPCM") services, EPCM temporary facilities, capital spares, and services;
- Capitalized operating costs (Area 980): Capital and operating costs incurred prior to commercial production being declared;
- Contingency (Area 999): Includes variations in quantities and differences between estimated and actual equipment, material prices, labour costs, and site-specific conditions. In addition, it accounts for variations resulting from uncertainties that are clarified during detailed engineering, when basic engineering designs and specifications are finalized.

21.1.2.1 Work Breakdown Structure (WBS) and Estimate Responsibilities

The capital cost estimate was developed in accordance with ODV's work breakdown structure ("WBS") with the estimate responsibilities summarized in Table 21-2.

Table 21-2: Estimate responsibilities by WBS

Area	Cost Area Description	Responsible Entity
200	Underground Mine	InnovExplo, WSP
300	Waste and Water Management	Integrated Sustainability, JDS
400	Electrical and Communications	BBA (for process plant)
500	Surface Infrastructure	JDS
600	Process Plant	BBA
700	Construction Indirects	JDS
980	Capitalized Operating Costs	BBA, InnovExplo
999	Contingency	ODV

21.1.2.2 Exclusions

The following items were excluded from the capital cost estimate:

- Licensing, land acquisition, and financing costs;
- Project preparation costs incurred to date, including studies, work programs, and early works;
- Sunk costs;
- Escalation costs;
- Fluctuation of currency exchange rates;
- Taxes, including carbon taxes, which are included in the financial model;
- Operating costs;
- Changes to design criteria;
- Work stoppages;
- Scope changes;
- Hydrological, environmental, or hazardous waste issues;
- Force majeure events.

21.1.2.3 Construction Labour

Crew Rates

Installation labour rates are calculated on the assumption of 84 hours worked per week on a single shift, with a rotation of two weeks in, one week out, per worker. The direct component of the crew rate was benchmarked against budget quotations from multiple contractors covering all key trades. Composite crew wage rates have been established for each commodity based on a craft mix comprised of foreman, journeymen, apprentices, and general labour across all construction trades. The composite crew rates include the following costs:

- Craft base rates fringe benefits and overtime;
- Mobilization and demobilization of contractor items;
- Non-manual labour (general foreperson, superintendent, project manager, etc.);
- Indirect manual labour;
- Small tools and consumables;
- Ownership and operational costs of construction equipment (excluding that supplied by the Owner);
- Health, safety, and environmental requirements;
- Site supervision and administration;
- Contractor temporary site facilities;
- Overhead and profit.

Contractor variable and fixed fees, and overhead and profit have been capped at a combined rate of 15% to reflect an open book construction strategy with potential contractors. Construction equipment has been captured in the Construction Indirects noted below in Section 21.1.4.9. Fuel costs are excluded from the construction equipment portion of the composite crew rates and were calculated separately in the indirect costs.

Construction Equipment is developed and assigned by specific crew. Hourly equipment costs include the material portion (depreciation, interest, cost of repair and maintenance, insurances permits, and taxes) and operating portion (lubricants and filters), excluding fuel. The cost of the operator is excluded from the hourly operating cost and included in the crew mix.

The composite crew rates exclude camp accommodations and camp catering for contractor manual and non-manual staff. These costs are captured separately in the capitalised operating costs. Table 21-3 provides a summary of hourly “all-in” crew rates by typical crew type.

Table 21-3: Blended rates per discipline

Activity	$/Hour
Civil Works	94.67
Concrete Works	112.62
Structural Steel	112.24
Architectural Finishes	112.24
Mechanical Works	138.15
Piping/Insulation	138.15
Electrical	143.69
Automation/Telecom	143.69

Labour Hours and Productivity

Direct field labour is the skilled and unskilled labour required to install the permanent plant equipment and bulk materials at the Project site. Unit installation hours are exclusive of contractor non-manual labour (site supervisors, accountants, and clerks) and indirect manual labour, which are captured in the composite crew rates.

Installation hours have been adjusted to take into consideration the following:

- Site location;
- Weather conditions;
- Extended overtime;
- Scattered items of work;
- Access to work area;
- Complexity;
- Height – scaffolding;
- Overcrowded/tight work areas;
- Availability of skilled workers;
- Efficiency;
- Labour turnover;
- Supervision.

Table 21-4: Labour productivity loss ratio

Activity	Factor
Civil Works	0.875
Concrete Works	0.875
Structural Steel	0.875
Architectural Finishes	0.875
Mechanical Works	0.875
Piping/Insulation	0.875
Electrical	0.875
Automation/Telecom	0.875

21.1.3 Pre-final Investment Decision Capital Costs

The Project capital cost estimate, as summarized in Table 21-5, pre-final investment decision expenses, which total $38.6M. Those expenditures are defined as costs not yet incurred but committed to and part of the Project budget prior to this FS being issued. These activities are ongoing and/or will be finalized for construction.

- Engineering for the water treatment plant at Bonanza Ledge;
- Construction costs of the water treatment plant upgrades at Bonanza Ledge;
- Water management infrastructure required to support the operation of the water treatment plant at Bonanza Ledge;
- Storage of milling equipment for the Project;
- Underground development as part of the Cow Bulk Sample;
- Construction Indirects for the activities listed above (i.e., engineering, procurement and other early Construction Indirects.

21.1.4 Initial Capital Costs

The initial capital costs cover the activities associated with the period preceding first ore. This includes the activities associated with construction and commissioning at both MSC and Bonanza Ledge, and the start of underground development. A summary of the initial capital costs is shown in Table 21-5. Note that the capitalized revenue and capitalized operating costs are not shown in Table 21-5.

Table 21-5: Project initial capital cost summary

Area	Cost Area Description	Initial Capital Cost ($M)	% of Initial Capital
200	Underground Mine[2]	313	38
300	Waste and Water Management	98	12
400	Electrical and Communications	19	2
500	Surface Infrastructure	42	5
600	Process Plant - Wells	180	22
	Subtotal – Direct Costs	**652**	**79**
700	Construction Indirects[1]	95	12
	Subtotal – Indirect Costs	**747**	**91**
999	Contingency (P50)	72	9
	Total	**819**	**100%**

(1) Surface mobile equipment included under construction indirect costs.

(2) Underground Mine (Area 200) shown above is split between the Underground Mine (Area 200), Underground Materials Handling (Area 290), and Paste Distribution Systems (Area 270)

21.1.4.1 Underground Mine (Area 200)

The total initial capital cost for the underground mine is $312.7M, of which $269.7M is for the underground mining costs listed in this section, as detailed in Table 21-6. The cost estimates for underground backfill and material handling/processing were provided by WSP, while all other underground mining costs were developed by InnovExplo.

Table 21-6: Underground mine initial capital costs (Area 200)

Cost Area Description	Total Cost ($M)
U/G Mobile Equipment	28.1
U/G Infrastructure	7.4
U/G Ventilation	22.8
U/G Water Management	7.3
U/G Electrical	17.6
U/G Communication	1.5
U/G Development	185.0
Total	**269.7**

21.1.4.2 Underground Materials Handling (Area 290)

Table 21-7: Underground materials handling initial capital costs (Area 290)

Cost Area Description	Total Cost ($M)
U/G Backfill	15.5
U/G Material Handling/Processing	27.5
Total	**43**

The underground ore circuit capital estimate contains the following:

- Grizzly and Rockbreaker station to size the raw production;
- Primary jaw crusher and secondary jaw crusher;
- Conveyors to convey crushed ore to underground silos;
- A loading station to the inclined conveyor to surface.

The ore sorter waste material will be directed underground and thereafter trucked to surface. The design system will have a:

- Waste silo from surface to underground;
- Chute at the bottom of the silo to load trucks.

The cost estimate for these infrastructures is based on vendor quotes and similar Project estimates.

21.1.4.3 Paste Distribution Systems (Area 270)

The total capital cost for the underground paste fill distribution include:

- All vertical bore holes from surface and underground interlevel;
- Tow high-pressure booster stations underground;
- All piping, couplings, valves, pipe supports and other miscellaneous items.

The estimated cost for materials is based on budgetary quote from suppliers. The estimate cost included the labour for the underground installation.

The estimated capital will be spread over the life of mine.

21.1.4.4 Waste and Water Infrastructure (Area 300)

The total initial capital cost for waste and water management infrastructure is $69.52M, as described in Table 21-8. All costs were provided by JDS with the exception of WSP providing the cost for the effluent discharge diffuser into the Jack of Clubs Lake.

Table 21-8: Waste and water infrastructure initial capital costs (Area 300)

Cost Area Description	Total Cost ($M)
Bonanza Ledge WRSF Phase 1	10.15
Bonanza Ledge WRSF Phase 2	15.50
Bonanza Ledge WRSF Phase 3	2.63
Raw Water Wells	0.70
Potable WTP	0.62
MSC Sedimentation Pond	5.01
WRSF Sediment Control Pond	6.59
MSC Non-Contact Water Diversion	0.91
MSC Contact Water Diversion	3.12
Bonanza Ledge Water Pipelines	3.00
MSC Water Pipelines	9.03
Bonanza Ledge Non-Contact Water Diversion	2.48
Bonanza Ledge Contact Water Diversion	1.37
Bonanza Ledge Pit Cover System	2.59
MSC WTP Civil Prep Work	2.05
Effluent Discharge	3.20
Sewage Treatment Plant	0.57
Total	**69.52**

21.1.4.5 Water Treatment Plant (Area 300)

Capital costs associated with the water treatment infrastructure were developed by Integrated Sustainability for both the Bonanza Ledge and MSC locations. These estimates were prepared using first-principles engineering methods and factored equipment costs. Values are expressed in Q1 2025 Canadian dollars and reflect Class 4 cost accuracy, with an expected range of -22.2% to +37%.

The Bonanza Ledge WTP has not been included in the capital cost as his construction is underway and part of the pre-final investment decision costs while the MSC WTP direct capital cost total approximately $49.97M.

Table 21-9: Mine Site Complex WTP – Capital cost estimate (Area 300)

Cost Area Description	Total Cost ($M)
Chemical Injection Systems (external to HDS)	0.35
HDS	8.51
Clarifier	3.60
MBBR	2.86
Oxidation System	0.97
Post-filtration	4.50
Solids Handling	1.47
Effluent System	2.49
Utilities	0.09
Electrical, Instrumentation and Controls	9.57
Piping, Piperacks, Supports	4.60
Site Preparation and Building	9.59
Equipment Freight	1.36
Total Capital Cost	**49.97**

21.1.4.6 Electrical and Communications (Area 400)

The total electrical and communications initial capital costs required within the process plant amounts to $19.11M. The process plant costs include the following items, which are also summarized in Table 21-10:

- Electrical equipment required in the process plant paste backfill E-room;
- G&A Information Systems;
- IT hardware;
- Security systems.

Note, for the power supply and distribution costs, and explanation on their contribution to the overall financial cashflow, please see Section 21.2.4.

Table 21-10: Electrical and communication initial capital costs (Area 400)

Cost Area Description	Total Cost ($M)
WAN Link (via HV powerline)	0.13
E-room	9.69
IT and Communications	2.57
IT Hardware	3.10
Network, Wireless and Telecom	0.39
Security Systems	0.40
G&A Information Systems	1.72
Television Systems	0.17
Communication Towers	0.61
Site Radio Systems	0.33
Total	**19.11**

21.1.4.7 Site Infrastructure (Area 500)

The total initial capital cost for site infrastructure is $42.2M, as described in Table 21-11. All costs were provided by JDS.

Table 21-11: Surface infrastructure initial capital costs (Area 500)

Cost Area Description	Total Cost ($M)
MSC Surface Infrastructure	10.22
MSC Main Access Road	6.33
Haul Roads	1.39
Highway 26 Intersection Bridge	3.08
MSC Offices	2.54
Mine Dry	4.20
ERT Garage	1.10
Ballarat Camp	10.35
Lowhee Air Intake	0.29
Shaft Air Intake	0.72
Fuel Storage	0.33
Propane Storage	0.33
MSC General Site Preparation	1.17
Gate House	0.22
Total	**42.2**

21.1.4.8 Process Plant (Area 600)

The process plant initial capital costs were estimated by BBA, excluding site preparation costs ($10M in site preparation associate to JDS' costs). The capital cost includes all unit operations, ranging from underground conveying to the paste plant, the gravity concentrate gold room, and the flotation concentrate bagging system. The 3D model, general arrangement drawings, and site layouts were used to estimate quantities and generate MTOs for all commodities. Major mechanical and electrical equipment costs were estimated using budgetary proposals from 2024 and early 2025. Equipment of lower monetary value were estimated based on BBA's recent project data.

Table 21-12 summarizes the initial capital costs for the process plant.

Table 21-12: Process plant initial capital costs (Area 600)

Cost Area Description	Total Cost ($M)
Process Plant General	72.91
Ore sorting and Crushing	21.89
Grinding	13.39
Gravity Recovery	3.41
Flotation	10.74
Regrind	6.55
Concentrate Thickening and Filtration	8.13
Tailings Thickening	4.62
Paste Backfill	15.58
Gold Room	1.12
Reagents	3.98
Services	8.00
Total Area 600 (BBA)[1]	**170.32**
Site Preparation (JDS)	10.22
Total Area 600	**180.27**

(1) BBA's process plant electrical and communications (Area 400) are shown under Section 21.1.4.6. JDS has one cost line item under cost Area 600, which is the site preparation cost required for the process plant area.

21.1.4.9 Construction Indirect Costs (Area 700)

The Construction Indirects (Area 700) includes all the costs needed to conduct the engineering, procurement, and project and construction management services for the Project. Other construction indirect costs were estimated based on the Project Execution Plan (Chapter 24), and include:

- Construction Office;
- Construction Temporary facilities (washrooms, lunchrooms, etc.);
- Quality control and quality assurance, and commissioning support;
- Vendor Representatives;
- Shop inspections during the manufacturing of equipment;
- Construction equipment rental for surface support (cranes, material handling, personnel lifts, site service and road maintenance, heaters & light plants, light trucks, etc.);
- Construction tools;
- Capital Spares.

Table 21-13: Construction indirect costs (Area 700)

Scope	Total Cost ($M)
Construction Indirects	9.25
Site CM staff and Consultants	31.80
Engineering	28.00
Toilets / Ablution Units	2.25
Temporary Construction Office	0.40
Temporary Electrical Power	3.13
QA/QC / Commissioning	2.08
Vendor Reps	0.75
Inspections	0.25
Construction Equipment	12.63
Construction Tools	2.14
Capital Spares	2.45
Total	**95.12**

21.1.4.10 Capitalized Operating Costs (Area 980)

Capitalized operating costs represent the operating and capital expenditures necessary to achieve commercial production. As such, the following components are included in these costs:

- Mine development capitalized operating cost expenditures (“OPEX”);
- Process plant capitalized OPEX;
- Water and waste management capitalized OPEX;
- Pre-staffing and training;
- Hot-commissioning and ramp-up;
- Electrical transmission line usage.

The capitalized operating costs are estimated to be $211.80M, as summarized in Table 21-14.

Table 21-14: Capitalized initial capital costs (Area 980)

Cost Area Description	Total Cost ($M)
Mining	99.81
General & Administration	62.49
Waste & Water Management	25.05
Processing	15.06
Transmission Line	9.40
Total	**211.80**

21.1.4.11 Contingency (Area 999)

Contingency is an allowance included in the initial capital cost estimate that is expected to be spent to cover the known but undefined items within the scope of the estimate. These can arise due to currently undefined items of work or equipment, or to uncertainty in the estimated quantities and unit prices for labour, equipment, and materials. Contingency does not cover scope changes, project exclusions, or project risk reserve costs.

Contingency was calculated for the Project using a Monte Carlo probabilistic approach based on execution philosophy, historic data, level of project definition, and advancement of engineering as well as contributions from the various firms according to their scope of work. Mining capital costs were excluded from the contingency calculation as these costs already include contingency.

ODV selected a contingency of $72M, which is the P50 of the Monte Carlo simulation. This represents approximately 16.5% of the initial capital costs.

It is expected that sufficiently developed engineering, adequate project management, and tight construction cost controls will be implemented to meet the budget for the Project.

21.1.5 Sustaining Capital Cost

Sustaining capital costs were estimated using the same estimation basis as outlined for the initial and expansion direct costs. The sustaining capital is incurred to maintain a 4,900 tpd throughout of the Project. It consists mainly of underground mine development costs, waste and water management costs, and contingency. The 16.5% contingency is only applied to the water and waste capital costs, as well as the infrastructure costs. The mine development capital costs have their own contingency included. Total sustaining capital costs incurred over the approximate 10 years of production are $426M of project-related capital expenditures, excluding end-of-mine site reclamation and closure costs. The sustaining capital costs, including site closure, restoration, and net of salvage value is $525M. The breakdown of LOM sustaining capital expenditures by area is provided in Table 21-15, while a detailed sustaining capital cost schedule is provided in Table 21-16.

Table 21-15: Project sustaining capital cost summary

Area	Description	Sustaining Capital Cost ($M)	%
200	Underground Mine	396.88	76
300	Waste & Water Management	24.38	5
400	Electrical & Communication	-	-
500	Surface Infrastructure	0.70	-
600	Process Plant - Wells	-	-
700	Construction Indirect Costs	-	-
999	Contingency	4.14	1
	Total	**426.10**	**81**
	Site Reclamation and Closure	134.81	26
	Salvage Value	(35.98)	(7)
	Total – Forecast to Spend	**524.93**	**100**

Table 21-16: Sustaining capital costs by year summary ($M)

Area	Cost Area Description	1	2	3	4	5	6	7	8	9	10	11-44	Total	%
200	Underground Mine	65.86	63.68	65.34	54.06	47.69	36.65	26.41	18.38	17.59	1.23	-	396.89	76
300	Water and Waste Management	21.75	-	-	-	2.63	-	-	-	-	-	-	24.38	5
400	Electrical & Communications	-	-	-	-	-	-	-	-	-	-	-	-	-
500	Surface Infrastructure	-	0.57	0.13	-	-	-	-	-	-	-	-	0.70	0
600	Process Plant	-	-	-	-	-	-	-	-	-	-	-	-	-
700	Construction Indirect Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
999	Contingency	3.59	0.09	0.02	-	0.43	-	-	-	-	-	-	4.13	1
	Subtotal	**91.19**	**64.34**	**65.49**	**54.06**	**50.75**	**36.65**	**26.41**	**18.38**	**17.59**	**1.23**	**0**	**426.10**	**81**
	Site Reclamation and Closure	-	-	-	-	-	-	-	-	-	-	134.81	134.81	26
	Salvage Value	-	-	-	-	-	-	-	-	-	-	(35.98)	(35.98)	(7)
	Total	**91.19**	**64.34**	**65.49**	**54.06**	**50.75**	**36.65**	**26.41**	**18.38**	**17.59**	**1.23**	**98.83**	**524.93**	**100**

21.1.5.1 Underground Mine (Area 200)

A large portion of sustaining capital costs is attributable to the underground mining operation. The sustaining capital costs related to the underground mine are estimated to be $396.9M. Significant sustaining capital is required as mining progresses, which includes drifts, ventilation raises, ramp extension, underground infrastructure, underground electrical and communications, underground material handling, paste backfill network, and mobile equipment. The underground mining sustaining capital costs are summarized in Table 21-17. InnovExplo provided the estimates for all underground mining sustaining capital costs, except for the underground material handling and paste network costs that were estimated by WSP.

Table 21-17: Underground sustaining capital costs – Area 200

Cost Area Description	Total Cost ($M)
U/G Mobile Equipment	155.5
U/G Infrastructure	5.4
U/G Ventilation	16.1
U/G Water Management	4.5
U/G Electrical	16.7
U/G Communication	1.8
U/G Backfill	16.3
U/G Development	180.6
U/G Material Handling/Processing	0.0
Total	**396.9**

21.1.5.2 Underground Materials Handling (Area 290)

No sustaining capital will be required for the underground material handling system. The majority of the cost is related to wearing parts and maintaining the crushing and conveying the infrastructure, which is included in the operating costs.

21.1.5.3 Underground Backfill (Area 270)

The estimate sustaining capital for the underground backfill relates to the paste fill distribution network is associated to the mining progresses. The capital required will be the installation of high-pressure booster pump, drill and equip paste fill boreholes and paste fill line extension to the initial infrastructure.

21.1.5.4 Waste and Water Infrastructure (Area 300)

Sustaining capital will be required for the Bonanza Ledge WRSF, which is broken down into three phased installations. Phase one of the WRSF will occur during the construction phase. Phase two expansion of the Bonanza Ledge WRSF will occur in Year 1, with phase three occurring in Year 5. Prior to decommissioning of the Bonanza Ledge WTP, a pipeline will be installed to pump water from the Bonanza Ledge SCP to the newly constructed MSC WTP, which will be the sole source for treating mine contact water on the property. Summarized capital costs are listed in Table 21-18.

Table 21-18: Waste and water infrastructure sustaining capital costs – Area 300

Cost Area Description	Total Cost ($M)
Bonanza Ledge WRSF – phase two	15.50
Bonanza Ledge WRSF – phase three	2.63
Water Pipeline	6.24
Total	**24.38**

21.1.5.5 Surface Infrastructure (Area 500)

Sustaining capital will be required for both the Cow portal and Mosquito fresh air intakes. These will be constructed in Year 2 and Year 3 respectively. In the year leading up to the Mosquito portal fresh air intake, construction of an access road will be required. Summarized capital costs are listed in Table 21-19.

Table 21-19: Surface infrastructure sustaining capital costs

Cost Area Description	Total Cost ($M)
Mosquito Creek Access Road	0.06
Cow Portal Fresh Air Intake	0.51
Mosquito Portal Fresh Air Intake	0.13
Total	**0.70**

21.1.5.6 Contingency (Area 999)

As for the initial capital cost estimate, a contingency was calculated for the sustaining capital cost estimate. ODV selected a contingency of $4.14M, which represents approximately 1% of the sustaining capital costs. Note that 16.5% contingency was applied to Areas 300 and 500 sustaining costs, but was not applied to the Area 200, as those items included their own contingency.

21.1.5.7 Rehabilitation and Site Closure

Total rehabilitation and closure costs over the LOM amount to $134.81M. Most of the costs ($123M) occur over the 6 years following end of production, which include bulk site infrastructure decommissioning, WRSF closure cover construction as well as reflooding of the underground and water treatment of any contact water unsafe for release. The remaining costs spanning 30 years account for long term monitoring required by the permit. All cost included are in line with the Project permits.

21.1.5.8 Mining Salvage Value

The salvage value associated with the mining component consists of the residual value of the mining equipment fleet, excluding light vehicles. A residual value equivalent to 20% of the original purchase price has been applied to the entire fleet, except for the two Roadheader mining units. Due to their relatively low utilization over the course of the Project, a higher residual value of 65% has been assigned to these two units. The total estimated salvage value for the mining equipment is $19.6M.

21.1.5.9 Processing Salvage Value

The salvage value of the processing plant's mechanical and electrical equipment is estimated based on the percentage of depreciation over each asset's expected useful life. For the plant's structural components, the residual value is based on the weight of recoverable steel, assuming it is sold as scrap metal. The total estimated salvage value for the process plant equipment and structures is $16.3M.

21.2 Operating Costs

21.2.1 Summary

The average OPEX over the mine life is estimated to be 110.7 per tonne ("$/t") processed, or 1,014 per ounce ("$/oz"). Table 21-20 provides the breakdown of the projected operating costs by phase and cost area for the Project.

Table 21-20: Operating cost summary

Area	Cost Area Description[1]	LOM Unit Cost ($/t processed)	LOM ($M)	Annual Average Cost ($M/year)	Average LOM ($/oz)	OPEX (%)
200	Underground Mining	62.3	1,080	98	570	56
300	Water and Waste Management	5.0	86	8	45	4
400	Electrical Transmission Line	4.9	86	8	45	4
600	Processing	23.2	403	37	213	21
800	General and Administration	15.4	266	24	141	14
	Total	**110.7**	**1,921**	**175**	**1,014**	**100%**

(1) Underground mining, Water and Waste Management, Processing and G&A operating costs do not include a portion of the expenditures that have been capitalized – refer to Section 21.1.4.10.

21.2.2 Basis of Operating Cost Estimate

The operating cost estimate was based on Q2 2025 assumptions. The estimate targeted an accuracy of ±15%. All operating cost estimates are in CAD. Costs were generally itemized in detail; however, some items of lesser significance are calculated estimates, or have been included as an allowance. Many items of the operating cost estimate are based on budget quotations; allowances are based on in-house data, and salaries are based on ODV's current & projected salary chart.

The operating cost estimate is based on the mine schedule indicative tonnage per time that was produced by ODV and InnovExplo for the FS and it is inclusive of site costs to the final Project close-out, including the waste management facilities; see Chapter 16 for more details related to the mine plan.

21.2.2.1 Assumptions and Exclusions

The following items were assumed:

- Some existing equipment and materials will be reused;
- The labour rate build-up will be based on the statutory laws governing benefits to workers that were in effect at the time of the estimate;
- No cost of commissioning assistance post C3 certificate issuance is included in the operating cost estimate;
- Freight estimates are based on vendor supplied freight quotations or in-house data. Freight for reagents is included in the price of those commodities. Freight for steel consumables is included in the price of that material. Freight for spare parts is calculated as a percentage of equipment cost expected to be used annually;
- No contingency is assumed;
- No cost escalation (or de-escalation) is assumed.

The following items were specifically excluded from the operating cost estimate, unless identified by the Owner's team and included in the General Services:

- Cost of financing and interest;
- Pre-start-up operations and maintenance training;
- Transport, insurance, and refining of doré from the plant (deducted from sales in calculating gross revenue).

21.2.2.2 Estimate Responsibilities

The overall operating cost estimate combined inputs from several sources, including InnovExplo, WSP, JDS, Integrated Sustainability and BBA as summarized in Table 21-21.

Table 21-21: Operating cost estimate responsibilities

Cost Area Description	Responsible Entity
Mineralized Material Transport	InnovExplo
Underground Mining	InnovExplo
Underground Materials Handling and Paste Systems	WSP
Water and Waste Management	Okane, BBA
Electrical and Communication	Clean Energy Consulting
Processing (MSC)	BBA
General and Administration	ODV

21.2.2.3 General Unit Rates

The general unit rates used in the operating cost estimate are summarized in Table 21-22. Propane, liquified natural gas and diesel unit prices do not consider the carbon tax, which was calculated separately along with mining taxes and corporate income taxes (Chapter 22).

Table 21-22: General rate and unit cost assumptions

Parameter	Unit	Value
Average Daily LOM Tonnage	tpd	4,900
Years of Operation	year	10
LOM Total Ore Tonnes Mined	Mt	17,815
LOM Average Gold Grade	Au g/t	3.62
Lom Total Gold Recovered	koz	1,894
BC Hydro Grid Power Unit Cost (MSC)	$/kWh	0.067
Generator Power Unit Cost	$/kWh	0.32
Propane Unit Cost	$/litre	0.65
Diesel Unit Cost	$/litre	1.37

21.2.3 Mining

InnovExplo provided estimates for all underground mine operating costs. The total underground mine operating cost is $1,080 M for the Project. The operating unit costs were calculated over the total ore mined from development and from production, excluding the tonnages during pre-production. The unit cost is $62.3/t mined. Mining operating costs are mostly composed of wages, electric power, consumables, fuel, and equipment maintenance. Equipment lease payments have not been included in operating costs, as they have been included as sustaining capital expenditures. All stope access development has been allocated to the operating cost. An average of 169 employees per rotation related to underground mining for operation and maintenance are anticipated when full production will be achieved. Table 21-23 summarizes the underground operating costs for the Project and provide a breakdown per item.

Table 21-23: Mining operating cost

Cost Area	Average Annual Cost ($M)	LOM Cost ($M)	Cost per Tonne Mined ($/t)	OPEX (%)
Definition Drilling	8.4	86.6	4.99	8%
Mine Development	21.0	215.8	12.44	20%
Production - Stope Preparation	3.2	33.1	1.91	3%
Production - Drilling and Blasting	15.9	163.3	9.41	15%
Production - Mucking and Hauling	22.5	231.1	13.32	21%
Production - Backfill	3.1	32.2	1.85	3%
UG Services	9.4	95.9	5.53	9%
Maintenance	10.4	107.1	6.17	10%
Energy Cost	7.3	75.3	4.34	7%
Material Handling	3.9	39.7	2.29	4%
Total	**105.3**	**1,080.2**	**62.3**	**100%**

21.2.3.1 Definition Drilling

The costs associated with definition drilling account for the diamond drilling activities required to enable final stope design prior to mining. These costs include:

- Contractor drilling costs, estimated at $140.00/m, based on drilling work conducted during the 2024 bulk sample program;
- Analytical costs, estimated at $10.00/m, assuming that 50% of drilled metres are analyzed at a rate of $20.00/sample;
- Labour costs for geological interpretation, estimated at $7.61/m;
- Miscellaneous expenses, estimated at $5.00/m.

This results in a total unit cost of $162.61/m.

The estimated drilling requirement was established based on the drilling completed to date, the extent of the mineralized zones, and the spacing of the planned drill pattern. A total of 548,000 m of definition drilling is anticipated across the different zones.

The total cost for the definition drilling program during the production period is estimated at $86.8M, which corresponds to $4.99 per tonne of processed material.

21.2.3.2 Mine Development

Development costs encompass all direct expenditures related to labour, materials, and equipment maintenance required for the excavation of operational drifts, as well as the transport of development-associated ore.

Material costs, including drilling accessories, ground support, explosives, fuel, and related consumables, were based on budgetary quotations provided by suppliers. Labour cost estimates were provided by ODV based on projected staffing requirements. Overall unit cost per metres of development was estimated at $2,194 for OPEX excavations.

A total of 94.3 km of operational drifts is planned for excavation, resulting in a total development cost of $215.8M, which includes $8.8M allocated for ore transport. This corresponds to a unit cost of $12.44/t mined.

21.2.3.3 Production - Stope Preparation

Stope preparation costs include expenditures related to the installation of secondary ground support ($0.87/t), such as cable bolts and shotcrete, rehabilitation of mineralized drifts ($0.93/t), and an allowance for probe drilling ($0.11/t).

21.2.3.4 Production - Drilling and Blasting

Drilling and blasting costs include labour, equipment, and materials required for production drilling, slot raise (opening raise) drilling and charging operations. Unit costs for drilling consumables, explosives, and detonators are based on budgetary quotations provided by suppliers.

A 30-inch opening raise is planned for each stope. Drilling estimates were developed based on a typical drill pattern aligned with the stope geometry and design parameters. Explosives costs include the use of emulsion, packaged explosives (sticks), and electronic detonators.

The average unit costs across all zones are as follows: $3.79/t for production drilling, $3.47/t for blasting, and $3.42/t for slot raise, resulting in a total unit cost of $10.68/t of production. For the Project, the total cost associated with drilling and blasting activities is estimated at $163.3M, corresponding to a unit cost of $9.41/t mined.

21.2.3.5 Production - Mucking and Hauling

The costs associated with the “Mucking and Hauling” cost centre include mucking operations, truck haulage of broken material, trucking between the Shaft Zone silos and the primary crusher feed point, as well as the transport of waste material from the ore sorter from the loading point to the surface waste stockpile.

The estimated unit costs incorporate labour, fuel, and maintenance expenses. For mucking operations, costs also include ore sample analysis. Mucking costs were assessed based on haul distances by zone, considering the mucking method used, manual or automated (with one operator for every two LHD units).

For haulage, the number of truck units required over time was estimated through simulations of travel distances associated with various tasks outlined in the mine plan.

Overall, the unit cost for mucking activities is estimated at $4.45/t, while unit costs for all truck haulage activities total $8.87/t mined, resulting in a combined unit cost of $13.32/t. The total cost attributed to this cost centre amounts to $231.1M.

21.2.3.6 Production – Backfill

The "Production – Backfill" cost centre includes labour, equipment, and material costs, where applicable, for waste rockfill operations, as well as the installation, dismantling, and relocation of the paste backfill distribution system.

The backfilling activities are supported by one crew of two workers on a rotating day/night shift, and an additional crew of two workers on the day shift.

Additional costs have been included for the construction of paste barricades, as well as for supplemental drilling required to implement the two-pass backfilling method (Doyon Method).

The unit cost for rock backfill has been estimated at $4.00/t, while the unit cost for paste backfill-related activities is estimated at $2.00/t of paste fill. In total, backfilling activities are projected to cost $32.2M, resulting in a blended unit cost of $1.85/t mined.

21.2.3.7 UG Services

The “Underground Services” cost centre encompasses support activities essential to underground operations, including material supply, levelling, general labour (handyman duties), and operational supervision.

The estimated costs include labour, maintenance of service equipment, and consumables required for these activities. A total of 19 personnel per rotation has been allocated to ensure consistent underground support.

The total estimated cost for this cost centre is $95.9M, representing a unit cost of $5.53/t mined.

21.2.3.8 Maintenance

The "Maintenance" cost centre includes hourly labour (mechanics, electricians, etc.) responsible for maintaining fixed equipment, as well as staff personnel such as supervisors, planners, reliability technicians, and instrumentation technicians.

It also covers maintenance costs for service equipment, along with annual maintenance costs for underground infrastructure, including the maintenance shop, dewatering systems, ventilation network, and communication systems.

A total of 22 personnel per rotation has been allocated to ensure the delivery of maintenance services.

The total estimated cost for this cost centre is $107.1M, representing a unit cost of $6.17/t mined.

21.2.3.9 Energy Cost

The "Energy Cost" centre includes all energy-related expenses for the Project. This encompasses propane consumption for heating the underground ventilation air using burner systems, as well as electricity consumption by fixed infrastructure (such as pumping systems, ventilation network, lighting, etc.) and mobile equipment (including production drills, Jumbo drills, bolters, roadheaders, and others).

Energy consumption estimates were based on the power requirements per unit, aligned with the mine plan and operational schedule.

A total of 53.6M litres of propane is projected to be consumed over the production period, at a unit cost of $0.65/L Electricity usage is estimated at 604,000 MWh, at a unit cost of $0.067/kWh.

In total, the estimated cost for the Energy Cost centre is $75.3M, corresponding to a unit cost of $4.34/t mined.

21.2.3.10 Material Handling & Crushing

Material Handling and Crushing cost are made up of the following major costs on an average annual basis (Table 21-24).

Table 21-24: Material handling and crushing operating cost

Cost Area	Average Annual Cost ($M)	Cost per Tonne Mined ($/t)
Energy	0.3	0.18
Maintenance	0.3	0.17
Mobile Equipment	0.5	0.27
Labour	2.8	1.54
Consultant/Contractor Support	0.1	0.05
Total	**3.9**	**2.21**

21.2.4 Electrical and Communications

The capital costs for the substation, substation electrical and transmission line systems were estimated by Clean Energy Consulting. Power supply and distribution, as well as Information Technology (“IT”) and communication comprise the main costs. The estimates were based on recent projects of similar size, power rating and layout as well as on pricing from suppliers for major electrical equipment. The capital costs were used to form the basis of the third-party agreement to own and operate the line, and ODV will be charged an annual fee (representing the operating cost in the paragraphs below).

Table 21-25: Electrical costs

Description	Total Cost ($M)
69 kV Power Line – Mobilization, Clearing, Access Roads and Surveying	9.96
69 kV Power Line – Supply and Installation incl. Post Construction Services	24.00
69 kV Power Line – Safety and Environmental	3.15
Site Substation, Wells – Electrical Equipment	6.10
Site Substation, Wells – Civil and Structures	2.21
Site Substation, Wells – Engineering and Commissioning	0.53
Main Site Electrical Room - Equipment	7.01
Main Site Electrical Room – Civil and Commissioning	0.62
Emergency Power	0.20
Total	**53.78**

A contingency of 15% has been added to the costs, giving a total of $61.85M.

The power line costs have been included as an operating cost under a separate infrastructure agreement, whereby the power infrastructure is built and operated by an independent third party, which charges the Project an annual usage fee. An annual operating cost of $9.4M has been allocated over a 10-year repayment period following electrification of the line, after which the third party is expected to charge a reduced rate of $1M per year for the remainder of the operating life of the Project. In the event of any potential future mine life extension beyond the 10 years envisioned in this FS, the reduced annual rate usage fee would remain applicable.

21.2.5 Processing

The average processing operating costs for processing were calculated over the LOM. The operating cost was estimated to be $23.16/t mined. The steady-state operating costs for the mill and paste plant includes reagents, maintenance parts and material, major equipment consumables, grinding media, personnel and contractors, utilities (i.e. electricity and propane), and other miscellaneous fees such as mobile equipment and laboratory costs. A breakdown of the steady-state processing operating costs, without contingency, is presented in Table 21-26.

Table 21-26: Mill operating costs

Cost Area	Average Annual Cost ($M)	LOM Cost ($M)	Cost per Tonne Mined ($/t)	OPEX (%)
Reagents	1.4	15.6	0.89	3.9%
Maintenance, Parts, and Materials	3.2	35.3	2.03	8.8%
Major equipment Consumables	1.0	10.6	0.61	2.6%
Grinding Media	1.0	11.1	0.64	2.8%
Personnel and Contractors	10.1	110.7	6.36	27.5%
Utilities	4.5	49.1	2.82	12.2%
Miscellaneous	0.3	2.9	0.17	0.7%
Total Processing Plant	**21.4**	**235.3**	**13.53**	**58.4%**
Paste Plant	15.2	167.5	9.63	41.6%
Total	**36.6**	**402.8**	**23.16**	**100%**

21.2.5.1 Reagents and Cement

Reagent and cement consumptions are reported in Chapter 17. Budget quotes were obtained from suppliers in 2024. A factor was added to the budgetary prices to cover transportation expenses. A summary of the average annual reagent and cement costs is presented in Table 21-27. The average annual cost of reagents and cement is calculated to be $15.4M ($1.4M for reagents, and $14.0M for cement), or $9.77/t mined ($0.89/t mined for reagents, and $8.88/t mined for cement), which represents 42.2% of the processing operating costs (3.9% for reagents, and 38.3% for cement).

Table 21-27: Reagents and cement costs

Cost Area	Average Annual Cost ($M)	LOM Cost ($M)	Cost per Tonne Mined ($/t)	OPEX (%)
PAX	0.2	2.1	0.12	0.5%
MIBC	0.9	10.2	0.59	2.5%
Polyfloat 7040	0.2	1.9	0.11	0.5%
Flocculant	0.1	1.3	0.07	0.3%
Refinery Reagents	0.002	0.02	0.001	0.005%
Total Reagents	**1.4**	**15.6**	**0.89**	**3.9%**
Cement (Paste Plant)	14.0	154.4	8.88	38.3%
Total	**15.4**	**169.9**	**9.77**	**42.2%**

21.2.5.2 Personnel and Contractors

A total of 88 workers are required for processing, which includes 16 salaried staff and 72 hourly workers divided amongst management and technical services, operations, and maintenance departments. The list of personnel, along with the salaries and benefits, including bonuses where applicable, associated with each position was provided by ODV. The contractor and consultant costs for processing include items such as special projects and research and development ("R&D"), which were added to the operation and maintenance personnel cost. The labour and contractor cost is estimated at an average of $10.1M per year or $6.36/t mined, which represents 27.5% of the processing operating costs.

21.2.5.3 Maintenance Materials and Consumables

Maintenance materials and consumables for the process plant were estimated based on the equipment capital cost per area and supplier data. Allowances were added for general materials, miscellaneous mechanical, piping, electrical, and instrumentation materials. The total cost for these items was estimated to average $4.2M per year or $2.64/t mined, which represents 11.4% of the processing operating costs.

21.2.5.4 Grinding Media

The Project process flowsheet requires two different types of steel media: balls for the ball mill and the for the regrind mill. The consumption rates for the media were calculated based on similar operations, whereas budgetary quotations were obtained for each type of media used. The average annual cost of media was estimated to be $1.0M or $0.64/t mined, which represents 2.8% of the processing operating costs.

21.2.5.5 Energy

An estimate of the electrical energy consumption was reported in Chapter 17, and it is based on the load list. The cost of electricity was calculated based on BC Hydro average cost of 6.7 cents per kilowatt hour ("¢/kWh"). Propane consumption for heating was calculated using estimated monthly heating energy requirements derived from historical weather data. The energy costs represent approximately 12.2% of the total process operating costs, at an average yearly cost of $4.5M or $2.82/t mined.

21.2.5.6 Plant Mobile Equipment and Laboratory Fees

Mobile equipment will be required at the site for operations and maintenance. The average of yearly laboratory fees is estimated at $243,800, and at $18,600 for mobile equipment. The samples collected include slurries from various stages of the flowsheet or the metallurgical laboratory, both high- and low-grade solution samples, bullion, and slag. The mobile equipment and laboratory costs represent approximately 0.7% of the total process operating costs, at an average yearly cost of $262,400 or $0.17/t mined.

21.2.6 Water Treatment

Annual operating costs for the WTPs at Bonanza Ledge and the MSC were estimated by Integrated Sustainability using a first-principles approach. These values reflect Q1 2025 Canadian dollars and exclude contingency, escalation, and Owner's indirect costs.

The estimates consider full design throughput, year-round operation, and include chemical consumption, labour, utilities, maintenance, and insurance. Unit pricing was developed from vendor quotes, industry benchmarks, and internal cost libraries.

The Bonanza Ledge WTP is expected to operate during the early development period (Stage 1), while the MSC WTP will commence in Stage 2 and remain active through operations and into closure. Costs have been normalized to annual values for consistency with other operating areas in this chapter.

Table 21-28: Bonanza Ledge WTP – Annual operating cost summary

Cost Category	Annual Cost ($M)	% of Total
Chemical Consumption	1.53	30%
Operating Labour	1.71	33%
Utilities	0.06	1%
Maintenance & Rentals	1.69	33%
Insurance & Other	0.15	3%
Total	**5.14**	**100**

Table 21-29: MSC WTP – Annual operating cost summary

Cost Category	Annual Cost ($M)	% of Total
Chemical Consumption	1.85	29%
Operating Labour	1.02	16%
Utilities	0.43	7%
Maintenance	2.21	35%
Insurance & Other	0.83	13%
Total	**6.35**	**100**

21.2.7 Waste & Water Management

The remainder of the Waste & Water Management operating costs include the following, as shown in below:

- Labour to monitor and maintain water management on site;
- Equipment and maintenance required to ensure placement and rehandling of the waste on the WRSF once deposited from the underground operation;
- Consumables required for maintenance of pumps, pipelines and lining;
- Contracting services required for Air, Noise and construction monitoring.

Table 21-30: Waste and water management operating cost

Cost Category	Annual Cost ($M)	LOM Total ($M)
Labour	0.93	11.0
Equipment & Maintenance	0.38	4.79
Fuel	0.16	2.03
Consumables	0.31	4.57
Contractor Support	0.51	6.27
Total	**2.28**	**28.67**

21.2.8 General and Administration

G&A costs are expenses not directly related to the production of goods and encompass items not included in the mining, processing, water and waste management, refining, and transportation costs of the Project. These costs were developed based on ODV and BBA's past project experience, and on that of similar sized operations.

The G&A cost area includes the following items:

- Site administration and management labour;
- Administration:
- Insurance;
- Office supplies;
- Camp and administration buildings electricity and heating, both at the mine site and in the nearest town of Quesnel;
- Property taxes;
- Mineral lease rental;
- Legal and bank fees;
- Human resources and community support:
  - Training;
  - Community and Impact Benefit Agreement ("IBA") commitments;
  - Sponsorships and association fees.
- Information Technology:
  - Communication service fees;
  - IT equipment and supplies.

- Health and safety:
  - Personal protective equipment and first aid supplies and industrial hygiene supplies;
  - Medical consultations;
  - Mine rescue team training.
- Technical services:
  - Equipment and software licenses;
  - Specialized consultants.
- Site services:
  - Roads and building maintenance;
  - Waste and sewage collection and disposal services;
  - Snow clearing;
  - Mobile equipment, operations and maintenance.
- Camp and food services:
  - Management and maintenance;
  - Cleaning services;
  - Food supply.
- Employee land transport;
- Security services;
- Closure liability (bonding);
- Permitting expenses;
- IBA payments.

A portion of G&A operating costs ($62M) attributable to the construction and underground development workforce was capitalized and included within sustaining capital cost estimates.

The overall G&A services labour will total approximately 84 employees at its peak. The peak headcount will include nine mine administration employees, four finance employees, two IT employees, nine site services employees, four human resources employees, 10 health and safety employees, and 46 technical services employees (surveying, mining engineering, and geology).

In general, the management and administrative staff will work on a 5/2 basis, mostly based out of the Quesnel office, while much of the technical services, and health and safety staff will work 14/14 rotations at the mine site

On an annual basis and net of G&A costs transferred to capital expenditures, the G&A operating costs are estimated to be $23M/year or approximately $329M over the LOM (prior to capitalization). The average G&A operating cost on a per tonne mined basis is $15.4/t. The operating costs within the G&A category are shown by activity in Table 21-31. The greatest cost within the G&A category is the administrative costs due to the closure bonding and permitting contributing a large portion at 38%, followed by Transportation, camp and food services, representing 23%.

Table 21-31: General and administrative costs by activity

Item	Total Cost ($M)	Average Annual Cost ($M/year)	Cost per Tonne Mined ($/t)	Percentage of Total[(1)] (%)
Administration	125.2	8.9	7.03	38
Human Resources, Finance, IT and Community Support	11.5	0.8	0.64	3
Health and Safety	16.2	1.2	0.91	5
Technical Services	58.9	4.2	3.31	18
Site Surface Services	36.3	2.6	2.04	11
Transportation, Camp and Food Services	75.4	5.4	4.23	23
Security Services	5.5	0.4	0.31	2
Subtotal	**328.9**	**23.5**	**18.46**	**100**
Transfer to Capital Expenditures	(62.5)		(3.60)	
Total	**266.5**		**15.4**	

(1) Percent distribution taken on total amount before capitalization of initial years.

21.3 Site Personnel Summary – All Areas

It is anticipated that 340 employees (staff and labour) will be required on site at the peak of construction, See Figure 21-2. A summary of labour in all areas is shown in Table 21-32.

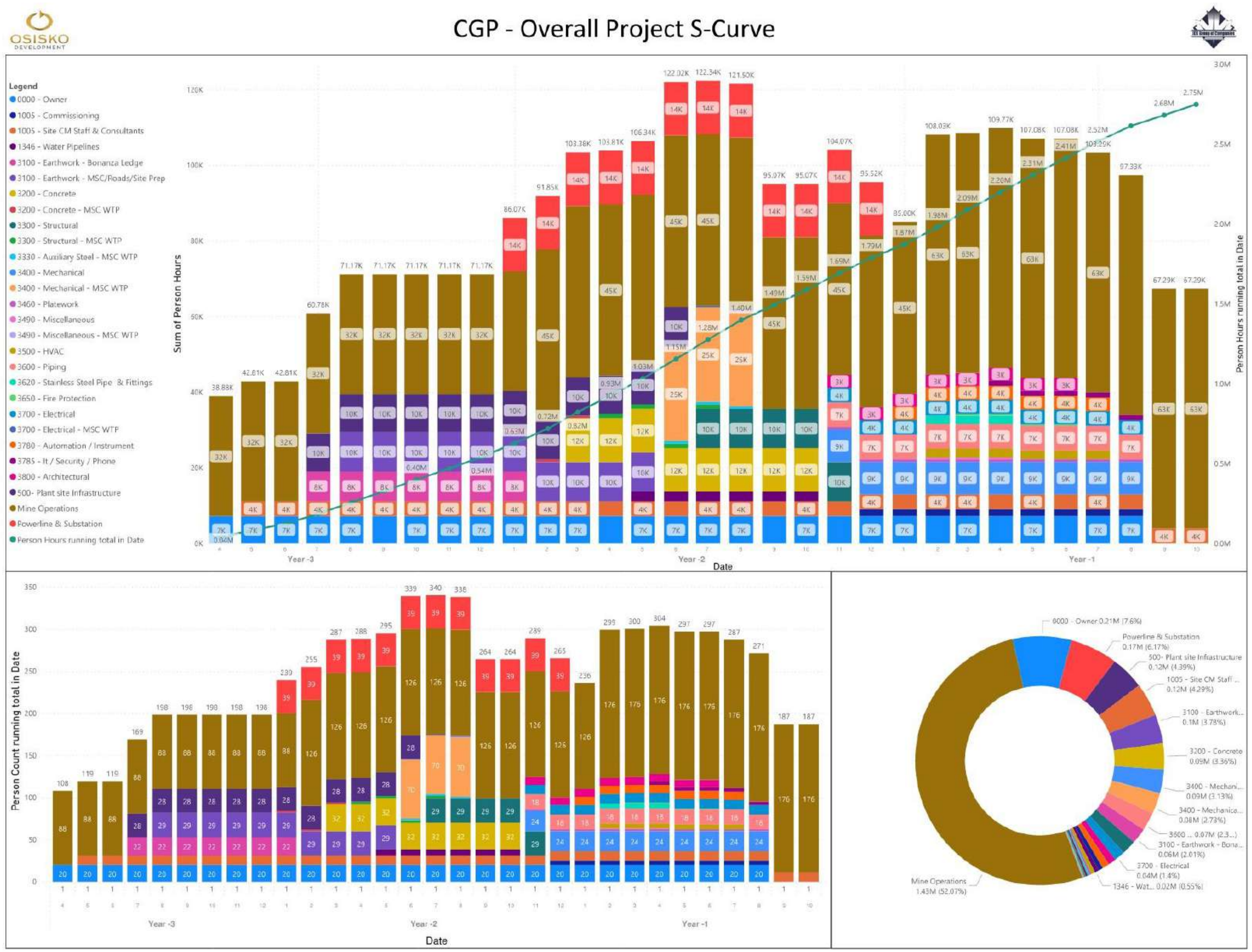


Figure 21-2: Overall construction Project labour S-Curve

Table 21-32: Peak labour by discipline for Construction and LOM

Area	Activity	Construction	LOM
General and Administration	Mine Administration	13	15
	Human Resources	4	4
	Health and Safety	9	10
	Technical Services	36	46
	Site and Camp Services	35	37
	Subtotal	**97**	**112**
Underground Mine	Staff and supervision	16	16
	Operations	193	200
	Maintenance and services	74	94
	Subtotal	**283**	**310**
Process Plant	Staff and Supervision	9	16
	Operations	20	40
	Maintenance and Services	16	32
	Subtotal	**45**	**88**
Water and Waste Management	Operations	15	15
	Subtotal	**15**	**15**
Construction	Construction staff	**129**	**0**
Total		**613**	**525**

22. Economic Analysis

22.1 Overview

The economic assessment of the Cariboo Gold Project for Osisko Development Corp. was carried out using a discounted cash flow approach on a pre-tax and after-tax basis, based on consensus equity research on long-term commodity price projections in United States dollars and cost estimates in the currency in which they are incurred. An exchange rate of USD 0.74 per CAD 1.00 was assumed to convert USD projections and particular components of the capital cost estimates into CAD. No provision was made for the effects of inflation. Current Canadian tax regulations were applied to assess the corporate tax liabilities, while the most recent provincial regulations were applied to assess the British Columbia mining and carbon tax liabilities.

The IRR on total investment was calculated based on 100% equity financing, even though ODV may decide in the future to finance part of the Project with debt financing. The NPV was calculated from the cash flow generated by the Project, using a discount rate of 5%. The simple payback period and the payback period after the start of operations are based on the undiscounted annual cash flow of the Project and they are also indicated as a financial measure. Furthermore, a sensitivity analysis has been performed for the after-tax base case to assess the impact of variations in the Project capital costs, USD:CAD exchange rate, price of gold, and operating costs.

The economic analysis presented in this chapter contains forward-looking information with regards to the commodity prices, exchange rates, proposed mine production plan, projected metal recoveries, operating costs, construction costs, and the Project schedule. The results of the economic analysis are subject to a number of known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here.

Osisko Gold Royalties retains a 5.0% net smelter return royalty on the Project.

22.2 Assumptions and Basis

The economic analysis was performed using the following assumptions and basis:

- The Project Execution Schedule developed in Chapter 24, taking into consideration key Project milestones;
- Commercial production is scheduled to be achieved 30 months after the start of construction, with first ore achieved 24 months after the start of construction. Operations are estimated to span a period of approximately 10 years;
- The base case gold price is USD 2,400/oz;

- The long-term price of gold was estimated on the basis of discussions with experts, consensus analyst estimates, and recently-published economic studies. The forecasts used are meant to reflect the average metal price expectation over the life of the Project. No price inflation or escalation factors were taken into account. It is understood that commodity prices can be volatile and that there is the potential for deviation from the LOM forecasts;
- The United States to Canadian dollar exchange rate has been assumed to be USD 0.74: CAD 1.00 over the life of mine (CAD:USD exchange rate of 1.35);
- All cost estimates are in constant Q2 2025 Canadian dollars with no inflation or escalation factors taken into account;
- All metal products are assumed to be sold in the same year that they are produced;
- Class specific Capital Cost Allowance rates are used for the purpose of determining the allowable taxable income;
- Final rehabilitation and closure costs are set to begin being incurred in Year 11;
- An overall salvage value of $36.0M based on the estimated residual values of mobile equipment, processing equipment, and electrical equipment was considered;
- Project revenue is derived from the sale of gold doré and gold flotation concentrate into the international marketplace. No contractual arrangements for doré exist at this time (see Section 19.5). ODV has a preliminary offer in place to purchase the gold concentrate. This financial analysis was performed on both a pre-tax basis and after-tax basis. The general assumptions used for this financial model, LOM plan tonnage, and grade estimates are summarized in Table 22-1.

Table 22-1: Financial model parameters

Description	Unit	Value
Long Term Gold Price	USD/oz	2,400
Exchange Rate	USD:CAD	0.74
Discount Rate	%	5.0
Mine Life	year	10
Total Ore Mined	Mt	17.8
Average Gold Grade	g/t	3.62
Overall Gold Metallurgical Recovery	%	92.6
Gold Recovered in Doré	koz	884.0
Gold Recovered in Flotation Concentrate	koz	1,033.5
Flotation Concentrate Produced	kt	240.8
Underground Mining Operating Cost	$/t	62.25

Description	Unit	Value
Processing Operating Cost	$/t	23.21
Waste and Water Management Operating Cost	$/t	4.97
Electrical Transmission Line Operating Cost	$/t	4.93
General and Administrative Operating Cost	$/t	15.36
Total Operating Cost	$/t	110.73
Royalties	% NSR	5.0
Initial Capital Cost	$M	880.8
Sustaining Capital Cost	$M	426.1
Reclamation Cost	$M	134.8
Salvage Value	$M	-36.0

22.3 Metal Production

Over the life of the mine, a total of 1.92 million ounces ("Moz") of gold will be recovered. Figure 22-1 provides the annual and cumulative production profile.

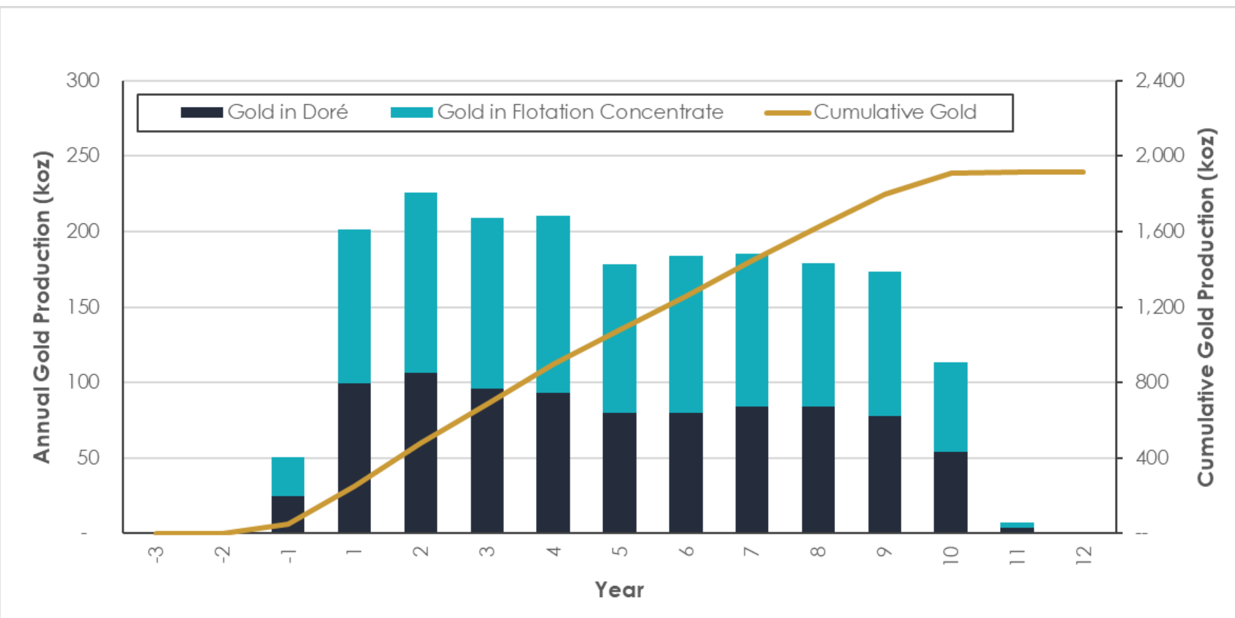


Figure 22-1: Annual and cumulative gold production

22.4 Capital Expenditures

All capital costs (pre-production, sustaining, reclamation, and closure) for the Project have been distributed against the Project schedule to support the economic cash flow model. Figure 22-2 presents the planned annual and cumulative LOM capital cost profile, excluding sunk costs and pre-permit expenses totalling $38.6M. Closure costs are presented net of salvage value.

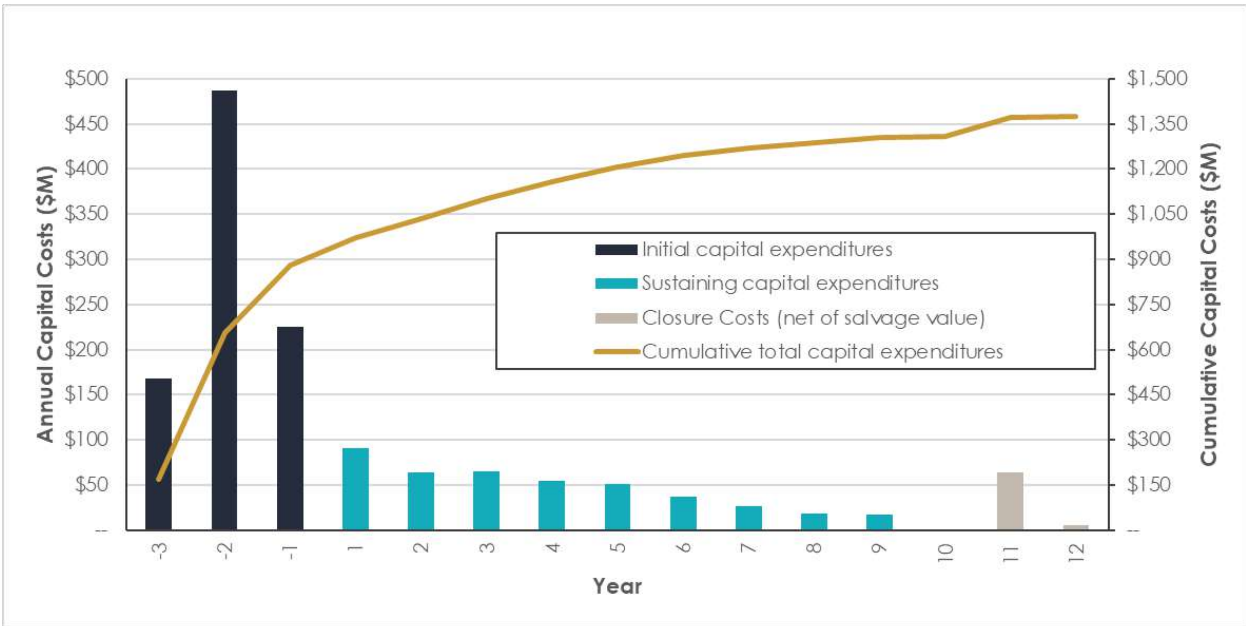


Figure 22-2: Overall Cariboo Gold Project capital cost profile

22.5 Royalties

Over the life of the Project, based on the agreement in place with OGR, a 5.0% NSR royalty is in place for the Project. It is estimated that approximately $291.7M in royalties is to be paid based on the base case metal prices and project assumptions.

22.6 Taxation

The taxation calculations for the Project were compiled with the assistance of ODV and their financial advisors. At the time of the effective date of this Report, the Project was subject to the following tax regimes:

- The Canadian Corporate Income Tax system, consisting of the federal income tax (modelled at a rate of 15%) and the provincial (British Columbia) income tax (modelled at a rate of 12%);
- The British Columbia Mineral Tax, which was modelled using a net current proceeds rate of 2% and a net revenue tax rate of 13%.

The tax calculations are underpinned by the following key assumptions:

- Calculations are based on the tax regimes valid at the date of the FS. Future changes in tax laws could impact the calculations;
- Tax attribute opening balances are based on information provided by ODV and include Project-related sunk costs and pre-permit expenses, which total $38.6M;
- The Project is held 100% by a corporate entity and the after-tax analysis does not attempt to reflect any future changes in corporate structure or property ownership;
- A total of 100% equity financing is assumed and, therefore, it does not consider interest and financing expenses;
- The BC carbon tax is deductible for BC mining tax purposes;
- The BC mineral and carbon taxes are deductible for federal and provincial income tax purposes;
- Payments projected relating to NSR royalties are allowed as a deduction for federal and provincial income tax purposes, but are added back for BC mineral tax purposes;
- Actual taxes payable will be affected by corporate activities and current and future tax benefits; however, these activities have not been considered.

The combined effect on the Project of the mining and income taxes including the elements described above, is an approximate cumulative effective tax rate of 29%, based on Project earnings before interest and tax ("EBIT"). It is anticipated, based on the Project assumptions, that ODV will pay approximately $213.3M in Canadian Corporate income tax, $170.7M in British Columbia Corporate income tax and $233.3M in British Columbia mineral tax over the life of the Project. Companies operating in British Columbia are subject to a carbon tax based on their annual greenhouse gas emissions. Carbon taxes for Scope 1 emissions have been applied to the tonnes of carbon dioxide equivalent ("t CO_2eq") amounts of the consumed fossil fuels such as diesel, gasoline, propane, and emulsion. The carbon tax rate is $95/t CO_2eq in 2025 and was assumed to escalate by $15 per year, up to a maximum of $170/t CO_2eq. A total of approximately 271,000 t CO_2eq in attributable emissions and 140,000 t CO_2eq in net emissions will be produced over the LOM, costing $21.4M in carbon taxes. The carbon tax amount is applied against the gross revenue when calculating federal and BC provincial income taxes, as well as when calculating the BC mining tax.

22.7 Financial Analysis Summary

A 5% discount rate was applied to the cash flow to derive the NPV for the Project on a pre-tax and after-tax basis. Cash flows have been discounted to the middle of Year -3 under the assumption that the Project will be financed and its construction will be initiated at that time. The summary of the financial evaluation for the base case of the Project is presented in Table 22-2.

Table 22-2: Financial analysis summary (pre-tax and after-tax)

Description		Unit	Value
Pre-tax	Net Present Value (0% discount rate)	$M	2,216.1
	Net Present Value (5% discount rate)	$M	1,371.4
	Internal Rate of Return	%	26.5
	Simple Payback Period	year	5.6
	Payback Period (after start of operations)	year	2.6
After-tax	Net Present Value (0% discount rate)	$M	1,577.4
	Net Present Value (5% discount rate)	$M	943.5
	Internal Rate of Return	%	22.1
	Simple Payback Period	year	5.8
	Payback Period (after start of operations)	year	2.8

The pre-tax base case financial model resulted in an IRR of 27% and a NPV of $1,371M, based on a discount rate of 5%. The simple pre-tax payback period from first production is 2.6 years. On an after-tax basis, the base case financial model resulted in an IRR of 22% and a NPV of $943M based on a discount rate of 5%. The simple after-tax payback period from first production is 2.8 years. The summary of the Project discounted cash flow financial model (pre-tax and after-tax) is presented in Table 22-3.

Table 22-3: Summary of the Project cash flow financial model

Year	Unit	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Total (to Year 12)
Production Summary																	
Total Tonnes Mined	kt	1.7	43.2	419.8	1,695.1	1,788.6	1,789.0	1,786.9	1,793.4	1,783.1	1,788.5	1,788.6	1,793.4	1,272.7	71.5	-	17,815.4
Total Tonnes Processed	kt	1.7	43.2	419.8	1,695.1	1,788.6	1,789.0	1,786.9	1,793.4	1,783.1	1,788.5	1,788.6	1,793.4	1,272.7	71.5	-	17,815.4
Head Grade Au	g/t	1.86	3.92	3.90	3.80	4.16	3.91	3.96	3.36	3.52	3.50	3.40	3.29	3.00	3.55	-	3.62
Gold Recovered in Doré	koz	-	-	25.01	99.66	106.61	96.10	93.51	79.85	79.64	84.10	83.92	77.99	54.02	3.59	-	884.0
Gold Recovered in Flotation Concentrate	koz	-	-	25.59	101.50	119.07	113.06	116.62	98.55	103.99	101.49	95.25	95.23	59.34	3.81	-	1,033.5
Flotation Concentrate Tonnage	kt	-	-	6.17	25.04	24.72	24.31	23.82	24.14	23.58	23.68	23.85	23.81	16.78	0.91	-	240.8
Payable Gold	koz	-	-	50.0	198.8	223.0	206.6	207.5	176.2	181.3	183.3	177.0	171.1	112.0	7.3	-	1,894.0
Revenue																	
Exchange Rate	USD:CAD	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Gross Revenue	$M	-	-	-	644.2	722.4	669.3	672.2	570.7	587.3	593.8	573.5	554.2	362.9	23.7	-	5,974.4
Doré Refining Charge	$M	-	-	-	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.0	-	3.0
Flotation Concentrate Transportation Charge	$M	-	-	-	6.6	6.5	6.4	6.2	6.3	6.2	6.2	6.2	6.2	4.4	0.2	-	61.5
Flotation Concentrate Treatment Charge	$M	-	-	-	6.6	6.5	6.4	6.3	6.4	6.2	6.2	6.3	6.3	4.4	0.2	-	61.8
Flotation Concentrate Refining Charge	$M	-	-	-	1.3	1.6	1.5	1.5	1.3	1.4	1.3	1.3	1.3	0.8	0.1	-	13.3
Net Smelter Return (NSR) Revenue	**$M**	**-**	**-**	**-**	**629.4**	**707.5**	**654.7**	**657.9**	**556.5**	**573.3**	**579.8**	**559.4**	**540.2**	**353.1**	**23.2**	**-**	**5,834.9**
Operating Expenses																	
Mining	$M	-	-	-	113.3	118.9	119.6	114.1	106.8	111.1	111.8	104.1	106.8	68.8	4.9	-	1,080.2
Processing	$M	-	-	-	40.1	42.0	41.2	39.9	39.9	38.8	40.2	40.3	39.1	35.4	6.0	-	402.8
Waste and Water Management	$M	-	-	-	8.5	8.1	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.5	0.7	-	86.3
Electrical Transmission Line	$M	-	-	-	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	0.5	0.5	-	85.6
General and Administration	$M	-	-	-	28.2	25.6	26.8	26.6	26.4	26.4	26.3	26.1	26.1	24.7	3.3	-	266.5
Total Operating Expenses	**$M**	**-**	**-**	**-**	**199.4**	**204.1**	**205.6**	**198.6**	**191.2**	**194.3**	**196.3**	**188.5**	**189.9**	**137.9**	**15.3**	**-**	**1,921.3**
Royalty Payments	$M	-	-	-	31.5	35.4	32.7	32.9	27.8	28.7	29.0	28.0	27.0	17.7	1.2	-	291.7
Total Cash Costs	USD/oz	-	-	-	1,070	857	900	876	961	972	969	959	997	1,016	-621	-	947
All-in Sustaining Costs	USD/oz	-	-	-	1,409	1,071	1,135	1,069	1,175	1,122	1,076	1,036	1,073	1,024	5,840	-	1,157
Capital Expenditures																	
Initial	$M	168.2	487.3	225.3	-	-	-	-	-	-	-	-	-	-	-	-	880.8
Sustaining	$M	-	-	-	91.2	64.3	65.5	54.1	50.8	36.6	26.4	18.4	17.6	1.2	-	-	426.1
Reclamation	$M	-	-	-	-	-	-	-	-	-	-	-	-	-	99.8	5.7	105.5
Salvage Value	$M	-	-	-	-	-	-	-	-	-	-	-	-	-	-36.0	-	-36.0
Total Capital Expenditures	**$M**	**168.2**	**487.3**	**225.3**	**91.2**	**64.3**	**65.5**	**54.1**	**50.8**	**36.6**	**26.4**	**18.4**	**17.6**	**1.2**	**63.9**	**5.7**	**1,376.5**
Changes in Working Capital	$M	-	-	-	41.4	3.5	-2.0	-0.5	-4.6	0.9	0.4	-1.5	-0.6	-11.7	-23.2	-2.2	-

Year	Unit	Year -3	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Total (to Year 12)
Pre-Tax Cash Flow																	
Pre-Tax Cash Flow	$M	-168.2	-487.3	-225.3	265.9	400.1	352.9	372.8	291.4	312.7	327.6	326.0	306.3	208.0	-34.0	-3.5	2,245.4
Cumulative Pre-Tax Cash Flow	**$M**	**-168.2**	**-655.5**	**-880.8**	**-614.9**	**-214.8**	**138.1**	**510.9**	**802.2**	**1,114.9**	**1,442.6**	**1,768.5**	**2,074.8**	**2,282.9**	**2,248.9**	**2,245.4**	
Taxes and Duties																	
British Columbia Mining Duties	$M	-	-	0.4	8.6	10.0	8.9	9.2	7.3	26.6	46.1	45.6	43.0	27.6	-	-	233.3
Federal Corporate Income Tax	$M	-	-	-	-	-	15.2	39.6	30.3	32.7	33.3	34.1	33.6	19.1	-18.6	-5.2	214.1
Provincial (BC) Corporate Income Tax	$M	-	-	-	-	-	12.2	31.7	24.3	26.1	26.7	27.3	26.9	15.2	-14.9	-4.2	171.3
Carbon Tax	$M	0.5	1.6	1.9	1.1	1.4	1.7	1.5	2.0	2.0	1.9	1.8	1.9	1.5	0.3	-	21.4
Total Taxes and Duties	**$M**	**0.5**	**1.6**	**2.3**	**9.7**	**11.4**	**38.1**	**81.9**	**63.9**	**87.5**	**108.0**	**108.8**	**105.4**	**63.4**	**-33.1**	**-9.4**	**640.1**
After-Tax Cash Flow																	
After-Tax Cash Flow	$M	-168.8	-488.9	-227.7	256.2	388.7	314.8	290.8	227.5	225.3	219.6	217.1	200.9	144.6	-0.9	6.0	1,605.3
Cumulative After-Tax Cash Flow	**$M**	**-168.8**	**-657.7**	**-885.3**	**-629.1**	**-240.4**	**74.4**	**365.2**	**592.7**	**818.0**	**1,037.6**	**1,254.7**	**1,455.6**	**1,600.2**	**1,599.3**	**1,605.3**	

Figure 22-3 shows the cumulative cash flows for the Project as projected for the LOM on a pre-tax and after-tax basis.

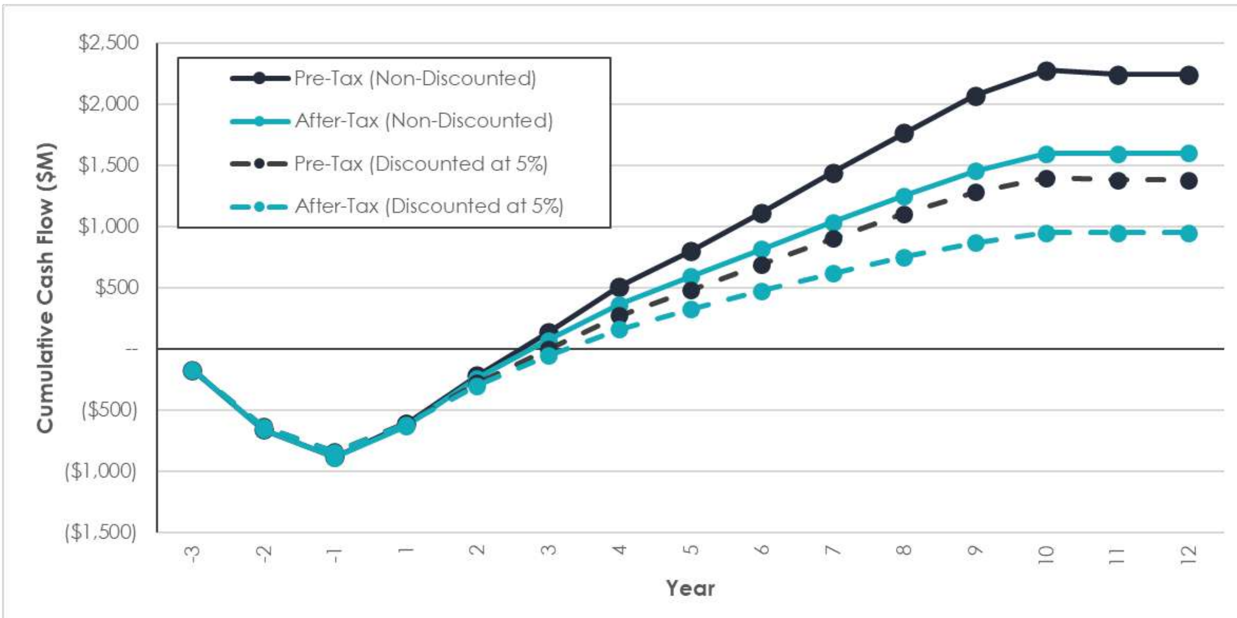


Figure 22-3: Life of mine cash flow projection (cumulative, pre-tax and after-tax)

22.8 Production Costs

A summary of the Project's production costs is provided in Table 22-4. All costs are in USD. Total cash costs are calculated per ounce on a payable basis using the costs of mining, material transport, processing, tailings, waste and water treatment, on-site general and administrative ("G&A") expenses, refining and smelting, and royalties. The LOM operating cash cost per ounce is USD 947/oz gold. The LOM all-in sustaining cost ("AISC"[1]) per ounce is USD 1,157/oz gold derived from the total cash costs plus sustaining capital, and closure costs. The operating margin over the LOM has been estimated to be USD 1,243/oz gold, based on a gold price of USD 2,400/oz.

[1] All-in Sustaining Costs are presented as defined by the World Gold Council ("WGC") less corporate G&A costs.

Table 22-4: Production cost summary

Description	Unit	Value
Metal Payable		
Gold	koz	1,843.9
Offsite Charges, Operating Costs and Royalties		
Doré Refining Charge	USD M	2.3
Flotation Concentrate Transportation Charge	USD M	46.7
Flotation Concentrate Treatment Charge	USD M	47.0
Flotation Concentrate Refining Charge	USD M	10.1
Mining	USD M	800.1
Processing	USD M	298.4
Waste and Water Management	USD M	63.9
Electrical Transmission Line	USD M	63.4
General and Administration	USD M	197.4
Royalties	USD M	216.1
Total Offsite Charges, Operating Costs and Royalties	USD M	1,745.3
AISC and Profit Margin (per oz payable)		
Gold Price	USD/oz	2,400
Cash Cost (Operating)	USD/oz	946.5
Sustaining and Closure Costs	USD M	388.8
Total Costs (Operating and Sustaining)	USD M	2,134.1
AISC	USD/oz	1,157.4
Operating Margin	USD/oz	1,242.6

22.9 Value Drivers

Figure 22-4 presents the primary Project value drivers in the form of a waterfall chart discounted at 5%. The main value drivers of the Project are processing recovery losses, mining operating expenses, processing operating costs, mining capital expenditures and taxes.

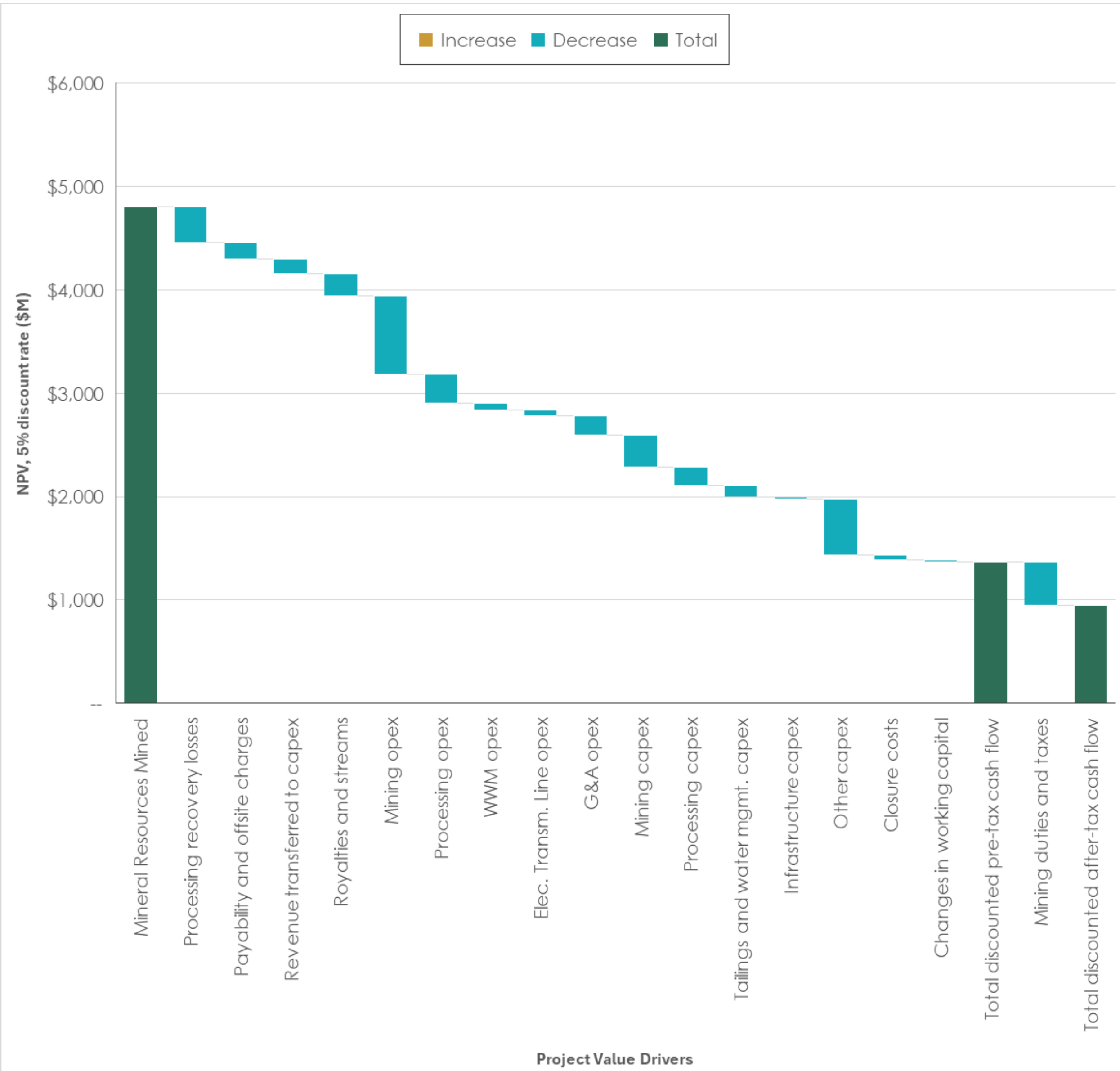


Figure 22-4: Main value drivers (discounted at 5%)

22.10 Sensitivity Analysis

A financial sensitivity analysis was conducted on the base case after-tax cash flow NPV ($M) and IRR of the Project, using the following variables: capital costs, operating costs, USD:CAD exchange rate, price of gold, and discount rate. The after-tax results for the Project IRR and NPV ($M) based on the sensitivity analysis are summarized in Table 22-5 through Table 22-9.

Table 22-5: NPV ($M) sensitivity results (after-tax) for metal price and exchange rate variations

USD:CAD	Gold Price (USD/ounce)						
	1,800	**2,000**	**2,200**	**2,400**	**2,600**	**2,800**	**3,000**
0.68	449.3	693.4	935.0	1,175.9	1,415.1	1,654.6	1,893.9
0.70	383.2	625.5	861.0	1,095.0	1,328.0	1,560.3	1,793.1
0.72	316.6	561.6	790.7	1,018.4	1,245.6	1,471.4	1,697.6
0.74	251.0	498.2	721.8	943.5	1,164.6	1,384.3	1,604.1
0.76	192.7	442.3	661.0	877.6	1,093.1	1,307.9	1,521.8
0.78	132.2	382.8	601.0	812.5	1,022.5	1,232.2	1,440.6
0.80	59.5	322.9	543.9	750.3	955.5	1,160.3	1,363.8

Table 22-6: IRR sensitivity results (after-tax) for metal price and exchange rate variations

USD:CAD	Gold Price (USD/ounce)						
	1,800	**2,000**	**2,200**	**2,400**	**2,600**	**2,800**	**3,000**
0.68	13.6%	17.9%	22.0%	25.8%	29.2%	32.6%	35.8%
0.70	12.4%	16.8%	20.8%	24.5%	28.0%	31.3%	34.5%
0.72	11.1%	15.6%	19.6%	23.3%	26.8%	30.0%	33.2%
0.74	9.9%	14.5%	18.4%	22.1%	25.6%	28.8%	31.9%
0.76	8.8%	13.4%	17.4%	21.0%	24.5%	27.7%	30.8%
0.78	7.6%	12.3%	16.3%	20.0%	23.4%	26.6%	29.6%
0.80	6.2%	11.2%	15.3%	18.9%	22.3%	25.5%	28.5%

Table 22-7: NPV ($M) sensitivity results (after-tax) for capital (LOM) and operating costs variations

OPEX	CAPEX						
	-30%	-20%	-10%	0%	10%	20%	30%
-30%	1,461.7	1,389.3	1,316.6	1,244.5	1,171.8	1,098.7	1,025.8
-20%	1,366.5	1,292.4	1,218.6	1,144.4	1,069.7	995.2	920.6
-10%	1,271.2	1,195.7	1,120.0	1,044.0	967.8	891.6	815.6
0%	1,175.9	1,098.8	1,021.2	943.5	865.8	788.1	709.7
10%	1,080.5	1,001.5	922.2	843.1	763.6	683.6	603.9
20%	984.8	904.1	823.4	742.2	660.7	579.5	497.5
30%	889.0	806.7	723.9	640.9	558.1	474.4	382.5

Table 22-8: IRR sensitivity results (after-tax) for capital (LOM) and operating costs variations

OPEX	CAPEX						
	-30%	-20%	-10%	0%	10%	20%	30%
-30%	39.1%	34.6%	30.8%	27.6%	24.9%	22.4%	20.3%
-20%	37.0%	32.6%	28.9%	25.8%	23.1%	20.7%	18.7%
-10%	34.9%	30.6%	27.0%	23.9%	21.3%	19.1%	17.1%
0%	32.7%	28.5%	25.1%	22.1%	19.6%	17.4%	15.5%
10%	30.6%	26.5%	23.1%	20.3%	17.8%	15.7%	13.9%
20%	28.4%	24.5%	21.2%	18.4%	16.1%	14.0%	12.2%
30%	26.2%	22.4%	19.2%	16.6%	14.3%	12.4%	10.5%

Table 22-9: NPV sensitivity results (after-tax) for discount rate

	Discount rate				
	0.0%	2.5%	5.0%	7.5%	10.0%
NPV (M$)	1,577.4	1,226.3	943.5	714.7	528.6

The graphical representations of the financial sensitivity analysis are depicted in Figure 22-5 for the Project's NPV and Figure 22-6 for the Project's IRR.

The sensitivity analysis reveals that the USD:CAD exchange rate and gold price have the most significant influence on both NPV and IRR compared to the other parameters, based on the range of values evaluated. After the USD:CAD exchange rates and gold price, NPV was most impacted by changes in operating costs and then, to a lesser extent, capital costs. After the USD:CAD exchange rate and gold price, the Project's IRR was most impacted by variations in capital costs and, to a lesser extent, by the operating costs. Overall, the NPV of the Project is positive over all of the range of values used for the sensitivity analysis.

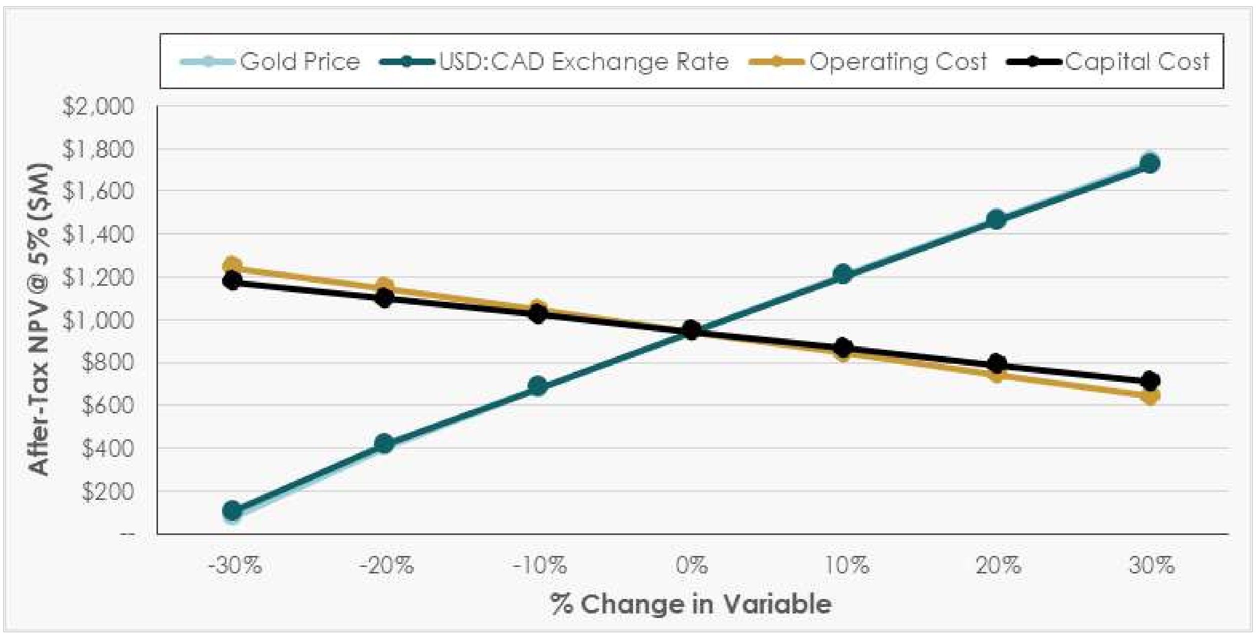


Figure 22-5: Sensitivity of the net present value (after-tax) to financial variables

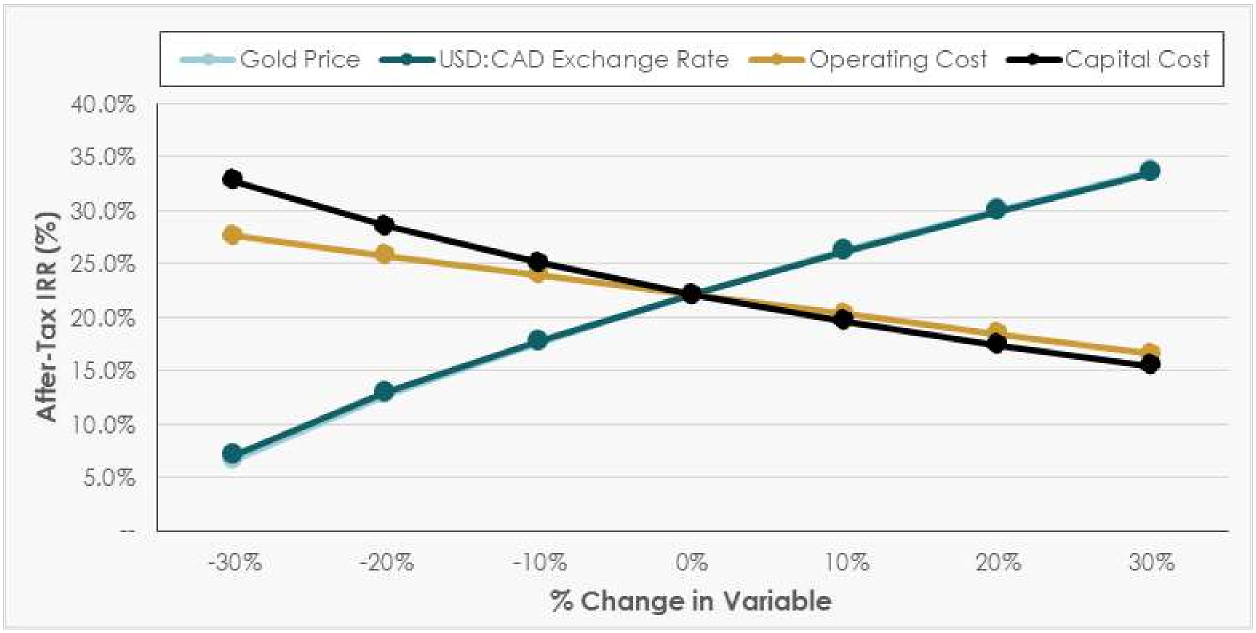


Figure 22-6: Sensitivity of the internal rate of return (after-tax) to financial variables

23. Adjacent Properties

There are no adjacent properties that would provide significant information relating to the Cariboo Gold Project. ODV maintains a significant land position in the Cariboo Regional District of BC, and the District of Wells' historical lode mines are located mainly within the boundaries of the Project.

The descriptions in this section are drawn from information publicly disclosed by the owners of the adjacent properties.

The information about mineralization on adjacent properties is not necessarily indicative of mineralization on the Project. The authors have not verified the mineral resource estimates or published geological information pertaining to the adjacent properties.

Figure 23-1 shows all the current owners of mining titles adjacent to the Project.

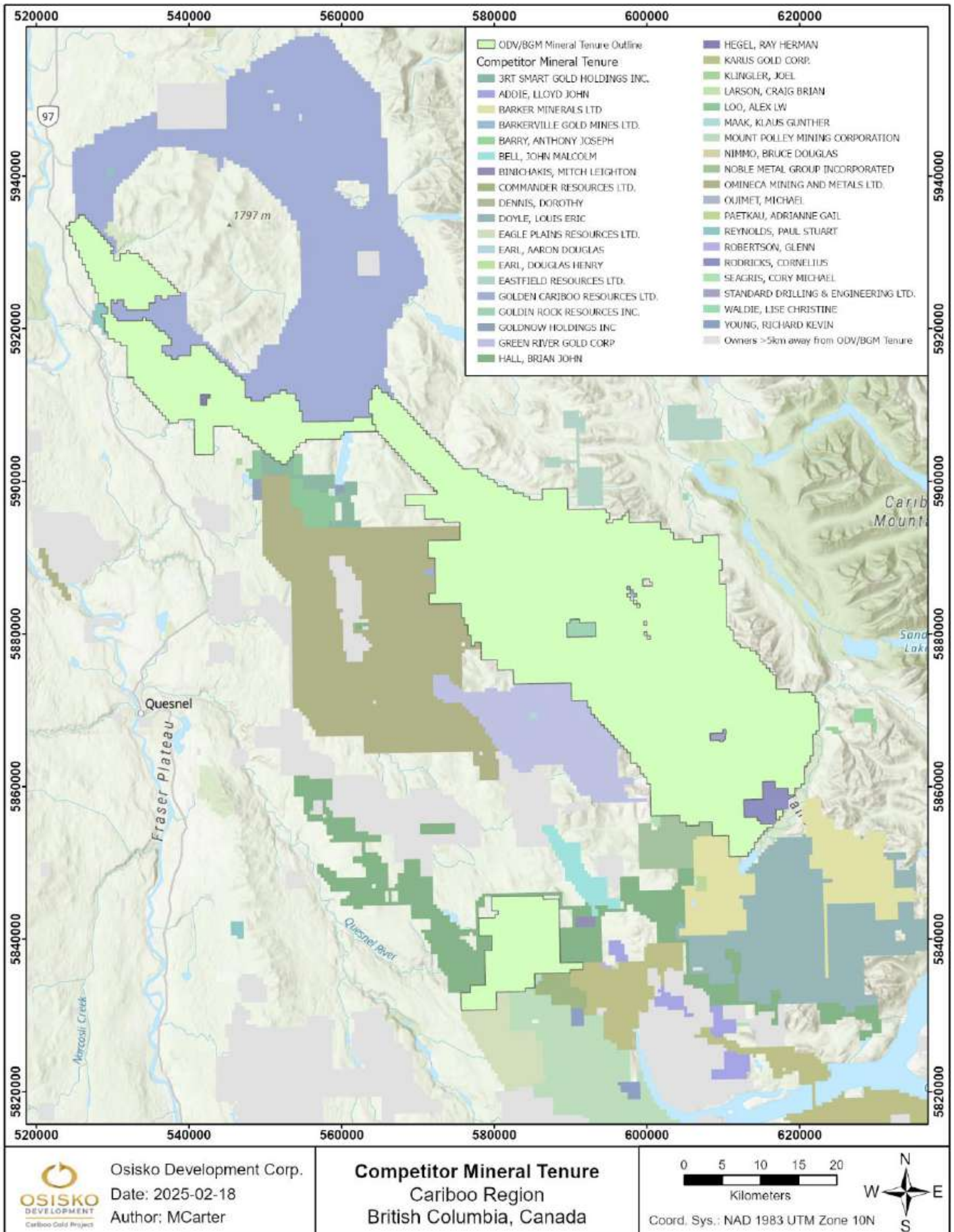


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Figure 23-1: Adjacent properties

24. Other Relevant Data and Information

24.1 Project Execution Plan

24.1.1 Introduction

The Cariboo Gold Project will be developed by Osisko Development Corp. to favour early production and reduce initial financing requirements. Upgrading of the Bonanza Ledge site infrastructure and development of the Mine Site Complex site near the town of Wells, BC will occur over a period of 24 months, with a 10-month ramp up period to follow completion of construction to achieve full production rates. The construction of the Bonanza Ledge site will consist of water management infrastructure and a Waste Rock Storage Facility. The construction at the MSC will consist of supporting site infrastructure such as potable water and sewage treatment plants, water treatment plant, electrical substation, fuel farm, mine dry and offices. A 4,900-tpd concentrator building will be located at the MSC, producing gold flotation concentrate and doré, which will then be bagged and transported to port for shipping. The Project is fully permitted, with detailed engineering and construction activities set to commence Q3 2025, subject to available financing.

The Project's organization and construction execution philosophy benefits from certain existing facilities, expansion of the Ballarat camp, and experience gained with the current operations at the Bonanza Ledge site.

24.1.2 Main Project Activities

The main activities associated with the technical development of the Project are:

- Pre-production activities:
  - Various key components of the Project outside the scope of the FS will require planning resources to implement strategies that are critical, ahead of the execution phase. The pre-production activities will require engineering, procurement, and construction activities to prepare the Bonanza Ledge site for the successful deployment of the Project's execution plan. These activities include the expansion of the Bonanza Ledge WTP to increase throughput capacity in addition to improving underground working dewatering capacity through installation of submersible pumps and water conveyance pipelines. Additional activities are discussed in Section 24.3 below.

- Execution:
  - The execution stage will cover the detailed engineering, procurement, and construction management. Engineering will generate technical specifications and increase the accuracy and definition of the requests for proposals ("RFP") issued during the FS for final and T&M bids from vendors. Technical and economic evaluations of the T&M quotations will be performed, and the procurement process for equipment, material, and services contracts will be finalized. Construction Management will then, with the support of the engineering and procurement teams, proceed with the installation of the materials and equipment under the quality standards established in the engineering documents.

The main development and construction activities associated with the Project are:

- Bonanza Ledge Site:
  - To support the expanded water management requirements at the Bonanza Ledge site, there will be upgrades to the water management infrastructure and water treatment plant, and the construction of a new WRSF.
- Mine Site Complex:
  - A new Process Plant will be constructed to process 4,900 tpd ROM material. To support the operation, new surface, and water management infrastructure will be required, as well as an upgrade of the existing Ballarat camp to support the workforce required to execute on construction. A main electrical substation and site electrical distribution will be constructed to support the operation.
- Transmission Line:
  - A 69 kilovolt ("kV") transmission line from the Barlow Substation near Quesnel, BC, to the MSC will be constructed and will include the clearing of the right-of-way over a distance of 69 km. The transmission line will connect into the MSC main electrical substation for transformation and distribution.

24.1.3 Project Organization

The Integrated Owner's Team has the personnel and experience to bring the Project from exploration through production. All upcoming Project activities, including detailed engineering, procurement, pre-production, and construction will be under the direction of the Chief Operating Officer ("COO") of ODV.

ODV will establish an Integrated Operations Team ("IOT"), consisting of the ODV Project Development Team ("PDT"), the Construction Management Team ("CMT"), and the Site Services Team ("SST"). The PDT is responsible for the management, engineering, procurement, environment, permitting, and financing activities of the Project. The Project design and development strategy is under the PDT's supervision. The CMT will be responsible for the execution of construction activities on site, both underground and on surface. Finally, the SST will provide services during the execution phase on site, such as managing infrastructure maintenance, lodging, logistics, and personnel travelling. The SST will leverage the experience gained from existing operational personnel to support the PDT and the CMT.

Additional support will be provided by ODV's senior management, which benefits from an experienced technical and construction team that has successfully designed and built several projects in Canada, Latin America, Africa, and Europe. The IOT will be comprised of direct employees, contractors, and consultants overseeing the successful execution of the Project.

24.1.4 Project Development Team

The PDT will supervise all aspects of the Project, including engineering, procurement, logistics, project controls, as well as ensuring adherence to active permits. The requirement for an early works program will be evaluated and planned during the early stages of the Project development. Specialized engineering firms will be selected for each portion of the Project to assemble a strong integrated design and execution team.

The PDT is responsible for the following activities in the respective phases:

- Detailed Engineering:
  - Management of engineering activities for all Project components.
- Procurement and Logistics:
  - RFPs for equipment and material;
  - Purchasing and contracting.
- Project Controls and Execution:
  - Cost control;
  - Scheduling and establishment of critical paths;
  - Earned Value Management for Project performance assessment.
- Permitting:
  - Adherence to Project permits.
- Compliance:
  - Integration to operations;
  - Reporting.
- Environmental Assessment:
  - Adherence to BC Environmental Act permits;
  - Government relations;
  - Condition management.

24.1.5 Construction Management Team

In the detailed engineering phase of the Project, the CMT will contribute to the Project design with constructability reviews. The CMT will be responsible for the following services:

- Constructability reviews;
- Site supervision of construction activities;
- Reporting;
- Health, safety, and environment ("HSE");
- Contract administration.

It is recognized that an effective health and safety program during the Project is a necessity. The success of the Construction Safety Program is contingent upon its enforcement at all stages of the Project, including design, construction planning, construction execution, and start-up and commissioning. The CMT will work closely with each group to ensure proper implementation and functional results.

The CMT will follow ODV's procedures and work methods to guarantee the protection of the environment. Furthermore, the CMT will work closely with each department of the operations group to ensure proper installation and functional results. During the construction phase, personnel from operations will be integrated into the construction team as coordinators and supervisors. Upon commissioning, the operations team will be integrated into the commissioning team, where they will work with equipment vendors and construction team alike, to gain familiarization and understanding of the equipment and process being used.

24.1.6 Site Services Team

The existing operations group will support the CMT for the following services during the construction phase:

- Staff payroll;
- Accounting support;
- IT support;
- Site security;
- Public relations;
- Environmental and permitting;
- Medical and first aid;
- Site Maintenance;
- Site logistics.

24.1.7 Pre-staffing and Training

The care and maintenance program engaged at the Bonanza Ledge site still employs key personnel that were involved in the management of the previous operations, and their experience on site will be leveraged in the pre-staffing and training programs required before the start of commercial production. The objective will be to develop a comprehensive set of Standard Operating Procedures ("SOPs") to achieve the key performance indicators set forth in the FS.

24.2 Key Project Execution Activities

The Project's Execution Schedule comprehensively integrates the various requirements of the closure plans of the previous operations as well as the deployment of the Project. More specifically, the construction of the MSC site will be undertaken in such a way as to turn over key process components progressively, so that the path to delivering first ore and, subsequently, first gold operational milestones are streamlined.

Earthworks excavation shall be sequenced to allow steady flow of work fronts available for concrete works. Successful sequencing of the excavation flowing through to concrete will allow for the concentrator building structural steel erection to commence ahead of schedule.

24.3 Project Execution Schedule

The Project execution plan and schedule have been developed to a FS level. The execution plan and schedule will be further advanced and detailed during the next stages of the Project development.

Major Project milestones emerging from the Project's master schedule are shown in Table 24-1.

Table 24-1: Project key milestones (preliminary)

Activity	Months from start of construction
Permitting	
Receipt of BC *Mines Act* permits - Q4 2024	Complete
Receipt of BC *Environmental Management Act* Permits - Q4 2024	Complete
Main Construction Permits	Complete
EA/Permit Amendment for Water Management Granted	23 months

Activity	Months from start of construction
Detailed Engineering	
FMR	Complete
MSC SCP	Complete
Pit Reclamation	Complete
WRSF Stage 1	Complete
MSC Pad Earthworks	1 month
Bonanza Ledge WTP Upgrade	2 months
Main Access Bridge	3 months
Camp & Offices	3 months
MSC WTP	6 months
69 kV/138 kV Powerline & Substation	6 months
Ventilation & Dewatering	6 months
Electrical & Communications	9 months
Paste Backfill	9 months
Crusher Stations	12 months
Process Plant Mill Building	15 months
WRSF Stage 2	24 months
Procurement	
MSC SCP	-6 months
WRSF Stage 1	2 months
MSC pad earthworks	2 months
Ventilation	2 months
Bonanza Ledge WTP Upgrades	3 months
Lowhee Raise Construction	3 months
Main Access Bridge	3 months
Camp	4 months
69 kV/138 kV Powerline & Substation	8 months
Offices	9 months
Electrical & Communications	9 months
Crusher Stations	12 months
MSC WTP	12 months
Paste Backfill	12 months

Activity	Months from start of construction
Pit Reclamation	12 months
Process Plant Mill Building	15 months
Construction	
MSC Water Management Infrastructure	5 months
Bonanza Ledge SCP Upgrade	6 months
Bonanza Ledge WTP Upgrade	6 months
Bonanza Ledge Water Management Infrastructure	6 months
WRSF Stage 1	6 months
MSC SCP	7 months
Main Access Bridge	9 months
MSC Pad Earthworks	10 months
MSC WTP Concrete Foundations	11 months
Pit Reclamation	15 months
Process Plant Mill Building Superstructure & Envelope	16 months
Process Plant Mill Building Concrete Foundations & Slab	17 months
MSC WTP – Structural, Mechanical, Piping, Electrical, Instrumentation	17 months
69 kV/138 kV Powerline	19 months
69 kV/138 kV Substation	19 months
Crusher Stations	24 months
First Ore & Process Plant C3	24 months
First Production Stoping	24 months
Process Plant Mill Building – Mechanical, Piping, Electrical, Instrumentation	24 months
Potable WTP & STP	30 months
Full Production Reached	34 months
WRSF Stage 2	36 months

24.3.1 Critical Path

The Project's execution schedule and costs were based on front-end detailed engineering activities, which are necessary to de-risk the Project's critical components, such as allowing the company to purchase long lead items. The Project benefits from having permits in hand already. Therefore, detailed engineering for specific project components, such as the Processing Plant, the waste rock storage facility at Bonanza Ledge, and the water treatment plant at the MSC will need to be initiated by Q4 Year -3.

24.4 Labour

24.4.1 Construction Labour

The Project's construction labour requirements profile was derived from the Master Schedule.

The construction activities were planned in close coordination with pre-production activities and with the aim of respecting the existing lodging facilities of the Ballarat Camp in Wells. During construction execution, given the substantially higher construction labour requirements at the MSC, the construction activities were planned to respect the new lodging capacity at Wells with the expansion of the Ballarat Camp from 76 to 264 rooms and the existing satellite facilities.

Construction labour will be sourced through established contractors on a regional level. When required, specific skills will be drawn from a wider area. The Project location benefits from its relative proximity to large industrial centres with known skilled labour within the Cariboo region, such as Prince George, Quesnel, Williams Lake and 100 Mile.

The following graph summarizes the lodging requirements and capacities at the Ballarat Camp adjacent to the town of Wells, BC, and to the MSC.

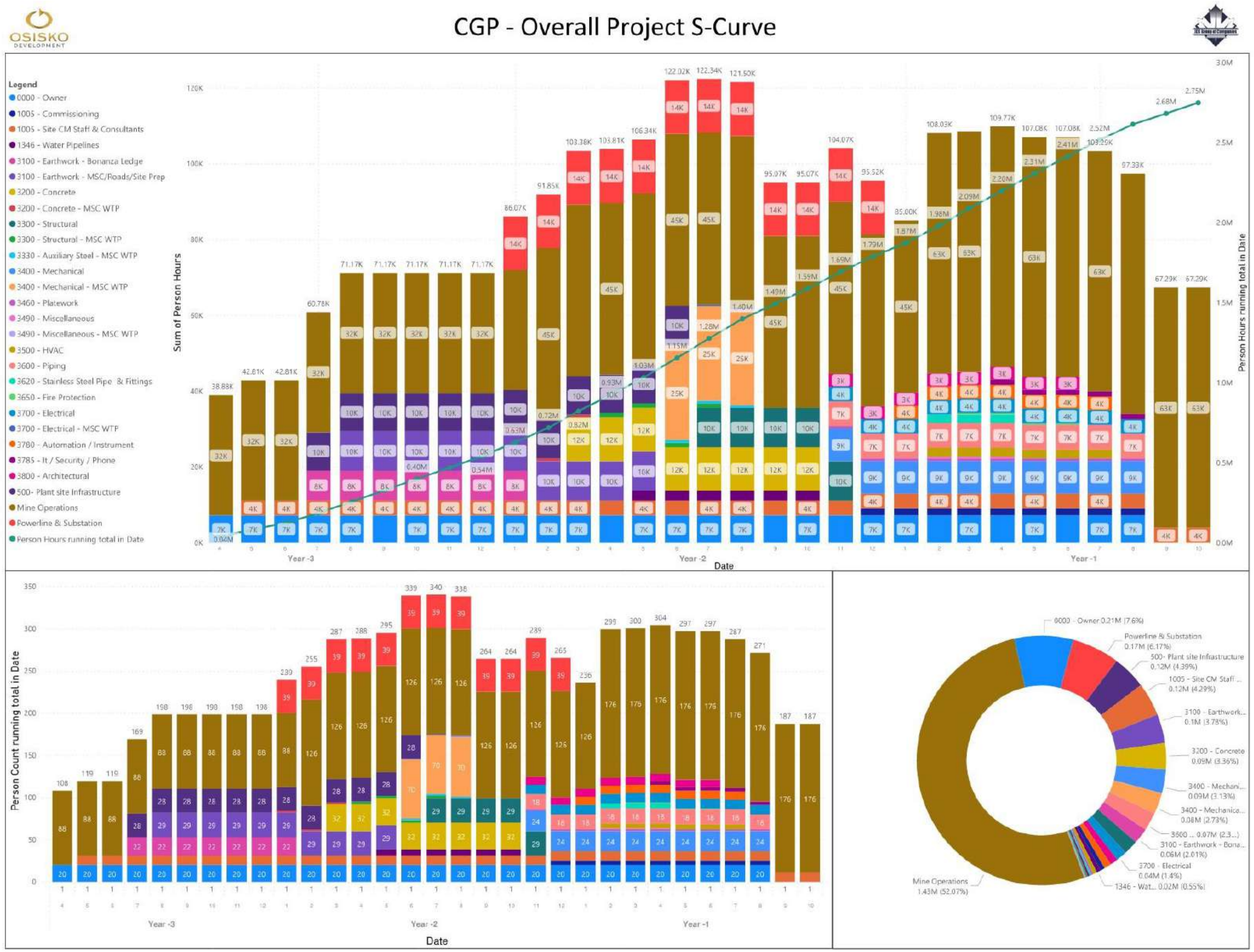

Figure 24-1: Ballarat Camp lodging requirements (by department)

25. Interpretation and Conclusions

This NI 43-101 Technical Report Feasibility Study for the Cariboo Gold Project (the "Report") was prepared and compiled by BBA at the request of ODV, with the support of experienced and competent independent consultants using accepted engineering methodologies and standards.

The Report provides a summary of the results and findings from each major area of investigation including exploration, geological modelling, mineral resource, plant feed estimations, mine design, metallurgy, process design, infrastructure, environmental management, waste and water management, capital and operating costs and economic analysis.

This 2025 FS provides updates and changes from the last published FS for the Cariboo Gold Property (2023). This FS incorporates several de-risking initiatives that include an accelerated development sequence, streamlined processing, improved flowsheet design, and increased average stope size of the underground mine. The Project has obtained the BC *Mines Act* and *Environmental Management Act* permits in Q4 2024 and is expected to be shovel-ready, subject to available financing.

The mutual conclusion of the QPs is that the Project, as summarized in this FS, contains adequate detail and information to support the positive economic outcome. The results of this FS indicate that the Project is technically feasible and has financial merit at the base case assumptions considered. The individual conclusions are summarized in the sections below.

25.1 Data Verification and Mineral

The Project combines the deposits of three contiguous mountains separated by valleys: Cow Mountain (Cow and Valley), Island Mountain (Shaft and Mosquito) and Barkerville Mountain (Bonanza Ledge, BC Vein, KL, and Lowhee). The QPs consider the 2025 Feasibility Mineral Resource Estimate ("2025 FS MRE") to be reliable, thorough, and based on quality data, reasonable hypotheses, and parameters.

The following conclusions are based on the QPs detailed review of all pertinent information and the 2025 MRE results:

- The Mineral Resource Estimate has not been updated since the 2022 FS MRE as there has been no new drilling;
- The bulk sample at Lowhee has been completed and results are pending. The bulk sample has been depleted from the 2025 FS MRE;
- The 2025 MRE demonstrate the geological and grade continuities for all eight gold deposits in the Cow-Island-Barkerville Mountain Corridor;

- In an underground scenario, the Project contains an estimated Measured Mineral Resource of 8,000 ounces of gold, an Indicated Mineral Resource of 1,604,000 ounces, and an Inferred Mineral Resource of 1,864,000 ounces. These Mineral Resources are exclusive of the Mineral Reserves;
- To report the 2025 FS MRE for the Project, conceptual mining shapes were used as constraints to demonstrate that the "reasonable prospects for eventual economic extraction" criteria is met;
- Additional diamond drilling on multiple zones would likely increase the Inferred Resources and it is uncertain, but reasonably expected, that Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Table 25-1 displays the results of the 2025 FS MRE exclusive of Mineral Reserves for the Project for all eight deposits: Cow, Valley, Shaft, Mosquito, KL, Lowhee, BC Vein, and Bonanza Ledge.

Table 25-1: Cariboo Gold Project 2025 FS MRE reported at a 1.8 g/t Au cut-off grade (except for Bonanza Ledge reported at a 3.5 g/t Au cut-off grade)

Category	Deposit	Tonne	Au Grade	Au Ounce
		'000	(Au g/t)	'000
Measured	**Bonanza Ledge**	**47**	**5.06**	**8**
Indicated	Bonanza Ledge	32	4.02	4
	BC Vein	1,057	3.00	102
	KL	527	2.80	47
	Lowhee	1,333	2.76	118
	Mosquito	1,553	2.96	148
	Shaft	6,121	2.92	575
	Valley	2,718	2.70	236
	Cow	3,991	2.91	374
Total Indicated Mineral Resources		**17,332**	**2.88**	**1,604**
Inferred	BC Vein	596	3.17	61
	KL	2,514	2.53	205
	Lowhee	486	3.01	47
	Mosquito	1,883	3.08	186
	Shaft	7,457	3.44	826
	Valley	2,470	3.01	239
	Cow	3,368	2.78	301
Total Measured and Indicated Mineral Resources		**17,380**	**2.88**	**1,612**
Total Inferred Mineral Resources		**18,774**	**3.09**	**1,864**

Mineral Resource Estimate notes (Table 25-1):

1. The independent and qualified persons for the Mineral Resources estimates, as defined by NI 43-101, are Carl Pelletier, P.Geo., and Tessa Scott, P.Geo. of InnovExplo Ltd. The effective date of the 2025 FS MRE is April 22, 2025.
2. These Mineral Resources, exclusive of the reserves, are not Mineral Reserves as they do not have demonstrated economic viability.
3. The Mineral Resource Estimate follows the 2014 CIM Definition Standards on Mineral Resources and Reserves and the 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.
4. A total of 481 vein zones were modelled for the Cow Mountain (Cow and Valley), Island Mountain (Shaft and Mosquito), Barkerville Mountain (BC Vein, KL, and Lowhee) deposits and one gold zone for Bonanza Ledge. A minimum true thickness of 2.0 m was applied, using the gold grade of the adjacent material when assayed or a value of zero when not assayed.
5. The estimate is reported for a potential underground scenario at a cut-off grade of 1.8 g/t Au, except for Bonanza Ledge at a cut-off grade of 3.5 g/t Au. The cut-off grade for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee deposits was calculated using a gold price of USD 2,400/oz; a USD:CAD exchange rate of 1.35; an underground mining cost of $66.3/t; a processing and transport cost of $30.80/t; a G&A plus Environmental cost of $22.40/t; and a sustaining CAPEX cost of $45.6/t. No changes have been applied for the Bonanza Ledge. The cut-off grade for the Bonanza Ledge deposit was calculated using a gold price of USD 1,700/oz; a USD:CAD exchange rate of 1.27; a global mining cost of $79.13/t; a processing and transport cost of $65.00/t; and a G&A plus Environmental cost of $51.65/t. The cut-off grades should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rate, mining cost, etc.).
6. Density values for Cow, Shaft, Lowhee, and BC Vein were estimated using the ID^2 interpolation method, with a value applied for the non-estimated blocks of 2.80 g/cm³ for Cow, 2.78 g/cm³ for Shaft, 2.74 g/cm³ for Lowhee, and 2.69 g/cm³ for BC Vein. Median densities were applied for Valley (2.81 g/cm³), Mosquito (2.79 g/cm³), and KL (2.81 g/cm³). A density of 3.20 g/cm³ was applied for Bonanza Ledge.
7. A four-step capping procedure was applied to composited data for Cow (3.0 m), Valley (1.5 m), Shaft (2.0 m), Mosquito (2.5 m), BC Vein (2.0 m), KL (1.75 m), and Lowhee (1.5 m). Restricted search ellipsoids ranged from 7 to 50 g/t Au at four different distances ranging from 25 m to 250 m for each deposit. High-grades at Bonanza Ledge were capped at 70 g/t Au on 2.0 m composited data.
8. The gold Mineral Resources for the Cow, Valley, Shaft, Mosquito, BC Vein, KL, and Lowhee vein zones were estimated using Datamine Studio™ RM 1.9 software using hard boundaries on composited assays. The OK method was used to interpolate a sub-blocked model (parent block size = 5 m x 5 m x 5 m). Mineral Resources for Bonanza Ledge were estimated using GEOVIA GEMS™ 6.7 software using hard boundaries on composited assays. The OK method was used to interpolate a block model (block size = 2 m x 2 m x 5 m).
9. Results are presented in-situ. Ounce (troy) = metric tons x grade / 31.10348. Calculations used metric units (metres, tonnes, g/t). The number of tonnes was rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects. Rounding followed the recommendations as per NI 43-101.
10. The QPs responsible for this section of the technical report are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource Estimate other than as disclosed in this Report.

25.2 Underground Mining

25.2.1 Geotechnical

The Project encompasses a range of ground conditions, from Very Poor to Good rock mass quality. A geotechnical classification system (Classes 1 to 5, with Class 1 representing competent ground conditions and Class 5 representing the least competent ground) was used to categorize stopes. Stope dimensions were defined for each class, typically 30 m in height, less than 8 m in width, and 15 m to 25 m in strike length, depending on anticipated rock mass quality. Design guidelines for Classes 1 to 3 were developed using industry-accepted empirical methods, while guidelines for Classes 3L and 4 were validated through a back-analysis of 21 stopes from the Bonanza Ledge Mine, demonstrating their applicability under similar geotechnical conditions.

25.2.2 Mine Design and Planning

The Project is planned to produce approximately 4,900 tpd of ore from narrow vein gold mineralization, utilizing a longitudinal retreat long-hole stoping method with 30-metre sublevel spacing and paste backfill. This mining method was selected based on the geometry of the deposit—including its narrow width and sub-vertical orientation—as well as the metal content and anticipated ground conditions. The property has a history of mining activity from 1877 to 1969, resulting in legacy excavations and locally variable ground conditions that may pose geotechnical challenges. The current mine design encompasses a strike length of approximately 4,400 m and an average vertical extent of 660 m, with the depth from surface varying significantly due to topographic relief. The total scheduled lateral development is estimated at 179 km. The projected life of mine is 10 years. Underground development will be executed using a combination of Jumbo drills and roadheader equipment, while production mucking and haulage will be carried out using 10-t LHD units and 51-t underground trucks. At peak production, the underground workforce is expected to total 201 workers per rotation to support mining operations and development activities. Total Mineral Reserves (i.e., Probable Reserves) have been estimated at 17.8 million tonnes ("Mt") at 3.6 g/t Au. Table 25-2 shows details of the Mineral Reserve Statement.

Table 25-2: Cariboo Gold Statement of Mineral Reserves, effective date of April 10, 2025

Category	Tonnage	Grade	Contained Gold
	(t)	Au (g/t)	(oz)
Proven			
-	-	-	-
Probable			
Cow	3,999,971	3.35	430,548
Valley	3,238,636	3.59	374,058
Shaft	8,548,295	3.72	1,021,599
Mosquito	1,105,370	3.94	140,102
Lowhee	923,162	3.52	104,491
Total Proven & Probable	**17,815,435**	**3.62**	**2,070,798**

Notes:

1. The Qualified Person for the Mineral Reserve Estimate is Eric Lecomte, P.Eng. (InnovExplo, a subsidiary of Norda Stelo).
2. The Mineral Reserve Estimate has an effective date of April 10, 2025.
3. Estimated at USD 1,915/oz Au using an exchange rate of USD 1.32:CAD 1.00, variable cut-off value from 1.70 g/t to 2.0 g/t Au.
4. Mineral Reserve tonnage and mined metal have been rounded to reflect the accuracy of the estimate and numbers may not add due to rounding.
5. Mineral Reserves include both internal and external dilution along with mining recovery. The average external dilution is estimated to be 10.1%. The average mining recovery factor is 91.3% to account for mineralized material left in each block in the margins of the deposit.

The mineable inventory exists within 435 discrete mineralized lenses spread across five zones, each requiring development access to accommodate the longitudinal extraction method. The Project's mine layout demonstrates a development-intensive stope access requirement and, therefore, it has a high development metre per tonne of ore ratio.

These factors may pose a challenge to the successful implementation of the mine plan given the challenging geotechnical parameters and intrinsically lower productivities of the mining method, which will translate into a rapid production sequence. However, through diligent planning and adherence to proper work procedures, sufficient active headings and stoping areas should meet daily production requirements.

25.2.3 Mine Materials Handling and Paste Distribution System

Underground Material Handling

The primary and secondary underground jaw crusher has been selected by Osisko Development based on ore size for the surface ore sorter that will feed the process treatment plant. The primary crusher is a jaw crusher designed to reduce ore to a size less than 100 mm. The system is designed for 284 tph. All the systems have been sized for a nominal production of 4,900 tpd.

The crushing system is completed by a network of ore silos and chutes, to provide seamless rehandling of the material throughout the long lateral mine area.

Paste Fill Distribution Network

Paste network is essential to the Project as it is the only permitted method to dispose of the mill flotation tailings. Therefore, a robust system with redundancy has been planned for the operation.

The conclusions and recommendations that can be drawn from the flow model analysis.

- Slump
  - The entire mine can b e backfilled with a paste slump range of 263 mm to 254 mm (8 inch to 10 inch) using two booster pump stations, one at 1275L for Lowhee mining area, and one at 1230L for the Mosquito mining area;
  - If the slump is reduced to 254 mm, the Paste Plant can fill the entire Shaft Zone of the mine;
  - With a paste slump of 229 mm:
    - The Shaft Zone can be filled, using the Mosquito Booster station;
    - The Paste Plant can fill the Cow Zone.
  - With a paste slump of 203 mm:
    - The Cow Zone can be filled using the Lowhee Booster Station;
    - The Valley Zone can be filled from the Paste Plant.
- Pumps and Pipelines
  - Both the Paste Plant surface pumps and booster station's paste pump need to be rated for 120 Bar operating pressure;
  - DN200 pipe was selected as DN150 pipe's friction factors were too high resulting in ether additional booster stations or requiring filling significant amounts of the mine with 254 mm slump thereby necessitating increased binder consumption.

25.3 Mineral Processing and Metallurgical Testing

The Project's process plant has been designed with an integrated, efficient flowsheet that prioritizes high recovery rates. Located outside of Wells, at the Mine Site Complex, the facility will employ a combination of gravity and flotation circuits to produce two gold concentrates.

Crushing operations will take place underground, with material being conveyed from the secondary crusher to the surface ore sorter. The crushed material is then screened, allowing fines to bypass the tertiary crusher and be sent directly to the mill feed bin. Coarser material will be separated into two feed streams for sorting. The sorted material will then undergo tertiary crushing before being returned to the mill feed bin.

Within the grinding circuit, centrifugal gravity separators have been incorporated to further enhance gold recovery. These separators are expected to recover a significant portion of the gold during the gravity separation phase. After gravity separation, the milled product will be subjected to flotation to produce a concentrate. All flotation tails will be disposed of as paste backfill into the underground.

The average metallurgical recovery per site is reported in Table 25-3. Based on the test work results and the proposed mine plan at the time, the overall projected Au recovery is 92.6%. The annual recovery projections are expected to differ from the average test work results according to the final mine proportions of ore zones.

Table 25-3: Average Gold Recovery and Process Step

Process Step	Average Au Stage Recovery (%)
Gravity Au Recovery - LOM	42.7
Flotation Au Recovery - LOM	49.9
Overall Au Recovery - LOM	92.6

The paste fill testing programs have provided critical insights into the material properties and performance characteristics of the paste. Over the course of the mine's life, the average binder consumption is projected to be 4%.

25.4 Water Balance

The objective of the water management system is to meet water supply requirements, protect infrastructure from interruptions and damage from flooding, and ensure discharge of surplus water to the environment meets regulatory requirements.

A site-wide water balance model was developed to simulate the proposed water management system performance. Water balance results showed that WTP demand will be highest during spring snowmelt. Summer and fall storm events may require the WTP to operate at maximum capacity to manage runoff. During winter, when runoff is minimal, inflow primarily originates from mine dewatering, resulting in steady treatment rates.

The system will be designed to manage extreme wet periods up to the EDF. When combined storage exceeds a threshold level, dewatering from the MSC underground will cease until pond volumes are reduced. After EDF conditions subside, the accumulated water will be drained from the MSC underground as capacity becomes available at the MSC WTP.

25.5 Water Quality

The Mine Site water quality model ("WQM") was developed to predict influent water quality and inform water treatment design. The following exceedances of the draft permit limits are predicted in influents of WTP for following mine phases:

- Construction and mine development: The Bonanza Ledge WTP influent is predicted to exceed the Bonanza Ledge discharge limits for total suspended solids, sulphate, total and un-ionized ammonia, nitrate nitrogen, nitrite nitrogen, total aluminum, total arsenic, total chromium, total cobalt, total iron, total lead, total manganese, total nickel, total silver, total uranium, total zinc, dissolved cadmium, dissolved copper, and dissolved iron.
- Mine production and ore processing: The MSC WTP influent is predicted to exceed the MSC discharge limits for total suspended solids, un-ionized ammonia, nitrate nitrogen, nitrite nitrogen, total aluminum, total arsenic, total chromium, total cobalt, total iron, total lead, total manganese, total mercury, total nickel, total phosphorous, dissolved copper dissolved iron and dissolved zinc.
- Closure: The MSC WTP influent is predicted to exceed the MSC discharge limits for total suspended solids, chloride, sulphate, nitrite nitrogen, total aluminum, total arsenic, total chromium, total cobalt, total iron, total lead, total manganese, total mercury, total nickel, total phosphorous, dissolved copper, and dissolved iron.
- Post-closure: The MSC WTP influent is predicted to exceed the MSC discharge limits for total suspended solids, total aluminum, total chromium, total cobalt, total iron, total manganese, total mercury, total nickel, total phosphorous, dissolved copper, and dissolved iron.

These WTP concepts, in Section 25.6.3, have been designed to treat to levels such that the discharge effluent meets all water quality discharge requirements, as set out in the permit conditions.

25.6 Infrastructure

The Project's surface infrastructure and services are designed to support the operations at the MSC and Bonanza Ledge Site. The Project also includes offsite infrastructure, such as a new 69 kV TL between the Barlow substation, near Quesnel, BC, and the MSC.

The Project will be comprised of three different areas, together referred to as the Mine Site:

- The MSC, near the District of Wells, BC and build on a historic mining site that has been abandoned. At the MSC, there will be the new Process Plant, new Water Treatment Plant, water management infrastructure, main substation, and ancillary facilities;
- The Bonanza Ledge Site will include the Waste Rock Storage Facility, and will use the water treatment infrastructure for the first 3 years of the Project;
- Offsite infrastructure to support the operations of the Project.

A distance of 3.5 km separates the MSC from the Bonanza Ledge site.

25.6.1 Mine Site Complex Operational

The Bonanza Ledge site has existing infrastructure that includes contact water collection channels, a water treatment plant to the south of the WRSF, an overburden stockpile, a WRSF, contact water collection ponds and sumps; and an existing modular office building will be reused for the operation at Bonanza Ledge. Additionally, the existing workshop, warehouse, electrical distribution infrastructure, and fuel storages (diesel and propane) will be reused for the Project.

The MSC has existing access roads, bulk explosives storage and magazines, and IT and telecommunications services, such as an existing communications tower.

The key proposed infrastructure to meet the Project needs are described below:

- Concentrator building;
- Raw water well and potable water treatment plant;
- Mine dry and offices;
- Fuel Farm – diesel, gasoline, propane;
- Sewage treatment plant;
- Water treatment plant;
- Electrical substation.

25.6.2 Water Management Infrastructure

The design of the water management infrastructure – Inclusive of contact and non-contact water channels, culverts, French drains, dissipation sumps, and sediment control ponds – was completed to meet robust performance criteria and sized to adequately manage runoff, minimize flood risks and ensure environmental protection. The design criteria used for the water management infrastructure includes considerations for climate change. Where possible, existing water management infrastructure is reused and upgraded, as needed.

Overall, the water infrastructure at the MSC and Bonanza Ledge areas supports the site's water management strategy and achieves the following objectives:

- Intercept and divert non-contact runoff;
- Collect and manage contact water through water treatment.

25.6.3 Water Treatment Facilities

Water treatment infrastructure is a critical component of the Project, supporting environmental compliance for discharge, operational water reuse, and closure planning. Two treatment facilities have been designed to manage contact water and mine dewatering flows: a temporary system at Bonanza Ledge and a permanent facility at MSC. Each system reflects the phased development schedule and site-specific hydrological and regulatory conditions.

The Bonanza Ledge WTP is an interim system intended to support early works and underground development (Stage 1). It includes a main WTP with chemical precipitation using barium hydroxide, clarification, multimedia filtration, and a containerized membrane treatment system. The membrane system comprises ultrafiltration ("UF") followed by nanofiltration ("NF") or reverse osmosis ("RO"), with final membrane selection remaining flexible at the time of final equipment specifications. The current design favours NF to avoid the need for downstream remineralization or post-treatment conditioning. A small-scale MBBR unit is also in service at Bonanza Ledge, used to supplement nitrogen removal locally, but it is not rated for full plant flow and is not part of the main Bonanza Ledge WTP.

The MSC WTP, scheduled for commissioning in Stage 2, will provide long-term treatment capacity for the full site. Designed for up to 800 m^3/h, it includes HDS precipitation, moving bed biofilm reactors (MBBRs) for ammonia and nitrate removal, and polishing filtration. Treated effluent will be reused where possible, with surplus water discharged to Jack of Clubs Lake via a submerged diffuser. The MSC WTP facility is designed to remain operational through active closure and into post-closure care.

Both systems incorporate features to handle seasonally variable flow, cold temperatures, and complex influent chemistry. Redundancy, heat tracing, and modularity are integrated to ensure resiliency and compliance under all operating scenarios. The water treatment strategy is fully embedded within the Project's overall water management plan and supports key environmental performance objectives and meets permit requirements.

25.6.4 Water Treatment Conveyance Infrastructure

A range of submersible and centrifugal pumps, varying in size and capacity, will be implemented to meet site-specific seasonal flow rates and pressure requirements. Larger pumps were used for high-volume fluid transfer and dewatering operations, while smaller units provided precise control in lower-demand areas. This approach allowed for efficient, scalable pumping solutions adaptable to changing operational conditions. Pumps will be run on VFDs to allow for flow variation.

A range of HDPE pipe diameters and pressure ratings were utilized to match the varying flow rate and pressure requirements across the different pipeline systems. Pipe sizes were selected based on hydraulic performance criteria, ensuring optimal flow velocity and minimal head loss, while pressure classes were chosen to withstand the specific operating conditions of each pipeline segment. This approach ensured reliability, efficiency, and long-term durability of the piping network under diverse service demands and is adequate for handling the water anticipated in the Project.

25.6.5 Power Supply (Transmission Line and Substation)

The transmission line and mine site substation will provide the required electrical power at 69 kV, based on what is available at the Barlow Substation. The mine site substation will be designed to 138 kV to accommodate future loads but will initially operate at 69 kV, which is sufficient to service the mining operations laid out in this 2025 FS. The transmission line will require a step-up substation to meet the future case. The line will be built and operated by a third party.

25.6.6 Waste Rock Storage Facility

A geotechnical slope stability assessment was performed on the proposed WRSF representing long-term conditions, as well as sensitivities considering seismic loading conditions and an increased water table. Modelling inputs were determined based on previous investigations, laboratory testing, instrumentation data and experience. Based on modelling results, the stability of the proposed WRSF meets the minimum FoS requirements for all scenarios and has sufficient capacity for the waste planned for surface storage in this 2025 FS.

25.7 Environmental Studies

The environmental baseline work completed to date, in addition to ongoing environmental monitoring requirements in the EAC, *Mines Act* permit, and *Environmental Management Act* permits, is aligned with this FS update. The feasibility study follows BC regulations and permits, pending future permit amendments. ODV has provided a closure plan and posted the required reclamation liability security bond with the BC Minister of Finance. Updates to the closure plan and estimated closure costs will proceed through the permit amendment processes, planned to follow this feasibility plan update.

25.8 Market Studies and Contracts

The Project will produce two saleable gold products: gold doré bars (produced from the gravity concentrate) and a high-grade flotation concentrate from a single processing facility in Wells, at the MSC. Doré bars will be sold and refined through a certified North American refinery, with numerous options available in both Canada and the United States.

In parallel, a high-grade flotation concentrate ranging between 110-150 g/t and averaging ~133 g/t Au over the LOM, estimated at approximately 65 tpd to 70 tpd, will also be produced. The concentrate input parameters for the sale of the flotation concentrate were based on a preliminary purchase offer agreement established with a well-known international metals trading firm. The flotation concentrate will be bagged and transported by truck from the MSC in Wells to the Port of Vancouver, where it will be shipped via ocean freight to a smelting partner.

No market studies have been conducted by ODV or its consultants in relation to the gold doré and flotation concentrate that will be produced by the Project.

In the past, ODV's Barkerville Gold Mines worked with an American refiner; there are no refining agreements, sales contracts or other contracts currently in place for the gold doré. The doré to be eventually produced by the Project will be shipped to a North American precious-metals refinery for recovery of the gold into high purity bars meeting the minimum LBMA delivery standards. There is a preliminary offer in place to purchase the gold concentrate with a well-known international metals trading firm.

There is a significant contract /agreement with Sandvik Financial Services Canada for the Roadheader Capital Lease.

25.9 Execution and Construction

The Project construction and execution is structured allowing for a controlled and scalable development timeline. Work will commence at the Bonanza Ledge site with the mine development and the construction of the SCP and WRSF facilities. While building these facilities additional rooms will be installed to increase capacity to support the construction of the Project.

Once additional rooms are made available, focus will be on the full development of the MSC area. Major construction activities will include the excavation and concrete work, process plant construction and a permanent WTP will be installed to meet the requirement of the mine development.

A new 69KV transmission line will be constructed from the Barlow substation near Quesnel to the MSC area. This work will start in Year -3, to be completed in time to support the commissioning of the process plant of the Project.

Construction planning emphasizes modular and climate resilient infrastructure, reuse of existing structures where feasible and integration with long term closure environmental management plans. Execution is paced to align with regulatory approvals and permit amendments, allowing the project to transition smoothly from construction to sustained production.

25.10Capital and Operating Costs

The total capital costs (initial, sustaining and closure) for the Project were estimated at $1,406M. The initial capital costs were estimated at $881M. Sustaining capital costs were estimated at $426M. The total initial capital costs include a contingency of $72M, which represents 16.5% of initial capital, and was selected by ODV based on the Monte Carlo simulation (P50). Tight project controls will be required to execute the Project within the allocated budget. Closure costs net of salvage value was evaluated at $99M.

The overall capital cost estimate developed in this study generally meets the AACE Class 3 requirements. Items such as sales taxes, land acquisition, permitting, licensing, feasibility studies, and financing costs are not included in the cost estimate.

The Project capital cost summary is outlined in Table 25-4.

Table 25-4: Capital cost summary [1][2]

Area	Cost area Description	Initial capital cost ($M)	Sustaining capital cost ($M)	Total cost ($M)
000	Surface Mobile Equipment	--	--	--
200	Underground Mine	313	397	710
300	Water and Waste Management	98	24	123
400	Electrical and Communication	19	0	19
500	Surface Infrastructure	42	1	43
600	Process Plant - Wells	180	0	180
700	Construction Indirect Costs	95	0	95
999	Contingency (16.5%)	72	4	76
	Total	**819**	**426**	**1,246**
-	Capitalized Revenue	-150	0	-150
-	Capitalized Operating Costs	212	0	212
-	Salvage Value	0	-36	-36
-	Site Reclamation and Closure	0	135	135
	Project Total	**881**	**525**	**1,406**

[1] Does not include Pre-final investment decision costs of $39M.
[2] Totals may differ slightly due to rounding.

The OPEX is based on a combination of experience, site data, reference projects, budgetary quotations, and factors as appropriate with a feasibility study. The target accuracy of the operating cost is +/-15%. The average operating cost over the 10-year mine life is estimated to be $110.7 per tonne mined. Table 25-5 presents the breakdown of the projected per-tonne mined operating costs for the Project.

Table 25-5: Operating cost summary

Area	Cost Area Description(1)	LOM Unit Cost ($/t processed)	LOM ($M)	Annual Average Cost ($M/y)	Average LOM ($/oz)	OPEX (%)
200	Underground Mining	62.3	1,080	98	570	56
300	Water and Waste Management	5.0	86	8	45	4
400	Electrical Transmission Line	4.9	86	8	45	4
600	Processing	23.2	403	37	213	21
800	General and Administration	15.4	266	24	141	14
	Total	**110.7**	**1,921**	**175**	**1,014**	**100%**

(1) Underground mining, water and waste management, processing and G&A operating cost do not include a portion of the expenditures which have been capitalized – refer to Section 21.1.4.10.

(2) The total capitalized operating costs amount to $212M and are not included in the operating cost summary.

It is anticipated that 613 personnel (administration, supervision, operations and maintenance ["O&M"]) will be required at the peak of the construction period, and 525 will be required for the Project during peak operations. At the peak of operations there will be 112 G&A personnel, 310 underground mine personnel, and 88 process plant personnel.

25.10.1 Indicative Economic Results

The financial analysis performed as part of this feasibility study using the base case assumptions results in an after-tax NPV 5% of $943M and an internal rate of return of 22.1% (unlevered) (base case exchange rate1.00:0.74 CAD:USD . There is a $1,577M cumulative after-tax LOM Free Cash Flow ("FCF"), and the payback period, from start of commercial production, is 2.8 years, over the planned mine life of 10 years.

The Project was subject to the following tax regimes:

- The Canadian Corporate Income Tax system, consisting of the federal income tax (modelled at a rate of 15%) and the provincial (British Columbia) income tax (modelled at a rate of 12%);
- The British Columbia Mineral Tax, which was modelled using net current proceeds rate of 2% and a net revenue tax rate of 13%.

The financial analysis summary (pre-tax and after-tax) is shown in Table 25-6:

Table 25-6: Financial analysis summary (pre-tax and after-tax)

Description		Unit	Value
Pre-tax	Net Present Value (0% discount rate)	$M	2,216.1
	Net Present Value (5% discount rate)	$M	1,371.4
	Internal Rate of Return	%	26.5
	Simple Payback Period	year	5.6
	Payback Period (after start of operations)	year	2.6
After-tax	Net Present Value (0% discount rate)	$M	1,577.4
	Net Present Value (5% discount rate)	$M	943.5
	Internal Rate of Return	%	22.1
	Simple Payback Period	year	5.8
	Payback Period (from commercial production)	year	2.8

The total taxes and duties over the life of the Project amount to $640.1M, total AISC amount to US$1,157/oz, with total royalties over the life of $291.7M.

Sensitivity analyses were performed on both NPV, and IRR, shown in Figure 25-1 and Figure 25-2 on an after-tax basis. The sensitivity analysis reveals that the USD:CAD exchange rate and gold price have the most significant influence on both NPV and IRR compared to the other parameters, based on the range of values evaluated. After the USD:CAD exchange rates and gold price, NPV was most impacted by changes in operating costs and then, to a lesser extent, capital costs. After the USD:CAD exchange rate and gold price, the Project's IRR was most impacted by variations in capital costs and, to a lesser extent, by the operating costs. Overall, the NPV of the Project is positive over all of the range of values used for the sensitivity analysis.

Based on this analysis, the Project is sufficiently robust (from an economic perspective) to support advancing to detailed engineering and construction financing, as per the recommendations set out in Chapter 26.

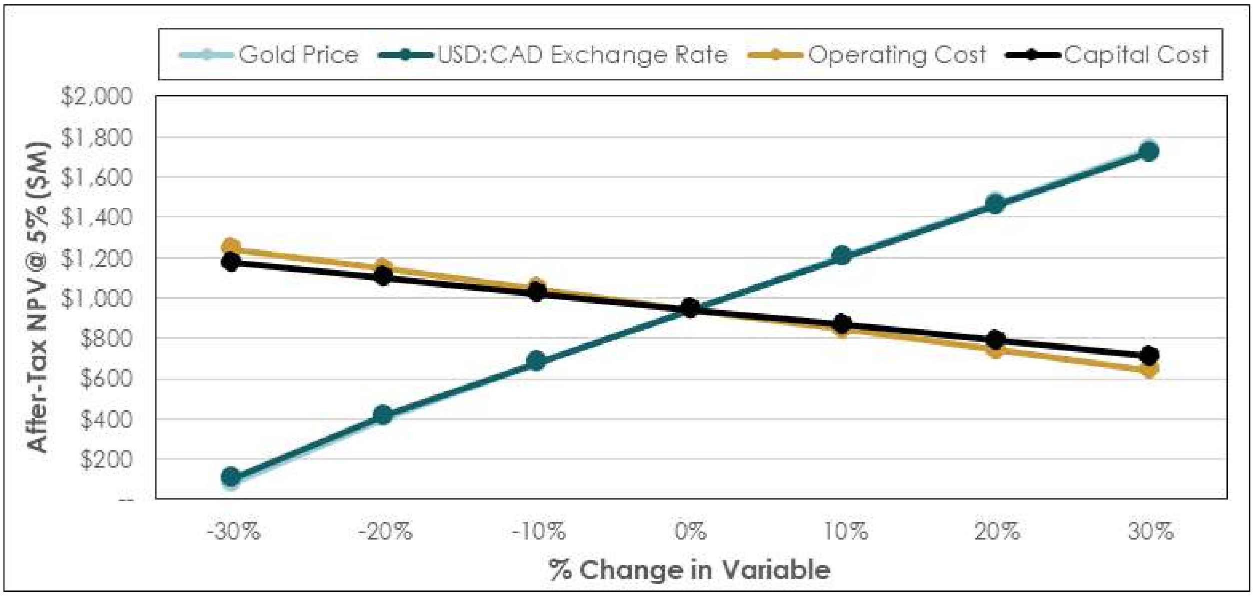

Figure 25-1: Sensitivity of the net present value (after-tax) to financial variables

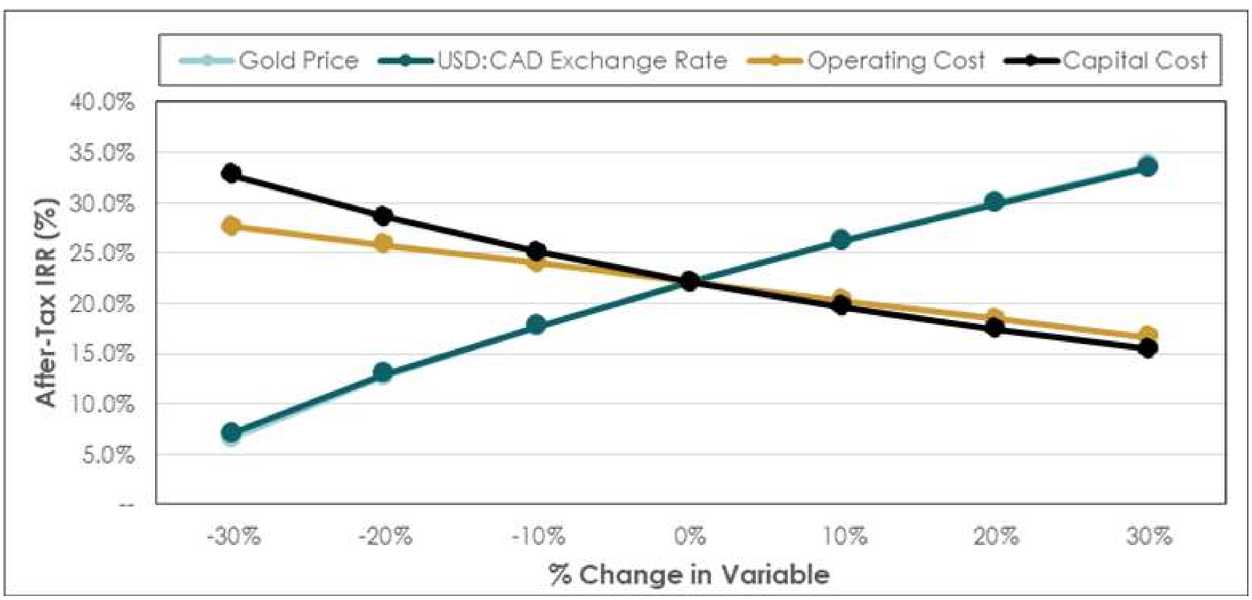

Figure 25-2: Sensitivity of the internal rate of return (after-tax) to financial variables

25.11 Project Risks and Opportunities

As with most mining projects, there are risks that could affect the economic viability of the Project. Many of these risks are based on a lack of detailed knowledge and can be managed as more sampling, testing, and design are conducted during the detailed engineering phase. Table 25-7 identifies what are currently deemed to be the most significant internal project risks, potential impacts, and possible mitigation approaches that could affect the technical feasibility and economic outcome of the Project.

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

There are significant opportunities not included that could improve the economics, timing, and/or permitting potential of the Project. The major opportunities that have been identified at this time are summarized in Table 25-8, excluding those typical to all mining projects, such as changes in metal prices, exchange rates, etc. Further information and assessments are needed before these opportunities should be included in the Project economics.

Table 25-7: Project risks (preliminary risk assessment)

Area	Risk Description and Potential Impact	Mitigation Approach
Geology and Mineral Resources	If the geological interpretations and assumptions (geometry and continuity of mineralized zones) used to generate the estimation domains are inaccurate, then there is potential lack of gold grade continuity.	Continue infill drilling to upgrade a larger proportion of the mineral inventory to Indicated and Measured resources to have an overall better resolution of the deposits. Complete evaluation of the bulk sample on Lowhee and continue with the program. Complete a bulk sample on the deposits (Cow, Mosquito, Shaft, Valley, and KL) to have reconciliation data to improve the confidence in the block model and the overall understanding of the deposits.
	If technical knowledge of the historic mine infrastructures is incomplete, then this deficiency could lead to local inaccuracy of the mineral resource.	Conduct drilling and underground surveying to validate void locations throughout the historic underground workings.
Underground Mine and Geotechnical	Ground conditions may be worse than anticipated, leading to dilution, lower grades, and delays.	Collect additional geotechnical data during early development.
	Labour shortages could limit the availability of skilled workers, increasing costs and reducing performance.	Begin recruiting early and implement internal training programs.
	Unrecorded historical workings may be encountered, leading to delays and higher paste fill costs.	Conduct probe drilling, monitor water, and add dewatering contingencies.
	Insufficient ventilation airflow delays development before the primary system is commissioned.	Phase ventilation installation with development; prioritize critical headings; use auxiliary fans/ventilation raises.
	Target zone production rates may not be achieved, increasing dilution and cost.	Develop ahead of production and open multiple mining zones.
	Roadheader performance is below expectations, delaying development and increasing costs.	Implement and closely monitor adherence to work procedures, prepare Jumbo contingency and confirm contractor/equipment availability.
	Automated mucking underperforms, requiring manual operation and raising labour costs.	Conduct full automation testing during pre-production.
	Two-pass (Doyon) method proves less effective, reducing recovery.	Review past case studies and establish a validated operating protocol.
	The dewatering strategy for historic underground workings has not been evaluated in detail, and significant	Conduct detailed hydrogeological and mine void modelling to refine dewatering estimates. Initiate early

Area	Risk Description and Potential Impact	Mitigation Approach
	uncertainty remains regarding the exact volume and location of these excavations. Additionally, pumping rates will be constrained until the permanent water treatment plant is commissioned. These factors could delay mine development and execution of the mine plan.	mapping and verification drilling to better define historic excavation boundaries. Evaluate the possibility of accelerating the construction schedule of the permanent water treatment facility and consider temporary water management solutions to support early mine development phase.
	Dewatering of old workings takes longer, affecting the Project schedule.	Increase pumping capacity and build buffer time into the schedule.
	Pressurized water or localized flooding near flooded old workings may cause safety incidents or flooding.	Use systematic cover/probe drilling; monitor water pressure; implement reinforced water control and emergency protocols.
	Paste backfilling of old voids takes longer than planned, delaying development.	Develop alternate mining sequences and maintain scheduling flexibility.
	No void is available underground for paste backfill, causing possible production delay	Permit emergency surface containment; align backfill and stope schedules; develop underground buffer storage.
	Plant tailing (paste backfill) volume exceeds available UG voids, potentially lowering ore sorter recovery.	Initiate permitting for surface deposition; refine void model; maintain flexibility in mining/backfill schedules.
Electrical	Power Exceedance	Due to inaccurate load estimations, mitigated by the 138 kV design of the substation and transmission line, power factor correction and scalable distribution equipment.
Site infrastructure	Mine waste rock quality impacting the quality of crushed aggregate to be utilized for engineered fill on the MSC pad infrastructure.	Utilizing screening to separate mine waste rock; local quarry material availability in Quesnel.
	Inability to utilize cut material at the MSC or the construction of civil infrastructure.	Further define geochemical characterization of the MSC materials.
	Final potable water supply location to be confirmed and permitted.	Complete investigations to select final location and complete permit application.
	Willow River Bridge foundation: its abutment foundations consist of weak soils.	Consider bridge foundation using pilings. Artesian conditions encountered while executing geotechnical drilling on the north side of Willow River. Strategy to be developed to investigate this area without environmental issues.

Area	Risk Description and Potential Impact	Mitigation Approach
	Site clearing and levelling may encounter historic contamination and will require removal of historic structures, including headframe, tanks, and concrete foundation materials.	Dismantle structural elements and disposal of materials.
	Surface water quality: MSC area foundation materials include historic waste rock and mill tailings and known groundwater contamination from metal leaching.	Establish a comprehensive water management plan during construction and integrate it in the final design of facilities and constructability reviews.
Water Management	Holding back (i.e., slowing or stopping pumping) mine dewatering during an extreme wet event results in an unacceptable interruption to production.	Seek alternative flood management methods such as increased WTP capacity or increased pond storage capacity on surface.
	The access road non-contact water channels at MSC area are constructed in the legacy tailings, potentially causing instability in the channels or affecting the water quality of the water that collects in the channels	Construct the channels above ground and reinforce the channel invert. Use of liners to prevent seepage from legacy tailings.
Mineral Processing and Metallurgy	The ore sorter mass pull is lower than the design value. The amount of ore sorter waste sent to UG will then increase.	A bulk sample will be collected and pilot scale test work will help validate assumptions. Adjustments can be done in the ramp-up period.
	Due to delays in stope development, there is a risk that no stope will be available in the underground mine to place tailings, which could lead to production delays.	Implement emergency tailings storage at the mill to manage temporary lack of underground stope availability. Adjust processing strategy to increase ore rejection, thereby reducing the volume of tailings generated.
	Fluctuations in concentrate volume from the flotation circuit may result in increased transportation and smelting costs. This is primarily due to the recovery model not being based on sulphur, compounded by the absence of sulphur grades in the block model, which limits the accuracy of concentrate volume predictions.	Sulphur assays will be conducted during mining operations to improve the understanding of sulphur distribution enabling future updates recovery model.
	The vacuum filtration of the flotation tailings is less efficient than anticipated. The binder consumption for the lower tailings solid percentage will then increase for compensation.	Do a test program for paste backfill recipes. Use standard operating procedures to help ensure efficient operation of filter.

Area	Risk Description and Potential Impact	Mitigation Approach
Geochemistry and Water Quality Predictions	The underground mine water quality is not represented by groundwater samples collected from deep mine workings, and then the influent predictions may not be representative, and the water treatment design may need to be re-evaluated.	Collect deep mine water samples and use sensitivity analysis for "mine pool" source term to define parameters that may affect the WTP design.
	Source terms change due to model updates resulting in different water quality predictions, which may lead to re-evaluation of the water management, WTP design and closure plan.	Use sensitivity analysis to account for uncertainties and run different scenarios for water management and closure to address the most sensitive parameters of concern.
	The dewatering of the underground will result in the formation of downward hydraulic gradients, and then the existing contamination in the near surface aquifers might potentially migrate into the underlying aquifers.	Update the groundwater quality model to evaluate potential impacts and mitigations.
	The reflooding of the underground at closure alters the quality of groundwater, including the discharges to receiving environment and potentially the Wells aquifer, which is used by the community of Wells for drinking water.	Refine the groundwater quality model to evaluate potential impacts and mitigations for closure/post-closure.
Water Treatment	Ammonia and Nitrate concentration fluctuations	The MBBRs will ideally operate throughout the year without any interruptions. If hydraulic and/or nitrogen loading to the system is lower than expected, there is potential to starve the biological community in the MBBR's. A supplementary source of nitrogen such as urea or calcium nitrate may be used to maintain a minimum concentration of nitrogen in the source water or recycled effluent. This will ensure the bacteria will remain active throughout the year.
	Extreme winter freezing conditions at the mines geographical location can affect operations.	All the pipelines exposed to outdoor conditions will be insulated and heat traced. The process tanks are insulated to prevent excessive heat loss. A heating system will need to be provided on a temporary basis or permanent to prevent freezing conditions in the MBBRs. Blowing air and agitation will be maximized to prevent freezing and media clogging.
	High solids loading to the WTP from mine workings	Ensure that loading of solids from mine workings is managed using correctly designed sumps, flocculation systems etc. to ensure that excess grit and solids is not delivered to the WTP.

Area	Risk Description and Potential Impact	Mitigation Approach
	Plant upset and restart	Operation spares and design allowances are made for any process upsets and mechanical failure. This WTP is designed for 95% operational availability. Standard operational procedure will be in place to plan for WTP restarts as well as water management.
	Lack of availability of critical reagents.	Chemical reagents will be stored with minimum 14 days of storage to accommodate any availability concerns.
Construction (Costs and Schedule)	Inability to utilize cut material at the MSC or the construction of civil infrastructure.	Sourcing material from the Quesnel area
	Inability to utilize cut material at the MSC or the construction of civil infrastructure.	Further define geochemical characterization of the MSC materials.
	Noise constraint is limiting the work at the MSC area to single shift until building is enclosed	Actual plan is considering the site conditions.
	Labour shortages could limit the availability of skilled workers, increasing costs and reducing performance.	Actual plan is considering bringing labour from outside the area.
Environmental, Permitting and Social License	Schedule risk - changes proposed to the Project will require amendments to existing certificates and permits. Timelines for regulatory processes may be lengthy and could impact construction and operational schedule targets.	Proceed with construction of approved activities as per current authorizations. Utilize regulatory mechanisms (notice of departures) as appropriate to authorize changes as necessary. Discuss project changes to key regulators, first nations and other stakeholders to develop a streamlined regulatory process schedule. Prepare and submit amendment applications in line with required processes under BC EAO, the BC Ministry of Mining and Critical Minerals, and the BC Ministry of Environment and Parks well in advance of schedule requirements.
	Compliance risk - implementation of water treatment technology is required to achieve water discharge limits within the permits.	Robust WTP design. Establish OMS manuals and SOPs to support compliance with required limits.
Rehabilitation and Closure	Compliance risk – water quality predictions at closure may not meet discharge limits.	Update modelling and mitigation planning for long term water quality management.

Table 25-8: Project opportunities

Area	Opportunity Explanation	Benefit
Geology and Mineral Resources	Surface and underground definition diamond drilling: Potential to upgrade Inferred resources to the indicated category.	Adding Indicated resources and conversion to reserves increases the economic value of the mining Project.
	Surface exploration drilling: Potential to identify additional Inferred resources.	Adding Inferred resources and subsequent conversion to Indicated and/or Measured and then reserves, would increase the economic value of the mining Project.
Geotechnical and Underground Mine	Assessing the economic viability of extracting ore from geotechnical Class 5 category using a selective mining method, such as cut-and-fill	Increase mineral resource recovery and enhance project value, particularly in areas previously considered uneconomic due to ground stability constraints.
	Further evaluation of the potential to merge stopes associated with closely spaced parallel lenses may lead to increased operational efficiency.	By consolidating these mining areas, the Project could benefit from reduced development and production costs through economies of scale and more efficient use of equipment and manpower.
	Ground conditions are better than anticipated based on the geotechnical model. This could impact schedule because of a reduction in additional support / rehab being required.	Less ground support than estimated will be required, and larger stopes may be possible, reducing cost and improving the schedule.
Geochemistry and Water Quality Predictions	If exploration drilling is triggered, collect deep mine water samples from historical working to reduce uncertainty related to "mine pool" water quality.	Reduction of uncertainty in "mine pool" water quality will result in better predictions of influent concentrations improving the WTP design.
	While there is time, update the groundwater quality model to evaluate potential impacts and mitigations on receptors.	Groundwater quality update is required to meet draft permit requirements, evaluate potential impacts and mitigations.
	On-going metallurgical testing allows to prepare paste backfill casts and evaluate metal leaching rates from cemented backfill.	Knowing leaching rates from cemented backfill reduces uncertainty in prediction of mine water quality.

Area	Opportunity Explanation	Benefit
Mineral Processing and Metallurgy	Dispose of rougher flotation tailings co-mingled with the ore sorter and development waste on surface.	Increase flexibility in the ore sorter mass pull by removing the constraint that requires all tailings to be placed under the grouped end, thereby improving overall gold recovery
	Test work showed strong potential for cyanide leaching of the flotation concentrate	Opportunity to eliminate smelting charges and concentrate transportation costs
Water Treatment	Underground water inflow potentially overestimated	Opportunity to reduce design and costs associated.
	Simplify MSC WTP water treatment system at Stage 2 if water quality is better than model predictions	Lower CAPEX and OPEX
	Reuse Bonanza Ledge WTP equipment at MSC during Stage 2 if schedule and permit conditions allow	Lower CAPEX, reduce waste
	Optimize chemical dosing using real-time monitoring and automated control systems	Lower OPEX
	Downrate Bonanza Ledge membrane system operation (e.g., reduce runtime or remove NF stage) if upstream performance allows	Lower OPEX
	Repurpose modular components from Bonanza Ledge for closure or other site water uses	Lower CAPEX, reduce waste
	Centralize sludge handling between Bonanza Ledge and MSC to reduce transport and O&M costs	Lower OPEX
	Expand internal reuse of treated water for reagent mixing, dust suppression, and gland seal water	Lower OPEX
	Evaluate semi-passive or hybrid polishing options for Stage 2 and low-flow closure period treatment	Lower CAPEX and OPEX
Electrical	Addition of a step-up substation to allow the transmission line to expand to 138 kV.	This will limit the line losses with the increased voltage required for mine site load increases.
Construction (Costs and Schedule)	Opportunity to blend contract for scopes of similar disciplines of work in the RFP process.	Enhances coordination and efficiency of the work being performed in addition to opportunities in cost savings due to having minimal project mobilization costs with additional contractors.

Area	Opportunity Explanation	Benefit
Environmental, Permitting and Social License	Synergies for environmental monitoring and management through geographic consolidation of site.	Reduction in complexity, cost and reporting. Improved compliance management.
Rehabilitation and Closure	Reassessment of the Reclamation Liability Cost Estimate ("RLCE") for the Project through permit amendment process.	Possible reduction in required security bond held by the Finance Minister.

Upside Potential

There are opportunities, beyond the scope of this FS, that could enhance the Project's economics, timing, and/or permitting—beyond those typical to all mining projects (such as changes in metals prices, exchange rates, and other variables). Additional information and further assessments are recommended to fully understand, quantify and potentially incorporate these opportunities into the Project's feasibility-level economics. Key recommendations and actions have been outlined in the Recommendations section to support a data-driven evaluation of the opportunities described below.

- Significant conversion potential of existing Mineral Resources to Mineral Reserves with sufficient drilling density and incorporating appropriate modifying factors. Priority focus areas include such Mineral Resources that are not in the current mine plan, but which are located directly adjacent to or, in some cases, as extensions of planned Mineral Reserve stopes. By leveraging existing planned infrastructure, this could potentially increase recoverable ounces with minimal additional capital expenditures and potentially have a positive material impact on Project economics. Total Measured and Indicated Mineral Resources outside of the Mineral Reserves include 17.38 Mt at an average grade of 2.88 g/t for contained 1.61 Moz of gold. Total Inferred Resources outside of the Mineral Reserves include 18.77 Mt at an average grade of 3.09 g/t for contained 1.86 Moz of gold.
- The planned processing plant and surface infrastructure design have been designed with flexibility to accommodate potential future expansion. Opportunities for low capital cost expansion scenarios aimed at increasing throughput within the planned Project footprint, and enabling filtered tailings co-disposal to enhance recovery, will be explored and evaluated, subject to sufficient Mineral Reserves being defined to support such an expansion, and the receipt of any required permit amendments.

Other opportunities include:

- Potential extension of mineralization along the Barkerville Trend and Lightning Creek Trend. Major prospects include Proserpine, Cariboo Hudson Mine, Burns-Nelson Mountain, and Yanks Peak;
- Pre-production ore toll milling of development material to generate revenue during the construction;
- Utilize pre-owned equipment to reduce upfront capital costs and development timelines;
- Explore alternative funding sources for certain off-site infrastructure.

25.12 Conclusion

This NI 43-101 Technical Report Feasibility Study for the Cariboo Gold Project was prepared and compiled by BBA at the request of ODV, with the support of experienced and competent independent consultants using accepted engineering methodologies and standards. It provides a summary of the results and findings from each major area of investigation, including:

- Exploration;
- Geological Modelling;
- Mineral Resource Estimate;
- Mine Design;
- Mineral Reserves Estimate;
- Metallurgy;
- Process Design;
- Infrastructure;
- Environmental Management;
- Waste and Water Management;
- Capital and Operating Costs;
- Economic Analysis.

The mutual conclusion of the QPs is that the Project, as summarized in this FS, contains adequate detail and information to support the positive economic outcome. The results of this FS indicate that the Project is technically feasible and has financial merit at the base case assumptions considered. Analysis of the results and findings from each major area of investigation completed as part of this FS suggests numerous recommendations for further investigations to mitigate risks and/or improve the base case designs.

26. Recommendations

26.1 Overview

In summary, the QPs recommend that ODV executes the work planned in Section 26.9 below, which includes, but is not limited to:

- The detailed engineering and construction schedule including the purchase of long lead time equipment, advance various construction readiness activities;
- Undertake exploration drilling with the objective of converting Inferred Mineral Resources within and around the mine area to Mineral Reserves;
- Define additional potential Mineral Reserves that could feed into the current or expanded mineral processing facilities;
- Detail mine planning, characterization and testing related to paste flow loop, as well as early supplier engagement;
- Perform additional test work will support a more comprehensive understanding of the lithological influence on metallurgical performance;
- Conduct a sensitivity analysis for parameters of concern for water quality/balance and reduce uncertainty related to inputs for parameters of concern, if possible;
- Commence with preparation for surface infrastructure.

26.2 Drilling and Geology

Based on the results of the 2025 FS MRE, it is recommended that the Project deposit be advanced to the next phase. Additional exploration and delineation drilling, as well as further geological and structural interpretation are recommended to determine the extents of the gold mineralization. The recommended geology work program is detailed below.

Recommended Work Program

- Underground infill drilling in vein corridors at close proximity from planned underground workings is recommended to convert resources currently categorized as Inferred to the Indicated category. A budget of 100,000 m of drilling is recommended for this program.
- Surface drilling at Proserpine, Cariboo Hudson and Yanks Peak prospects with the objective of expanding the geological understanding and mineralization to the southeast. A budget of 30,000 m of drilling is recommended for this program;
- An update on the Project is recommended to incorporate the results of the proposed drilling program;

- Underground infill drilling in vein corridors at close proximity from planned underground workings is recommended with the objective of supporting the conversion of Mineral Resources currently categorized as Inferred to the Indicated category. A budget of 100,000 m of drilling is recommended for this program.

Operational Recommendations

- Continue geological mapping and surface sampling programs to define and identify new targets is recommended;
- Assess the results of the underground bulk sample(s) and continue the bulk sample program. Continued testing of geological and grade continuities, metallurgical, and geotechnical parameters is recommended.

26.3 Underground Mining

26.3.1 Geotechnical

Recommended Work Program

- For rock engineering, it is recommended that ODV acquires supplementary geotechnical data to improve rock mass characterization, particularly in areas where no previous logging was conducted and in zones hosting major underground infrastructure. This includes targeted underground geotechnical drilling in critical areas such as vent raise locations, the crusher chamber, and other large excavations. Core should be systematically logged for geotechnical parameters, and representative samples submitted for laboratory strength testing. This should be conducted during the detailed engineering phase.
- Once additional underground access is established, perform site-specific in situ stress measurements to validate current design assumptions and inform ground support strategies for large excavations and stress-sensitive zones.
- Before mining near-surface stopes (e.g., those beneath crown pillars), obtain high-resolution topographic and bedrock surface data to support accurate modelling and assess potential surface stability concerns.

Operational Recommendations

- Implement systematic geotechnical and geological mapping throughout underground development, similar to practices employed at the Bonanza Ledge Mine. These observations should be used to continuously refine the geological and geotechnical understanding of the rock mass.

- Conduct additional geological and structural interpretation to better understand the role of faults and discontinuities on mine stability. This work should be supported by further data collected through mapping and targeted drilling
- Survey all blasted stopes, both during mining and after mucking, to compare actual stope geometry with planned designs. These reconciliations should be used to evaluate dilution and recovery in relation to the geotechnical conditions encountered and to calibrate design assumptions accordingly.

26.3.2 Mine Design and Planning

To strengthen the mine planning process and ensure technical and economic robustness, the following recommendations are proposed:

Recommended Work Program

- Advance mine design and production scheduling through further engineering work, including:
  - Optimize of the development sequence during the pre-production period, prior to the commissioning of the main ventilation network. A thorough validation of the planned equipment in each sector, as well as the available ventilation capacity, is essential. This phase is critical to ensuring the successful implementation of the development sequence during the ramp-up period.
  - Optimize the development sequence during the latter stages of the mine life. Strategic deferral of certain development activities or a potential reduction in workforce may improve the Project’s NPV.
  - Evaluate the potential impact on the mine sequencing and design if Inferred Mineral Resources material disseminated between current vein structures are converted into Indicated Mineral Resources.
- Carry out detailed engineering studies for critical underground infrastructure, specifically:
  - Electrical power and underground communication distribution systems;
  - Dewatering networks;
  - Paste backfill distribution systems.
- Continue engagement with equipment and service suppliers to refine cost estimates, evaluate availability, and secure commercial terms through binding quotations or negotiated agreements.

Operational Recommendations

- Conduct detailed mapping and verification of historical underground workings (drifts and stopes) once underground access is safe and possible, to improve the understanding of dewatering requirements and reduce geotechnical uncertainty in mine design.
- Assess the technical feasibility of a top-down mining sequence using up-hole longhole drilling techniques to potentially enhance recovery and scheduling flexibility.

26.3.3 Mine Materials Handling and Paste Distribution

It is recommended that ODV performs additional work to validate and advance the design of the material handling and paste distribution networks. The main areas of optimization and de-risking are listed below.

Recommended Work Program

- Advance the primary and secondary comminution model to optimize equipment selection and sizing. Opportunities to remove the secondary crusher and replace the primary by a smaller sized jaw should be investigated as it would have significant beneficial cost impact to the underground space required and construction timeline.
- Perform flow modelling on the silos and chutes to ensure proper design and material transfers.
- Perform flow loop testing on the paste mixture to advance detail engineering, and full sizing equipment.

Operational Recommendations

- Along with the mine planning, detailed paste contingency scenarios and plans should be developed in order to ensure functionality and continuous disposal underground.

26.4 Mineral Processing and Metallurgical Test Work

It is recommended that the metallurgical test program be continued to validate the results obtained during the FS test work campaigns. Additional test work will support a more comprehensive understanding of the lithological influence on metallurgical performance. The following test programs are recommended:

Recommended Work Program

- Conduct additional ore sorting test work on each deposit, including LOM composites and variability samples.
- Characterize fines generation during the crushing process.

- Perform fines grinding tests to improve the characterization of flotation concentrate.
- Carry out full flowsheet testing for any newly defined deposit.
- Undertake equipment-specific testing to support the sizing of key process equipment (e.g., settling, filtration).
- Perform a paste backfill UCS test program to confirm binder concentration and binder selection.

These items will inform complete detail engineering and process optimization.

Operational Recommendations

- Assess the impact of dilution on mineral sorting performance and downstream processing efficiency.

26.5 Water Balance

Recommendations related to the next stages of the water balance on the Project are as follows:

Recommended Work Program

- Flood mitigation includes holding back mine water in the underground to manage extreme wet events with magnitude up to the EDF. Detail the effect of holding back the mine water to ensure the proposed mitigation is executable year to year.
- Validate and calibrate the hydrogeology model with information collected from underground active dewatering and pumping out of historical flooded workings.
- Expand the scope of the water balance model to include downstream watercourses and the Jack of Clubs Lake.

Operational Recommendations

- Continue collecting the following field data to support future model calibration and verification:
  - Bonanza Ledge WTP flow rate;
  - Bonanza Ledge FMR pump out rate;
  - Weather monitoring;
  - Hydrometric monitoring in downstream watercourses.
- Modify the water balance model to reflect design changes as the Project progresses. Use the model as tool to evaluate the expected performance of the water management system while considering design options and refinements.

26.6 Water Quality

The following updates of the water quality model are recommended:

Recommended Work Program

- Obtain more data from deep underground workings and update mine pool inputs.
- Add discharge locations and nodes for receiving environment (Lowhee Creek and Jack of Clubs Lake) to the model and include subsurface/groundwater inputs to these nodes.
- Calibrate and validate model using historical data.
- Conduct a sensitivity analysis for parameters of concern and reduce uncertainty related to inputs for parameters of concern if possible.

Operational Recommendations

- Update the water quality model to reflect project changes and refinements.

26.7 Surface Infrastructure

26.7.1 Mine Site Operational Infrastructure

The following infrastructure is proposed for the needs of the Project. The items below highlight work required to advance these to detail engineering and construction.

- MSC Access Road:
  - Willow River Bridge foundations should be designed to clarify uncertainty in foundation design and capital cost. The geotechnical investigation should include Electronic Cose method, Seismic information (CPTu), review of lateral spreading and settlement, and the complete survey to confirm grade line. In addition, the environmental information/constraints should be well defined.
  - Evaluate bearing capacity of foundation materials along the length of the road to determine if soil reinforcement is required to establish a stable road prism, where poor subgrade conditions exist.
- MSC Preparation:
  - Validate the requirements to dismantle and dispose of historic structures, if any.
  - Undertake further assessment on the geochemical characterization of the material to be excavated at the MSC to finalize the earthworks development strategy and assess potential and optional sources of structural backfill materials to ensure suitability for construction, improve certainty of unit cost, and initiate permitting or negotiation of rights of access to the source area.

- Bonanza Ledge WRSF:
  - Further characterize the waste rock material geotechnical parameters to confirm stability and configuration and conduct further geochemical characterization.
  - Finalize the assessment of the suitability of using underground development waste as construction material for the waste rock storage facility.
- Structural Foundations at the MSC:
  - Undertake an additional geotechnical investigation to map the bedrock profile better and the assessment of volumes of overburden and historical waste material.
  - Conduct the additional assessment of the bearing capacity of the bedrock at the location of the concentrator.
- Surface water management for the MSC and Bonanza Ledge:
  - Assess the surface water management concept according to the results of the environmental site assessment, and compliance with the Project permitting or table of comments must be respected.
  - Perform the detailed design of the sediment water pond, and diversion, collection and spillway channels required to ensure stability and certainty of arrangement and material quantities.
- Advance the design of the underground FMR in order to confirm the viability and constraints associated with the concept.
  - For the MSC sediment pond construction, develop an instrumentation and monitoring plan to be followed during the dam fill placement to avoid rapid loading and allow for increased foundation pore water pressure to dissipate.
- For the MSC sediment pond construction, update estimates of differential settlement by confirming thickness of glaciolacustrine foundation under the dam and pond, and prepare an instrumentation and monitoring program for the construction and operations.
- Lodging Capacity in Wells:
  - Further develop the Project schedule to a Level 3 to gain deeper granularity on labour curves and validate the lodging requirements versus the planned lodging capacity.

26.7.2 Water Management Infrastructure

Recommendations related to the next stages of water management infrastructure design are as follows:

Recommended Work Program

- Confirm contributing watershed areas to ensure channel and sumps/pond sizing is adequate.

- Conduct detailed design and Issue for Construction ("IFC") drawings for contact and non-contact water management infrastructure at both Bonanza Ledge and MSC areas to meet the Project schedule requirements and construction timelines.
- Conduct field surveys of channels alignment to confirm grades, ground truth and support detailed design and IFC drawings, and identify potential construction challenges and opportunities. Key areas of focus include areas with steep slopes or major change in slope gradation.
- Conduct field surveys of existing water channels in the Bonanza Ledge area to confirm that these channels can meet design criteria, to plan for upgrades if necessary, and to support integration into the broader water infrastructure network.
- Investigate the Legacy tailings material at the MSC area and assess the risk of potential stability and contamination risks. The study would evaluate the ability to support excavation works and channel construction, as well as the potential for leaching constituents of concerns into the channel, presenting contamination risks. The study should also support construction alternatives such as constructing the channels above ground, over the Legacy tailings.

Operational Recommendations

- Optimize the Bonanza Ledge approach to manage flood events. In particular, evaluate improvements to the current design that consists of pumping water from the east side of the WRSF (Pond A) up across the WRSF and back down towards the SCP and then back up the WRSF to the FMR. Alternative approaches could be explored to minimize energy use and operational complexity.

26.7.3 Water Treatment Facilities

Recommendations related to the next stages of the water treatment design are as follows:

- Complete preliminary Issued for Approval ("IFA") design of the MSC WTP to support permit amendment for a combined Mine site and Bonanza Ledge WTP.
- Complete detailed design IFC design of the MSC WTP to meet the Project schedule requirements and construction timelines.
- Construct the MSC WTP as per the Project construction schedule.
- Conduct bench or pilot testing on influent water to:
  - Validate that the treatment approach can achieve the proposed treatment targets.
  - Validate the design assumptions.
  - Refine estimates of the reagent consumption and sludge generation rates.
  - Generate water treatment solids for geochemical testing to support the development of waste disposal options.

26.7.4 Water treatment Conveyance Infrastructure Pumping and Piping Systems

Recommendations related to the pumping and piping systems are as follows:

- Complete additional engineering work to optimize the pumping systems used across the Bonanza Ledge and MSC sites. Current use of submersible pumps installed in parallel to be reviewed and improved upon with consideration to alternative options.
- Further assess seasonal flow rates and review cost benefit analysis to running twinned pipelines should high flow rate fluctuations be seen from season to season.

26.7.5 Power Supply (Transmission Line and Substation

Recommendations related to the TL and site power distribution include:

- Advance procurement of long lead items.
- Compile an accurate load list.
- Finalize and obtain the license of occupation for the TL and follow up with obtaining the occupant license to cut.
- Continue to have discussions with private landowners and overlapping tenure holders along the route on land usage planning.
- Determine the operations requirements for forestry service roads along the route and future plans.
- Ground truth the wetland areas and structure placements along the line route.

26.7.6 Waste Rock Storage Facility

The stability analyses conducted for the proposed WRSF design, as well as sensitivities, meet the minimum required FoS. The following is a list of recommendations to further reduce uncertainty and confirm assumptions:

- Sample and test the development waste rock to confirm the strength of the material.
- Test liner cover and liner bedding for strength parameters as soon as they are available. This will be used to confirm the parameters used in this stability analysis and future analyses.
- Install instrumentation to measure and monitor the phreatic surface within the footprint of the WRSF.

26.8 Environment and Permitting

The Project has received authorization to proceed with construction of the major components and aspects of the mine operations. Under Section 19 of the British Columbia *Environmental Assessment Act*, the holder of an EAC may apply to the Executive Director of EAO for an amendment. An application for amendment is necessary when a Certificate Holder proposes to change any aspect of the certificate, e.g., design, location, construction, operation or decommissioning of the Project. Changes to the Project will require Amendment to the Environmental Assessment Certificate, *Mines Act* permit, and *Environmental Management Act* permits.

A fulsome assessment of the changes as it relates to the existing permits, and development of a permitting strategy to address the required amendments should be completed, with input from regulatory agencies.

26.9 Work Program Budget

A work program summarized in Table 26-1 has been developed based on the Project needs and the QP's recommendations described above. The work program includes additional and included activities to advance the Project through detail engineering and construction.

Table 26-1: Work program budget

Work Program Recommendations	Cost Estimate ($000s)
Drilling & Geology	
Regional Exploration Drilling - Proserpine (12,900 m)	6,500
Regional Exploration Drilling - Cariboo Hudson (10,000 m)	5,000
Regional Exploration Drilling - Yanks Peak (6,300 m)	3,000
Underground Infill Drilling (100,000 m)	30,000
Drilling & Geology Total	**45,000**
Mine Design & Geotechnical	
Underground Major Infrastructure Detailed Geotechnical Characterization	250
Site Specific In Situ Stress Measurements	50
Crown Pillar Definition	150
Detailed Construction Mine Plan[1]	350
Detailed Underground Infrastructure Engineering[1]	500
Supplier Engagement	15
Underground Crushing and Material Handling Detail Engineering and Modelling[1]	350
Paste Mixture Flow Loop Testing[1]	50
Mine Design & Geotechnical Total	**1,715**

Work Program Recommendations	Cost Estimate ($000s)
Mineral Processing & Metallurgy	
Variability Testing[1]	800
Fines Testing	100
Full Process Pilot[1]	500
Equipment Specific Testing[1]	200
Paste USC Testing	100
Mineral Processing & Metallurgy Total	**1,700**
Water Balance & Water Quality	
EDF Management Planning	50
Hydrogeological Model Calibration	250
Expanded Water Balance Model[1]	350
Mine Pool Characterization	25
Add Discharge Nodes, Calibrate and Add Sensitivities to the Model[1]	200
Water Balance & Water Quality Total	**875**
Surface Infrastructure	
MSC Access Road Testing and Engineering[1]	150
MSC Site Preparation[1]	50
Bonanza Ledge WRSF[1]	150
MSC Foundation[1]	50
Surface Water Management Detail Engineering[1]	250
MSC Sediment Pond[1]	350
Construction Housing[1]	25
MSC WTP Detail Engineering and Pilot Testing[1]	4,500
Power Supply Engineering & Permitting[1]	700
Surface Infrastructure Total	**6,225**
Environment & Permitting	
Permitting Change Assessment[1]	250
Environment & Permitting Total	**250**
Recommendation & Work Program Total	**55,765**

(1) Cost included as part of the 2025 FS CAPEX estimate, or pre-final investment decision cost.

26.10 Conclusion

Amanda Fitch, QP, finds the recommendations and budgets to be reasonable and justified based on the studies and observations made to date. It is recommended that ODV conducts the planned activities subject to funding availability and any other matters that may cause the objectives to be altered in the normal course of the Project development. The exploration program is discretionary and can be staged or deferred until funding or operational cash flow is available. The other work streams are essential to achieve construction readiness in anticipation of construction financing and a final investment decision and should be advanced expeditiously so as not to jeopardize the projected timelines.

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APPENDIX 1: List of Mineral Claims and Leases
(as of April 30, 2025)

# Title	Title Type	Property	Owner	Issue Date	Good To Date	Area (Ha)	Royalties
203991	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	07-Sep-76	13-Nov-32	75.00	Osisko Gold Royalties Ltd. (5%)
204176	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	14-Aug-79	13-Nov-32	25.00	Osisko Gold Royalties Ltd. (5%)
204177	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	14-Aug-79	13-Nov-32	25.00	Osisko Gold Royalties Ltd. (5%)
204753	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	11-Jul-83	13-Nov-32	25.00	Osisko Gold Royalties Ltd. (5%)
204754	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	11-Jul-83	13-Nov-32	25.00	Osisko Gold Royalties Ltd. (5%)
204755	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	11-Jul-83	13-Nov-32	25.00	Osisko Gold Royalties Ltd. (5%)
205247	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	19-Aug-86	13-Nov-32	500.00	Osisko Gold Royalties Ltd. (5%)
205267	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	18-Sep-86	13-Nov-32	300.00	Osisko Gold Royalties Ltd. (5%)
367954	Mineral Claim	Cariboo Gold	BGM (100%)	23-Feb-99	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%), Melvin Lee Zeiler (2%) (whole)
367955	Mineral Claim	Cariboo Gold	BGM (100%)	23-Feb-99	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%), Melvin Lee Zeiler (2%) (whole)
369917	Mineral Claim	Cariboo Gold	BGM (100%)	03-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
369918	Mineral Claim	Cariboo Gold	BGM (100%)	03-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370010	Mineral Claim	Cariboo Gold	BGM (100%)	07-Jul-99	18-Apr-32	500.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370011	Mineral Claim	Cariboo Gold	BGM (100%)	06-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370012	Mineral Claim	Cariboo Gold	BGM (100%)	06-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370013	Mineral Claim	Cariboo Gold	BGM (100%)	06-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370014	Mineral Claim	Cariboo Gold	BGM (100%)	06-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370015	Mineral Claim	Cariboo Gold	BGM (100%)	06-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370016	Mineral Claim	Cariboo Gold	BGM (100%)	08-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370028	Mineral Claim	Cariboo Gold	BGM (100%)	06-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370029	Mineral Claim	Cariboo Gold	BGM (100%)	06-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370030	Mineral Claim	Cariboo Gold	BGM (100%)	07-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370230	Mineral Claim	Cariboo Gold	BGM (100%)	14-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
370234	Mineral Claim	Cariboo Gold	BGM (100%)	15-Jul-99	18-Apr-32	25.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (whole) (2.5%)
374225	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374226	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374227	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374228	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374229	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374230	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374231	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374232	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374233	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374234	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jan-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374706	Mineral Claim	Cariboo Gold	BGM (100%)	08-Mar-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374707	Mineral Claim	Cariboo Gold	BGM (100%)	08-Mar-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374708	Mineral Claim	Cariboo Gold	BGM (100%)	08-Mar-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374709	Mineral Claim	Cariboo Gold	BGM (100%)	08-Mar-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374710	Mineral Claim	Cariboo Gold	BGM (100%)	08-Mar-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)

# Title	Title Type	Property	Owner	Issue Date	Good To Date	Area (Ha)	Royalties
374711	Mineral Claim	Cariboo Gold	BGM (100%)	08-Mar-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374712	Mineral Claim	Cariboo Gold	BGM (100%)	08-Mar-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
374713	Mineral Claim	Cariboo Gold	BGM (100%)	08-Mar-00	18-Apr-33	25.00	Osisko Gold Royalties Ltd. (5%)
375260	Mineral Claim	Cariboo Gold	BGM (50%) and Imperial Metals Corp. (50%)	09-Apr-00	13-Nov-32	400.00	Osisko Gold Royalties Ltd. (5%)
384112	Mineral Claim	Cariboo Gold	BGM (100%)	19-Feb-01	18-Apr-33	300.00	Osisko Gold Royalties Ltd. (5%), Melvin Lee Zeiler (2%) (whole)
384113	Mineral Claim	Cariboo Gold	BGM (100%)	19-Feb-01	18-Apr-33	400.00	Osisko Gold Royalties Ltd. (5%), Melvin Lee Zeiler (2%) (whole)
412065	Mineral Claim	Cariboo Gold	BGM (100%)	08-Jul-04	18-Apr-32	500.00	Osisko Gold Royalties Ltd. (5%), & Estate of Bryan Muloin (whole) (3% of 2% NSR)
412066	Mineral Claim	Cariboo Gold	BGM (100%)	08-Jul-04	18-Apr-32	375.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (97% of 2% NSR) & Estate of Bryan Muloin (whole) (3% of 2% NSR)
505901	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-32	349.67	Osisko Gold Royalties Ltd. (5%)
505905	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	972.78	Osisko Gold Royalties Ltd. (5%)
505910	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-32	1,265.76	Osisko Gold Royalties Ltd. (5%)
505914	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	1,399.53	Osisko Gold Royalties Ltd. (5%)
505916	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	1,164.10	Osisko Gold Royalties Ltd. (5%), Douglas Merrick & Harold Merrick (partial) (2%)
505917	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	658.93	Osisko Gold Royalties Ltd. (5%), Douglas Merrick & Harold Merrick (partial) (2%)
505921	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	914.78	Osisko Gold Royalties Ltd. (5%)
505922	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	583.13	Osisko Gold Royalties Ltd. (5%)
505924	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-32	543.58	Osisko Gold Royalties Ltd. (5%)
505925	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	1,066.31	Osisko Gold Royalties Ltd. (5%), Douglas Merrick & Harold Merrick (partial) (2%)
505926	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	310.41	Osisko Gold Royalties Ltd. (5%), Douglas Merrick & Harold Merrick (partial) (2%)
505927	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-32	738.06	Osisko Gold Royalties Ltd. (5%)
505936	Mineral Claim	Cariboo Gold	BGM (100%)	04-Feb-05	18-Apr-33	426.62	Osisko Gold Royalties Ltd. (5%), Douglas Merrick & Harold Merrick (partial) (2%)
506154	Mineral Claim	Cariboo Gold	BGM (100%)	07-Feb-05	18-Apr-32	155.56	Osisko Gold Royalties Ltd. (5%)
506315	Mineral Claim	Cariboo Gold	BGM (100%)	08-Feb-05	18-Apr-33	894.11	Osisko Gold Royalties Ltd. (5%)
506436	Mineral Claim	Cariboo Gold	BGM (100%)	09-Feb-05	18-Apr-33	408.28	Osisko Gold Royalties Ltd. (5%)
506440	Mineral Claim	Cariboo Gold	BGM (100%)	09-Feb-05	18-Apr-33	972.35	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
506489	Mineral Claim	Cariboo Gold	BGM (100%)	09-Feb-05	18-Apr-32	388.47	Osisko Gold Royalties Ltd. (5%)
506493	Mineral Claim	Cariboo Gold	BGM (100%)	09-Feb-05	13-Nov-32	1,549.54	Osisko Gold Royalties Ltd. (5%)
506497	Mineral Claim	Cariboo Gold	BGM (100%)	09-Feb-05	18-Apr-33	853.84	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
506614	Mineral Claim	Cariboo Gold	BGM (100%)	10-Feb-05	18-Apr-32	1,167.70	Osisko Gold Royalties Ltd. (5%)
506618	Mineral Claim	Cariboo Gold	BGM (100%)	10-Feb-05	18-Apr-32	622.63	Osisko Gold Royalties Ltd. (5%)
506620	Mineral Claim	Cariboo Gold	BGM (100%)	10-Feb-05	18-Apr-33	933.89	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2%)
506630	Mineral Claim	Cariboo Gold	BGM (100%)	10-Feb-05	18-Apr-32	350.79	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
506637	Mineral Claim	Cariboo Gold	BGM (100%)	10-Feb-05	13-Nov-32	1,131.33	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2.5%)
506658	Mineral Claim	Cariboo Gold	BGM (100%)	10-Feb-05	18-Apr-32	506.36	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
506720	Mineral Claim	Cariboo Gold	BGM (100%)	10-Feb-05	18-Apr-33	1,085.46	Osisko Gold Royalties Ltd. (5%), Charnobay/Wells Syndicate (partial) (3%)
506721	Mineral Claim	Cariboo Gold	BGM (100%)	10-Feb-05	18-Apr-33	1,070.04	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2%)
506956	Mineral Claim	Cariboo Gold	BGM (100%)	11-Feb-05	18-Apr-33	1,247.95	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2.5%)

# Title	Title Type	Property	Owner	Issue Date	Good To Date	Area (Ha)	Royalties
507131	Mineral Claim	Cariboo Gold	BGM (85%), Standard Drilling & Engineering Ltd. (12.5%), Shane Morgan Williams (2.5%)	14-Feb-05	18-Apr-32	562.74	Osisko Gold Royalties Ltd. (5%)
507132	Mineral Claim	Cariboo Gold	BGM (97.5%), Shane Morgan Williams (2.5%)	14-Feb-05	18-Apr-32	931.38	Osisko Gold Royalties Ltd. (5%), William G. Timmins (partial) (2.5%)
507133	Mineral Claim	Cariboo Gold	BGM (97.5%), Shane Morgan Williams (2.5%)	14-Feb-05	18-Apr-32	1,339.02	Osisko Gold Royalties Ltd. (5%)
507134	Mineral Claim	Cariboo Gold	BGM (97.5%), Shane Morgan Williams (2.5%)	14-Feb-05	18-Apr-32	543.03	Osisko Gold Royalties Ltd. (5%), William G. Timmins (partial) (2.5), Osisko Gold Royalties Ltd. (partial) (2%)
507135	Mineral Claim	Cariboo Gold	BGM (97.5%), Shane Morgan Williams (2.5%)	14-Feb-05	18-Apr-32	911.60	Osisko Gold Royalties Ltd. (5%)
507136	Mineral Claim	Cariboo Gold	BGM (97.5%), Shane Morgan Williams (2.5%)	14-Feb-05	18-Apr-32	872.37	Osisko Gold Royalties Ltd. (5%), . & Osisko Gold Royalties Ltd. (partial) (2%)
507247	Mineral Claim	Cariboo Gold	BGM (100%)	15-Feb-05	18-Apr-32	698.82	Osisko Gold Royalties Ltd. (5%)
507248	Mineral Claim	Cariboo Gold	BGM (100%)	15-Feb-05	18-Apr-33	621.30	Osisko Gold Royalties Ltd. (5%)
507259	Mineral Claim	Cariboo Gold	BGM (100%)	15-Feb-05	18-Apr-33	252.33	Osisko Gold Royalties Ltd. (5%)
507260	Mineral Claim	Cariboo Gold	BGM (100%)	15-Feb-05	18-Apr-32	19.41	Osisko Gold Royalties Ltd. (5%)
507261	Mineral Claim	Cariboo Gold	BGM (100%)	15-Feb-05	18-Apr-33	620.63	Osisko Gold Royalties Ltd. (5%)
507264	Mineral Claim	Cariboo Gold	BGM (100%)	15-Feb-05	18-Apr-33	1,026.62	Osisko Gold Royalties Ltd. (5%), Charnobay/Wells Syndicate (partial) (3%)
507265	Mineral Claim	Cariboo Gold	BGM (100%)	15-Feb-05	18-Apr-32	542.59	Osisko Gold Royalties Ltd. (5%), . & Osisko Gold Royalties Ltd. (partial) (2%)
507288	Mineral Claim	Cariboo Gold	BGM (100%)	16-Feb-05	18-Apr-32	426.36	Osisko Gold Royalties Ltd. (5%), . & Osisko Gold Royalties Ltd. (partial) (2%)
507304	Mineral Claim	Cariboo Gold	BGM (100%)	16-Feb-05	18-Apr-32	388.20	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
507309	Mineral Claim	Cariboo Gold	BGM (100%)	16-Feb-05	18-Apr-32	1,030.24	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (1%)
508778	Mineral Claim	Cariboo Gold	BGM (100%)	11-Mar-05	18-Apr-32	775.28	Osisko Gold Royalties Ltd. (5%), . & Osisko Gold Royalties Ltd. (partial) (2%)
508905	Mineral Claim	Cariboo Gold	BGM (100%)	14-Mar-05	13-Nov-32	871.72	Osisko Gold Royalties Ltd. (5%)
509015	Mineral Claim	Cariboo Gold	BGM (100%)	16-Mar-05	18-Apr-32	193.86	Osisko Gold Royalties Ltd. (5%), . & Osisko Gold Royalties Ltd. (partial) (2%)
509017	Mineral Claim	Cariboo Gold	BGM (100%)	16-Mar-05	18-Apr-32	639.85	Osisko Gold Royalties Ltd. (5%), William G. Timmins (partial) (2.5), Osisko Gold Royalties Ltd. (partial) (2%)
509179	Mineral Claim	Cariboo Gold	BGM (100%)	17-Mar-05	13-Nov-32	833.23	Osisko Gold Royalties Ltd. (5%), . & Osisko Gold Royalties Ltd. (partial) (2%)
512571	Mineral Claim	Cariboo Gold	BGM (85%), Standard Drilling & Engineering Ltd. (12.5%), Shane Morgan Williams (2.5%)	14-May-05	18-Apr-32	484.93	Osisko Gold Royalties Ltd. (5%), William G. Timmins (partial) (2.5%)
512739	Mineral Claim	Cariboo Gold	BGM (100%)	16-May-05	18-Apr-32	877.72	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2.5%), Roundtop Exploration Inc. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2%)
512795	Mineral Claim	Cariboo Gold	BGM (97.5%), Shane Morgan Williams (2.5%)	17-May-05	18-Apr-32	155.22	Osisko Gold Royalties Ltd. (5%)
513739	Mineral Claim	Cariboo Gold	BGM (100%)	01-Jun-05	18-Apr-32	484.88	Osisko Gold Royalties Ltd. (5%), William G. Timmins (partial) (2.5%)
514442	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jun-05	18-Apr-32	155.75	Osisko Gold Royalties Ltd. (5%)
514446	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jun-05	18-Apr-33	291.87	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
517260	Mineral Claim	Cariboo Gold	BGM (100%)	12-Jul-05	18-Apr-32	38.87	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (1%)
517416	Mineral Claim	Cariboo Gold	BGM (100%)	12-Jul-05	18-Apr-33	58.28	Osisko Gold Royalties Ltd. (5%)
517423	Mineral Claim	Cariboo Gold	BGM (100%)	12-Jul-05	18-Apr-33	252.39	Osisko Gold Royalties Ltd. (5%)
517433	Mineral Claim	Cariboo Gold	BGM (100%)	12-Jul-05	18-Apr-32	19.41	Osisko Gold Royalties Ltd. (5%)
519556	Mineral Claim	Cariboo Gold	BGM (100%)	31-Aug-05	18-Apr-33	485.01	Osisko Gold Royalties Ltd. (5%)
519559	Mineral Claim	Cariboo Gold	BGM (100%)	31-Aug-05	18-Apr-32	484.79	Osisko Gold Royalties Ltd. (5%)
519563	Mineral Claim	Cariboo Gold	BGM (100%)	31-Aug-05	18-Apr-33	484.60	Osisko Gold Royalties Ltd. (5%)
521241	Mineral Claim	Cariboo Gold	BGM (100%)	15-Oct-05	18-Apr-32	485.66	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (1%)
521242	Mineral Claim	Cariboo Gold	BGM (100%)	15-Oct-05	18-Apr-33	486.17	Osisko Gold Royalties Ltd. (5%)
521329	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-33	486.72	Osisko Gold Royalties Ltd. (5%)
521330	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	486.84	Osisko Gold Royalties Ltd. (5%)

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521331	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	487.11	Osisko Gold Royalties Ltd. (5%)
521332	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-33	487.40	Osisko Gold Royalties Ltd. (5%)
521333	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-33	487.63	Osisko Gold Royalties Ltd. (5%)
521336	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-33	487.79	Osisko Gold Royalties Ltd. (5%)
521337	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	486.69	Osisko Gold Royalties Ltd. (5%)
521338	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	486.69	Osisko Gold Royalties Ltd. (5%)
521339	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-33	488.08	Osisko Gold Royalties Ltd. (5%)
521340	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	487.96	Osisko Gold Royalties Ltd. (5%)
521342	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	486.75	Osisko Gold Royalties Ltd. (5%)
521346	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-33	487.06	Osisko Gold Royalties Ltd. (5%)
521348	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-33	487.04	Osisko Gold Royalties Ltd. (5%)
521349	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	486.93	Osisko Gold Royalties Ltd. (5%)
521350	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	486.94	Osisko Gold Royalties Ltd. (5%)
521351	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	487.17	Osisko Gold Royalties Ltd. (5%)
521352	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-33	487.35	Osisko Gold Royalties Ltd. (5%)
521353	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	487.35	Osisko Gold Royalties Ltd. (5%)
521356	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	487.43	Osisko Gold Royalties Ltd. (5%)
521357	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	487.19	Osisko Gold Royalties Ltd. (5%)
521358	Mineral Claim	Cariboo Gold	BGM (100%)	19-Oct-05	18-Apr-32	428.52	Osisko Gold Royalties Ltd. (5%)
521829	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-33	488.14	Osisko Gold Royalties Ltd. (5%)
521839	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-32	488.20	Osisko Gold Royalties Ltd. (5%)
521844	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-32	488.43	Osisko Gold Royalties Ltd. (5%)
521852	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-32	488.19	Osisko Gold Royalties Ltd. (5%)
521872	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-32	488.16	Osisko Gold Royalties Ltd. (5%)
521877	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-32	488.45	Osisko Gold Royalties Ltd. (5%)
521880	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-32	488.32	Osisko Gold Royalties Ltd. (5%)
521881	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-32	488.65	Osisko Gold Royalties Ltd. (5%)
521883	Mineral Claim	Cariboo Gold	BGM (100%)	02-Nov-05	18-Apr-32	390.78	Osisko Gold Royalties Ltd. (5%)
522125	Mineral Claim	Cariboo Gold	BGM (100%)	08-Nov-05	18-Apr-33	581.01	Osisko Gold Royalties Ltd. (5%), Charnobay/Wells Syndicate (partial) (3%)
528996	Mineral Claim	Cariboo Gold	BGM (100%)	27-Feb-06	18-Apr-32	466.26	Osisko Gold Royalties Ltd. (5%)
529036	Mineral Claim	Cariboo Gold	BGM (100%)	27-Feb-06	18-Apr-33	19.41	Osisko Gold Royalties Ltd. (5%)
529712	Mineral Claim	Cariboo Gold	BGM (100%)	07-Mar-06	18-Apr-33	330.14	Osisko Gold Royalties Ltd. (5%)
529713	Mineral Claim	Cariboo Gold	BGM (100%)	07-Mar-06	18-Apr-33	720.92	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2.5%), Osisko Gold Royalties Ltd. (partial) (2%)
529715	Mineral Claim	Cariboo Gold	BGM (100%)	07-Mar-06	18-Apr-33	835.61	Osisko Gold Royalties Ltd. (5%)
529717	Mineral Claim	Cariboo Gold	BGM (100%)	07-Mar-06	18-Apr-32	545.68	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2.5%)
529719	Mineral Claim	Cariboo Gold	BGM (100%)	07-Mar-06	18-Apr-33	757.72	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (1%), Osisko Gold Royalties Ltd. (partial) (2%)
529720	Mineral Claim	Cariboo Gold	BGM (100%)	07-Mar-06	18-Apr-32	603.80	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
529721	Mineral Claim	Cariboo Gold	BGM (100%)	07-Mar-06	13-Nov-32	1,615.57	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2%)

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529722	Mineral Claim	Cariboo Gold	BGM (100%)	07-Mar-06	18-Apr-32	507.38	Osisko Gold Royalties Ltd. (5%)
535526	Mineral Claim	Cariboo Gold	BGM (100%)	13-Jun-06	18-Apr-33	465.85	Osisko Gold Royalties Ltd. (5%)
535671	Mineral Claim	Cariboo Gold	BGM (100%)	14-Jun-06	18-Apr-33	953.05	Osisko Gold Royalties Ltd. (5%)
535855	Mineral Claim	Cariboo Gold	BGM (100%)	17-Jun-06	18-Apr-32	39.02	Osisko Gold Royalties Ltd. (5%)
536691	Mineral Claim	Cariboo Gold	BGM (100%)	07-Jul-06	18-Apr-33	467.11	Osisko Gold Royalties Ltd. (5%)
537354	Mineral Claim	Cariboo Gold	BGM (100%)	17-Jul-06	18-Apr-32	19.50	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2.5%)
546306	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-06	18-Apr-33	331.89	Osisko Gold Royalties Ltd. (5%)
546307	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-06	18-Apr-33	815.89	Osisko Gold Royalties Ltd. (5%)
546309	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-06	13-Nov-32	1,438.50	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (1%), Osisko Gold Royalties Ltd. (partial) (2%)
546310	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-06	18-Apr-33	854.59	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (1%)
546311	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-06	18-Apr-33	563.12	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
546314	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-06	18-Apr-33	1,299.19	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2%)
546315	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-06	18-Apr-33	1,027.11	Osisko Gold Royalties Ltd. (5%), Charnobay/Wells Syndicate (partial) (3%)
546611	Mineral Claim	Cariboo Gold	BGM (100%)	05-Dec-06	18-Apr-33	604.62	Osisko Gold Royalties Ltd. (5%)
546612	Mineral Claim	Cariboo Gold	BGM (100%)	05-Dec-06	18-Apr-33	719.15	Osisko Gold Royalties Ltd. (5%)
546613	Mineral Claim	Cariboo Gold	BGM (100%)	05-Dec-06	18-Apr-33	663.22	Osisko Gold Royalties Ltd. (5%)
546614	Mineral Claim	Cariboo Gold	BGM (100%)	05-Dec-06	18-Apr-33	619.46	Osisko Gold Royalties Ltd. (5%)
546617	Mineral Claim	Cariboo Gold	BGM (100%)	05-Dec-06	18-Apr-32	955.51	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (97% of 2% NSR) & Estate of Bryan Muloin (whole) (3% of 2% NSR)
546620	Mineral Claim	Cariboo Gold	BGM (100%)	05-Dec-06	18-Apr-32	954.67	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (97% of 2% NSR) & Estate of Bryan Muloin (whole) (3% of 2% NSR)
546722	Mineral Claim	Cariboo Gold	BGM (100%)	06-Dec-06	13-Nov-32	1,147.58	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%), Osisko Gold Royalties Ltd. (partial) (2%)
546723	Mineral Claim	Cariboo Gold	BGM (100%)	06-Dec-06	18-Apr-32	702.56	Osisko Gold Royalties Ltd. (5%)
546724	Mineral Claim	Cariboo Gold	BGM (100%)	06-Dec-06	18-Apr-33	837.09	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
546725	Mineral Claim	Cariboo Gold	BGM (100%)	06-Dec-06	18-Apr-33	953.60	Osisko Gold Royalties Ltd. (5%)
546726	Mineral Claim	Cariboo Gold	BGM (100%)	06-Dec-06	18-Apr-33	971.93	Osisko Gold Royalties Ltd. (5%)
546727	Mineral Claim	Cariboo Gold	BGM (100%)	06-Dec-06	18-Apr-33	952.84	Osisko Gold Royalties Ltd. (5%)
554735	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	484.18	Osisko Gold Royalties Ltd. (5%)
554737	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	484.18	Osisko Gold Royalties Ltd. (5%)
554739	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	483.95	Osisko Gold Royalties Ltd. (5%)
554740	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	483.95	Osisko Gold Royalties Ltd. (5%)
554741	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	484.16	Osisko Gold Royalties Ltd. (5%)
554742	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	483.93	Osisko Gold Royalties Ltd. (5%)
554743	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	484.16	Osisko Gold Royalties Ltd. (5%)
554745	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	483.70	Osisko Gold Royalties Ltd. (5%)
554746	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	483.98	Osisko Gold Royalties Ltd. (5%)
554747	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	484.12	Osisko Gold Royalties Ltd. (5%)
554748	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	483.96	Osisko Gold Royalties Ltd. (5%)
554749	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	483.74	Osisko Gold Royalties Ltd. (5%)

# Title	Title Type	Property	Owner	Issue Date	Good To Date	Area (Ha)	Royalties
554750	Mineral Claim	Cariboo Gold	BGM (100%)	20-Mar-07	18-Apr-33	483.99	Osisko Gold Royalties Ltd. (5%)
554802	Mineral Claim	Cariboo Gold	BGM (100%)	21-Mar-07	18-Apr-33	38.71	Osisko Gold Royalties Ltd. (5%)
564597	Mineral Claim	Cariboo Gold	BGM (100%)	15-Aug-07	18-Apr-32	19.52	Osisko Gold Royalties Ltd. (5%)
564598	Mineral Claim	Cariboo Gold	BGM (100%)	15-Aug-07	18-Apr-32	19.50	Osisko Gold Royalties Ltd. (5%)
567677	Mineral Claim	Cariboo Gold	BGM (100%)	09-Oct-07	18-Apr-32	39.00	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2.5%)
567678	Mineral Claim	Cariboo Gold	BGM (100%)	09-Oct-07	18-Apr-32	19.50	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2.5%)
572001	Mineral Claim	Cariboo Gold	BGM (100%)	15-Dec-07	18-Apr-32	19.51	Osisko Gold Royalties Ltd. (5%)
572011	Mineral Claim	Cariboo Gold	BGM (100%)	16-Dec-07	18-Apr-32	19.51	Osisko Gold Royalties Ltd. (5%)
572348	Mineral Claim	Cariboo Gold	BGM (100%)	21-Dec-07	18-Apr-32	19.51	Osisko Gold Royalties Ltd. (5%)
572437	Mineral Claim	Cariboo Gold	BGM (100%)	23-Dec-07	18-Apr-32	19.50	Osisko Gold Royalties Ltd. (5%)
573880	Mineral Claim	Cariboo Gold	BGM (100%)	16-Jan-08	18-Apr-32	38.98	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2.5%)
577422	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-08	18-Apr-33	349.90	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2%)
581059	Mineral Claim	Cariboo Gold	BGM (100%)	12-Apr-08	18-Apr-33	468.39	Osisko Gold Royalties Ltd. (5%), Dustin Alsager Rivard (whole) (2%)
592159	Mineral Claim	Cariboo Gold	BGM (100%)	29-Sep-08	18-Apr-32	350.74	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (1%), Osisko Gold Royalties Ltd. (97% of 2% NSR) & Estate of Bryan Muloin (partial) (3% of 2 % NSR)
593162	Mineral Claim	Cariboo Gold	BGM (100%)	20-Oct-08	18-Apr-33	58.29	Osisko Gold Royalties Ltd. (5%)
593959	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	485.28	Osisko Gold Royalties Ltd. (5%)
593960	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	485.04	Osisko Gold Royalties Ltd. (5%)
593961	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	484.80	Osisko Gold Royalties Ltd. (5%)
593962	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	484.79	Osisko Gold Royalties Ltd. (5%)
593963	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	485.03	Osisko Gold Royalties Ltd. (5%)
593965	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	485.27	Osisko Gold Royalties Ltd. (5%)
593966	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	466.03	Osisko Gold Royalties Ltd. (5%)
593967	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	465.87	Osisko Gold Royalties Ltd. (5%)
593968	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	465.68	Osisko Gold Royalties Ltd. (5%)
593969	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	465.50	Osisko Gold Royalties Ltd. (5%)
593970	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	465.21	Osisko Gold Royalties Ltd. (5%)
593971	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	466.00	Osisko Gold Royalties Ltd. (5%)
593972	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	465.34	Osisko Gold Royalties Ltd. (5%)
593973	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	387.63	Osisko Gold Royalties Ltd. (5%)
593974	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	77.64	Osisko Gold Royalties Ltd. (5%)
593975	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	155.26	Osisko Gold Royalties Ltd. (5%)
593979	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	485.22	Osisko Gold Royalties Ltd. (5%)
593980	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	485.00	Osisko Gold Royalties Ltd. (5%)
593981	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	484.77	Osisko Gold Royalties Ltd. (5%)
593982	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	484.62	Osisko Gold Royalties Ltd. (5%)
593983	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	484.62	Osisko Gold Royalties Ltd. (5%)
593984	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	484.87	Osisko Gold Royalties Ltd. (5%)
593985	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	484.87	Osisko Gold Royalties Ltd. (5%)
593986	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	465.72	Osisko Gold Royalties Ltd. (5%)

# Title	Title Type	Property	Owner	Issue Date	Good To Date	Area (Ha)	Royalties
593987	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	485.19	Osisko Gold Royalties Ltd. (5%)
593988	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-08	18-Apr-33	252.34	Osisko Gold Royalties Ltd. (5%)
594001	Mineral Claim	Cariboo Gold	BGM (100%)	07-Nov-08	18-Apr-33	58.18	Osisko Gold Royalties Ltd. (5%)
594002	Mineral Claim	Cariboo Gold	BGM (100%)	07-Nov-08	18-Apr-33	38.80	Osisko Gold Royalties Ltd. (5%)
594003	Mineral Claim	Cariboo Gold	BGM (100%)	07-Nov-08	18-Apr-33	38.81	Osisko Gold Royalties Ltd. (5%)
595151	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-08	18-Apr-33	116.51	Osisko Gold Royalties Ltd. (5%)
595157	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-08	18-Apr-33	388.25	Osisko Gold Royalties Ltd. (5%)
595164	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-08	18-Apr-33	427.12	Osisko Gold Royalties Ltd. (5%)
595165	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-08	18-Apr-33	116.53	Osisko Gold Royalties Ltd. (5%)
595166	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-08	18-Apr-33	38.83	Osisko Gold Royalties Ltd. (5%)
595167	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-08	18-Apr-33	77.68	Osisko Gold Royalties Ltd. (5%)
595168	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-08	18-Apr-33	58.23	Osisko Gold Royalties Ltd. (5%)
596023	Mineral Claim	Cariboo Gold	BGM (100%)	13-Dec-08	18-Apr-33	77.50	Osisko Gold Royalties Ltd. (5%)
596024	Mineral Claim	Cariboo Gold	BGM (100%)	13-Dec-08	18-Apr-33	464.96	Osisko Gold Royalties Ltd. (5%), Douglas Merrick & Harold Merrick (partial) (2%)
596025	Mineral Claim	Cariboo Gold	BGM (100%)	13-Dec-08	18-Apr-33	58.13	Osisko Gold Royalties Ltd. (5%), Douglas Merrick & Harold Merrick (partial) (2%)
596144	Mineral Claim	Cariboo Gold	BGM (100%)	16-Dec-08	18-Apr-33	350.60	Osisko Gold Royalties Ltd. (5%)
598430	Mineral Claim	Cariboo Gold	BGM (100%)	01-Feb-09	08-Mar-26	97.64	Osisko Gold Royalties Ltd. (5%)
600139	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-09	18-Apr-33	155.27	Osisko Gold Royalties Ltd. (5%)
600140	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-09	18-Apr-33	38.82	Osisko Gold Royalties Ltd. (5%)
600141	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-09	18-Apr-33	19.41	Osisko Gold Royalties Ltd. (5%)
600142	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-09	18-Apr-33	135.93	Osisko Gold Royalties Ltd. (5%)
600143	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-09	18-Apr-33	213.54	Osisko Gold Royalties Ltd. (5%)
600144	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-09	18-Apr-33	19.41	Osisko Gold Royalties Ltd. (5%)
600145	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-09	18-Apr-33	77.66	Osisko Gold Royalties Ltd. (5%)
624892	Mineral Claim	Cariboo Gold	BGM (100%)	27-Aug-09	18-Apr-33	116.51	Osisko Gold Royalties Ltd. (5%)
624894	Mineral Claim	Cariboo Gold	BGM (100%)	27-Aug-09	18-Apr-33	38.84	Osisko Gold Royalties Ltd. (5%)
624895	Mineral Claim	Cariboo Gold	BGM (100%)	27-Aug-09	18-Apr-33	19.42	Osisko Gold Royalties Ltd. (5%)
625567	Mineral Claim	Cariboo Gold	BGM (100%)	29-Aug-09	18-Apr-33	19.42	Osisko Gold Royalties Ltd. (5%)
667163	Mineral Claim	Cariboo Gold	BGM (100%)	10-Nov-09	18-Apr-33	77.77	Osisko Gold Royalties Ltd. (5%)
755342	Mineral Claim	Cariboo Gold	BGM (100%)	23-Apr-10	18-Apr-32	389.34	Osisko Gold Royalties Ltd. (5%)
755362	Mineral Claim	Cariboo Gold	BGM (100%)	23-Apr-10	18-Apr-32	389.53	Osisko Gold Royalties Ltd. (5%)
755382	Mineral Claim	Cariboo Gold	BGM (100%)	23-Apr-10	18-Apr-32	467.64	Osisko Gold Royalties Ltd. (5%)
755402	Mineral Claim	Cariboo Gold	BGM (100%)	23-Apr-10	18-Apr-32	486.70	Osisko Gold Royalties Ltd. (5%)
755422	Mineral Claim	Cariboo Gold	BGM (100%)	23-Apr-10	18-Apr-32	486.94	Osisko Gold Royalties Ltd. (5%)
755442	Mineral Claim	Cariboo Gold	BGM (100%)	23-Apr-10	18-Apr-32	486.88	Osisko Gold Royalties Ltd. (5%)
755462	Mineral Claim	Cariboo Gold	BGM (100%)	23-Apr-10	18-Apr-32	467.43	Osisko Gold Royalties Ltd. (5%)
780562	Mineral Claim	Cariboo Gold	BGM (100%)	27-May-10	18-Apr-33	193.97	Osisko Gold Royalties Ltd. (5%)
835729	Mineral Claim	Cariboo Gold	BGM (100%)	12-Oct-10	18-Apr-32	448.31	Osisko Gold Royalties Ltd. (5%)
835730	Mineral Claim	Cariboo Gold	BGM (100%)	12-Oct-10	18-Apr-32	487.49	Osisko Gold Royalties Ltd. (5%)
835731	Mineral Claim	Cariboo Gold	BGM (100%)	12-Oct-10	18-Apr-32	487.47	Osisko Gold Royalties Ltd. (5%)

# Title	Title Type	Property	Owner	Issue Date	Good To Date	Area (Ha)	Royalties
835733	Mineral Claim	Cariboo Gold	BGM (100%)	12-Oct-10	18-Apr-32	390.22	Osisko Gold Royalties Ltd. (5%)
835734	Mineral Claim	Cariboo Gold	BGM (100%)	12-Oct-10	18-Apr-32	487.72	Osisko Gold Royalties Ltd. (5%)
853622	Mineral Claim	Cariboo Gold	BGM (100%)	05-May-11	18-Apr-33	116.56	Osisko Gold Royalties Ltd. (5%)
856509	Mineral Claim	Cariboo Gold	BGM (100%)	09-Jun-11	18-Apr-33	407.82	Osisko Gold Royalties Ltd. (5%)
856510	Mineral Claim	Cariboo Gold	BGM (100%)	09-Jun-11	18-Apr-33	155.41	Osisko Gold Royalties Ltd. (5%)
896709	Mineral Claim	Cariboo Gold	BGM (100%)	13-Sep-11	18-Apr-33	913.22	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (1%)
928311	Mineral Claim	Cariboo Gold	BGM (100%)	06-Nov-11	18-Apr-32	487.33	Osisko Gold Royalties Ltd. (5%)
1014607	Mineral Claim	Cariboo Gold	BGM (100%)	19-Nov-12	18-Apr-33	19.52	Osisko Gold Royalties Ltd. (5%)
1028446	Mineral Claim	Cariboo Gold	BGM (100%)	23-May-14	18-Apr-33	19.52	Osisko Gold Royalties Ltd. (5%)
1028453	Mineral Claim	Cariboo Gold	BGM (100%)	23-May-14	18-Apr-33	19.52	Osisko Gold Royalties Ltd. (5%)
1028454	Mineral Claim	Cariboo Gold	BGM (100%)	23-May-14	18-Apr-33	78.08	Osisko Gold Royalties Ltd. (5%)
1028464	Mineral Claim	Cariboo Gold	BGM (100%)	23-May-14	18-Apr-33	175.33	Osisko Gold Royalties Ltd. (5%)
1029935	Mineral Claim	Cariboo Gold	BGM (100%)	30-Jul-14	18-Apr-32	19.49	Osisko Gold Royalties Ltd. (5%), Osisko Gold Royalties Ltd. (partial) (2.5%)
1033303	Mineral Claim	Cariboo Gold	BGM (100%)	11-Jan-15	18-Apr-33	19.52	Osisko Gold Royalties Ltd. (5%)
1033403	Mineral Claim	Cariboo Gold	BGM (100%)	16-Apr-14	18-Apr-33	97.64	Osisko Gold Royalties Ltd. (5%)
1033404	Mineral Claim	Cariboo Gold	BGM (100%)	16-Apr-14	18-Apr-33	136.67	Osisko Gold Royalties Ltd. (5%)
1039381	Mineral Claim	Cariboo Gold	BGM (100%)	18-Oct-15	18-Apr-33	19.52	Osisko Gold Royalties Ltd. (5%)
1042345	Mineral Claim	Cariboo Gold	BGM (100%)	26-Feb-16	18-Apr-33	1,798.94	Osisko Gold Royalties Ltd. (5%)
1042346	Mineral Claim	Cariboo Gold	BGM (100%)	26-Feb-16	18-Apr-33	1,933.33	Osisko Gold Royalties Ltd. (5%)
1042347	Mineral Claim	Cariboo Gold	BGM (100%)	26-Feb-16	18-Apr-33	1,932.17	Osisko Gold Royalties Ltd. (5%)
1042348	Mineral Claim	Cariboo Gold	BGM (100%)	26-Feb-16	18-Apr-33	1,351.80	Osisko Gold Royalties Ltd. (5%)
1045261	Mineral Claim	Cariboo Gold	BGM (100%)	11-Jul-16	18-Apr-33	38.87	Osisko Gold Royalties Ltd. (5%)
1045698	Mineral Claim	Cariboo Gold	BGM (100%)	31-Jul-16	18-Apr-33	19.52	Osisko Gold Royalties Ltd. (5%)
1045814	Mineral Claim	Cariboo Gold	BGM (100%)	07-Aug-16	18-Apr-33	78.11	Osisko Gold Royalties Ltd. (5%)
1049349	Mineral Claim	Cariboo Gold	BGM (100%)	20-Jan-17	13-Nov-32	19.41	Osisko Gold Royalties Ltd. (5%)
1050434	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-17	18-Apr-33	330.42	Osisko Gold Royalties Ltd. (5%)
1050437	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-17	18-Apr-33	58.29	Osisko Gold Royalties Ltd. (5%)
1050442	Mineral Claim	Cariboo Gold	BGM (100%)	28-Feb-17	18-Apr-33	252.61	Osisko Gold Royalties Ltd. (5%)
1050747	Mineral Claim	Cariboo Gold	BGM (100%)	14-Mar-17	18-Apr-33	408.25	Osisko Gold Royalties Ltd. (5%)
1050748	Mineral Claim	Cariboo Gold	BGM (100%)	14-Mar-17	18-Apr-33	525.22	Osisko Gold Royalties Ltd. (5%)
1050749	Mineral Claim	Cariboo Gold	BGM (100%)	14-Mar-17	18-Apr-33	583.41	Osisko Gold Royalties Ltd. (5%)
1050750	Mineral Claim	Cariboo Gold	BGM (100%)	14-Mar-17	18-Apr-33	233.36	Osisko Gold Royalties Ltd. (5%)
1050753	Mineral Claim	Cariboo Gold	BGM (100%)	14-Mar-17	18-Apr-33	291.72	Osisko Gold Royalties Ltd. (5%)
1050754	Mineral Claim	Cariboo Gold	BGM (100%)	14-Mar-17	18-Apr-33	1,186.57	Osisko Gold Royalties Ltd. (5%)
1050755	Mineral Claim	Cariboo Gold	BGM (100%)	14-Mar-17	18-Apr-33	641.95	Osisko Gold Royalties Ltd. (5%)
1050768	Mineral Claim	Cariboo Gold	BGM (100%)	15-Mar-17	18-Apr-33	680.35	Osisko Gold Royalties Ltd. (5%)
1050769	Mineral Claim	Cariboo Gold	BGM (100%)	15-Mar-17	18-Apr-33	116.65	Osisko Gold Royalties Ltd. (5%)
1052290	Mineral Claim	Cariboo Gold	BGM (100%)	01-Jun-17	18-Apr-33	78.13	Osisko Gold Royalties Ltd. (5%)
1055004	Mineral Claim	Cariboo Gold	BGM (100%)	19-Sep-17	18-Apr-33	19.53	Osisko Gold Royalties Ltd. (5%)
1055005	Mineral Claim	Cariboo Gold	BGM (100%)	19-Sep-17	18-Apr-33	58.60	Osisko Gold Royalties Ltd. (5%)

# Title	Title Type	Property	Owner	Issue Date	Good To Date	Area (Ha)	Royalties
1055083	Mineral Claim	Cariboo Gold	BGM (100%)	21-Sep-17	18-Apr-33	195.30	Osisko Gold Royalties Ltd. (5%)
1055084	Mineral Claim	Cariboo Gold	BGM (100%)	21-Sep-17	18-Apr-33	214.87	Osisko Gold Royalties Ltd. (5%)
1057242	Mineral Claim	Cariboo Gold	BGM (100%)	26-Dec-17	18-Apr-33	58.28	Osisko Gold Royalties Ltd. (5%)
1060121	Mineral Claim	Cariboo Gold	BGM (100%)	18-Apr-18	18-Apr-33	1,942.27	Osisko Gold Royalties Ltd. (5%)
1060157	Mineral Claim	Cariboo Gold	BGM (100%)	19-Apr-18	18-Apr-33	58.61	Osisko Gold Royalties Ltd. (5%)
1060160	Mineral Claim	Cariboo Gold	BGM (100%)	19-Apr-18	18-Apr-33	716.90	Osisko Gold Royalties Ltd. (5%)
1060183	Mineral Claim	Cariboo Gold	BGM (100%)	20-Apr-18	18-Apr-33	175.75	Osisko Gold Royalties Ltd. (5%)
1069588	Mineral Claim	Cariboo Gold	BGM (100%)	10-Jul-19	18-Apr-32	19.50	Osisko Gold Royalties Ltd. (5%)
1072306	Mineral Claim	Cariboo Gold	BGM (100%)	31-Oct-19	18-Apr-33	19.40	Osisko Gold Royalties Ltd. (5%)
1072307	Mineral Claim	Cariboo Gold	BGM (100%)	31-Oct-19	18-Apr-33	19.40	Osisko Gold Royalties Ltd. (5%)
1095306	Mineral Claim	Cariboo Gold	BGM (100%)	07-Feb-05	18-Apr-33	718.73	Osisko Gold Royalties Ltd. (5%)
1095308	Mineral Claim	Cariboo Gold	BGM (100%)	01-Dec-06	18-Apr-33	446.60	Osisko Gold Royalties Ltd. (5%)
1100534	Mineral Claim	Cariboo Gold	BGM (100%)	16-Jan-23	13-Nov-32	465.07	Osisko Gold Royalties Ltd. (5%)
ML-1105995	Mineral Lease	Cariboo Gold	BGM (100%)	13-Jul-23	13-Jul-25	155.20	

APPENDIX 2: List of Placer Claims and Leases (as of April 30, 2025)

# Title	Title Type	Property	Holder	Issue Date	Good To Date	Area (Ha)	Royalties
560453	Placer Claim	Cariboo Gold	BGM (100%)	11-Jun-07	15-Nov-25	19.43	Osisko Gold Royalties Ltd. (5%)
645923	Placer Claim	Cariboo Gold	BGM (100%)	02-Oct-09	02-Apr-26	19.41	Osisko Gold Royalties Ltd. (5%)
839402	Placer Claim	Cariboo Gold	BGM (100%)	01-Dec-10	31-Dec-25	19.41	Osisko Gold Royalties Ltd. (5%)
1038243	Placer Claim	Cariboo Gold	BGM (100%)	28-Aug-15	26-Aug-25	213.66	Osisko Gold Royalties Ltd. (5%)
1042111	Placer Claim	Cariboo Gold	BGM (100%)	17-Feb-16	13-Oct-25	174.75	Osisko Gold Royalties Ltd. (5%)
1042112	Placer Claim	Cariboo Gold	BGM (100%)	17-Feb-16	13-Oct-25	58.26	Osisko Gold Royalties Ltd. (5%)
1045734	Placer Claim	Cariboo Gold	BGM (100%)	03-Aug-16	03-Aug-25	38.8	Osisko Gold Royalties Ltd. (5%)
1046530	Placer Claim	Cariboo Gold	BGM (100%)	08-Sep-16	08-Sep-25	19.4	Osisko Gold Royalties Ltd. (5%)
1048024	Placer Claim	Cariboo Gold	BGM (100%)	24-Nov-16	24-Nov-25	19.4	Osisko Gold Royalties Ltd. (5%)
1049379	Placer Claim	Cariboo Gold	BGM (100%)	22-Jan-17	22-Jan-26	38.82	Osisko Gold Royalties Ltd. (5%)
1049537	Placer Claim	Cariboo Gold	BGM (100%)	27-Jan-17	27-Jan-26	19.43	Osisko Gold Royalties Ltd. (5%)
1050158	Placer Claim	Cariboo Gold	BGM (100%)	20-Feb-17	20-Feb-26	19.42	Osisko Gold Royalties Ltd. (5%)
1052277	Placer Claim	Cariboo Gold	BGM (100%)	31-May-17	31-May-26	19.41	Osisko Gold Royalties Ltd. (5%)
1052361	Placer Claim	Cariboo Gold	BGM (100%)	04-Jun-17	04-Jun-26	38.8	Osisko Gold Royalties Ltd. (5%)
1052637	Placer Claim	Cariboo Gold	BGM (100%)	18-Jun-17	18-Jun-26	19.42	Osisko Gold Royalties Ltd. (5%)
1055510	Placer Claim	Cariboo Gold	BGM (100%)	13-Oct-17	13-Oct-25	38.8	Osisko Gold Royalties Ltd. (5%)
1055674	Placer Claim	Cariboo Gold	BGM (100%)	20-Oct-17	20-Oct-25	19.42	Osisko Gold Royalties Ltd. (5%)
1057397	Placer Claim	Cariboo Gold	BGM (100%)	02-Jan-18	18-Oct-25	174.78	Osisko Gold Royalties Ltd. (5%)
1058336	Placer Claim	Cariboo Gold	BGM (100%)	06-Feb-18	06-Feb-26	19.42	Osisko Gold Royalties Ltd. (5%)
1058337	Placer Claim	Cariboo Gold	BGM (100%)	06-Feb-18	06-Feb-26	19.43	Osisko Gold Royalties Ltd. (5%)
1063142	Placer Claim	Cariboo Gold	BGM (100%)	16-Sep-18	16-Sep-25	19.41	Osisko Gold Royalties Ltd. (5%)
1063186	Placer Claim	Cariboo Gold	BGM (100%)	19-Sep-18	19-May-26	38.83	Osisko Gold Royalties Ltd. (5%)
1063528	Placer Claim	Cariboo Gold	BGM (100%)	02-Oct-18	02-Oct-25	38.85	Osisko Gold Royalties Ltd. (5%)

# Title	Title Type	Property	Holder	Issue Date	Good To Date	Area (Ha)	Royalties
1063975	Placer Claim	Cariboo Gold	BGM (100%)	22-Oct-18	22-Oct-25	19.41	Osisko Gold Royalties Ltd. (5%)
1064016	Placer Claim	Cariboo Gold	BGM (100%)	24-Oct-18	24-Oct-25	19.41	Osisko Gold Royalties Ltd. (5%)
1064017	Placer Claim	Cariboo Gold	BGM (100%)	24-Oct-18	24-Oct-25	19.42	Osisko Gold Royalties Ltd. (5%)
1064018	Placer Claim	Cariboo Gold	BGM (100%)	24-Oct-18	24-Oct-25	19.41	Osisko Gold Royalties Ltd. (5%)
1067277	Placer Claim	Cariboo Gold	BGM (100%)	17-Mar-19	17-Mar-26	19.42	Osisko Gold Royalties Ltd. (5%)
1067348	Placer Claim	Cariboo Gold	BGM (100%)	20-Mar-19	10-Jan-26	698.63	Osisko Gold Royalties Ltd. (5%)
1068909	Placer Claim	Cariboo Gold	BGM (100%)	04-Jun-19	04-Jun-26	58.31	Osisko Gold Royalties Ltd. (5%)
1072073	Placer Claim	Cariboo Gold	BGM (100%)	23-Oct-19	17-Jul-25	58.23	Osisko Gold Royalties Ltd. (5%)
1072331	Placer Claim	Cariboo Gold	BGM (100%)	01-Nov-19	01-Nov-25	58.32	Osisko Gold Royalties Ltd. (5%)
1072332	Placer Claim	Cariboo Gold	BGM (100%)	01-Nov-19	01-Nov-25	19.43	Osisko Gold Royalties Ltd. (5%)
1072333	Placer Claim	Cariboo Gold	BGM (100%)	01-Nov-19	01-Nov-25	19.44	Osisko Gold Royalties Ltd. (5%)
1072334	Placer Claim	Cariboo Gold	BGM (100%)	01-Nov-19	01-Nov-25	19.43	Osisko Gold Royalties Ltd. (5%)
1072335	Placer Claim	Cariboo Gold	BGM (100%)	01-Nov-19	01-Nov-25	19.44	Osisko Gold Royalties Ltd. (5%)
1072336	Placer Claim	Cariboo Gold	BGM (100%)	01-Nov-19	01-Nov-25	19.44	Osisko Gold Royalties Ltd. (5%)
1072337	Placer Claim	Cariboo Gold	BGM (100%)	01-Nov-19	01-Nov-25	19.43	Osisko Gold Royalties Ltd. (5%)
1072338	Placer Claim	Cariboo Gold	BGM (100%)	01-Nov-19	01-Nov-25	19.43	Osisko Gold Royalties Ltd. (5%)
1074530	Placer Claim	Cariboo Gold	BGM (100%)	11-Feb-20	10-Jan-26	1,340.98	Osisko Gold Royalties Ltd. (5%)
1074531	Placer Claim	Cariboo Gold	BGM (100%)	11-Feb-20	10-Jan-26	873.86	Osisko Gold Royalties Ltd. (5%)
1076725	Placer Claim	Cariboo Gold	BGM (100%)	12-Jun-20	12-Dec-25	19.41	Osisko Gold Royalties Ltd. (5%)
1079815	Placer Claim	Cariboo Gold	BGM (100%)	29-Nov-20	29-Nov-25	19.41	Osisko Gold Royalties Ltd. (5%)
1094668	Placer Claim	Cariboo Gold	BGM (100%)	30-Mar-22	30-Mar-26	19.41	Osisko Gold Royalties Ltd. (5%)
1099731	Placer Claim	Cariboo Gold	BGM (100%)	07-Dec-22	07-Dec-25	38.85	Osisko Gold Royalties Ltd. (5%)
1099735	Placer Claim	Cariboo Gold	BGM (100%)	07-Dec-22	07-Dec-25	19.43	Osisko Gold Royalties Ltd. (5%)
1101383	Placer Claim	Cariboo Gold	BGM (100%)	28-Jan-23	28-Jan-26	19.43	Osisko Gold Royalties Ltd. (5%)

# Title	Title Type	Property	Holder	Issue Date	Good To Date	Area (Ha)	Royalties
1101408	Placer Claim	Cariboo Gold	BGM (100%)	28-Jan-23	28-Jan-26	19.43	Osisko Gold Royalties Ltd. (5%)
1102992	Placer Claim	Cariboo Gold	BGM (100%)	11-Mar-23	11-Mar-26	19.41	Osisko Gold Royalties Ltd. (5%)
514441	Placer Lease	Cariboo Gold	BGM (100%)	13-Jun-05	13-Jun-25	104.8	Osisko Gold Royalties Ltd. (5%)
541435	Placer Lease	Cariboo Gold	BGM (100%)	15-Sep-06	15-Sep-25	24.76	Osisko Gold Royalties Ltd. (5%)
545967	Placer Lease	Cariboo Gold	BGM (100%)	27-Nov-06	27-Nov-26	35.69	Osisko Gold Royalties Ltd. (5%)
367303	Placer Lease	Cariboo Gold	BGM (100%)	05-Feb-99	05-Feb-26	161.77	Osisko Gold Royalties Ltd. (5%)
370373	Placer Lease	Cariboo Gold	BGM (100%)	19-Oct-99	19-Oct-25	46.26	Osisko Gold Royalties Ltd. (5%)
384442	Placer Lease	Cariboo Gold	BGM (100%)	15-May-01	15-May-26	254.86	Osisko Gold Royalties Ltd. (5%)
394333	Placer Lease	Cariboo Gold	BGM (100%)	19-Aug-02	19-Aug-25	518.8	Osisko Gold Royalties Ltd. (5%)
395284	Placer Lease	Cariboo Gold	BGM (100%)	28-Aug-02	28-Aug-25	524.7	Osisko Gold Royalties Ltd. (5%)
396850	Placer Lease	Cariboo Gold	BGM (100%)	20-Jan-03	20-Jan-26	271.1	Osisko Gold Royalties Ltd. (5%)
401340	Placer Lease	Cariboo Gold	BGM (100%)	16-May-03	16-May-23	17	Osisko Gold Royalties Ltd. (5%)
401342	Placer Lease	Cariboo Gold	BGM (100%)	16-May-03	16-May-23	124.55	Osisko Gold Royalties Ltd. (5%)
401442	Placer Lease	Cariboo Gold	BGM (100%)	16-May-03	16-May-23	282.36	Osisko Gold Royalties Ltd. (5%)
404854	Placer Lease	Cariboo Gold	BGM (100%)	24-Nov-03	24-Nov-23	29.1	Osisko Gold Royalties Ltd. (5%)

APPENDIX 3: Crown-Granted Mineral Claims
(as of April 30, 2025)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
023-747-692	BB2009650	4215/55	ADA JANE BRUCE MASON	DAVID JORGENSON, BUSINESSMAN/RESTAURANT OWNER	BARKERVILLE GOLD MINES LTD.	0.20	OGR (5%)
023-747-676	PS36983	4215/55	ADA JANE BRUCE MASON	CHERYL KATHERYN MACARTHY, BUSINESSWOMAN	BARKERVILLE GOLD MINES LTD.	0.21	OGR (5%)
023-677-104	PL8364	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.52	OGR (5%)
023-677-091	PL8363	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.18	OGR (5%)
023-677-074	PL8361	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
023-677-066	PL8360	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
023-677-058	PL8359	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.20	OGR (5%)
023-677-031	PL8357	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.39	OGR (5%)
023-677-023	PL8356	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.30	OGR (5%)
023-677-015	PL8355	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.24	OGR (5%)
023-677-007	PM47667	4215/55	ADA JANE BRUCE MASON	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD. / THE CROWN IN RIGHT OF BRITISH COLUMBIA	1.25	OGR (5%)
023-207-655	CA1027296	4215/55	ADA JANE BRUCE MASON	STANDARD DRILLING & ENGINEERING LTD.	BARKERVILLE GOLD MINES LTD.	0.29	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
018-856-870	CA9850205	4215/55	ADA JANE BRUCE MASON	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.60	OGR (5%)
018-329-705	CA3679841	4215/55	ADA JANE BRUCE MASON	DARYLE WAYNE NESIMUIK, SECURITY GUARD	BARKERVILLE GOLD MINES LTD.	0.39	OGR (5%)
018-329-683	PT14010	4215/55	ADA JANE BRUCE MASON	567093 B.C. LTD. AS TO AN UNDIVIDED 1/2 INTEREST & 567102 B.C. LTD. AS TO AN UNDIVIDED 1/2 INTEREST	BARKERVILLE GOLD MINES LTD.	0.76	OGR (5%)
018-172-792	CA4250001	4215/55	ADA JANE BRUCE MASON	RICHARD THOMAS WRIGHT, AUTHOR	BARKERVILLE GOLD MINES LTD.	0.29	OGR (5%)
014-982-056	PD28740	4215/55	ADA JANE BRUCE MASON	THE LOWHEE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	BARKERVILLE GOLD MINES LTD.	246.00	OGR (5%)
014-543-575	PC37299	4215/55	ADA JANE BRUCE MASON	ERNEST. H. BELLAVANCE & ORPHIR CHARLES BELLAVANCE (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
014-543-567	PC37298	4215/55	ADA JANE BRUCE MASON	ERNEST. H. BELLAVANCE & ORPHIR CHARLES BELLAVANCE (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-914-740	PC21461	4215/55	ADA JANE BRUCE MASON	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	1.32	OGR (5%)
013-900-111	CA6737987	4215/55	ADA JANE BRUCE MASON	NESTEL CONTRACTING LTD.	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-900-064	CA6737986	4215/55	ADA JANE BRUCE MASON	NESTEL CONTRACTING LTD.	BARKERVILLE GOLD MINES LTD.	0.23	OGR (5%)
013-864-653	PS39105	4215/55	ADA JANE BRUCE MASON	ROBERT LISLE BUXTON, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-864-645	PS39106	4215/55	ADA JANE BRUCE MASON	ROBERT LISLE BUXTON, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-864-629	PS39104	4215/55	ADA JANE BRUCE MASON	ROBERT LISLE BUXTON, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-864-611	PS39103	4215/55	ADA JANE BRUCE MASON	ROBERT LISLE BUXTON, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.13	OGR (5%)
013-864-599	CA4717816	4215/55	ADA JANE BRUCE MASON	JACK O CLUBS GENERAL INC.	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
013-840-100	PM29333	4215/55	ADA JANE BRUCE MASON	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	51.14	OGR (5%)
013-840-088	PC20358	4215/55	ADA JANE BRUCE MASON	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	6.25	OGR (5%)
013-839-969	PC20351	4215/55	ADA JANE BRUCE MASON	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.17	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
013-839-951	PC20350	4215/55	ADA JANE BRUCE MASON	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-839-926	PC20184	4215/55	ADA JANE BRUCE MASON	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-839-918	PS39107	4215/55	ADA JANE BRUCE MASON	ROBERT LISLE BUXTON, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-820-354	CA16656	4215/55	ADA JANE BRUCE MASON	BRENDAN MORRIS WOODMAN, BAKER & TERRY ANNE WOODMAN, COMPUTER TECHNICIAN AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-820-346	CA16655	4215/55	ADA JANE BRUCE MASON	BRENDAN MORRIS WOODMAN, BAKER & TERRY ANNE WOODMAN, COMPUTER TECHNICIAN AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-820-338	CA16654	4215/55	ADA JANE BRUCE MASON	BRENDAN MORRIS WOODMAN, BAKER & TERRY ANNE WOODMAN, COMPUTER TECHNICIAN AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
013-820-320	CA16653	4215/55	ADA JANE BRUCE MASON	BRENDAN MORRIS WOODMAN, BAKER & TERRY ANNE WOODMAN, COMPUTER TECHNICIAN AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-820-231	CA16652	4215/55	ADA JANE BRUCE MASON	BRENDAN MORRIS WOODMAN, BAKER & TERRY ANNE WOODMAN, COMPUTER TECHNICIAN AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.55	OGR (5%)
013-817-931	PS39102	4215/55	ADA JANE BRUCE MASON	ROBERT LISLE BUXTON, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.13	OGR (5%)
013-817-680	27591M	4215/55	ADA JANE BRUCE MASON	FREDERICK THOMASSON (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-817-655	19149M	4215/55	ADA JANE BRUCE MASON	FREDERICK W. BECKER (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-817-647	11460M	4215/55	ADA JANE BRUCE MASON	JOSEPH HAROLD SMYTH (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-814-966	PS39101	4215/55	ADA JANE BRUCE MASON	ROBERT LISLE BUXTON, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.27	OGR (5%)
013-813-951	BA89358	4215/55	ADA JANE BRUCE MASON	CHERYL KATHERYN MACCARTHY, BUSINESSWOMAN & DAVID GORDON JORGENSON, BUSINESSMAN AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
013-778-935	CA3662739	4215/55	ADA JANE BRUCE MASON	BRITISH COLUMBIA EMERGENCY HEALTH SERVICES	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
013-778-927	CA3662734	4215/55	ADA JANE BRUCE MASON	BRITISH COLUMBIA EMERGENCY HEALTH SERVICES	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
013-778-919	CA3662725	4215/55	ADA JANE BRUCE MASON	BRITISH COLUMBIA EMERGENCY HEALTH SERVICES	BARKERVILLE GOLD MINES LTD.	0.27	OGR (5%)
012-180-491	PT17982	4215/55	ADA JANE BRUCE MASON	GEORGE WILLIAM HARTFORD, DIAMOND DRILLER	BARKERVILLE GOLD MINES LTD.	0.24	OGR (5%)
008-466-424	PP6789	4215/55	ADA JANE BRUCE MASON	JOY MARGUERITE STEPAN, BUSINESSWOMAN	BARKERVILLE GOLD MINES LTD.	0.29	OGR (5%)
008-466-416	BB3013093	4215/55	ADA JANE BRUCE MASON	HER MAJESTY THE QUEEN IN RIGHT OF CANADA AS REPRESENTED BY THE MINISTER OF PUBLIC SAFETY AND EMERGENCY PREPAREDNESS C/O ROYAL CANADIAN MOUNTED POLICE	BARKERVILLE GOLD MINES LTD.	0.25	OGR (5%)
007-813-678	CA8737090	4215/55	ADA JANE BRUCE MASON	MERIDIAN VENTURES LTD., INC.NO. 1196928	BARKERVILLE GOLD MINES LTD.	0.17	OGR (5%)
007-530-692	BA142314	4215/55	ADA JANE BRUCE MASON	TIMOTHY JOHN HINDSON, PICKER TRUCK SWAMPER	BARKERVILLE GOLD MINES LTD.	1.43	OGR (5%)
007-527-331	CA7206272	4215/55	ADA JANE BRUCE MASON	CHRISTINA ROSE MARIA SCHIEN, SR. BUSINESS SYSTEMS ANALYST & EVELYN CAROLYN WATT, ASSOCIATE DIRECTOR HUMAN RESOURCES AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.92	OGR (5%)
006-787-592	CA3322184	4215/55	ADA JANE BRUCE MASON	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.42	OGR (5%)
006-342-281	Y5870	4215/55	ADA JANE BRUCE MASON	METOD NOVAK, MILLWORKER & MARIA NOVAK, HIS WIFE AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.33	OGR (5%)
010-403-060	PP20687	4215/55, 2517/101	ADA JANE BRUCE MASON (DL 131) / MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING COMPANY LTD.) (DL 391)	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-820-150	PC19612	1036/97, 2517/101	ARCHIBALD MCINTYRE	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
013-820-125	PC19611	1036/97, 2517/101	ARCHIBALD MCINTYRE	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
013-820-117	PC19610	1036/97, 2517/101	ARCHIBALD MCINTYRE	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
031-410-839	CA9850175	1036/97	ARCHIBALD MCINTYRE	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
031-410-821	CA9850164	1036/97	ARCHIBALD MCINTYRE	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
031-410-812	CA9850203	1036/97	ARCHIBALD MCINTYRE	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
031-288-812	CA8702236	1036/97	ARCHIBALD MCINTYRE	DAWN MARIE LEROY, REVENUE CLERK & PHILLIP OLIVER LEROY, PLOW TRUCK DRIVER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
031-288-804	CA8702235	1036/97	ARCHIBALD MCINTYRE	DAWN MARIE LEROY, REVENUE CLERK & PHILLIP OLIVER LEROY, PLOW TRUCK DRIVER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
030-119-731	CA6363142	1036/97	ARCHIBALD MCINTYRE	DAVID GORDON JORGENSON, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.17	OGR (5%)
029-934-532	CA5512752	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.16	OGR (5%)
029-311-161	CA6501520	1036/97	ARCHIBALD MCINTYRE	CHRISTOPHER ROBERT RANDALL, MAINTENANCE-SECURITY	BARKERVILLE GOLD MINES LTD.	0.25	OGR (5%)
028-952-341	BB1500919	1036/97	ARCHIBALD MCINTYRE	MARILYN LEIGH TURNER, CASHIER-HOST	BARKERVILLE GOLD MINES LTD.	0.36	OGR (5%)
028-116-925	WX2103600	1036/97	ARCHIBALD MCINTYRE	KATHLEEN ANNE KINAKIN, PHOTOGRAPHIC RENTALS MANAGER	BARKERVILLE GOLD MINES LTD.	0.22	OGR (5%)
027-312-861	CA670439	1036/97	ARCHIBALD MCINTYRE	PAUL GUIGUET, SURVEYOR	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
027-146-570	BB535428	1036/97	ARCHIBALD MCINTYRE	LYNDA JEAN MOON, BUSINESSWOMAN	BARKERVILLE GOLD MINES LTD.	0.29	OGR (5%)
026-468-891	WX2049866	1036/97	ARCHIBALD MCINTYRE	CAROLINE CONSTANCE BARBARA VON SCHILLING	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
026-468-883	CA6677331	1036/97	ARCHIBALD MCINTYRE	TIM GORDON ARTHUR HURLEY EXECUTOR OF THE WILL OF PATRICIA KATHLEEN CHAUNCEY, DECEASED (CA6677331)	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
025-268-902	PS32266	1036/97	ARCHIBALD MCINTYRE	BRIAN JAMES WEST, SECURITY PATROLMAN	BARKERVILLE GOLD MINES LTD.	0.28	OGR (5%)
024-815-781	PP20686	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.30	OGR (5%)
024-633-321	BV28062	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.53	OGR (5%)
024-633-313	BV280661	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.81	OGR (5%)
024-633-305	BV280660	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	2.09	OGR (5%)
024-577-961	PN30753	1036/97	ARCHIBALD MCINTYRE	GARY ANTHONY CIROTTO, GUIDE & BARBARA ANGELA CIROTTO, HOMEMAKER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.22	OGR (5%)
024-309-231	CA754311	1036/97	ARCHIBALD MCINTYRE	JANE MCDOUGAL ATKINSON, SELF EMPLOYED	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
024-238-635	PM37394	1036/97	ARCHIBALD MCINTYRE	WELLS HOTEL LTD.	BARKERVILLE GOLD MINES LTD.	0.45	OGR (5%)

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023-612-428	CA7445575	1036/97	ARCHIBALD MCINTYRE	CARRIE-LEE DAWNE CHARD, PRODUCTION WORKER & TAMMY DOROTHY GAYLENE CHARD, CUSTODIAL & SPECIAL EVENTS AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.22	OGR (5%)
023-544-970	PN32150	1036/97	ARCHIBALD MCINTYRE	BRADLEY KANE PETER CHUDIAK, BARRISTER AND SOLICITOR & PATRICIA LEAH SCHMIT, BARRISTER AND SOLICITOR AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.38	OGR (5%)
023-437-545	CA589225	1036/97	ARCHIBALD MCINTYRE	PETER NORTH, MUSIC DIRECTOR	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
023-304-626	CA1276916	1036/97	ARCHIBALD MCINTYRE	PHILLIP LEROY, TRUCK DRIVER & DAWN LEROY, REVENUE CLERK	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
023-266-481	CA4347724	1036/97	ARCHIBALD MCINTYRE	DAVID JACOB HARDER, PRODUCER/CURATOR & CARLEIGH CHRISTIANE BRIDGE DREW, MARKETING OFFICER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
023-242-281	CA2162580	1036/97	ARCHIBALD MCINTYRE	KARA ERMINA SONJA HAACK, RETAIL MANAGER	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
023-216-395	PJ39337	1036/97	ARCHIBALD MCINTYRE	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
023-216-387	PJ39336	1036/97	ARCHIBALD MCINTYRE	THE CROWN IN RIGHT OF BRITISH COLUMBIA, AS REPRESENTED BY THE MINISTER OF ENVIRONMENT LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
023-216-271	BB1350286	1036/97	ARCHIBALD MCINTYRE	BRIAN DOUGLAS RUMMEL, SELF EMPLOYED BUSINESSMAN & PATRICIA DONNA ANGELA RUMMEL, SALES CLERK AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
023-213-833	PL42582	1036/97	ARCHIBALD MCINTYRE	S.L.R. DEVELOPMENTS LTD.	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
023-203-935	CA4715819	1036/97	ARCHIBALD MCINTYRE	MANDY DANIELLE KILSBY, CURATOR & DONALD ERNSET ALEXANDER NELSON, ACTOR/MAINTENANCE AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.31	OGR (5%)
023-195-291	CA6750676	1036/97	ARCHIBALD MCINTYRE	JULIE ELLEN BOWLBY, RETIRED	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
023-189-941	CA3934472	1036/97	ARCHIBALD MCINTYRE	WAYNE RANDOLPH HOLMES, PURCHASER & VICKY LYNN HOLMES, HOMEMAKER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
023-080-817	PJ16775	1036/97	ARCHIBALD MCINTYRE	RODGER DAVID BOYCHUK, RETIRED	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)

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019-012-055	CA4109683	1036/97	ARCHIBALD MCINTYRE	ISLAND MOUNTAIN ARTS SOCIETY	BARKERVILLE GOLD MINES LTD.	0.38	OGR (5%)
018-968-635	CA7038884	1036/97	ARCHIBALD MCINTYRE	KARA ERMINA SONJA HAACK, RCMP DISPATCHER	BARKERVILLE GOLD MINES LTD.	0.13	OGR (5%)
018-962-327	CA9077660	1036/97	ARCHIBALD MCINTYRE	MATTHEW CRAWFORD LEES, HR MANAGER & KRISTA RAE WALLACE, SINGER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
018-959-911	CA5417040	1036/97	ARCHIBALD MCINTYRE	SHANE STEPHEN LARSON, BLACKSMITH & ANA MICHELLE LARSON, FLIGHT ATTENDANT AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
018-959-903	CA5249337	1036/97	ARCHIBALD MCINTYRE	RICHARD ANTON WESTERN, SELF EMPLOYED	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
018-959-890	CA5249336	1036/97	ARCHIBALD MCINTYRE	RICHARD ANTON WESTERN, SELF EMPLOYED	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
018-947-824	PJ4417	1036/97	ARCHIBALD MCINTYRE	JODY ANNE HUNTER, GOVERNMENT EMPLOYEE	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
018-847-421	BX202773	1036/97	ARCHIBALD MCINTYRE	KATHLEEN SHARON LANDRY, SELF-EMPLOYED	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
018-847-391	CA4483505	1036/97	ARCHIBALD MCINTYRE	JOHN DAVID PAGET, RETIRED & HEDY TAMLAY CONWRIGHT, NURSE AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
018-847-374	CA5940055	1036/97	ARCHIBALD MCINTYRE	JOEY JAMES CONNOR, HEAVY EQUIPMENT OPERATOR & CANDICE ERIN CONNOR, OFFICE ADMINISTRATOR AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
018-847-366	CA3715088	1036/97	ARCHIBALD MCINTYRE	IAN BRUCE MACDONALD, LOG HOME BUILDER	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
018-847-340	BX36213	1036/97	ARCHIBALD MCINTYRE	BARKERVILLE GOLD MINES LTD.	THE CROWN IN RIGHT OF BRITISH COLUMBIA	0.13	
018-847-331	CA6301440	1036/97	ARCHIBALD MCINTYRE	THOMAS EDWIN COOLEN, AUTOMOTIVE MECHANIC & JENNA MAUREEN COOLEN, HOMEMAKER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.13	OGR (5%)
018-847-323	BB1110089	1036/97	ARCHIBALD MCINTYRE	LINDA ETHEL DAVIS, TEACHER	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
018-847-129	CA4862227	1036/97	ARCHIBALD MCINTYRE	LINDSAY KAY READ, FINANCIAL DIRECTOR	BARKERVILLE GOLD MINES LTD.	0.16	OGR (5%)
018-685-056	CA6190280	1036/97	ARCHIBALD MCINTYRE	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD. / HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	0.36	OGR (5%)
017-971-403	PS7390	1036/97	ARCHIBALD MCINTYRE	ROBERT LISLE BUXTON, CHARTERED ACCOUNTANT	BARKERVILLE GOLD MINES LTD.	0.37	OGR (5%)

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016-234-871	CA4986782	1036/97	ARCHIBALD MCINTYRE	JANET LYNN AITKEN, CUSTOMER SERVICE & JOHN BARRETT AITKEN, PUBLIC WORKS SUPERINTENDENT AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
016-234-863	CA6887422	1036/97	ARCHIBALD MCINTYRE	SAMANTHA JOYCE ROGERS CONTRACTOR & GEORGE EDWARD ROGERS, MINER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
016-122-691	CA784202	1036/97	ARCHIBALD MCINTYRE	MARK DAVID DAWSON, PERFORMING ARTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
015-810-194	PP20693	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
015-810-186	PP20694	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
015-332-438	8407M	1036/97	ARCHIBALD MCINTYRE	THE LOWHEE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY) (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	205.72	OGR (5%)
014-998-211	PJ8473	1036/97	ARCHIBALD MCINTYRE	AMBRUS LOGGING LTD.	BARKERVILLE GOLD MINES LTD.	34.33	OGR (5%)
013-820-206	PC19614	1036/97	ARCHIBALD MCINTYRE	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
013-820-184	PC19613	1036/97	ARCHIBALD MCINTYRE	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
013-820-036	PC19616	1036/97	ARCHIBALD MCINTYRE	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	1.50	OGR (5%)
013-817-817	CA8915858	1036/97	ARCHIBALD MCINTYRE	DANIEL MICHAEL LORNE SERVICE, MECHANIC	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
013-817-710	CA6668811	1036/97	ARCHIBALD MCINTYRE	TERESITA ESTRADA BOPP, TEACHER	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
013-816-098	PG32297	1036/97	ARCHIBALD MCINTYRE	ARTHUR JAMES OLSON, TRUCK DRIVER	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
013-789-571	PC19512	1036/97	ARCHIBALD MCINTYRE	VICTOR KARL BOPP, DISTRICT PARTS MANAGER & VICTOR KARL BOPP, DISTRICT PARTS MANAGER TERISITA BOPP, HIS WIFE AS JOINT TENANTS (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
013-789-546	CA4130472	1036/97	ARCHIBALD MCINTYRE	CATRINA ISABELL PENROSE, CHAMBERMAID & COLLEEN ISABELL PENROSE, RETIRED & BARRY WILLFORD, RETIRED AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)

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013-789-520	CA4130471	1036/97	ARCHIBALD MCINTYRE	CATRINA ISABELL PENROSE, CHAMBERMAID & COLLEEN ISABELL PENROSE, RETIRED & BARRY WILLFORD, RETIRED AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
013-779-281	PC19453	1036/97	ARCHIBALD MCINTYRE	MURIAL QUIRING, HEATHER CORNFIELD & FLORENCE IONE JONES (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
013-779-265	PC19452	1036/97	ARCHIBALD MCINTYRE	MURIAL QUIRING, HEATHER CORNFIELD & FLORENCE IONE JONES (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
013-779-249	PC19451	1036/97	ARCHIBALD MCINTYRE	MURIAL QUIRING, HEATHER CORNFIELD & FLORENCE IONE JONES (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
013-779-133	CA1259383	1036/97	ARCHIBALD MCINTYRE	JOSEPH WILLIAM MARTIN JOHNSON, SOCIAL WORKER AS TO AN UNDIVIDED 1/3 INTEREST & LEAH MARTIN, SOCIAL WORKER AS TO AN UNDIVIDED 1/3 INTEREST & JOSHUA JEREMY TROTTER-WANNER, ENGINEER AS TO AN UNDIVIDED 1/3 INTEREST	BARKERVILLE GOLD MINES LTD.	0.25	OGR (5%)
013-779-117	CA1259384	1036/97	ARCHIBALD MCINTYRE	JOSEPH WILLIAM MARTIN JOHNSON, SOCIAL WORKER AS TO AN UNDIVIDED 1/3 INTEREST & LEAH MARTIN, SOCIAL WORKER AS TO AN UNDIVIDED 1/3 INTEREST & JOSHUA JEREMY TROTTER-WANNER, ENGINEER AS TO AN UNDIVIDED 1/3 INTEREST	BARKERVILLE GOLD MINES LTD.	0.25	OGR (5%)
013-778-374	BB419321	1036/97	ARCHIBALD MCINTYRE	HEDY TAMLAY CONWRIGHT, REGISTERED NURSE	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
013-778-366	CA9229300	1036/97	ARCHIBALD MCINTYRE	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
013-778-358	CA6779575	1036/97	ARCHIBALD MCINTYRE	KSENYA ANN DORWART, COMMUNITY OUTREACH MANAGER	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
013-778-340	CA3359504	1036/97	ARCHIBALD MCINTYRE	ERIN LEE DE ZWART, MENTAL HEALTH WORKER & MARY LEAH DE ZWART, RETIRED AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
013-714-791	FB512633	1036/97	ARCHIBALD MCINTYRE	JACK O CLUBS GENERAL INC.	BARKERVILLE GOLD MINES LTD.	1.26	OGR (5%)
013-229-133	PJ19357	1036/97	ARCHIBALD MCINTYRE	WILLIAM HUGH ALEXANDER HORNE, ARTIST & CLAIRE MARIA KUJUNDZIC, ARTIST AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.17	OGR (5%)

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013-176-889	PC7350	1036/97	ARCHIBALD MCINTYRE	THOMAS CHARLES HATTON, PLACER MINER & JUDITH JEAN MOORING, FIRST AID ATTENDANT AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.35	OGR (5%)
013-176-871	PC7349	1036/97	ARCHIBALD MCINTYRE	THOMAS CHARLES HATTON, PLACER MINER & JUDITH JEAN MOORING, FIRST AID ATTENDANT AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
013-176-854	PC7348	1036/97	ARCHIBALD MCINTYRE	THOMAS CHARLES HATTON, PLACER MINER & JUDITH JEAN MOORING, FIRST AID ATTENDANT AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.35	OGR (5%)
012-572-306	PH30389	1036/97	ARCHIBALD MCINTYRE	SHARON PATRICIA STREICEK, HOMEMAKER (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.33	OGR (5%)
011-970-022	CA5969432	1036/97	ARCHIBALD MCINTYRE	EDWARD ALLAN TIPMAN, ENGINEER & MARIANNE TIPMAN, RETIRED AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
011-279-192	BB783081	1036/97	ARCHIBALD MCINTYRE	THE BITRAD INTERNATIONAL GROUP CORPORATION	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
011-095-326	PB21723	1036/97	ARCHIBALD MCINTYRE	BRITISH COLUMBIA TELEPHONE COMPANY	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
011-095-300	PB21722	1036/97	ARCHIBALD MCINTYRE	BRITISH COLUMBIA TELEPHONE COMPANY	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
011-095-261	CA2913103	1036/97	ARCHIBALD MCINTYRE	DARYLE WAYNE NESIMUIK, SECURITY GUARD	BARKERVILLE GOLD MINES LTD.	0.27	OGR (5%)
011-095-245	CA2913104	1036/97	ARCHIBALD MCINTYRE	DARYLE WAYNE NESIMUIK, SECURITY GUARD	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-095-237	CA2913105	1036/97	ARCHIBALD MCINTYRE	DARYLE WAYNE NESIMUIK, SECURITY GUARD	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
011-095-211	PG34020	1036/97	ARCHIBALD MCINTYRE	RODGER DAVID BOYCHUK, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
011-095-199	PG34021	1036/97	ARCHIBALD MCINTYRE	RODGER DAVID BOYCHUK, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.03	OGR (5%)
011-095-181	PG34022	1036/97	ARCHIBALD MCINTYRE	RODGER DAVID BOYCHUK, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
011-095-148	CA1552305	1036/97	ARCHIBALD MCINTYRE	MARK RIMMINGTON NORMAN, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
011-095-113	CA1552304	1036/97	ARCHIBALD MCINTYRE	MARK RIMMINGTON NORMAN, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
011-094-630	BV270444	1036/97	ARCHIBALD MCINTYRE	KAREN JENNIFER JEFFERY, HOMEMAKER	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
011-094-613	BV270443	1036/97	ARCHIBALD MCINTYRE	KAREN JENNIFER JEFFERY, HOMEMAKER	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
011-094-583	BV270442	1036/97	ARCHIBALD MCINTYRE	KAREN JENNIFER JEFFERY, HOMEMAKER	BARKERVILLE GOLD MINES LTD.	0.22	OGR (5%)
011-094-532	PP20690	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)

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011-094-516	PP20689	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
011-047-542	CA586990	1036/97	ARCHIBALD MCINTYRE	ROBERT ANDREW HAMILTON, SELF EMPLOYED	BARKERVILLE GOLD MINES LTD.	0.13	OGR (5%)
011-047-526	CA2340860	1036/97	ARCHIBALD MCINTYRE	FAITH MOOSANG, ARTIST	BARKERVILLE GOLD MINES LTD.	0.17	OGR (5%)
011-047-518	CA7014671	1036/97	ARCHIBALD MCINTYRE	SHAYNA DAWN FERGUSON, JANITOR & AUSTIN REED FREDERICK, EQUIPMENT OPERATOR	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
011-047-500	BW109803	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.32	OGR (5%)
011-047-470	PL47763	1036/97	ARCHIBALD MCINTYRE	BARBARA AUDREY SCHMODE, COOK	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
011-047-461	CA2024968	1036/97	ARCHIBALD MCINTYRE	KAREN JEFFERY, THEATRE PRODUCER AS TO AN UNDIVIDED 99/100 INTEREST & DAVID JEFFERY, RETIRED AS TO AN UNDIVIDED 1/100 INTEREST	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-047-453	PP20688	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
011-047-411	PJ47181	1036/97	ARCHIBALD MCINTYRE	THE CROWN IN RIGHT OF BRITISH COLUMBIA REPRESENTED BY THE MINISTER OF ENVIRONMENT, LANDS AND PARKS	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
011-047-399	CA8464066	1036/97	ARCHIBALD MCINTYRE	DONNA MERLE WILLIAMS, HEAD OF MUSIC	BARKERVILLE GOLD MINES LTD.	0.17	OGR (5%)
011-047-348	CA7065170	1036/97	ARCHIBALD MCINTYRE	IAN JAMES DOUGLAS, DISABLED & ELIZABETH CLAIRE ISAAC, RETIRED AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
011-047-330	PB25618	1036/97	ARCHIBALD MCINTYRE	ISLAND MOUNTAIN ARTS SOCIETY	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
011-047-305	T11197, T9510	1036/97	ARCHIBALD MCINTYRE	ROBERT WALLACE ERIC NORTH, BUSINESSMAN AS TO AN UNDIVIDED 1/2 INTEREST (FORFEITED TO CROWN) & JAMES KENDALL SHIELDS, SHIPPER RECEIVER) AS TO AN UNDIVIDED 1/2 INTEREST (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
011-047-267	PN36895	1036/97	ARCHIBALD MCINTYRE	KAREN JENNIFER PLANDEN, EXECUTIVE ARTISTIC DIRECTOR	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
011-047-259	S27810	1036/97	ARCHIBALD MCINTYRE	TREVOR BRADLEY DAVIES, FALLER	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
011-047-241	68931M	1036/97	ARCHIBALD MCINTYRE	SHELAGH CAROL MATHEWS (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
011-047-232	16118M	1036/97	ARCHIBALD MCINTYRE	GEORGE CHARNQUIST AS TO AN UNDIVIDED 1/2 INTEREST (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)

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011-047-224	27825M	1036/97	ARCHIBALD MCINTYRE	MAXWELL ARTHUR ANSLEY (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-047-208	R31537	1036/97	ARCHIBALD MCINTYRE	DARLEEN MARY MCLENNAN, HOUSEWIFE (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
011-047-194	17436M	1036/97	ARCHIBALD MCINTYRE	EDWARD PIKE (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-047-160	BB365920	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.04	OGR (5%)
011-047-151	CA10179	1036/97	ARCHIBALD MCINTYRE	WILLIAM IAN RUMMEL, SELF-EMPLOYED	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
011-047-143	BB629960	1036/97	ARCHIBALD MCINTYRE	GARY WAYNE FIEGEHEN, PHOTOGRAPHER	BARKERVILLE GOLD MINES LTD.	0.05	OGR (5%)
011-047-135	CA5807889	1036/97	ARCHIBALD MCINTYRE	PETER JOHN CORBETT, FISH BIOLOGIST	BARKERVILLE GOLD MINES LTD.	0.04	OGR (5%)
011-047-119	PC28252	1036/97	ARCHIBALD MCINTYRE	MICHAEL DUANE DEWEESE, MINER & MARION DEWEESE, SECRETARY AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-047-101	PG47433	1036/97	ARCHIBALD MCINTYRE	CATHERINE GARNETT, SPEECH LANGUAGE PATHOLOGIST	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
011-025-514	CA425359	1036/97	ARCHIBALD MCINTYRE	ANTHONY JOSEPH MCDONALD, QUESNEL SR. GOLF CHAMPION & DEANNA JOAN WINDSOR, GIS ANALYST AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-025-395	PM2898A	1036/97	ARCHIBALD MCINTYRE	THE CROWN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-025-361	BB225529	1036/97	ARCHIBALD MCINTYRE	NORMA ELIZABETH JEE, TEACHER & HELMUTH RUDOLF EWERT, SELF EMPLOYED BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
011-025-255	CA670589	1036/97	ARCHIBALD MCINTYRE	LORI ANN CARIFELLE, PROGRAM DIRECTOR & DWAYNE MICHAEL SALES, LOGGER AS TO AN UNDIVIDED 1/2 INTEREST AS JOINT TENANTS AND KARA TALULAH CARIFELLE, NURSERY WORKER & DARYL RAYMOND NELSON, MILLWORKER AS TO AN UNDIVIDED 1/2 INTEREST AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
011-025-221	027726	1036/97	ARCHIBALD MCINTYRE	MARJORIE NEEDS, BUSINESSWOMAN (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-025-182	CA7139136	1036/97	ARCHIBALD MCINTYRE	BRENDAN JAMES BAILEY, SELF-EMPLOYED	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-024-941	R39682	1036/97	ARCHIBALD MCINTYRE	THOMAS NEIL VANT, CLERGYMAN	BARKERVILLE GOLD MINES LTD.	0.16	OGR (5%)
011-024-925	CA7413903	1036/97	ARCHIBALD MCINTYRE	CAROLINE RUTH ZINZ, ARCHIVIST	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)

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011-024-895	PN39701	1036/97	ARCHIBALD MCINTYRE	THOMAS NEIL VANT, MANAGER	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-024-887	CA2758497	1036/97	ARCHIBALD MCINTYRE	STEWART LLOYD SCOTT MOTTERAM, SILVACULTURIST	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-024-879	BB1341717	1036/97	ARCHIBALD MCINTYRE	ROBERT ANDREW HAMILTON, HISTORICAL INTERPRETER	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
011-024-861	BB1965670	1036/97	ARCHIBALD MCINTYRE	JOHN ROBERT RAINEY, MECHANIC & MELANIE ANN RAINEY, SELF EMPLOYED AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
011-024-721	PG30879	1036/97	ARCHIBALD MCINTYRE	DOROTHEA LYNETTE FUNK, RADIO ANNOUNCER	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-024-712	CA562166	1036/97	ARCHIBALD MCINTYRE	RICHARD NESS EZOWSKI, BUSINESSMAN & NADIA EZOWSKI, BUSINESSWOMAN AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-024-542	N22940	1036/97	ARCHIBALD MCINTYRE	JULES PAUL GUIGUET, MINING TECHNOLOGIST	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-023-180	BV280666	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
011-023-171	BV280665	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-023-163	BV280664	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
011-023-155	BV280663	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
011-022-922	PP20691	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
010-450-092	64053M	1036/97	ARCHIBALD MCINTYRE	HENRY WANNER (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
008-406-766	CA6435401	1036/97	ARCHIBALD MCINTYRE	CAPRI MARIA ASPE, HEAVY EQUIPMENT OPERATOR & JEFFERY BERNARD WANNOP, GEOLOGIST AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
008-406-723	CA6435387	1036/97	ARCHIBALD MCINTYRE	CAPRI MARIA ASPE, HEAVY EQUIPMENT OPERATOR & JEFFERY BERNARD WANNOP, GEOLOGIST AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.13	OGR (5%)
007-789-939	CA1385835	1036/97	ARCHIBALD MCINTYRE	GREGORY NORMAN SOUW, CAMP GROUND ATTENDANT	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
007-789-891	Y25816	1036/97	ARCHIBALD MCINTYRE	RONALD MARTIN YOUNG, PHOTOGRAPHER	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
006-911-765	PM7978	1036/97	ARCHIBALD MCINTYRE	JULIA HENRIETTA WHEATLEY, ATTENDANT	BARKERVILLE GOLD MINES LTD.	0.23	OGR (5%)
006-816-118	CA9405747	1036/97	ARCHIBALD MCINTYRE	WELLS-BARKERVILLE COMMUNITY FOREST LTD.	BARKERVILLE GOLD MINES LTD.	1.30	OGR (5%)
006-816-070	CA1997684	1036/97	ARCHIBALD MCINTYRE	ISLAND MOUNTAIN ARTS SOCIETY	BARKERVILLE GOLD MINES LTD.	1.12	OGR (5%)

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006-816-045	CA5970174	1036/97	ARCHIBALD MCINTYRE	MANDELA WANI, PRODUCTION WORKER	BARKERVILLE GOLD MINES LTD.	1.07	OGR (5%)
006-816-002	N12139	1036/97	ARCHIBALD MCINTYRE	RODGER BOYCHUK, HANDYMAN	BARKERVILLE GOLD MINES LTD.	1.12	OGR (5%)
006-773-931	CA9231853	1036/97	ARCHIBALD MCINTYRE	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.27	OGR (5%)
006-455-476	PL66224	1036/97	ARCHIBALD MCINTYRE	STEPHEN JOHN OLIVER, LAWYER & ANN BROOKS OLIVER, BOOKKEEPER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
006-455-468	PL66223	1036/97	ARCHIBALD MCINTYRE	STEPHEN JOHN OLIVER, LAWYER & ANN BROOKS OLIVER, BOOKKEEPER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
006-455-417	PL66222	1036/97	ARCHIBALD MCINTYRE	STEPHEN JOHN OLIVER, LAWYER & ANN BROOKS OLIVER, BOOKKEEPER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.30	OGR (5%)
006-455-395	PL66221	1036/97	ARCHIBALD MCINTYRE	STEPHEN JOHN OLIVER, LAWYER & ANN BROOKS OLIVER, BOOKKEEPER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.30	OGR (5%)
006-342-418	CA2925850	1036/97	ARCHIBALD MCINTYRE	CLIFFORD CECIL COLLINS, SELF-EMPLOYED & NORMA JEAN COLLINS, SELF-EMPLOYED AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
006-261-477	CA8221260	1036/97	ARCHIBALD MCINTYRE	JILLIAN LEAH MERRICK, MUSEUM MANAGER	BARKERVILLE GOLD MINES LTD.	0.23	OGR (5%)
005-856-931	PE30745	1036/97	ARCHIBALD MCINTYRE	WELLS RECREATION SOCIETY, INC.	BARKERVILLE GOLD MINES LTD.	1.00	OGR (5%)
005-761-620	CA6891406	1036/97	ARCHIBALD MCINTYRE	MIA ANGELA CIROTTO, EDUCATION ASSISTANT	BARKERVILLE GOLD MINES LTD.	1.00	OGR (5%)
005-657-512	PP20692	1036/97	ARCHIBALD MCINTYRE	DISTRICT OF WELLS	BARKERVILLE GOLD MINES LTD.	4.01	OGR (5%)
005-042-551	PM21600	1036/97	ARCHIBALD MCINTYRE	JOHN ROBERT BYRNS, BUSINESSMAN & ROBERT GIBB, BUSINESSMAN AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	1.00	OGR (5%)
004-885-635	CA1552303	1036/97	ARCHIBALD MCINTYRE	MARK RIMMINGTON NORMAN, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
004-885-627	CA1552302	1036/97	ARCHIBALD MCINTYRE	MARK RIMMINGTON NORMAN, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
004-820-860	PK38330	1036/97	ARCHIBALD MCINTYRE	ROBERT BLAINE RUMMEL, SELF EMPLOYED & LINDA MADELINE RUMMEL, TEACHER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
004-820-851	PK38329	1036/97	ARCHIBALD MCINTYRE	ROBERT BLAINE RUMMEL, SELF EMPLOYED & LINDA MADELINE RUMMEL, TEACHER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
004-800-079	BB693105	1036/97	ARCHIBALD MCINTYRE	TYLER BRIAN DOERKSEN, FORESTRY TECHNICIAN	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
004-595-424	CA6719840	1036/97	ARCHIBALD MCINTYRE	DANIELLE LYNN CLOUTIER, GEOTECHNICIAN	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)

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004-595-416	CA6719839	1036/97	ARCHIBALD MCINTYRE	DANIELLE LYNN CLOUTIER, GEOTECHNICIAN	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
004-300-840	CA6335205	1036/97	ARCHIBALD MCINTYRE	ELLEN IRENE JOAN PARTNOY, HEAVY DUTY MECHANIC	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
004-187-041	CA5292798	1036/97	ARCHIBALD MCINTYRE	BRIAN CAMERON LEWIS, TECHNICIAN & MURRY RUSSEL KRAUSE, EXECUTIVE DIRECTOR AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
004-183-878	PT14262	1036/97	ARCHIBALD MCINTYRE	TAMMY MICHELE BROWN, GRAPHIC DESIGNER	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
004-133-188	CA9149300	1036/97	ARCHIBALD MCINTYRE	ROCKY JAMES NENKA, COMMERCE LEAD & TYLER FRANCIS MACDONALD BURNSON, ADMINISTRATOR AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
004-133-170	CA9149299	1036/97	ARCHIBALD MCINTYRE	ROCKY JAMES NENKA, COMMERCE LEAD & TYLER FRANCIS MACDONALD BURNSON, ADMINISTRATOR AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
003-834-085	CA5843285	1036/97	ARCHIBALD MCINTYRE	ANTHONY TRENT RADELET, LEAD CORE CUTTER & HOLLY ELIZABETH MCRAE, CORE CUTTER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.15	OGR (5%)
013-818-635	PC19615	1036/97, 2517/101	ARCHIBALD MCINTYRE (DL289), MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD. (DL391)	THE SOUTH WELLS DEVELOPMENT COMPANY LIMITED (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.07	OGR (5%)
013-700-863	PC17214	8772/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	33.76	OGR (5%)
013-700-847	PC17213	8771/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	19.60	OGR (5%)
013-700-839	PC17212	8770/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	47.37	OGR (5%)
013-700-812	PC17211	8769/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	38.10	OGR (5%)
013-700-880	PC17216	8768/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	27.08	OGR (5%)

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013-700-871	PC17215	8767/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	36.41	OGR (5%)
015-282-163	31938M	8766/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	13.03	OGR (5%)
015-360-211	PD703	8765/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	33.95	OGR (5%)
015-360-202	PD704	8764/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	36.07	OGR (5%)
015-360-172	PD705	8763/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	25.30	OGR (5%)
015-359-891	PD706	8762/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	42.64	OGR (5%)
015-359-786	PD707	8761/858	BARKERVILLE MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	26.53	OGR (5%)
013-699-709	PC17217	461/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	26.04	OGR (5%)
013-700-162	PC17222	428/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	24.80	OGR (5%)
013-699-903	PC17221	427/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	43.42	OGR (5%)
013-699-822	PC17220	426/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	32.23	OGR (5%)
013-699-784	PC17219	425/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	42.15	OGR (5%)

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013-699-733	PC17218	424/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.64	OGR (5%)
013-699-695	PC17204	423/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
013-699-652	PC17203	422/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
013-699-598	PC17202	421/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	40.89	OGR (5%)
013-699-253	PC17191	420/675	CARIBOO AMALGAMATED GOLD MINES LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	9.50	OGR (5%)
015-360-971	PD718	1193/682	CARIBOO CONSOLIDATED MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	39.83	OGR (5%)
015-361-225	PD717	1192/682	CARIBOO CONSOLIDATED MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	18.66	OGR (5%)
015-361-233	PD716	1191/682	CARIBOO CONSOLIDATED MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	30.10	OGR (5%)
015-361-276	PD715	1190/682	CARIBOO CONSOLIDATED MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	45.17	OGR (5%)
015-361-322	PD714	1189/682	CARIBOO CONSOLIDATED MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	31.76	OGR (5%)

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015-361-373	PD713	1188/682	CARIBOO CONSOLIDATED MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	7.02	OGR (5%)
015-361-403	PD712	1187/682	CARIBOO CONSOLIDATED MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	37.62	OGR (5%)
015-307-425	PC58826	3302/504	CHARLES JOHN SEYMOUR BAKER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.21	OGR (5%), Franco Nevada (3%)
015-307-000	PC58825	3301/504	CHARLES JOHN SEYMOUR BAKER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.14	OGR (5%), Franco Nevada (3%)
015-307-751	PC58829	3300/503	CHARLES JOHN SEYMOUR BAKER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.30	OGR (5%), Franco Nevada (3%)
015-307-743	PC58828	3299/503	CHARLES JOHN SEYMOUR BAKER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.19	OGR (5%), Franco Nevada (3%)
015-307-727	PC58827	3298/503	CHARLES JOHN SEYMOUR BAKER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	48.92	OGR (5%), Franco Nevada (3%)
006-411-215	Y6523	2188/792	DALBY B. MORKILL	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	43.54	OGR (5%)
006-411-193	Y6522	2187/792	DALBY B. MORKILL	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	44.16	OGR (5%)
006-411-070	Y6521	2186/792	DALBY B. MORKILL	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	49.76	OGR (5%)
006-410-987	Y6520	2185/792	DALBY B. MORKILL	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	27.63	OGR (5%)
024-954-527	FB488576	3417/306	FRANK W. KIBBEE	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	2.56	OGR (5%)

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015-939-375	PD15662	9497/665	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	39.34	OGR (5%)
015-939-324	PD15661	9497/665	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	39.29	OGR (5%)
015-292-312	11510M	9496/665	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	35.78	OGR (5%)
015-939-197	11509M	9495/665	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	49.08	OGR (5%)
015-939-278	PD15660	9494/665	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	29.90	OGR (5%)
015-939-251	PD15660	9494/665	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	29.82	OGR (5%)
015-939-201	11508M	9493/665	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	31.72	OGR (5%)
015-291-481	12079M	389/674	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	21.68	OGR (5%)
015-291-413	12077M	388/674	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	33.15	OGR (5%)
015-291-391	12076M	387/674	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	31.39	OGR (5%)
015-292-509	12075M	386/674	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	47.11	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
015-289-681	CA4347921	385/674	FREDERICK JAMES TREGILLUS	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	20.22	OGR (5%)
013-614-941	PC17398	2882/799	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	26.14	OGR (5%)
013-724-541	PC18149	216/673	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	47.78	OGR (5%)
013-724-631	PC18148	215/673	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	29.08	OGR (5%)
015-292-304	11956M	214/673	FREDERICK JAMES TREGILLUS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	35.46	OGR (5%)
015-939-243	PD15664	9498/665	FREDERICK JAMES TREGILLUS AND ALBERT JAMES BLAIR	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	4.61	OGR (5%)
015-939-235	PD15663	9498/665	FREDERICK JAMES TREGILLUS AND THOMAS ALBERT BLAIR	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	4.69	OGR (5%)
015-291-537	12080M	383/674	FREDERICK JAMES TREGILLUS AND THOMAS ALBERT BLAIR	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	2.16	OGR (5%)
015-384-586	12073M	382/674	FREDERICK JAMES TREGILLUS AND THOMAS ALBERT BLAIR	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	42.49	OGR (5%)
004-056-710	CA6623323	1F/34	GEORGE TRUMAN, GEORGE W. ROBINSON, FELIX NEUFELDER, A. COUTTS, JOHN JORDAN,	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	36.20	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
			FREDERICK STERITRY AND P. MANETTA				
004-086-872	PT5233, PC16246	20F/34	HILAIRE MOLLEUR, ANGELO PENDOLA, OLIVIER D'ARPENTIGNY AND ALEXANFDER GARANT	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	35.91	OGR (5%)
013-724-533	PC18150	8910/760	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	23.80	OGR (5%), Franco Nevada (3%)
015-292-096	19027M	8396/754	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	6.35	OGR (5%), Franco Nevada (3%)
013-699-326	PC17193	8323/654	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	14.16	OGR (5%)
015-292-045	12368M	790/678	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	49.17	OGR (5%), Franco Nevada (3%)
015-292-347	9756M	6437/635	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	19.16	OGR (5%), Franco Nevada (3%)
015-292-274	9758M	6436/635	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	43.33	OGR (5%), Franco Nevada (3%)
015-292-363	9757M	6435/635	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	31.78	OGR (5%), Franco Nevada (3%)
015-342-824	PD349	6434/635	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	49.36	OGR (5%), Franco Nevada (3%)
015-342-778	PD348	6433/635	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	44.60	OGR (5%), Franco Nevada (3%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
013-708-066	PC17251	5989/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	15.49	OGR (5%)
013-708-058	PC17250	5988/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	19.32	OGR (5%)
013-708-023	PC17249	5988/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	19.32	OGR (5%)
013-707-965	PC17248	5987/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	4.63	OGR (5%)
013-708-210	PC17246	5986/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	29.56	OGR (5%)
013-708-198	PC17244	5985/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	2.79	OGR (5%)
013-708-180	PC17243	5984/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	46.32	OGR (5%)
013-708-171	PC17242	5984/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	46.31	OGR (5%)
013-708-163	PC17241	5983/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	44.80	OGR (5%)
013-708-155	PC17240	5983/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	44.80	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
013-708-139	PC17239	5982/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	32.52	OGR (5%)
017-164-923	PC17236	5981/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.68	OGR (5%)
013-708-121	PC17235	5980/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	34.76	OGR (5%)
013-708-112	PC17234	5979/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	45.11	OGR (5%)
013-708-104	PC17233	5978/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	37.95	OGR (5%)
013-708-091	PC17232	5977/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	49.75	OGR (5%)
013-700-791	PC17210	5976/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	46.64	OGR (5%)
013-700-758	PC17209	5975/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	45.38	OGR (5%)
013-700-740	PC17208	5974/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	25.22	OGR (5%)
013-700-731	PC17207	5973/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	24.33	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
013-700-715	PC17206	5972/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	34.63	OGR (5%)
013-707-906	PC17231	5323/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.71	OGR (5%)
013-707-850	PC17230	5322/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.49	OGR (5%)
013-708-236	PC17238	5321/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	38.40	OGR (5%)
013-708-228	PC17237	5320/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	38.40	OGR (5%)
013-707-914	PC17247	5320/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	35.21	OGR (5%)
013-707-892	PC17229	5319/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	4.17	OGR (5%)
013-707-922	PC17228	5318/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	26.61	OGR (5%)
013-707-884	PC17227	5317/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	38.13	OGR (5%)
013-707-876	PC17226	5316/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.11	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
013-708-074	PC17225	5315/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	48.22	OGR (5%)
013-707-868	PC17224	5314/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.09	OGR (5%)
008-218-803	CA3393918	5313/624 (U), 5763/628 (S)	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	30.05	OGR (5%)
005-537-541	CA9850196	5313/624 (U), 5763/628 (S)	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	1.00	OGR (5%)
013-700-367	PC17223	5312/624	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
016-016-114	15203M	4609/717	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	13.37	OGR (5%), Franco Nevada (3%)
016-563-051	13460M	2686/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	18.50	OGR (5%), Franco Nevada (3%)
016-562-895	13459M	2685/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	4.83	OGR (5%), Franco Nevada (3%)
015-291-839	13458M	2684/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	29.87	OGR (5%), Franco Nevada (3%)
015-343-634	PD456	2683/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	50.80	OGR (5%), Franco Nevada (3%)

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010-422-862	PB12572	2683/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	50.80	OGR (5%), Franco Nevada (3%)
015-291-812	13456M	2682/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.62	OGR (5%), Franco Nevada (3%)
015-291-804	13455M	2681/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	20.29	OGR (5%), Franco Nevada (3%)
015-291-791	13454M	2680/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	20.31	OGR (5%), Franco Nevada (3%)
015-291-766	13453M	2679/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%), Franco Nevada (3%)
015-291-723	13452M	2678/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	46.66	OGR (5%), Franco Nevada (3%)
015-291-685	13451M	2677/697	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	48.47	OGR (5%), Franco Nevada (3%)
013-708-201	PC17245	5986/630	ISLAND MOUNTAIN MINES COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	29.56	OGR (5%)
015-300-226	CA9850174	2099/1091	JAMES THOMAS WATT	BARKERVILLE GOLD MINES LTD.	NONE	1.60	
004-078-632	CA9850189	5F/34	JOHN BOWRON, DANIEL CAREY, ANDREW FLETCHER, WESLEY HALL, WILLIAM JEFFARES, JOHN MCALISTER, DONALD MCEWEN, ARCHIBALD MCNAUGHTON, JOHN MUNROE, ALEXANDER MUNROE AND FELIX NEUFELDER	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	47.30	OGR (5%)

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004-086-902	PT5234, PC16247	30F/34	JOHN LAUYON, MICHAEL DRISCOLL AND WILLIAM P. WILLIAMS	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	5.32	OGR (5%)
015-038-688	W21719	3268/154	JOHN PINKERTON	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	36.92	OGR (5%)
015-286-649	S28511	3925/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.07	OGR (5%)
005-910-595	Y1636	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-552	Y1635	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-412	Y1634	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-391	Y1633	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-293	Y1632	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-277	Y1631	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.01	OGR (5%)
005-910-188	Y1630	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-161	Y1629	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)

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005-910-153	Y1628	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-137	Y1627	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.04	OGR (5%)
005-910-111	Y1626	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-099	Y1625	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-048	Y1623	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-910-021	Y1622	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-909-953	Y1609	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-909-911	Y1608	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-909-881	Y1607	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-909-864	Y1606	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-909-813	Y1605	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)

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005-890-519	S28504	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
005-890-471	S28507	3922/510	LAURENT MULLER	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.14	OGR (5%)
004-056-752	CA4347922	32F/34	LEWIS WINTRIP	BARKERVILLE GOLD MINES LTD.	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	82.23	
026-025-906	BB1991819	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.38	OGR (5%)
024-317-497	PS24541	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	STEPHEN EMANUEL MARKS, CONSULTANT	BARKERVILLE GOLD MINES LTD.	0.44	OGR (5%)
019-209-495	PJ13778	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	ROYAL CANADIAN LEGION (PACIFIC) WELLS AND DISTRICT #128	BARKERVILLE GOLD MINES LTD.	0.37	OGR (5%)
019-184-204	PT15157	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	LEVERNE HELEN RAY, BUSINESSWOMAN	BARKERVILLE GOLD MINES LTD.	0.24	OGR (5%)
019-113-854	CA6881775	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
019-065-612	PH49893	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	STEPAN BAZIUK, RETIRED & ROSE ELIZABETH BAZIUK, HOMEMAKER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
017-589-517	CA9850206	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	4.94	OGR (5%)

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017-589-509	CA3473810	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	NUGGET HILL RV PARK LTD.	BARKERVILLE GOLD MINES LTD.	4.85	OGR (5%)
016-171-985	CA6255616	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	CASEY LEIGH ROBINSON, EARLY CHILDHOOD EDUCATOR & GABRIEL LAKOTA FOURCHALK, RESTAURANT MANAGER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
015-389-481	PT3046	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	GARY STEPHEN CHAMPAGNE, WELLS ADMINISTRATOR & LINDA MAE CHAMPAGNE, PRE SCHOOL TEACHER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
014-997-347	CA4769286	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	43.60	OGR (5%)
014-385-732	CA3322183	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	6.58	OGR (5%)
014-018-853	M35643	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	RICHARD ALLAN CARPENTER, LANDSCAPER (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.02	OGR (5%)
014-018-829	M35643	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	RICHARD ALLAN CARPENTER, LANDSCAPER (FORFEITED TO CROWN	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
014-004-721	19939M	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	NICHOLAS BIRD (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
013-853-503	PK41041	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	DORTHELO M. WHITE (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-853-481	PK41040	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	DORTHELO M. WHITE (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)

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013-818-597	PT14019	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	DOROTHY KATHLEEN JACOBSON, RETIRED	BARKERVILLE GOLD MINES LTD.	0.02	OGR (5%)
013-818-520	CA7037415	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	ALEXANDRA ROSEANN CLARKE, GEOTECHNICIAN	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
013-817-906	11837M	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	OLIVE ESTHER BRADSHAW (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.09	OGR (5%)
013-817-884	23986M	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	ALBERT JOHN TAYLOR (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
013-817-876	37991M	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	WILLIAM ALFRED FOSTER (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
013-817-868	24646M	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	EDWARD KENNETH INCH (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
013-814-877	PH38121	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	MARGARET KEIBEL, REGISTERED NURSE	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
013-814-818	CA7841104	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	PATRICIA DONNA ANGELA RUMMEL, SALES CLERK &BRIAN DOUGLAS RUMMEL, RETAIL STORE OWNER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
013-814-796	CA49803	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	DANIEL PETER UNGER, ELECTRICIAN	BARKERVILLE GOLD MINES LTD.	0.29	OGR (5%)
013-814-745	CA7592468	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA AS REPRESENTED BY THE MINISTER OF CITIZENS' SERVICES	BARKERVILLE GOLD MINES LTD.	1.65	OGR (5%)

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013-814-478	U6752	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	HOWARD JAMES WEBER, RETIRED & HELEN MOLLAT WEBER, HIS WIFE AS JOINT TENANTS (FORFEITED)	BARKERVILLE GOLD MINES LTD.	0.08	OGR (5%)
013-814-338	CA3562944	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	NORTHWOODS INN RESTAURANT LTD.	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
013-814-125	PD43489	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	KATHLEEN FRANCIS WILLIAMS, ADMINISTRATIVE CLERK (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-807-137	S28189	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	VIRGINIA BARREDO FERRIER, MANAGERESS (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.33	OGR (5%)
013-789-759	PM17115	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	LEO NOEL LANDRIAULT, TRUCK DRIVER	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-789-741	CA6852256	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	CASEY LEIGH ROBINSON, EARLY CHILDHOOD EDUCATOR	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
013-789-708	BA114340	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	LAUREEN CARRIE LIVINGSTONE, SCREENING OFFICER	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
013-789-651	BA127519	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	LAUREEN CARRIE LIVINGSTONE, SCREENING OFFICER	BARKERVILLE GOLD MINES LTD.	0.11	OGR (5%)
013-215-469	PP3825	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BC TRANSPORTATION FINANCING AUTHORITY	BARKERVILLE GOLD MINES LTD.	0.33	OGR (5%)
013-100-572	CA6670546	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD. / THE CROWN IN RIGHT OF BRITISH COLUMBIA	0.16	OGR (5%)

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011-186-330	CA1607931	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	JANET RUBY SAMSON, HOMEMAKER	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
009-497-463	CA6851547	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	0.29	OGR (5%)
008-942-994	BB1970531	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BRITISH COLUMBIA BUILDINGS CORPORATION	BARKERVILLE GOLD MINES LTD.	1.29	OGR (5%)
008-466-386	BB3013092	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	HER MAJESTY THE QUEEN IN RIGHT OF CANADA AS REPRESENTED BY THE MINISTER OF PUBLIC SAFETY AND EMERGENCY PREPAREDNESS C/O ROYAL CANADIAN MOUNTED POLICE	BARKERVILLE GOLD MINES LTD.	0.24	OGR (5%)
008-447-756	CA1598791	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	DARYL TERENCE BRACKETT, MILLWORKER & SURESH MITTER KERAM, STEAM PLANT OPERATOR	BARKERVILLE GOLD MINES LTD.	5.02	OGR (5%)
008-425-817	PC11498	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	VIRGINIA BARREDO FERRIER, PROPRIETOR (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.30	OGR (5%)
008-421-595	PB52550	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	VIRGINIA BARREDO FERRIER, PROPRIETOR (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.05	OGR (5%)
007-932-073	PK30489	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	LARMA HOLDINGS LTD.	BARKERVILLE GOLD MINES LTD.	1.34	OGR (5%)
007-486-421	CA3401899	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	PEGGY-ANNE LILLIAN CROTEAU, BUSINESSWOMAN & MARCEL CHARLES FENTON GUIGUET, MACHINE OPERATOR AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
007-486-405	CA3401898	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	PEGGY-ANNE LILLIAN CROTEAU, BUSINESSWOMAN & MARCEL CHARLES FENTON GUIGUET, MACHINE OPERATOR AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)

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005-363-900	PP3703	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	BC TRANSPORTATION FINANCING AUTHORITY	BARKERVILLE GOLD MINES LTD.	0.06	OGR (5%)
004-956-460	X29283	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	HERBERT WALTER KIEBEL, CONTRACTOR (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
004-956-451	X29282	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	HERBERT WALTER KIEBEL, CONTRACTOR (FORFEITED TO CROWN)	BARKERVILLE GOLD MINES LTD.	0.10	OGR (5%)
004-933-206	CA71100	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	CLIFFORD CECIL COLLINS, SMALL ENGINE PROGRAM COORDINATOR & NORMA JEAN COLLINS, COMMUNITY SUPPORT WORKER AS JOINT TENANTS	BARKERVILLE GOLD MINES LTD.	1.88	OGR (5%)
004-426-142	CA879575	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	MARILYN LEIGH TURNER, BUSINESSWOMAN	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
003-902-170	PD14585	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	NORTHWOODS INN RESTAURANT LTD.	BARKERVILLE GOLD MINES LTD.	0.38	OGR (5%)
003-815-986	BB658631	2517/101	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.)	ROBERT VERNON ST. JOHN, BUSINESSMAN	BARKERVILLE GOLD MINES LTD.	0.16	OGR (5%)
005-076-081	CA3473811	2517/101, 4215/55	MARY AGNES MASON (TRANSFERRED TO LOWHEE MINING CO. LTD.), ADA JANE BRUCE MASON	NUGGET HILL RV PARK LTD.	BARKERVILLE GOLD MINES LTD.	0.19	OGR (5%)
004-078-560	CA332187	42F/34	PHILIP RICHARD TAYLOR LEACY AND JOHN BUTTS	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	10.00	OGR (5%)
004-078-608	CA9850190	35F/34	ROBERT DRIUKALL	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	58.00	OGR (5%)
004-087-054	PT5232, PC16245	39F/34	ROBERT JOHUS AND GEORGE HENRY JOHUS	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	3.78	OGR (5%)

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008-801-908	CA9850181	35/36 (B), 2672/597 (U)	THE BRITISH COLUMBIA MILLING AND MINING COMPANY (LIMITED)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	20.60	OGR (5%)
014-982-013	CA3322181	35/36	THE BRITISH COLUMBIA MILLING AND MINING COMPANY (LIMITED)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	20.00	OGR (5%)
015-306-992	PC58824	126/47	THE BRITISH COLUMBIA MILLING AND MINING COMPANY (LIMITED)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	20.53	OGR (5%), Franco Nevada (3%)
014-385-759	CA9850179	4614/617 (S), 35/36 (B)	THE BRITISH COLUMBIA MILLING AND MINING COMPANY LIMITED (CG 36/36); CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY) (CG 4614/617)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	19.88	OGR (5%)
005-890-578	S28501	211/673	THE CARIBOO GOLD QUARTZ MINING COMPANY (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTRY OF LANDS PARKS AND HOUSING	BARKERVILLE GOLD MINES LTD.	0.65	OGR (5%)
015-134-954	W21843	9418/665	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	12.19	OGR (5%)
015-134-971	W21841	9417/665	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.49	OGR (5%)
015-135-021	W21838	9416/665	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	37.87	OGR (5%)
015-135-004	W21840	9415/665	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	29.10	OGR (5%)
015-135-039	W21854	9414/665	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	30.50	OGR (5%)

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015-134-792	W21849	9413/665	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.76	OGR (5%)
015-133-991	W21853	9412/665	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
015-134-806	W21842	9411/665	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.84	OGR (5%)
015-135-055	W21837	6969/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.03	OGR (5%)
015-152-049	PC54227	6968/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	34.57	OGR (5%)
015-151-450	PC54222	6967/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
015-151-417	PC54221	6966/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	32.43	OGR (5%)
015-151-301	PC54220	6965/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	49.74	OGR (5%)
015-151-174	PC54219	6964/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	49.59	OGR (5%)
015-151-093	PC54218	6963/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER	BARKERVILLE GOLD MINES LTD.	47.52	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
				RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT			
015-151-999	PC54226	6962/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.66	OGR (5%)
015-151-930	PC54225	6961/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	19.96	OGR (5%)
015-151-905	PC54224	6960/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	43.99	OGR (5%)
015-134-911	W21839	6959/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	9.33	OGR (5%)
015-134-008	W21852	6958/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	12.65	OGR (5%)
015-151-859	PC54223	6957/640	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.04	OGR (5%)
015-133-702	W21889	6802/639	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	48.16	OGR (5%)
015-151-026	PC54212	6801/639	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.62	OGR (5%)
015-151-018	PC54211	6800/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
015-151-000	PC54210	6799/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	40.99	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
015-150-640	PC54209	6798/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
015-151-794	PC54232	6797/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.66	OGR (5%)
015-151-727	PC54231	6796/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.60	OGR (5%)
015-151-590	PC54229	6795/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	21.11	OGR (5%)
015-151-557	PC54228	6794/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	36.70	OGR (5%)
015-150-470	PC54208	6793/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	49.59	OGR (5%)
015-152-405	PC54217	6792/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	39.16	OGR (5%)
015-152-367	PC54216	6791/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	37.01	OGR (5%)
015-152-341	PC54215	6790/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.58	OGR (5%)
015-152-294	PC54214	6789/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)

PID	Title #	CG #	Original grantee	Fee simple owner	UNDERSURFACE OWNER	Area (Acres)	Royalty
015-152-103	PC54213	6788/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	49.59	OGR (5%)
015-151-697	PC54230	6712/638	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	17.73	OGR (5%)
013-699-563	PC17201	6527/636	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	38.89	OGR (5%)
013-699-539	PC17200	6218/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.50	OGR (5%)
013-699-491	PC17199	6217/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
013-699-440	PC17198	6216/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)
013-699-415	PC17197	6215/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	31.67	OGR (5%)
013-699-393	PC17196	6214/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	40.02	OGR (5%)
013-699-385	PC17195	6213/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	43.95	OGR (5%)
013-699-369	PC17194	6212/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	35.94	OGR (5%)

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015-287-131	U40874	6211/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	20.90	OGR (5%)
013-699-202	PC17190	6210/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	2.83	OGR (5%)
013-699-181	PC17189	6209/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	41.34	OGR (5%)
013-699-172	PC17205	6208/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	42.00	OGR (5%)
013-699-148	PC17188	6207/633	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	50.34	OGR (5%)
008-222-762	PD44700	6206/633, 5313/624 (U), 5763/628 (S)	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	WELLS HISTORICAL SOCIETY	BARKERVILLE GOLD MINES LTD.	0.23	OGR (5%)
013-699-288	PC17192	5448/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	9.78	OGR (5%)
015-193-845	U40887	5447/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.15	OGR (5%)
015-193-934	U40886	5446/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	44.89	OGR (5%)
015-193-942	U40885	5445/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	2.90	OGR (5%)

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015-193-951	U40884	5444/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	39.80	OGR (5%)
015-193-969	U40883	5443/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	34.46	OGR (5%)
015-193-977	U40882	5442/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	35.77	OGR (5%)
015-193-985	U40881	5441/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	44.59	OGR (5%)
015-194-027	U40880	5440/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.33	OGR (5%)
014-385-686	CA9850193	5439/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	23.02	OGR (5%)
015-194-116	U40879	5438/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	34.34	OGR (5%)
015-194-141	U40875	5437/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	32.09	OGR (5%)
014-385-643	CA3322188	5436/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	49.41	OGR (5%)
015-194-167	U40878	5435/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%)

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015-194-183	U40877	5434/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	22.05	OGR (5%)
016-292-987	PD30176	5433/625	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.12	OGR (5%)
015-282-155	15499M	4883/719	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.56	OGR (5%)
013-724-509	PC18151	4882/719	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.30	OGR (5%)
015-282-147	15497M	4881/719	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.17	OGR (5%)
015-282-104	15496M	4880/719	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	0.23	OGR (5%)
015-282-082	15495M	4879/719	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	4.91	OGR (5%)
015-282-074	15494M	4878/719	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.05	OGR (5%)
015-289-800	W21851	211/673	THE CARIBOO GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	16.49	OGR (5%)
014-385-741	CA3322182	535/92	THE ORIOLE SYNDICATE LIMITED	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	42.42	OGR (5%)
015-307-654	PC58844	2088/130	THE ORIOLE SYNDICATE LIMITED	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	29.87	OGR (5%)

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015-307-662	PC58845	2087/130	THE ORIOLE SYNDICATE LIMITED	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	47.59	OGR (5%)
015-307-603	PC58843	2085/130	THE ORIOLE SYNDICATE LIMITED	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	49.63	OGR (5%)
015-291-448	12078M	384/674	THOMAS ALBERT BLAIR	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA C/O MINISTER RESPONSIBLE FOR THE HERITAGE CONSERVATION ACT	BARKERVILLE GOLD MINES LTD.	37.21	OGR (5%)
004-056-787	CA4347919	4B/35	UNKNOWN (PRE-TANTALIS)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	10.00	OGR (5%)
004-056-582	BB1960681	41F/34	UNKNOWN (PRE-TANTALIS)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	13.81	OGR (5%), Franco Nevada (3%)
004-086-627	CA9850166	2B/35	UNKNOWN (PRE-TANTALIS)	BARKERVILLE GOLD MINES LTD.	NONE ON TITLE (UNDERSURFACE RIGHTS GRANTED GMA 1873)	23.00	
004-056-736	CA6623292	1B/35	UNKNOWN (PRE-TANTALIS)	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	12.00	OGR (5%)
007-794-037	CA3322178	2460/595	WAYSIDE CONSOLOIDATED GOLD MINES (NON-PERSONAL LIABILITY)	BARKERVILLE GOLD MINES LTD. & AMAZON PETROLEUM CORP.	NONE	33.73	
007-794-029	CA3322177	1245/583 (U), 6228/633(S)	WAYSIDE CONSOLOIDATED GOLD MINES (NON-PERSONAL LIABILITY)	BARKERVILLE GOLD MINES LTD. & AMAZON PETROLEUM CORP.	NONE	51.65	
015-329-437	PD39	6295/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.16	OGR (5%), Franco Nevada (3%)
015-329-411	PD38	6294/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	0.50	OGR (5%), Franco Nevada (3%)
015-329-402	PD37	6293/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	22.40	OGR (5%), Franco Nevada (3%)
015-329-399	PD36	6292/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	25.07	OGR (5%), Franco Nevada (3%)

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015-329-381	PD35	6291/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	18.93	OGR (5%), Franco Nevada (3%)
015-329-372	PD34	6290/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	39.78	OGR (5%), Franco Nevada (3%)
015-329-356	PD33	6289/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	11.32	OGR (5%), Franco Nevada (3%)
015-329-330	PD32	6288/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.52	OGR (5%), Franco Nevada (3%)
015-329-313	PD31	6287/633	WILLIAM A. SIMKINS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA	BARKERVILLE GOLD MINES LTD.	51.65	OGR (5%), Franco Nevada (3%)
004-078-543	CA3322186	2F/34	WILLIAM ANDREW MEACHAM AND ITHIEL BLAKE MASON	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	25.26	OGR (5%)
004-078-578	CA9850168	17F/34	WILLIAM BOSWELL STEELE, THOMAS BELL, ANGELO PENDOLA, PETER MANETTA, JOSEPH HUOT DE ST. LAURENT, WILLIAM H. THOMPSON, OLIVIER D'ARPENTIGNY, NICOLAS CUNIO, JAMES BOYCE, JOHN MCLEAN, ANGUS MCPHERSON AND ISAAC BIRCH FISHER	BARKERVILLE GOLD MINES LTD. & GOLDEN CARIBOO RESOURCES LTD.	NONE ON TITLE (UNDERSURFACE RIGHTS GRANTED GMA 1873)	125.00	
004-087-097	PT5235, PC16248	38F/34	WILLIAM SAUDERS AND EDWARD COLLINS NEUFELDER	BARKERVILLE GOLD MINES LTD.	BARKERVILLE GOLD MINES LTD.	3.18	OGR (5%)
013-614-959	24187M	213/673 (U), 2882/799 (S)	WILLIAMS CREEK GOLD QUARTZ MINING COMPANY LIMITED (NON-PERSONAL LIABILITY)	WILLIAMS CREEK GOLD QUARTZ MINING CO. LIMITED (FORFEITED TO CROWN L35148)	BARKERVILLE GOLD MINES LTD.	25.99	OGR (5%)