Revel Ridge Project

NI 43-101 Technical Report and Preliminary Economic Assessment

Revelstoke Mining Division, British Columbia, Canada

Effective Date: December 29, 2023

Prepared for:

Rokmaster Resources Corp.
615 625 Howe Street
Vancouver BC V6C 2T6

Prepared by:

Ausenco Engineering Canada ULC
1050 West Pender, Suite 1200
Vancouver, BC, Canada

List of Qualified Persons:

Kevin Murray, P. Eng., Ausenco Engineering Canada ULC
Scott Weston, P. Geo., Ausenco Sustainability ULC
Stacy Freudigmann, P. Eng., F. Aus.IMM., Canenco Consulting Corp.
Eugene Puritch, P. Eng., FEC CET, P&E Mining Consultants Inc.
William Stone, Ph.D., P. Geo., P&E Mining Consultants Inc.
David Burga, P. Geo., P&E Mining Consultants Inc.
Evan Verkade, P. Eng., Mining Plus Canada Consulting Ltd.
Wilson Muir, P. Eng., Knight Piésold Ltd.

CERTIFICATE OF QUALIFIED PERSON
Kevin Murray, P.Eng.

I, Kevin Murray, P. Eng., certify that:

1. I am employed as Manager Process Engineering with Ausenco Engineering Canada Inc., with an office address of 1050 West Pender Street, Suite 1200, Vancouver, BC Canada, V6E 3S7.
2. This certificate applies to the technical report titled "*Revel Ridge Project, NI 43-101 Technical Report and Preliminary Economic Assessment*" (the "Technical Report"), prepared for Rokmaster Resources Corp. (the "Company") with an effective date of December 29, 2023 (the "Effective Date").
3. I graduated from the University of New Brunswick, Fredericton NB, in 1995 with a Bachelor of Science in Chemical Engineering.
4. I am a member in good standing of Engineers and Geoscientists British Columbia, License# 32350, and Northwest Territories Association of Professional Engineers and Geoscientists' Registration# L4940.
5. I have practiced my profession for 22 years. I have been directly involved in all levels of engineering studies from preliminary economic analysis (PEA) to feasibility studies including being a Qualified Person for flotation projects including NorZinc Ltd.'s Prairie Creek PEA, Ero Copper Corp.'s Boa Esparença Feasibility Study, Skeena Resources Ltd's Eskay Creek Feasibility Study as well as gold projects including Freeman Gold Corp's Lehmi project and Fortune Bay's Goldfields project. I have been directly involved with test work and flowsheet development from preliminary testing through to detailed design and construction of pressure oxidation processes with Teck and have direct gold operations support experience at Red Lake Gold Mine, Porcupine Gold Mine and Éléonore Gold mine as well has commissioning support at Argonaut Gold's Magino Gold mine.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
7. I have visited the Revel Ridge Project on Oct 25, 2022.
8. I am responsible for Sections 1.1, 1.2, 1.4, 1.10-1.12, 1.14-1.17, 2.1-2.4.1, 2.5-2.6, 3.2, 4, 5, 6, 17, 18.1-18.4.4, 18.4.6-18.4.7, 19, 21.1-21.2.2, 21.2.4, 21.2.6-21.3.2, 21.3.4-21.3.5, 22, 23, 24, 25.1-25.2, 25.8-25.9.1, 25.10, 25.12-25.14, 25.15.1.3, 25.15.1.6, 25.15.2.3, 25.15.2.4, 26.1, 26.5, 26.7.9, and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have had no previous involvement with the Revel Ridge Project.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: February 07, 2024.

"SIGNED AND SEALED"

Kevin Murray, P. Eng.

Ausenco Permit to Practice 1001905

Engineers and Geoscientists British Columbia

CERTIFICATE OF QUALIFIED PERSON
Scott Weston, P. Geo.

I, Scott Weston, P. Geo., certify that:

1. I am a Professional Geoscientist, currently employed as Vice President, Business Development and Strategy with Ausenco Sustainability ULC ("Ausenco"), with an office address of 4515 Central Boulevard, Burnaby, B.C., Canada.
2. This certificate applies to the technical report titled "Revel Ridge Project NI 43-101 Technical Report and Preliminary Economic Assessment" (the "Technical Report") prepared for Rokmaster Resources Corp. ("the "Company") that has an effective date of December 29, 2023 (the "Effective Date").
3. I graduated from University of British Columbia, Vancouver, B.C., Canada 1995 with a Bachelor of Science, Physical Geography, and Royal Roads University, Victoria, B.C., Canada 2003 with a Master of Science, Environment and Management.
4. I am a Professional Geoscientist of Engineers and Geoscientists British Columbia; registration number 124888.
5. I have worked as a geoscientist continuously for 28 years, leading or working on teams advancing multidisciplinary environmental projects related to natural resource development. Examples of projects I have been involved with include: Wasamac Project FS, Eskay Creek Mine PFS, Las Chispas Mine FS, and Casino Project FS.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
7. I have not visited the Revel Ridge Project.
8. I am responsible for Section(s) 1.13, 3.1, 20, 25.11, 25.15.1.5, 25.15.2.4, 26.7, and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have had no previous involvement with the Revel Ridge Project.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: February 07, 2024.

"SIGNED AND SEALED"

Scott Weston, P. Geo.

Ausenco Permit to Practice 1001905

Engineers and Geoscientists British Columbia

CERTIFICATE OF QUALIFIED PERSON
Stacy Freudigmann, P.Eng., F.AUS.IMM

I, Stacy Freudigmann, P.Eng., F.AUS.IMM., certify that:

1. I am employed as Principal with Canenco Consulting Corp. (Canenco), with an office at 602 East 4th Street, North Vancouver, BC, Canada.
2. This certificate applies to the technical report titled "Revel Ridge Project NI 43-101 Technical Report and Preliminary Economic Assessment" (the "Technical Report") prepared for Rokmaster Resources Corp. ("the "Company") that has an effective date of December 29, 2023 (the "Effective Date").
3. I am a graduate of the James Cook University with a B.Sc. (Hons) in Industrial Chemistry (1996) and Curtin University, Western Australia School of Mines with a Grad.Dip. Metallurgy (1999).
4. I am aa Professional Engineer with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG #L4673), the Professional Engineers and Geoscientists of Newfoundland & Labrador (PEGNL #N1125) and with Association of Professional Engineers and Geoscientists of British Columbia (EGBC #33972). I am a Member of the Canadian Institute of Mining and Metallurgy and the Australasian Institute of Mining and Metallurgy as a Fellow, (F.Aus.IMM.).
5. I have practiced my profession continuously for more than 25 years. I have been directly involved in mining and mineral processing projects in the Americas, Europe, the UK, Asia Pacific, USA, and Canada.
6. I have read the definition of "Qualified Person" (QP) set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements of a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
7. I have visited the Project site on the 29th of October 2020, the 22nd of July 2021, and 25th October 2022.
8. I am responsible for Sections 1.7, 2.4.3, 13, 25.5, 25.15.1.3, 25.15.2.3, 26.3, and 27 of the Technical Report.
9. I am independent of Rokmaster Resources Corp. as independence is defined in Section 1.5 of NI 43-101.
10. I have been previously involved with the Project as a QP on previous Technical Reports in 2021 and 2023.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: February 07, 2024.

"SIGNED AND SEALED"

Stacy Freudigmann, P.Eng., F.AUS.IMM.

CERTIFICATE OF QUALIFIED PERSON
Eugene Puritch, P.Eng., FEC, CET

I, Eugene Puritch, P.Eng., FEC, CET, certify that:

1. I am employed as a position with P&E Mining Consultants Inc., (P&E), with an office address of 2 County Court Blvd., Suite 478 Brampton, Ontario, CanadaL6W 3W8.
2. This certificate applies to the technical report titled "Revel Ridge Project, NI 43-101 Technical Report and Preliminary Economic Assessment", (the "Technical Report"), with an effective date of December 29, 2023, prepared for Rokmaster Resources Corp. (the "Company")
3. I graduated from The Haileybury School of Mines with a Technologist Diploma in Mining as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen's University.
4. I am a professional engineer registered with the Professional Engineers Ontario (No. 100014010), Engineers and Geoscientists British Columbia (No. 42912) and NWT and Nunavut Association of Professional Engineers and Geoscientists (No. L3877) and with Professional Engineers and Geoscientists Newfoundland and Labrador (No. 5998).
5. I have practiced my profession continuously for 46 years with experience as:
   - Mining Technologist - H.B.M.& S. and Inco Ltd., 1978-1980
   - Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., 1981-1983
   - Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, 1984-1986
   - Self-Employed Mining Consultant – Timmins Area, 1987-1988
   - Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, 1989-1995
   - Self-Employed Mining Consultant/Resource-Reserve Estimator, 1995-2004
   - President – P&E Mining Consultants Inc, 2004-Present

   My relevant recent silver and gold mineral resource estimation experience is as follows:
   - Endeavour Silver – Terronera – Mexico
   - GoGold Resources – Los Ricos, Santa Gertrudis - Mexico
   - Zacatecas Silver – Panuco, Esperanza – Mexico
   - McEwen Mining – San Jose – Argentina
   - Hochschild Mining – Arcata, Pallancata, Inmaculada – Peru
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
7. I have not visited the Revel Ridge site.
8. I am responsible for Section(s) 14 and appropriate portions of Sections 1.6, 1.8, 14, 25.6, 25.15.1.1, 25.15.2.1, 26.2, and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have been previously involved with the Project. I was a "Qualified Person" for a Technical Report titled "Technical Report and Updated Mineral Resource Estimate of the Revel Ridge Polymetallic Property, Revelstoke Mining Division, British Columbia, Canada", with an effective date of November 15, 2021; "Updated Technical Report on The Revel Ridge Property (formerly J&L Property), Revelstoke Minng Division, British Columbia, Canada", with an effective date of January 29, 2020; and "Technical Report and Updated Mineral Resource Estimate on the J&L Property, Revelstoke, British Columbia, Canada" with an effective date of January 23, 2018.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: February 07, 2024.

"SIGNED AND SEALED"

Eugene Puritch, P.Eng., FEC, CET

CERTIFICATE OF QUALIFIED PERSON
William Stone, PhD., P. Geo.

I, William Stone, PhD., P. Geo., certify that:

1. I am employed as an independent geological consultant working for P&E Mining Consultants Inc, with an office address of 2 County Court Blvd., Suite 478 Brampton, Ontario, CanadaL6W 3W8.
2. This certificate applies to the technical report titled “Revel Ridge Project NI 43-101 Technical Report and Preliminary Economic Assessment” (the “Technical Report”) prepared for Rokmaster Resources Corp. (“the “Company”) that has an effective date of December 29, 2023 (the “Effective Date”).
3. I graduated from Dalhousie University with a Bachelor of Science (Honours) degree in Geology (1983). In addition, I have a Master of Science in Geology (1985) and a Ph.D. in Geology (1988) from the University of Western Ontario. I have worked as a geologist for a total of 35 years since obtaining my M.Sc. degree.
4. I am a geological consultant currently licensed by the Professional Geoscientists of Ontario (License No 1569).
5. My relevant experience for the purpose of the Technical Report is:
   - Contract Senior Geologist, LAC Minerals Exploration Ltd. 1985-1988
   - Post-Doctoral Fellow, McMaster University 1988-1992
   - Contract Senior Geologist, Outokumpu Mines and Metals Ltd. 1993-1996
   - Senior Research Geologist, WMC Resources Ltd. 1996-2001
   - Senior Lecturer, University of Western Australia 2001-2003
   - Principal Geologist, Geoinformatics Exploration Ltd. 2003-2004
   - Vice President Exploration, Nevada Star Resources Inc. 2005-2006
   - Vice President Exploration, Goldbrook Ventures Inc. 2006-2008
   - Vice President Exploration, North American Palladium Ltd. 2008-2009
   - Vice President Exploration, Magma Metals Ltd. 2010-2011
   - President & COO, Pacific North West Capital Corp. 2011-2014
   - Consulting Geologist 2013-2017
   - Senior Project Geologist, Anglo American 2017-2019
   - Consulting Geoscientist 2020-Present

   My relevant recent gold and silver geology, exploration, and analysis experience is as follows:
   - GoGold Resources – Los Ricos North, Santa Gertrudis - Mexico
   - GoGold Resources – Los Ricos South, Santa Gertrudis - Mexico
   - P2 Gold – Gabbs, Nevada
   - Silver Tiger – El Tigre - Mexico
   - Westhaven Gold – Shovelnose, British Columbia
   - Zacatecas Silver – Panuco, Esperanza – Mexico
6. I have read the definition of “Qualified Person”(QP) set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a QP for those sections of the Technical Report that I am responsible for preparing.
7. I have not visited the project site.
8. I am responsible for Section(s) 1.3, 7, 8, 11, 25.3, and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have had prior involvement with the Project that is the subject of this Technical Report. I was a “Qualified Person” for a Technical Report titled “Technical Report and Updated Mineral Resource Estimate of the Revel Ridge Polymetallic Property, Revelstoke Mining Division, British Columbia, Canada”, with an effective date of November 15, 2021.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: February 07, 2024.

{SIGNED AND SEALED}

William E. Stone, Ph.D., P.Geo.

CERTIFICATE OF QUALIFIED PERSON
David Burga, P. Geo.,

I, David Burga, P. Geo., certify that:

1. I am employed an independent geological consultant contracted by P & E Mining Consultants Inc, with an office address of 2 County Court Blvd., Suite 478 Brampton, Ontario, CanadaL6W 3W8.
2. This certificate applies to the technical report titled "Revel Ridge Project NI 43-101 Technical Report and Preliminary Economic Assessment" (the "Technical Report") prepared for Rokmaster Resources Corp. ("the "Company") that has an effective date of December 29, 2023 (the "Effective Date").
3. I graduated from the University of Toronto with a Bachelor of Science degree in Geological Sciences (1997).
4. I have worked as a geologist for over 20 years since obtaining my B.Sc. degree.
5. I am a geological consultant currently licensed by the Association of Professional Geoscientists of Ontario (License No 1836).
6. My relevant experience for the purpose of the Technical Report is:
   - Exploration Geologist, Cameco Gold 1997-1998
   - Field Geophysicist, Quantec Geoscience 1998-1999
   - Geological Consultant, Andeburg Consulting Ltd. 1999-2003
   - Geologist, Aeon Egmond Ltd. 2003-2005
   - Project Manager, Jacques Whitford 2005-2008
   - Exploration Manager – Chile, Red Metal Resources 2008-2009
   - Consulting Geologist 2009-Present.

   My relevant recent drilling of silver and gold deposits and data verification experience is as follows:
   - Endeavour Silver – Terronera – Mexico
   - GoGold Resources – Los Ricos, Santa Gertrudis - Mexico
   - Zacatecas Silver – Panuco, Esperanza – Mexico
   - McEwen Mining – San Jose – Argentina

Hochschild Mining – Arcata, Pallancata, Inmaculada – Peru

7. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
8. I have visited the project site on September 8, 2021, and on May 22 and 23, 2023.
9. I am responsible for Section(s) 1.5, 1.6, 2.4.2, 9, 10, 12, 25.4, and 27 of the Technical Report.
10. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101. I have had prior involvement with the Project that is the subject of this Technical Report. I was a "Qualified Person" for a Technical Report titled "Technical Report and Updated Mineral Resource Estimate of the Revel Ridge Polymetallic Property, Revelstoke Mining Division, British Columbia, Canada", with an effective date of November 15, 2021.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: February 07, 2024.

"SIGNED AND SEALED"

David Burga, P. Geo.

CERTIFICATE OF QUALIFIED PERSON
Evan Verkade, P. Eng.

I, Evan Verkade, P.Eng., certify that:

1. I am employed as a Principal Mining Consultant with Mining Plus Canada Consulting Ltd., (MP), with an office address of Suite 504, 999 Canada Place, Vancouver, BC V6C 3E1, Canada.
2. This certificate applies to the technical report titled "Revel Ridge Project NI 43-101 Technical Report and Preliminary Economic Assessment" (the "Technical Report") prepared for Rokmaster Resources Corp. ("the "Company") that has an effective date of December 29, 2023 (the "Effective Date").
3. I graduated from Queen's University with a Bachelor of Science in Mining Engineering in 2007.
4. I am a professional engineer registered with Engineers and Geoscientists British Columbia (No. 49660) and with Engineers Yukon (No. 3173).
5. I have practiced my profession continuously for 17 years with 14 years onsite at multiple underground and open pit operations. I have 8 years of combined experience as the Underground Chief Engineer working for Barrick Goldstrike, Nyrstar Myra Falls, and Minto Metals Mine where I would contribute to and review technical studies, mining inventories and mine plans.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
7. I have not visited the project site.
8. I am responsible for Sections 1.9, 16, 18.4.5, 21.2.3, 21.3.3, 25.7, 25.15.1.2, 25.15.2.2, 26.4, and 27 of the Technical Report.
9. I am independent of the Company as independence is defined in Section 1.5 of NI 43-101.
10. I have not been previously involved with the Revel Ridge Project.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: February 07, 2024.

"SIGNED AND SEALED"

Evan Verkade, P.Eng.

CERTIFICATE OF QUALIFIED PERSON
Wilson Muir, P.Eng.

I, Wilson Muir, P.Eng., certify that:

1. I am employed as a Senior Engineer with Knight Piésold Ltd. (KP), with an office address of 200 - 1164 Devonshire Avenue, North Bay, Ontario, Canada, P1B 6X7.
2. This certificate applies to the technical report titled "Revel Ridge Project NI 43-101 Technical Report and Preliminary Economic Assessment" (the "Technical Report") prepared for Rokmaster Resources Corp. ("the "Company") that has an effective date of December 29, 2023 (the "Effective Date").
3. I graduated from the University of British Columbia with a Bachelor of Applied Science degree in Geological Engineering in May 1994.
4. I am a professional engineer registered with Professional Engineers Ontario (No. 100060272).
5. I have practiced my profession continuously for 29 years with 26 years of experience in tailings and water management in Canada and internationally.
6. I have read the definition of "Qualified Person" set out in the National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for those sections of the Technical Report that I am responsible for preparing.
7. I visited the project site on October 25th, 2022.
8. I am responsible for Sections 2.4.4, 18.4.8 through 18.4.10, 21.2.5, 25.9.2, 25.15.1.4, 26.6, and 27 of the Technical Report.
9. I am independent of Rokmaster Resources Corp., as independence is defined in Section 1.5 of NI 43-101.
10. I have been previously involved with the Revel Ridge Project. I provided technical and cost estimate input into the NI 43-101 titled "An Updated Preliminary Economic Assessment of the Revel Ridge Project, Revelstoke, B.C., Canada" with a report signature date of January 22nd, 2021.
11. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

Dated: February 07, 2024.

"SIGNED AND SEALED"

Wilson Muir, P.Eng

Important Notice

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1 SUMMARY

1.1 Introduction

Rokmaster Resources Corp. (Rokmaster or the Company) commissioned Ausenco Engineering Canada Inc. and Ausenco Sustainability Inc. (Ausenco) to compile a preliminary economic assessment (PEA) of the Revel Ridge Project (the Property or the Project). The PEA was prepared in accordance with the Canadian disclosure requirements of National Instrument 43-101 – Standards and Disclosure for Mineral Projects (NI 43-101) and the requirements of Form 43-101 F1.

The responsibilities of the engineering companies contracted by Rokmaster to prepare this technical report are as follows:

- Ausenco managed and coordinated the work related to the technical report, and developed PEA-level design, capital and operating cost estimates for the process plant and general site infrastructure. Ausenco also undertook the review of the environment and permitting studies and completed the economic analysis.
- Mining Plus Canada Consulting Ltd. (Mining Plus) designed the underground mining, mine production schedule and provided the mine capital and operating costs.
- Canenco Consulting Corp. (Canenco) managed and directed the metallurgical test work programs.
- Knight Piésold Ltd. (KP or Knight Piésold) designed the site water management plans and relevant structures, and estimated the bulk material estimates for the South Waste Storage Facility (SWSF) and the Central Waste Rock Stockpile (CWRS).
- P&E Mining Consultants Inc., (P&E) developed the mineral resource estimate (MRE) for the Project and completed the work related to the geological setting, deposit type, drilling, exploration works, sample preparation and analysis, and data verification.
- T. Engineering designed the backfill paste plant and provided the capital and operating costs for that facility.

The Property hosts two known polymetallic precious and base metal deposits:

- Revel Ridge Main Deformation Zone (MDZ) and the
- Revel Ridge Yellowjacket deposit (RRYZ)

The MDZ hosts four distinct zones:

- Revel Ridge Main Zone (RRMZ)
- Revel Ridge Footwall Zone (RRFZ)
- Revel Ridge Hanging Wall Zone (RRHZ)
- Revel Ridge Main Extension Zone (RRMEX)

Gold, silver, lead, and zinc are the metals of interest.

1.2 Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

The Revel Ridge Property is contiguous and consists of 35 mineral tenure claims and 10 Crown Grant Lots for a total area of 14,722 ha. The Property is centred at approximately 420,719 m E and 5,681,811 m N (North American Datum 83 Universal Transverse Mercator Zone 11U), or at Latitude 51° 17′ N and Longitude 118° 08′ W. The claims are owned 100% by Huakan International Mining Inc. (Huakan) or by Rokmaster.

Rokmaster has an option agreement dated December 23, 2019, to earn a 100% interest in the Property from Huakan International Mining Inc. (Huakan), formerly Merit Mining Corp. (Merit). The agreement provides for Rokmaster to make escalating annual option payments totalling C$44,2000,000 in cash by the fifth anniversary of the agreement to earn a 100% interest in the Property and associated assets without any underlying royalties. Rokmaster paid the first option payment of C$200,000 on February 25, 2020, the second option payment of C$1,000,000 on February 25, 2021, and the third option payment of C$4,000,000 on February 25, 2022.

On February 2, 2023, Rokmaster announced that it entered into an amending agreement with Huakan to extend the fourth option payment due on February 25, 2023, by 12 months to February 2024, at which time a penalty of C$400,000 will also be due as consideration for the extension. Accordingly, the total payment due on February 25, 2024, is C$19,400,000. Pursuant to the amending agreement, the Company also agreed to complete an updated PEA and an updated MRE on the Revel Ridge Project on or before December 31, 2023.

Rokmaster has been advised that a legal action has arisen between Armex Mining Corp. (Armex) and Huakan, whereby Armex claims that it has a valid letter of intent with Huakan covering the Property. Huakan has notified Armex that it intends to defend the Armex action and has filed a counter claim against Armex. This legal action has not been resolved as of the effective date of this technical report.

1.3 Geology and Mineralization

The Revel Ridge Property lies within the Selkirk Mountains near the north end of the Kootenay Arc, a complex sequence of east dipping Neoproterozoic to Lower Paleozoic metasedimentary and metavolcanic miogeosynclinal rocks. The Kootenay Arc is characterized by tight to isoclinal folds and generally west verging thrust faults with greenschist grade regional metamorphism. The Revel Ridge Property is underlain by north to northwest-striking, moderate to steeply east-dipping metasedimentary and metavolcanic rocks of the Hamill and Lardeau Group and Badshot and Mohican Formation rocks. Gold mineralization at Revel Ridge is spatially related to a property scale, ductile deformation zone which ranges in width from approximately 5- 25 m and which has a strike length exceeding 5 km: The MDZ forms approximately 500 m into rocks of the hanging wall of the Akolkolex Thrust, which is an arc parallel regional scale thrust. Formation of the mineralized deformation zone may in part be related to the development of the larger regional scale thrust.

The RRMZ is the principal mineralized zone hosted within the MDZ which is considered to be a structurally controlled orogenic gold-polymetallic deposit. The RRMZ is a sheet-like tabular sulphide vein system hosted in a large planer deformation zone composed of banded massive and stringer arsenopyrite-pyrite-sphalerite-galena mineralization with appreciable content of gold and silver. The RRMZ has been traced on surface by drilling, geological mapping and soil geochemistry for a minimum strike length of 5.7 km and on-strike mineral showings occur along a structural trend up to approximately 8 km long. Concentrated drilling has intersected the RRMZ over a 2,200 m strike-length and at least

1,175 m in down-dip extent. The RRMZ generally dips approximately 55° to 60° to the northeast with an average true thickness of 2.5 m, but it may exceed 15 m locally in true thickness and has the potential to be expanded beyond the current drilled limits.

The silver-lead-zinc-rich RRYZ is considered to be a silver-zinc rich carbonate hosted replacement deposit composed of multiple parallel siliceous sphalerite-galena-bearing zones. The individual zones making up the RRYZ occur as lenticular bodies within silicified and marbleized limestone horizons. In comparison to the RRMZ, the RRYZ tends to have shorter strike lengths and shorter down dip lengths in the range of 500 m of strike and 200 m downdip. The zones may demonstrate periodicity with mineralization re-starting at permissive lithologic and structural points and potentially folded repetitions of carbonate stratigraphy.

1.4 History

Numerous exploration companies including several major mining companies have explored and advanced the Property since the discovery of the RRMZ in 1912. At least 453 surface and underground diamond drill holes totalling 82,931 m have been completed on the Property from 1983 to the effective date of this technical report. A total of 3.1 km of underground workings are present on the Property. A 1.4 km long track drift (2.4 m x 2.4 m profile) at the 830 m level has exposed the RRMZ for approximately 800 m in length. The 550 m long (5 m x 5 m profile) 832 m level trackless drift developed by Merit in 2008, connects to the 830 m track drift and provides underground access to the 830 m drift. Five crosscuts totalling 1,150 m provided access to drill stations that were utilized to drill-define the deposits. Several raises have aided in the extraction of several bulk samples. There is an adit and drift extending 152 m along the RRMZ called the “986 m level” that is presently inaccessible.

In late 2010, Merit/Huakan completed a 60-hole, 7,897 m underground drill program focused on the RRMZ. . This program had the objective of verifying historical drilling and sampling and infilling the 800 m strike by 200 m dip extent of the RRMZ with 30 m drill centres. This program led to P&E completing the first MRE prepared in accordance with NI 43-101 on the Property in September 2011, and a subsequent PEA by Micon International Limited (Micon) in June 2012, based on that 2011 mineral resource estimate.

The 2010 exploration program was followed in 2012 by a 450 m drifting and a 45-hole, 9,725 m underground drill program to expand the historical MRE of the RRMZ. . The 2012 program was successful in increasing the mineral resources. Results of an updated MRE (MRE) by P&E were reported in a news release by Huakan dated September 18, 2012. This historical estimate significantly increased Indicated mineral resources on the RRMZ and for the first time included a MRE on the RRYZ. In January 2013, Huakan reported updated metallurgical testwork results from a bulk sample collected in the 2012 program. Updated mineral resource estimates were released subsequently in 2018, 2020 and, more recently, in 2023.

The 2020 updated MRE supported a subsequent, updated PEA by Micon in January 2021.

1.5 Exploration and Drilling

All mineralized zones have potential for further expansion. The RRMZ in particular, remains open to expansion by drilling down-dip and along strike. The RRMZ has a predictable tabular geometry and grade distribution, and is laterally extensive as defined in the surface mapping, geochemical surveys, mineral prospecting and sampling, and drilling completed to the effective date of this technical report. The strike length of the RRMZ is indicated to be a minimum of 5.7 km by drilling, geological mapping, and soil geochemistry and has been drilled for approximately 2,200 m along strike and 1,175 m down-dip.

In total, at least 453 underground and surface drill holes totalling 82,931 m have been completed on the Revel Ridge Property to the effective date of this technical report. Historically, a total of at least 40,948 m in 332 drill holes were completed by many operators prior to 2020. Rokmaster completed a total of 41,983 m in 121 drill holes in 2020-2021 and 2022. Rokmaster's underground and surface drilling programs focused on the expansion of the RRMZ and RRYZ, and discovery/delineation of the nearby RRFZ, RRHZ and RRMEX Zones.

1.6 Sample Preparation, Analysis and Data Verification

Rokmaster implemented a robust quality assurance/quality control (QA/QC) program from the commencement of its exploration activities at the Property in 2020. In the author's opinion, Rokmaster's sample preparation, analytical procedures, security, and QA/QC program meet industry standards, and that the data are of quality and satisfactory for use in the mineral resource estimate reported in this technical report. The Company should continue with the current QC protocol, which includes the insertion of appropriate certified reference materials (CRMs), blanks and duplicates, and to further support this protocol with umpire assaying (on at least 5% of samples) at a reputable secondary laboratory.

The Revel Ridge Property was visited by Mr. David Burga, P.Geo., of P&E, on September 8, 2021, for the purpose of completing a site visit and due diligence sampling. Mr. Burga collected 18 samples from ten diamond drill holes during the September 2021 site visit. All samples were selected from holes drilled in 2020 and 2021. A range of high, medium and low-grade samples were selected from the stored drill core. Drill core samples were collected by taking a quarter drill core and leaving the other quarter drill core in the box. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag and delivered by Mr. Burga to AGAT Laboratories in Mississauga, ON for analysis.

AGAT has developed and implemented a Quality Management System (QMS) at each of its locations to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards. AGAT maintains ISO registrations and accreditations (ISO 9001:2015 and ISO/IEC 17025:2017). Drill core samples collected during the 2021 site visit were analyzed for gold by fire assay with AAS finish and for silver, copper, lead and zinc by sodium peroxide fusion with an ICP-OES/ICP-MS finish. All samples were also analyzed to determine drill core bulk density by wet immersion.

The Revel Ridge Property was again visited by Mr. David Burga, P.Geo., on May 22 and 23, 2023, for the purpose of completing a site visit that included drilling sites, outcrops, GPS location verifications, discussions, and due diligence drill core sampling. Mr. Burga collected 11 samples from four diamond drill holes completed in 2022. A range of high, medium and low-grade samples were selected from the stored drill core. Samples were collected by taking a quarter drill core, with the other quarter drill core remaining in the drill core box. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag and delivered by Mr. Burga to the Actlabs laboratory (Actlabs) in Ancaster, Ontario for analysis. Samples at Actlabs were analyzed for gold and silver by fire assay with gravimetric finish. Copper, lead and zinc were analyzed by aqua regia digest with ICP-OES finish. Bulk density determinations were measured on all drill core samples by the wet immersion method.

The Actlabs' Quality System is accredited to international quality standards through ISO/IEC 17025:2017 and ISO 9001:2015. The accreditation program includes ongoing audits, which verify the QA system and all applicable registered test methods. Actlabs is also accredited by Health Canada. Actlabs is independent of P&E and Rokmaster.

The authors consider that there is positive correlation between the gold, silver, copper, lead and zinc assay values in Rokmaster's database and the independent verification samples collected by P&E and analyzed at AGAT and Actlabs. The authors are of the opinion that the data are of good quality and appropriate for use in the current MRE.

1.7 Metallurgical Testwork

Numerous metallurgical test work programs have been undertaken on the Revel Ridge Project since 1982. These programs have been completed by independent reputable metallurgical laboratories, using primarily drill core samples from exploration drilling and bulk samples from underground workings; and have included, but are not limited to characterization and mineralogical studies, comminution studies, dense media separation (DMS), bulk sorting tests, gravity concentration tests, flotation, bio-oxidation, pressure oxidation (POX), and leach tests.

Recent more detailed work on the mineralogy of the RRMZ deposit has shown that the lead (Pb) and zinc (Zn) mineralization is finely disseminated, likely requiring a finer grind to liberate and recover the target metals. The silver (Ag) is largely in solid solution with the lead and Freibergite, therefore will mainly appear in the lead concentrate. The gold (Au) is refractory and predominantly associated with arsenopyrite in solid solution and although highly variable, a small amount of the gold is associated with pyrite and as free gold.

Based on the observations from test work, sensor-based sorting would appear to be successful in removing dilution from the mined mineralization. Result from the sorting study showed that the mass pull for bulk material product was approximately 50%, with recoveries of gold and silver in that material both surpassing 99%.

Geological review has indicated potential for limestone and marble reserves found onsite to be available to be used as a processing reagent. Geochemical analysis and neutralization tests indicate the limestone was relatively pure. The likelihood of significant limestone material being present in the waste rejects from sorting in a mining scenario at Revel Ridge is very high due to large areas of the main deformation zone having limestone in the immediate hanging wall or footwall (or both).

The metallurgical testing has produced an effective flowsheet for recovering of the metals of value; removing dilution with sorting, preconcentrating the mill feed with bulk flotation, regrinding and sequential flotation of the bulk concentrate to produce concentrates of lead and zinc, with the remaining zinc rougher tails being processed through a POX-leach circuit for recovery of the remaining gold and silver. Based on the envisioned circuit and corresponding laboratory test response, the overall process recoveries based on the samples tested for the RRMZ mineralization are expected to be in the range of 94-96% Au, 84-85% Ag, 71-73% Pb into a concentrate with a 48% Pb grade and 70-74% Zn into a concentrate with a 54% Zn grade. The RRYZ mineralization is less complex metallurgically than the RRMZ mineralization and responds to standard sequential flotation. Based on the metallurgical studies undertaken in 2014, the overall process recoveries for the RRYZ were expected to be 86% Au, 94% Ag, 88% Pb, and 93% Zn.

The lead concentate will contain grades of arsenic and antimony that will incur penalties and the zinc conentrate will contain grades of cadnium that will incur penalties.

1.8 Mineral Resource Estimation

Mineral resource estimates of the Revel Ridge Property were completed by P&E in 2011, 2012, 2018, 2020 and 2022. In addition, a PEA was completed by Micon in 2012 and an updated PEA was completed by Micon in 2021. All these earlier mineral resource estimates are superseded by the mineral resource estimate described in Section 14 of this technical report. The MRE presented in the current technical report has been prepared in accordance with Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 and in conformity with generally accepted "CIM Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral resources have been classified in accordance with the "CIM Standards on Mineral Resources and Reserves: Definition and Guidelines" as adopted by CIM Council on May 10, 2014, and CIM Best Practices Guidelines (2019). Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into a Mineral Reserve. Confidence in the estimate of Inferred mineral resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

The MRE in this current technical report was prepared by the authors using the drill hole database provided by Rokmaster and also includes the analytical results from 223 underground chip samples. Both drill hole and underground chip sample data have been composited over 0.5 m intervals. These data have been reviewed and validated, and the Mineral Resource Estimated by the authors using inverse distance cubed for gold and silver and inverse distance squared for lead and zinc.

The updated 2023 MRE for the Revel Ridge Project, with an effective date of June 6, 2023, is presented in Table 1-1 and Table 1-2. At a cut-off of C$110/t net smelter return (NSR), the MRE totals for all the mineralized zones are: 1.53 million gold equivalent (AuEq) ounces contained within 7.16 million tonnes with an average grade of 6.63 g/t AuEq in the Measured and Indicated classifications; and 1.49 million AuEq ounces within 7.56 million tonnes at an average grade of 6.11 g/t AuEq in the Inferred classification (Table 1-1).

Table 1-1: Revel Ridge Total Updated Measured and Indicated and Inferred Underground Mineral Resources

Classification	Tonnes	AuEq (g/t)	AuEq (oz)	AgEq (g/t)	AgEq (oz)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
Measured	1,916,500	7.88	485,600	799.0	49,231,400	5.49	58.6	2.05	4.01
Indicated	5,239,700	6.18	1,040,400	652.8	109,967,500	3.64	48.5	1.93	4.25
Measured + Indicated	**7,156,200**	**6.63**	**1,526,000**	**691.9**	**159,198,900**	**4.14**	**51.2**	**1.96**	**4.18**
Inferred	7,563,900	6.11	1,486,000	621.7	151,188,800	4.42	48.9	1.48	2.62

Notes

1. Mineral resources are not mineral reserves and do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
2. The inferred mineral resource in this estimate has a lower level of confidence than that applied to an Indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of the Inferred mineral resource could be upgraded to an indicated mineral resource with continued exploration, however there is no certainty an upgrade to the inferred mineral resource would occur or what proportion would be upgraded to an indicated mineral resource.
3. The mineral resources in this estimate were calculated using the CIM Standards on mineral resources and reserves, definitions, and guidelines (2014) prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council and CIM Best Practices Guidelines (2019).
4. The following parameters were used to derive the NSR block model C$/tonne cut-off values used to define the mineral resource:
   - March 2023 Consensus Economics long term forecast metal prices of Au US$1,750/oz, Ag US$22/oz, Pb US$0.95/lb, Zn US$1.26/lb
   - Exchange rate of US$0.74 = C$1.00

- RRMZ process recoveries of Au 96%, Ag 85%, Pb 71%, Zn 70%
- RRYZ process recoveries of Au 86%, Ag 94%, Pb 88%, Zn 93%

5. MDZ AuEq = Au g/t + (Ag g/t x 0.010) + (Pb% x 0.265) + (Zn% x 0.314); MDZ AgEq = Ag g/t + (Au g/t x 101.478) + (Pb% x 26.933) + (Zn% x 31.847); RRYZ AuEq = Au g/t + (Ag g/t x 0.008) + (Pb% x 0.310) + (Zn% x 0.457); RRYZ AgEq = Ag g/t + (Pb% x 40.588) + (Zn% x 59.737)
6. Totals may not sum due to rounding.

The Mineral Resource Estimates for each of the five mineralized zones at Revel Ridge are listed in Table 1-2.

Table 1-2: Mineral Resource Estimate

Classification	Cut-off NSR (C$/t)	Tonnes (kt)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	Pb (%)	Zn (%)	NSR (C$/t)	AuEq (g/t)	AuEq (koz)	AgEq (g/t)	AgEq (koz)
Totals For All Mineralized Zones													
Measured	110	1,916.5	58.6	3,611.6	5.49	338.5	2.05	4.01	544.46	7.88	485.6	799.0	49,231.4
Indicated	110	5,239.7	48.5	8,168.8	3.64	613.9	1.93	4.25	409.01	6.18	1,040.3	652.8	109,967.5
Meas + Ind	110	7,156.2	51.2	11,780.4	4.14	952.4	1.96	4.18	445.28	6.63	1,526.0	691.9	159,198.9
Inferred	110	7,563.9	46.9	11,414.3	4.42	1,075.1	1.48	2.62	417.53	6.11	1,486.7	621.7	151,188.8
Totals For Revel Ridge Main Zone													
Measured	110	1,550.1	63.6	3,171.4	5.89	293.6	2.25	4.25	585.42	8.46	421.5	857.4	42,730.1
Indicated	110	2,922.4	49.6	4,662.5	4.97	466.6	2.02	3.60	491.00	7.13	669.8	722.7	67,902.9
Meas + Ind	110	4,472.6	54.5	7,833.8	5.29	760.3	2.10	3.83	523.72	7.59	1,091.30	769.4	110,663.0
Inferred	110	5,689.1	49.1	8,975.5	4.94	903.3	1.66	2.93	466.75	6.79	1,241.60	688.1	125,859.5
Totals For Revel Ridge RRFZ													
Measured	110	196.1	33.8	212.8	5.08	32.0	0.95	1.78	427.01	6.23	39.3	631.4	3,980.8
Indicated	110	846.5	28.8	785.0	4.01	109.1	0.74	1.11	328.53	4.84	131.8	491.0	13,362.9
Meas + Ind	110	1,042.5	29.8	997.9	4.21	141.1	0.78	1.24	347.05	5.10	171	517.4	17,343.7
Inferred	110	704.7	21.5	488.2	3.96	89.7	0.53	1.00	313.43	4.63	104.9	469.5	10,637.3
Totals For Revel Ridge RRYZs													
Measured	110	0.5	48.0	0.8	0.11	0	1.89	3.99	122.36	2.79	0	363.1	5.8
Indicated	110	887.4	62.9	1794.1	0.10	2.9	2.65	9.08	289.50	5.47	156.2	712.8	20,336.6
Meas + Ind	110	887.9	62.9	1795.0	0.10	2.9	2.65	9.07	289.40	5.47	156.2	712.6	20,342.4
Inferred	110	132.6	126.3	538.8	0.04	0.2	2.43	4.96	198.20	4.03	17.2	521.5	2,223.3
Totals For Revel Ridge RRHZ													
Measured	110	169.7	41.5	226.6	2.35	12.8	1.53	4.37	307.37	4.55	24.8	460.9	2,514.7
Indicated	110	583.5	49.4	927.1	1.88	35.3	2.09	4.69	296.84	4.4	82.6	445.9	8,365.1
Meas + Ind	110	753.2	47.6	1,153.7	1.99	48.1	1.96	4.62	299.21	4.43	107.4	449.3	10,879.8
Inferred	110	575.1	44.8	827.6	1.67	30.9	1.51	3.1	232.23	3.49	64.6	353.7	6,539.9
Totals For Revel Ridge RRMEX													
Inferred	110	462.4	39.3	584.1	3.44	51.1	0.36	0.04	263.83	3.94	58.5	398.8	5,928.8

Notes:

1. Mineral resources are not mineral reserves and do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
2. The inferred mineral resource in this estimate has a lower level of confidence than that applied to an Indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of the Inferred mineral resource could be upgraded to an indicated mineral resource with continued exploration, however there is no certainty an upgrade to the inferred mineral resource would occur or what proportion would be upgraded to an indicated mineral resource.
3. The mineral resources in this estimate were calculated using the CIM Standards on mineral resources and reserves, definitions, and guidelines (2014) prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council and CIM Best Practices Guidelines (2019).
4. The following parameters were used to derive the NSR block model C$/tonne cut-off values used to define the mineral resource:
   - March 2023 Consensus Economics long term forecast metal prices of Au US$1,750/oz, Ag US$22/oz, Pb US$0.95/lb, Zn US$1.26/lb

- Exchange rate of US$0.74 = C$1.00
- RRMZ process recoveries of Au 96%, Ag 85%, Pb 71%, Zn 70%
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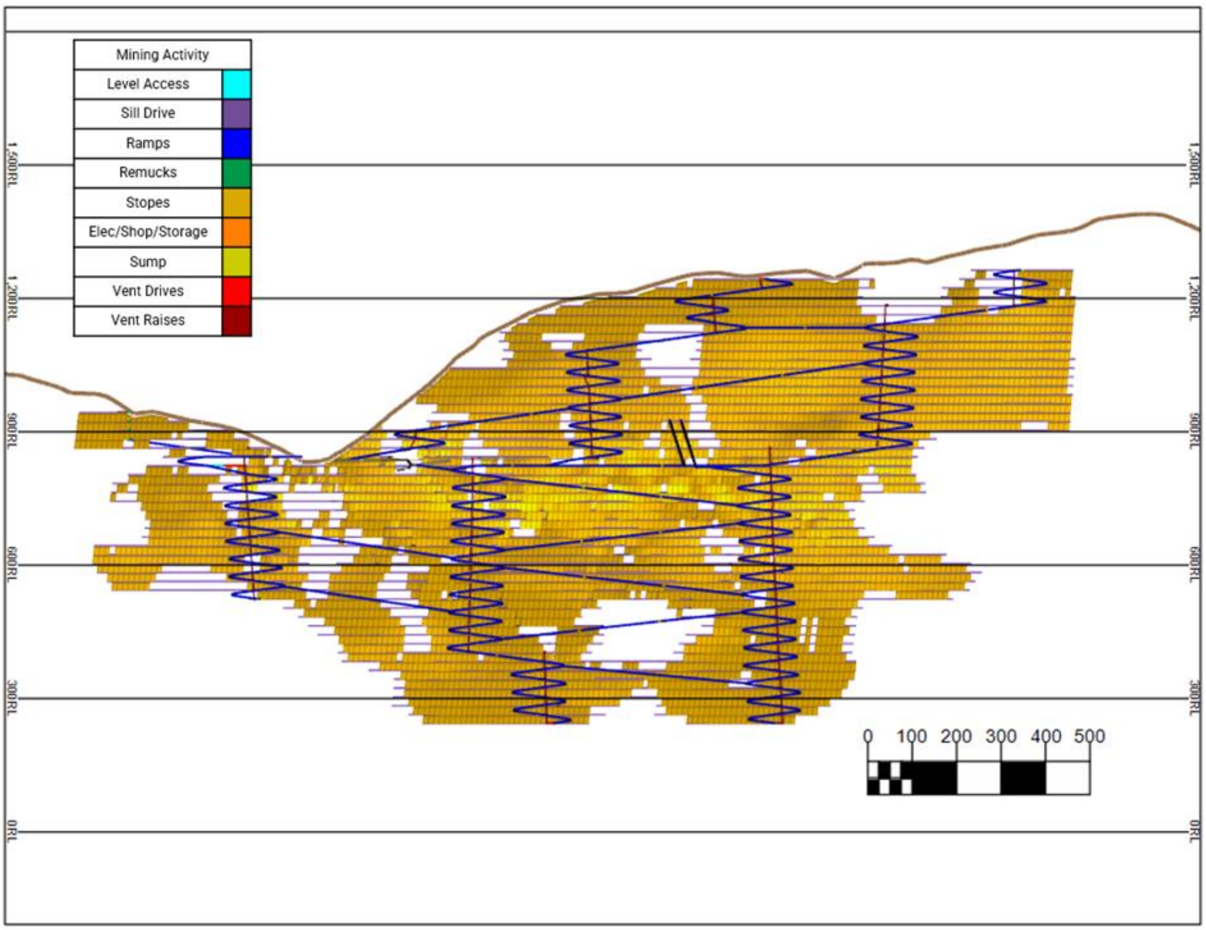
5. MDZ AuEq = Au g/t + (Ag g/t x 0.010) + (Pb% x 0.265) + (Zn% x 0.314); MDZ AgEq = Ag g/t + (Au g/t x 101.478) + (Pb% x 26.933) + (Zn% x 31.847); RRYZ AuEq = Au g/t + (Ag g/t x 0.008) + (Pb% x 0.310) + (Zn% x 0.457); RRYZ AgEq = Ag g/t + (Pb% x 40.588) + (Zn% x 59.737)
6. Totals may not sum due to rounding.

1.9 Mining Methods

Figure 1-1: Underground Mine Design – Long Section Looking Northeast



Source: Mining Plus (2023).

The Revel Ridge mine utilizes the underground mining method of Longhole Open Stoping (LHOS) to extract mineralized material from the RRMZ and RRYZ in a bottom-up sequence. Mining will utilize the existing adits and exploration development to access the deposit and follow along the mineralization 2.25 km along strike and 1.0 km vertically. Stopes are designed to be 20 m in height and 24 m along strike with a minimum design width of 2.0 m. Stopes will be backfilled with pastefill and cemented backfill to provide support and maximize extraction.

The conceptual mine plan estimates a thirteen-year Life of Mine (LOM) based on an average production rate of 2,920 t/d of mill feed. The mine is expected to deliver 11.8 Mt of feed to the mill over the Life of Mine with an average NSR grade of C$361/t and average gold equivalent grade of 5.23 g/t. The mine design is shown in Figure 1-1.

1.10 Recovery Methods

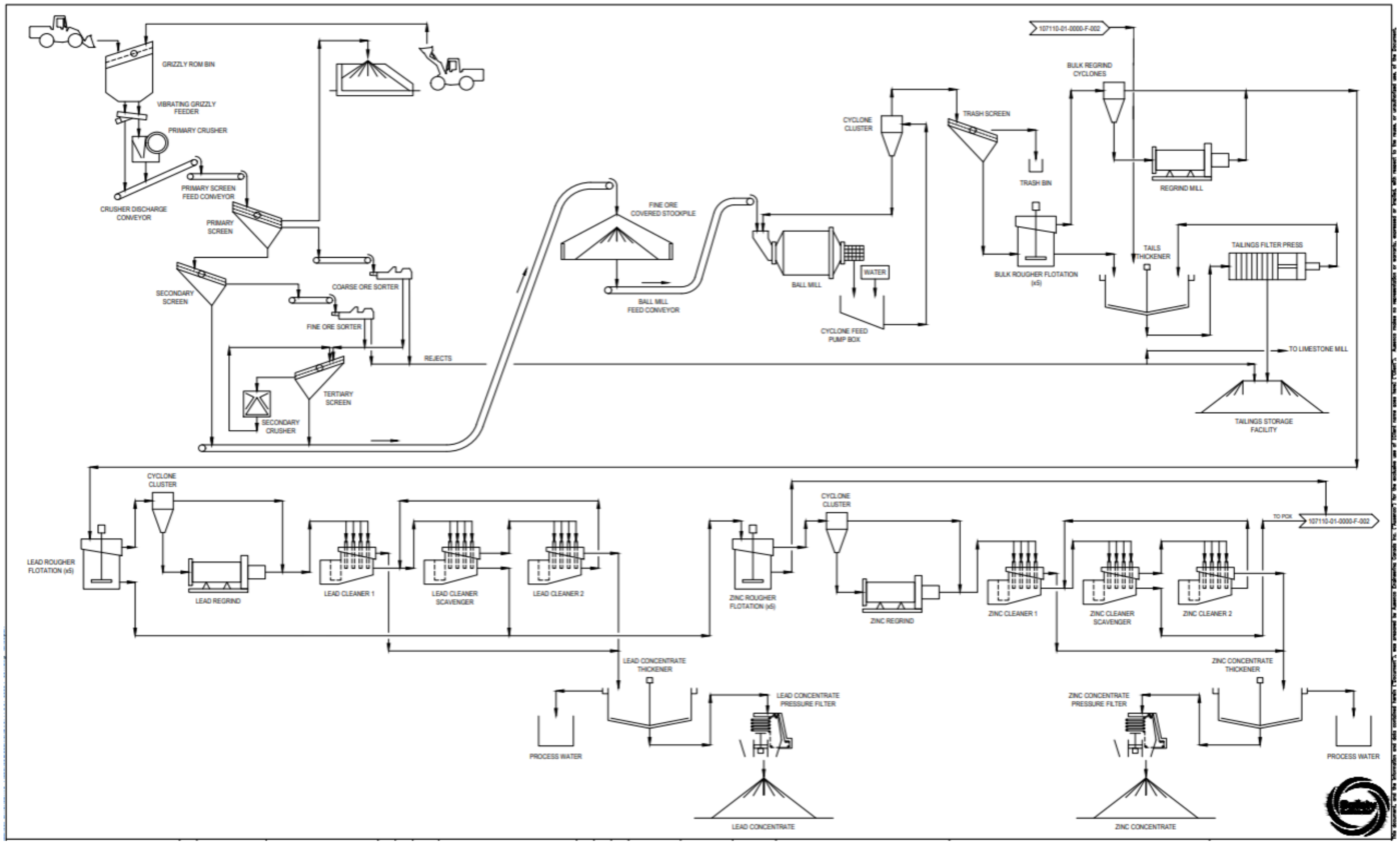
The process design is based on processing mineralized material from the Revel Ridge deposits through crushing, particle sorting, and grinding along with bulk sulphide flotation followed by lead and zinc flotation of the bulk concentrate to produce saleable lead and zinc concentrates. The bulk flotation tails are filtered and stacked in the tailings storage facility. The Zn flotation tails are processed through pressue oxidation (POX), hot cure, and lime boil circuits to maximize the amenability of gold and silver to cyanide leach and recovery into gold doré via the Merrill Crowe process. The design is based on previous testwork programs performed on the deposit, Ausenco's extensive database of reference projects and in house modelling programs. The plant is designed for a throughput of 2,920 t/d or 1.1 Mt/a at 92% availability. The crushing and sorting circuit is designed with an availability of 65%. The plant will operate with two 12-hour shifts per day, 365 days per year.

The process plant features the following:

- Primary and secondary crushing circuit,
- Coarse and fine particle sorting,
- Grinding circuit (ball milling),
- Bulk flotation and concentrate regrind,
- Lead rougher flotation, concentrate regrind, lead cleaner flotation, concentrate thickening and filtration,
- Zinc rougher flotation, concentrate regrind, zinc cleaner flotation, concentrate thickening and filtration,
- Pressure oxidation, gas handling, hot cure, lime boil and counter-current decantation thickening circuit,
- Leach feed regrind, cyanide leach and leach residue wash,
- Clarification, deaeration and Merrill Crowe precipitation circuit,
- Gold smelting circuit with mercury retort,
- Cyanide detoxification circuit,
- Tailings thickening and tailings filtration circuit.

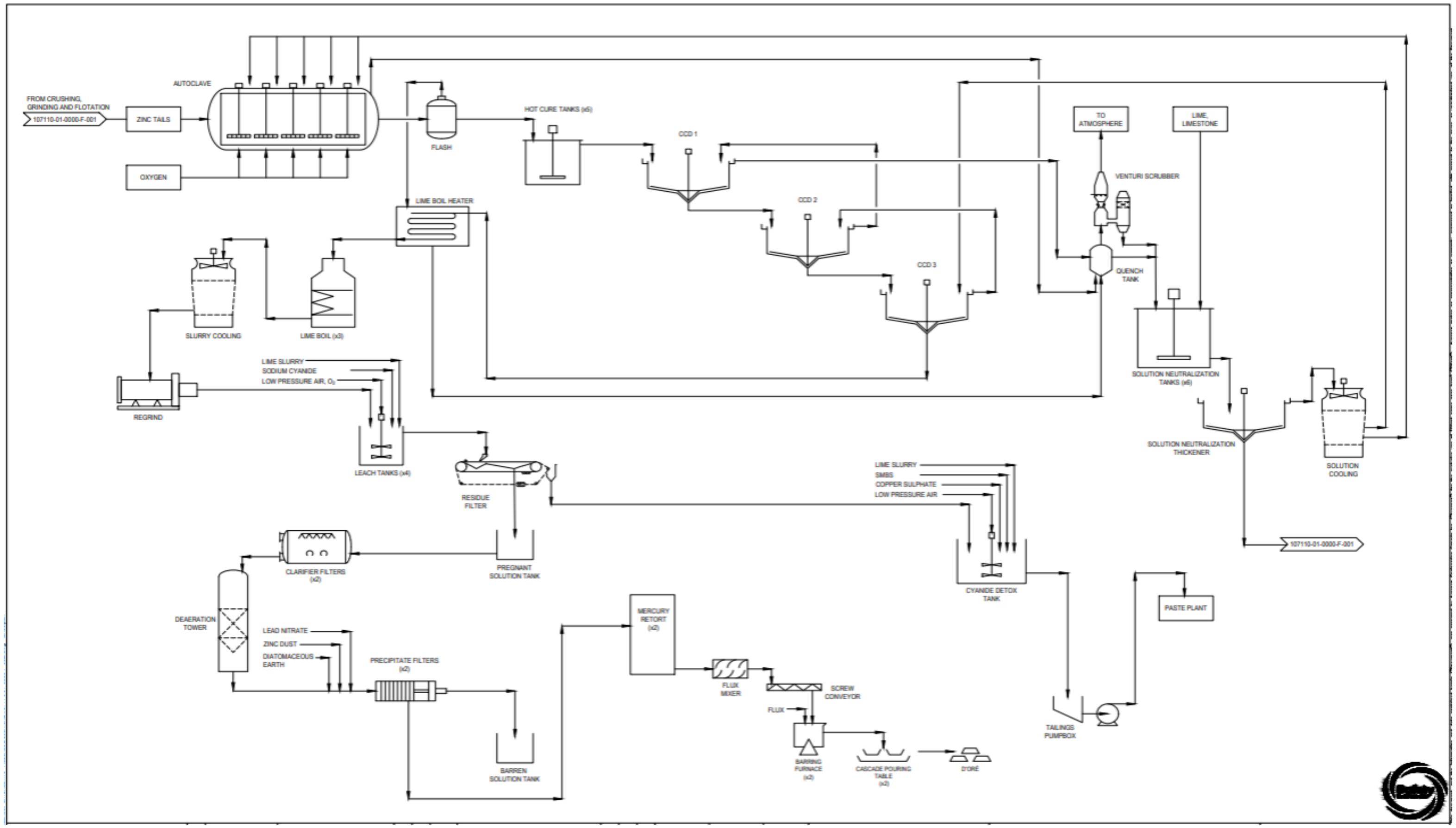
The simplified process flow diagram for the project is shown in Figure 1-2 and Figure 1-3.

Figure 1-2: Process Flow Diagram (Crushing, Grinding, and Flotation)



Source: Ausenco (2023).

Figure 1-3: Process Flow Diagram (POX and Gold Leaching Circuit)



Source: Ausenco (2023).

1.11 Project Infrastructure

1.11.1 Overview

The major project facilities include the site access road, process plant, waste storage facilities, and water management structures. Support facilities also displayed include the gold room, truckshop, cemented backfill paste plant, and building containing administration offices, a laboratory, mine dry, first-aid and lunchroom.

The Revel Ridge site will be drive-in, with camp facilities located on the property. The majority of the workforce will be based locally and will drive to the site each day, while some workers from further abroad will be housed in the camp.

The overall site layout is shown in Figure 1-4.

1.11.2 Site Access

The Property is reached by travelling 32 km North along Provincial Highway 23 from Revelstoke, and then eastward 13 km along the Carnes Creek Forest Service Road. The existing 1.3 km site access road will be upgraded to the east of Carnes Creek which will connect Carnes Creek FSR to the existing mine camp area. Part of the site access road will necessitate upgrading the bridge crossing spanning the creek.

1.11.3 Power Supply

Power will be provided from a connection to BC Hydro's electrical grid via a 69-kV transmission line. The transmission line will be stepped down to the 13.8-kV at the substation for distribution to different power requirements across the project site.

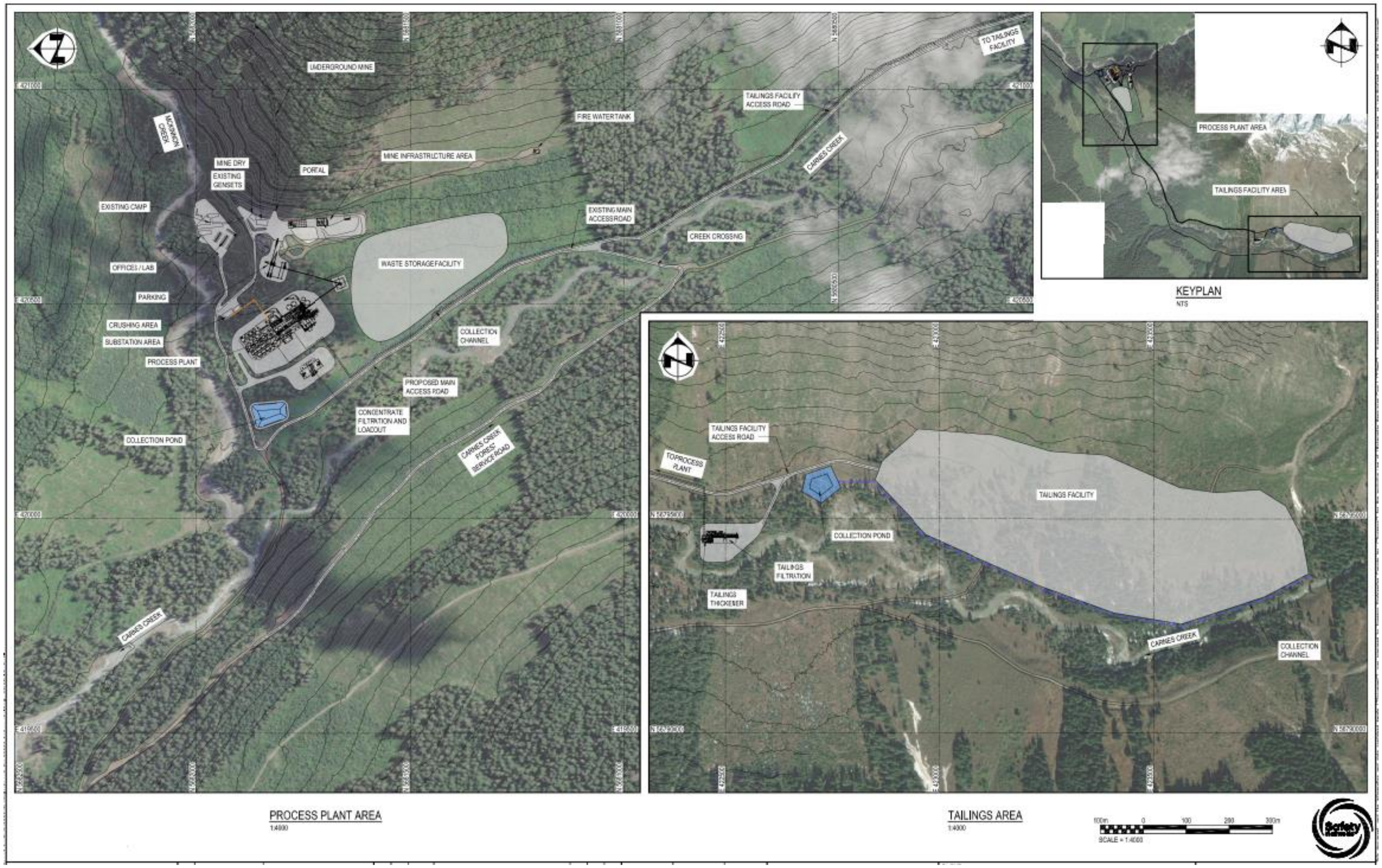
1.11.4 Water Supply

Fresh water will be sourced from the Carnes Creek. The water will be transported through pumps and approximately 700 m of overland pipeline to the process plant where the freshwater tanks will be located. This water will be the source of potable water on site, used for the building facilities and process plant.

1.11.5 On-Site Roads

The roads within the process plant area will generally be a standard lane width of 6 m wide, integrated with the process plant pad earthworks and designed with adequate drainage. The roads will allow access between the mill building, crushing buildings, stockpile and concentrate loadout. The process plant roads will tie-in to the existing roads which connect the administration building, change house and mine dry to the portal, Run-of-Mine (ROM) stockpile, and processing plant.

Figure 1-4: Overall Site Layout Plan



Source: Ausenco (2023).

1.11.6 Buildings

The plant site consists of the necessary infrastructure to support the processing operations. All infrastructure buildings and structures will be built and constructed as per applicable codes and regulations. The project site will include an administration building, plant maintenance shop and warehouse, and other buildings.

1.11.7 Waste Rock and Tailings Storage Facilities

Two waste storage facilities will be constructed to manage waste from project development. The Central Waste Rock Stockpile (CWRS), located at the Plant Site Area, will manage excess waste rock generated during underground mine development. The South Waste Storage Facility (SWSF), located 4 km south of the Plant Site Area, will manage rougher tailings and neutralization residue from processing. The tailings and residue will be filtered prior to placement and compaction in the SWSF.

1.11.8 Water Management

Water management measures for the site were developed to reduce impacts to the surrounding landscape. Annual water balance analyses indicate that the Project will operate under a net hydrological surplus. Diversion ditches will convey non-contact water from upslope areas to the nearby creeks. Collection ditches will convey contact water from processing and waste management areas to water management ponds. Water collected from the SWSF area will be pumped to the Process Plant for reuse. Water collected from the CWRS and process plant run-off will be directed to the Central Water Management Pond (CWMP) for either reuse in the process plant as process water or for treatment and discharge to the environment, as required. The CWMP will also receive water from the underground workings.

1.12 Markets and Contracts

The concentrates produced will be trucked from the project site to Vancouver, where it will subsequently be transported by sea to clients. Concentrates and gold doré will be sold into the general market to North American, European, or Asian smelters and refineries.

Project economics were estimated based on long-term metal prices of US$0.90/lb Pb, US$1.26/lb Zn, US$23.00/oz Ag and US$1,850.00 Au. These metal prices were based on a 3-year trailing average and consensus analyst estimates.

Transportation and off-take agreements for the concentrates and doré are not currently in place but are expected to be negotiated within the industry norms. Similarly, there are no contracts currently in place for supply of reagents, utilities, or other bulk commodities required to construct and operate the Project.

1.13 Environmental, Permitting and Social Considerations

1.13.1 Environmental Considerations

A number of environmental baseline studies and reports were completed between 1990 and 2022. The programs involved the collection of baseline data within the proposed project footprint area and commenced the process of identifying potential environmental constraints and opportunities related to the proposed development of the project.

The environmental baseline studies included:

- Fish population and habitat (2004, 2008, 2021, 2022)
- ARD testing for mineralized and waste material (2007)
- Surface water hydrology and water quality (1990, 2020-2023)
- Groundwater quality (2020-2023)
- Wildlife (2008)
- Vegetation (2004, 2008, 2021)

Updated and expanded baseline studies complementary to the onsite engineered infrastructure designs, should include air quality, meteorology, noise, greenhouse gases and climate change, hydrogeology, and cultural resources, and will be required to support the project through pre-feasibility, feasibility, environmental impact assessment and permitting.

The project site is not within any current park boundary, however, there are two recreation sites, one provincial park, and one national park located within 30 km of the Project, including: Carnes Creek recreation site (11 km west, downstream), Wadley recreation site (9 km southwest, downstream), Martha Creek Provincial Park (15 km southwest, downstream), and Mount Revelstoke National Park (15 km south).

1.13.2 Closure and Reclamation Considerations

The current Conceptual Closure and Reclamation Plan for the project includes the following measures:

- Backfill and seal the underground workings.
- The surface infrastructure including the mineralised stockpile, explosives magazines, fuel, and storage facilities will be decommissioned and removed from the site.
- Concrete slabs and footings will be broken and placed appropriately to meet project closure and reclamation objectives.
- Process buildings, pipelines, conveyor systems, and equipment will be removed from site or appropriately landfilled in an approved facility.
- The CWRS and SWSF will be re-contoured for geotechnical stability, capped with a graded earthfill/rockfill cover to facilitate runoff and minimize infiltration, and revegetated.
- Compacted surfaces including laydowns, civil pads, and roads will be decompacted, re-contoured, capped with a graded earthfill/rockfill cover to facilitate runoff and minimize infiltration, and revegetated.
- Water treatment will be continued as required, until water quality meets discharge criteria. Once water quality meets discharge criteria, water treatment will be stopped, diversions will be decommissioned.

- The downstream slope of the SWSF will be progressively covered with soil and vegetated as the SWSF is raised. Final soil/vegetative covers will be installed along the SWSF crest and CWRS slope and crest at closure. Re-grading of the downstream slopes is not anticipated to be required at closure. The SWSF and CWRS arrangements have been laid out to mimic the local topography and the closed facilities will create landforms that closely resemble the surrounding landscape.
- At closure, it is envisaged that there will be minimal PAG rock due to the nature of the deposit and process oxidation, however any PAG rock present will be managed by capping it with low permeability glacial till to reduce seepage and oxygen infiltration.
- For mine roads, Rokmaster will remove all culverts and install cross-ditches for drainage. The mine site access road will not be deactivated as it will be required for access for continued reclamation activities and monitoring.

Closure planning will include dialogue with respective stakeholders to determine post-mining land use objectives and necessary investigations required to achieve and monitor those objectives.

1.13.3 Permitting Considerations

The major provincial legislation and associated authorizations anticipated for the project include the following: a BC Environmental Assessment Certificate, issued under the BC Environmental Assessment Act, a BC Mines Act Permit, issued under the Mines Act; and Effluent and Air Emissions Permits, issued under the BC Environmental Management Act.

1.13.4 Social Considerations

The property is located within the traditional territories of the Okanagan, Shuswap, and Ktunaxa First Nations.

Baseline socio-economic studies, cultural baseline studies, archaeological overview assessments and archaeological impact assessments will be required at the appropriate time as the project advances into the feasibility and permitting phases and the full extent of the disturbed footprint of the project has been identified.

Rokmaster has commenced conversations with local stakeholders and will be required to consult with the community and local Indigenous stakeholders as part of the EA process, as identified by the provincial government's Section 11 Order when it is issued for the project. On-going consultation efforts will aim to engage both community leaders and members in a spirit of cooperation and communication.

1.14 Capital and Operating Cost Estimates

1.14.1 Capital Cost Estimates

The capital costs provided in this PEA are reported in Canadian dollars (C$) with no allowance for escalation or exchange rate fluctuations. The capital cost estimate conforms to Class 5 guidelines of the Association for the Advancement of Cost Engineering International (AACE International) with an estimated accuracy of +50%/-30% accuracy. The capital cost estimate was developed in Q4 2023 dollars based on budgetary quotations for equipment and construction contracts, as well as in-house database of projects and advanced studies including experience from similar operations.

The total initial capital cost for the Revel Project is C$588.3M and the LOM sustaining cost including financing is C$485.6M. The capital cost summary is presented below in Table 1-3.

Table 1-3: Summary of Capital Costs

WBS	WBS Description	Initial Capital Cost (C$M)	Sustaining Capital Cost (C$M)	Total Cost (C$M)
1000	Mining	89.4	372.1	461.4
2000	Process Plant	280.1	0.0	280.1
3000	Additional Facilities	10.4	66.9	77.3
4000	On-Site Infrastructure	19.5	0.0	19.5
5000	Off-Site Infrastructure	10.0	0.0	10.0
	Total Directs	**409.5**	**439.0**	**848.4**
6000	Project Indirects	13.2	2.1	15.3
7000	Project Delivery	61.2	7.3	68.5
8000	Owner's Cost	20.5	0.0	20.5
	Total Indirects	**94.9**	**9.5**	**104.3**
9000	Provisions (Contingency)	84.0	37.2	121.1
	Closure	-	-	**75.7**
	Project Totals	**588.3**	**485.6**	**1,149.6**

Note: total may not add up due to rounding.

1.14.2 Operating Cost Estimates

The costs considered on-site operating costs are those related to mining, processing, tailings handling, maintenance, power, and general and administrative activities.

A summary of the operating costs is presented below in Table 1-4.

The unit operating cost is C$156.97/t milled, including an annual G&A cost of C$3.65M.

Table 1-4: Operating Cost Summary

Cost Area	Annual Costs (C$M)	C$/t Milled
Mining	85.4	82.67
Process	73.1	70.76
G&A	3.65	3.53
Total	**162.1**	**156.97**

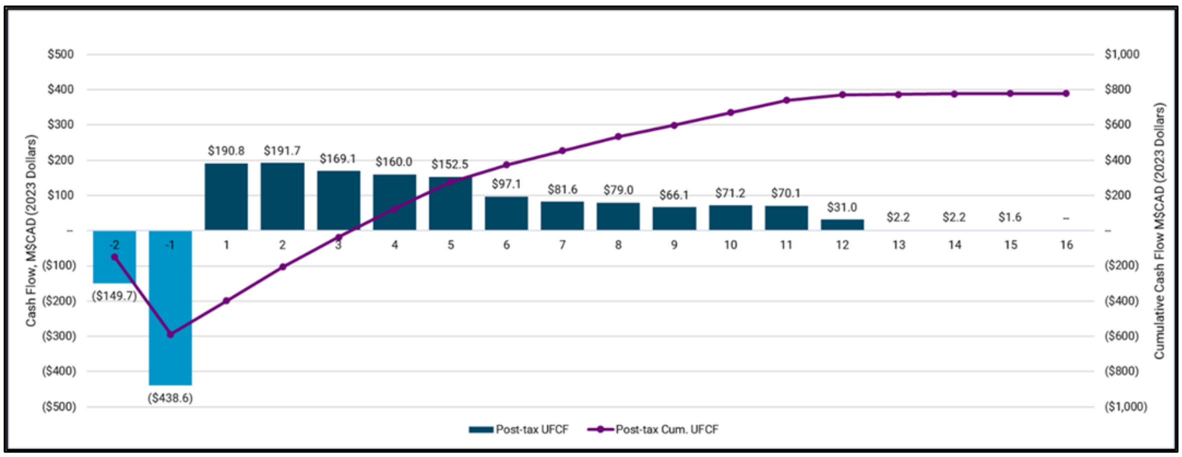
Note: total may not add up due to rounding.

1.15 Economic Analysis

The economic analysis was performed assuming an 5% discount rate. On a pre-tax basis the net present value (NPV) discounted at 5% is C$750.8M; the internal rate of return (IRR) is 29.0 % and payback period is 2.6 years. On a post-tax basis, the NPV discounted at 5% is C$453.9M; the IRR is 21.1 %, and the payback period is 3.2 years. A summary of project economics is shown in Table 1-5. The analysis was done on an annual cashflow basis; the cashflow output is shown graphically in Figure 1-5.

Readers are cautioned that the PEA is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Figure 1-5: LOM Post Tax Free Cash Flow



Source: Ausenco (2023).

1.15.1 Sensitivity Analysis

A sensitivity analysis was conducted on the base case pre-tax and post-tax NPV and IRR of the project using the following variables: metal prices, discount rate, head grade, total operating cost and initial capital cost.

The post tax sensitivity analysis results are summarized in Table 1-6.

Table 1-5: Economic Analysis Summary

General	LOM Total / Avg.
Lead Price (US$/lb)	0.90
Zinc Price (US$/lb)	1.26
Gold Price (US$/oz)	1,850
Silver Price (US$/oz)	23.00
USD:CAD	1.35
Mine Life (Years)	11.4
Total Processed Feed Tonnes (kt)	11,772
Total Waste Tonnes (kt)	4,113
Production	**LOM Total / Avg.**
Mill Head Grade – Pb (%)	1.34
Mill Head Grade – Zn (%)	2.52
Mill Head Grade – Au (g/t)	3.69
Mill Head Grade – Ag (g/t)	38.18
Recovery Rate – Pb (%) to saleable Pb Concentrate	68.4
Recovery Rate – Zn (%) to saleable Zn Concentrate	66.8
Recovery Rate – Au (%) to saleable Pb Concentrate	13.8
Recovery Rate – Ag (%) to saleable Pb Concentrate	36.5
Recovery Rate – Au (%) to saleable Zn Concentrate	0.4
Recovery Rate – Ag (%) to saleable Zn Concentrate	5.8
Recovery Rate – Au (%) to doré	80.4
Recovery Rate – Ag (%) to doré	41.7
Total Metal Payable – Pb (M lbs.)	224
Total Metal Payable – Zn (M lbs.)	372
Total Metal Payable – Au (koz)	1,300
Total Metal Payable – Ag (koz)	10,716
Average Annual Payable Production – Pb (M lbs.)	20
Average Annual Payable Production – Zn (M lbs.)	33
Average Annual Payable Production – Au (koz)	114
Average Annual Payable Production – Ag (koz)	940
Operating Costs	
Mining Cost (C$/t Milled)	82.67
Processing Cost (C$/t Milled)	70.76
G&A Cost (C$/t Milled)	3.53
Total Operating Costs (C$/t Milled)	156.97
Cash Costs (By-Product Basis) (US$/oz Au)	540.2
AISC (By-Product Basis) (US$/oz Au)	836.1
Capital Costs	**LOM Total / Avg.**
Initial Capital (C$M)	588.3
Sustaining Capital (C$M)	485.6
Closure Capital (C$M)	75.7
Salvage Value (C$M)	42.0
Financials	**Pre-Tax**
NPV (5%) ($M)***	750.8
IRR (%)***	29.0
Payback (Years)	2.6
Financials	**Post-Tax**
NPV (5%) ($M)***	453.9
IRR (%)***	21.1
Payback (Years)	3.2

* Cash Costs includes mining costs, processing costs, mine-level G&A, offsite charges, and royalties.
** AISC includes cash costs plus sustaining capital and closure cost.
*** Values shown in the press release are rounded to zero decimal places.

Table 1-6: Post Tax Sensitivity Analysis

Post-Tax Sensitivity to Metal Price

Discount Rate	Post-Tax NPV (US$M) Sensitivity to Discount Rate – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%	Discount Rate	Post-Tax IRR (%) Sensitivity to Discount Rate – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%
1.0%	$159	$435	$700	$965	$1,231	1.0%	6.6%	14.6%	21.1%	27.0%	32.4%
3.0%	$93	$334	$566	$797	$1,028	3.0%	6.6%	14.6%	21.1%	27.0%	32.4%
5.0%	$37	$250	**$454**	$657	$860	5.0%	6.6%	14.6%	**21.1%**	27.0%	32.4%
8.0%	($29)	$149	$319	$488	$657	8.0%	6.6%	14.6%	21.1%	27.0%	32.4%
10.0%	($64)	$95	$247	$397	$547	10.0%	6.6%	14.6%	21.1%	27.0%	32.4%

Total OPEX	Post-Tax NPV (US$M) Sensitivity to OPEX – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%	Total OPEX	Post-Tax IRR (%) Sensitivity to OPEX – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0)	$210	$415	$618	$821	$1,023	(20.0)	13.0%	19.6%	25.6%	31.0%	36.1%
(10.0)	$127	$332	$536	$739	$941	(10.0)	10.1%	17.2%	23.4%	29.0%	34.3%
--	$37	$250	**$454**	$657	$860	--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	($55)	$167	$372	$575	$778	10.0%	2.4%	11.7%	18.7%	24.8%	30.4%
20.0%	($146)	$81	$290	$493	$696	20.0%	0.0%	8.4%	16.1%	22.6%	28.4%

Initial CAPEX	Post-Tax NPV (US$M) Sensitivity to Initial CAPEX – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%	Initial CAPEX	Post-Tax IRR (%) Sensitivity to Initial CAPEX – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	$121	$326	$529	$731	$934	(20.0)	11.3%	20.1%	27.5%	34.3%	40.5%
(10.0%)	$80	$288	$491	$694	$897	(10.0)	8.7%	17.0%	24.0%	30.3%	36.1%
--	$37	$250	**$454**	$657	$860	--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	($6)	$212	$416	$620	$822	10.0%	4.8%	12.5%	18.6%	24.2%	29.2%
20.0%	($49)	$173	$379	$582	$785	20.0%	3.2%	10.6%	16.5%	21.8%	26.6%

Recovery	Post-Tax NPV (US$M) Sensitivity to Recovery – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%	Recovery	Post-Tax IRR (%) Sensitivity to Recovery – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	($293)	($111)	$71	$239	$403	(20.0)	0.0%	0.0%	7.9%	14.2%	19.5%
(10.0%)	($128)	$77	$265	$449	$631	(10.0)	0.0%	8.2%	15.1%	20.9%	26.2%
--	$37	$250	**$454**	$657	$860	--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	$194	$419	$642	$865	1,088	10.0%	12.6%	20.0%	26.6%	32.5%	38.1%
20.0%	$342	$586	$830	$1,073	1,315	20.0%	17.7%	25.0%	31.6%	37.8%	43.5%

Head Grade	Post-Tax NPV (US$M) Sensitivity to Head Grade – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%	Head Grade	Post-Tax IRR (%) Sensitivity to Head Grade – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	($293)	($111)	$71	$239	$403	(20.0)	0.0%	0.0%	7.9%	14.2%	19.5%
(10.0%)	($128)	$77	$265	$449	$631	(10.0)	0.0%	8.2%	15.1%	20.9%	26.2%
--	$37	$250	**$454**	$657	$860	--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	$194	$419	$642	$865	$1,088	10.0%	12.6%	20.0%	26.6%	32.5%	38.1%
20.0%	$342	$586	$830	$1,073	$1,315	20.0%	17.7%	25.0%	31.6%	37.8%	43.5%

Total CAPEX	Post-Tax NPV (US$M) Sensitivity to Total CAPEX – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%	Total CAPEX	Post-Tax IRR (%) Sensitivity to Total CAPEX – Commodity Price: (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	$172	$376	$579	$782	$984	(20.0)	13.6%	22.0%	29.3%	35.9%	42.1%
(10.0%)	$108	$313	$517	$719	$922	(10.0)	9.9%	18.0%	24.8%	31.0%	36.8%
--	$37	$250	**$454**	$657	$860	--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	($34)	$186	$391	$594	$797	10.0%	3.6%	11.6%	17.9%	23.5%	28.6%
20.0%	($105)	$122	$328	$532	$735	20.0%	0.9%	9.0%	15.1%	20.5%	25.4%

1.16 Conclusions and Interpretations

The MRE includes combined Measured & Indicated resource of 7.2Mt grading 4.14 g/t gold, 51.2 g/t silver, 1.96% lead and 4.19 % zinc plus an additional 7.6 Mt of material grading 4.42 g/t gold, 48.9 g/t silver, 1.48% lead and 2.62%

zinc in the Inferred category. The current effective flowsheet for recovery of the metals of value includes removing mine dilution with sensor-based particle sorting, preconcentrating the mill feed with bulk flotation, followed by regrinding and sequential flotation of the bulk concentrate producing concentrates of lead and zinc, with the remaining zinc rougher tails being processed through a POX-leach circuit for recovery of the remaining gold and silver.

The mining method selected for the Revel Ridge property is LHOS using cemented backfill. Mining operations should be able to feed 1.1 Mt/a of mineralized material (1.34% Pb, 2.52% Zn, 3.69 g/t Au, 38.18 g/t Ag) for processing over a 11-year project life. Based on the assumptions and parameters in this technical report, the PEA shows a positive economics (i.e. C$ 453.9 M post-tax NPV (5%) and 21% post-tax IRR). The PEA supports a decision to carry out additional studies to progress the project further into detailed assessment.

1.17 Recommendations

The Revel Ridge Project demonstrates positive economics, as shown by the results presented in this technical report.

It is recommended to continue developing the project through prefeasibility study (PFS). The recommended work program to advance through PFS includes additional drilling to convert inferred resources to indicated resources, additional drilling, metallurgical work and trade-off studies to further improve the process plant design, additional geotechnical drilling to improve the mine plan, further work to characterise the water management and tailings storage facility and expansion and ongoing data collection of environmental data for future permitting and a concentrate marketing study. Table 1-7 summarizes the estimated cost for the recommended future work on the Revel Ridge Project.

Table 1-7: Cost Summary for the Recommended Future Work

Item	Budget (C$M)
Exploration and Drilling	9.6
Metallurgical Testwork	1.4
Mining Methods	0.8
Process and Infrastructure Engineering	1.5
Water Management and SWSF	3.0
Environmental Studies, Permitting, Social or Community Recommendations	1.0
Concentrate Marketing Studies	0.1
Total	**17.3**

Note: total may not add up due to rounding.

2 INTRODUCTION

2.1 Introduction

Rokmaster commissioned Ausenco to compile a PEA of the Revel Ridge Project. The PEA was prepared in accordance with the Canadian disclosure requirements of National Instrument 43-101 – Standards and Disclosure for Mineral Projects (NI 43-101) and the requirements of Form 43-101 F1.

The responsibilities of the engineering companies contracted by Rokmaster to prepare this technical report are as follows:

- Ausenco managed and coordinated the work related to the technical report and developed PEA-level design, including capital and operating cost estimates for the process plant, general site infrastructure, environment and permitting, economic analysis, and completed a review of the environmental studies.
- Mining Plus designed the underground mining, mine production schedule and mine capital and operating costs.
- Canenco managed and directed the metallurgical test work programs.
- Knight Piésold estimated and designed the bulk material estimates for the SWSF and site wide water management measures.
- P&E developed the MRE for the project and completed the work related to the geological setting, deposit type, drilling, exploration works, sample preparation and analysis, and data verification.

2.2 Terms of Reference

The purpose of this technical report is to present the results of the PEA and to support the Rokmaster Resources disclosure in a new release dated December 29, 2023, titled "PEA Delivers Rokmaster Resources Corp Robust Project Economics for Revel Ridge: After-Tax NPV5.0% of C$454M, 21% IRR and 3.2 Year Payback".

All measure units used in this technical report are metric unless otherwise noted and currency is expressed in Canadian dollars (C$). This technical report uses English.

Mineral Resources are estimated in accordance with the 2019 edition of the Canadian Institute of Mining, Metallurgy and Exploration (CIM) Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019 CIM Best Practice Guidelines) and are reported using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves (2014 CIM Definition Standards).

Readers are cautioned that the PEA is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

2.3 Qualified Persons

The Qualified Persons (QP) for the report are listed in Table 2-1. By virtue of their education, experience and professional association membership and independence from Rokmaster Resources, they are considered QP as defined by NI 43-101.

Table 2-1: Report Contributors

Qualified Person	Professional Designation	Position	Employer	Independent of Rokmaster Resources	Sections
Kevin Murray	P. Eng.	Processing Engineering Manager	Ausenco Engineering Canada ULC	Yes	1.1, 1.2, 1.4, 1.10-1.12, 1.14-1.17, 2.1-2.4.1, 2.5-2.6, 3.2, 4, 5, 6, 17, 18.1-18.4.4, 18.4.6-18.4.7, 19, 21.1-21.2.2, 21.2.4, 21.2.6-21.3.2, 21.3.4-21.3.5, 22, 23, 24, 25.1-25.2, 25.8-25.9.1, 25.10, 25.12-25.14, 25.15.1.3, 25.15.1.6, 25.15.2.3, 25.15.2.4, 26.1, 26.5, 26.7.9, and 27
Scott Weston	P. Geo.	VP Business Management	Ausenco Sustainability ULC	Yes	1.13, 3.1, 20, 25.11, 25.15.1.5, 25.15.2.4, 26.7, and 27
Stacy Freudigmann	P. Eng., FF.Aus.IMM	Principal	Canenco Consulting Corp.	Yes	1.7, 2.4.3, 13, 25.5, 25.15.1.3, 25.15.2.3, 26.3, and 27
Eugene Puritch	P. Eng. FEC CET	President	P&E Mining Consultants Inc.	Yes	1.6, 1.8, 14, 25.6, 25.15.1.1, 25.15.2.1, 26.2, and 27
William Stone	PhD., P. Geo	Geological Consultant	P&E Mining Consultants Inc.	Yes	1.3, 7, 8, 11, 25.3, and 27
David Burga	P. Geo.	Geological Consultant	P&E Mining Consultants Inc.	Yes	1.5, 1.6, 2.4.2, 9, 10, 12, 25.4, and 27
Evan Verkade	P.Eng.	Principal Mining Consultant	Mining Plus Canada Consultanting Ltd	Yes	1.9, 16, 18.4.5, 21.2.3, 21.3.3, 25.7, 25.15.1.2, 25.15.2.2, 26.4, and 27
Wilson Muir	P. Eng	Senior Engineer	Knight Piésold Ltd.	Yes	2.4.4, 18.4.8 through 18.4.10, 21.2.5, 25.9.2, 25.15.1.4, 26.6, and 27

2.4 Site Visits

2.4.1 Site Inspection by Kevin Murray, P. Eng.

Kevin Murray visited the site on October 25, 2022, and was able to review the general topography of the project site as well as site access, existing offices, and camp facilities.

2.4.2 Site Inspection by David Burga, P. Geo.

The Revel Ridge Project was visited by Mr. David Burga, P.Geo., of P&E, on May 22 and 23, 2023, for the purpose of completing a site visit that included drilling sites, outcrops, GPS location verifications, discussions, and due diligence drill core sampling. A data verification sampling program was conducted as part of Mr. Burga's on-site review.

2.4.3 Site Inspection by Stacy Freudigmann, P. Eng.

Stacy Freudigmann visited the site on October 29, 2020, July 22, 2021, and October 25, 2022, and was able to observe exploration activities, underground workings, drill core, the general topography of the project site, site access, potential site infrastructure locations and existing offices and camp facilities.

2.4.4 Site Inspection by Wilson Muir, P. Eng.

The site visit was completed by Mr. Wilson Muir, P.Eng. on October 25, 2022, prior to the onset of winter conditions. The weather was mostly cloudy and approximately 5 degrees Celsius with light winds. The ground was clear of snow, allowing for visual observations of the ground conditions.

The main tasks of the site visit included:

- Site meetings/familiarization and project planning with Rokmaster, Ausenco, and Canenco personnel.
- Reconnaissance and inspection of potential waste and water management locations by truck, foot, and helicopter.
- Collection of relevant background information.
- Fulfilment of the qualified person (QP) requirements.

2.5 Effective Dates

The effective date of the overall technical report is December 29, 2023.

The effective date of the MRE (MRE) is June 6, 2023.

2.6 Information Sources and References

Documents listed in Section 3 and Section 27 were used to support preparation of the technical report. The authors are not experts with respect to legal, socio-economic, land title or politial issues and are therefore not qualified to comment on issues related to the status of permitting, legal agreements and royalties. The sources of information supplied by Rokmaster include historical data and reports compliled by previous consultants and researchers of the project as well as other documents cited throughout the technical report and referenced in Section 27.

The QPs have relied on Rokmaster's internal experts and legal counsel for details on project history, and information related to ownership. The QPs used their experience to determine if the information from previous reports was suitable for inclusion in this technical report and adjusted information that required amending. This technical 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 do not consider them to be material.

2.6.1 Previous Technical Reports

- Stone, W., Brown, F., Barry J., Burga, D., Puritch, E., and Freudigmann, S., 2023, technical report and Updated MRE of the Revel Ridge Polymetallic Property, Revelstoke, Mining Division, British Columbia, Canada, Effective date June 6, 2023, Report date July 28, 2023, prepared for Rokmaster Resources Corp.
- Stone, W., Brown, F., Barry J., Burga, D., Puritch, E., and Freudigmann, S., 2022, technical report and Updated MRE of the Revel Ridge Polymetallic Property, Revelstoke, Mining Division, British Columbia, Canada, Effective date November 15, 2021, Report date January 17, 2022, prepared for Rokmaster Resources Corp.
- Puritch, E., Brown, F., Barry, J., Routledge, R., Fung, N., and Gowans, R.M., 2021, NI 43-101 technical report – An Updated Preliminary Economic Assessment of the Revel Ridge Project, Revelstoke, B.C., Canada, Effective date: December 8, 2020, Report date: January 22, 2021, prepared for Rokmaster Resources Corp.

2.6.2 Definitions

Table 2-2: Unit Abbreviations

Unit	Meaning
(°)	degree
%	percent
a	annum
asl	Above sea level
B	billion
C	Celsius
C$	Canadian dollar
cm	centimetre
dmt	dry metric tonne
g	gram
h	hour
ha	hectare
kg	kilogram
km	kilometre
km^2	square kilometres
km^3	cubic kilometres
kV	kilovolt
kW	kilowatt

Unit	Meaning
kWh/a	kilowatt hour per annum
kWh/t	kilowatt hour per metric tonne
L	litre
lb	pound
M	million
m	metre
m^2	square metre
m^3	cubic metre
m^3/h	cubic metres per hour
masl	metres above sea level
mg	milligrams
min	minute
mL	millilitres
mm	millimetre
$M(m^3)$	million cubic metres
Mt	million tonnes
Mt/a	million tonnes per annum
MWh	megawatt hour
µm	micron
oz	ounce
ppm	parts per million
s	second
t	metric tonne
t/d	metric tonnes per day
t/h	metric tonnes per hour
t/m^3	metric tonnes per cubic metre
t/y	metric tonnes per year
US$	United States dollar
%w/w	weight per weight

Table 2-3: Name Abbreviations

Abbreviation	Description
AA	atomic absorption spectroscopy
Ag	Silver
ARD	Acid rock drainage
AND	Aphanitic andesite dykes
Au	Gold
Az	azimuth
BIF	banded iron formation
BCSEE	BC Species and Ecosystem Explorer
BWi	bond ball mill work index
CAD	Consultative Areas Database
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CoG	cut-off grade
CRM	certified reference material

Abbreviation	Description
CWi	Bond crusher work index
DCIP	direct current resistivity and induced polarization
DDH	diamond drill hole
E-GRG	extended gravity recoverable Au
EA	environmental assessment
ECCC	Environment and Climate Change Canada
EM	electromagnetic
EMA	Environmental Management Act
FA	fire assay
FET	federal excise tax
FS	feasibility study
FSR	Forest Service Road
G&A	general and administration
GPR	gross production royalty
GQCV	greenstone-hosted quartz-carbonate vein deposits
GRAV	gravimetric finish method
ICP	inductively coupled plasma
ICP-OES	inductively coupled plasma - optical emission spectrometry
ID2	inverse distance squared
ID3	inverse distance cubed
IOCG	iron oxide copper Au
IP	induced polarization
IRGS	intrusion-related Au system
ISO	International Organization for Standardization
LHSO	Longhole Open Stoping
LIDAR	light detection and ranging
LSA	local study area
LUP	land use permit
MCF	mechanized cut and fill
MDMER	Metal and Diamond Mining Effluent Regulations
MRE	mineral resource estimate
NAD 83	North American Datum of 1983
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Quebec)
NN	nearest neighbour
NSR	net smelter return
NTS	national topographic system
OK	ordinary kriging
Pb	Lead
PEA	preliminary economic assessment
PFS	prefeasibility study
PGE	platinum group elements
QA/QC	quality assurance/quality control
QP	qualified person (as defined in National Instrument 43-101)
ROM	run of mine
RQD	rock quality designation

Abbreviation	Description
SAG	semi-autogenous grinding
SCC	Standards Council of Canada
SD	standard deviation
S_d.BWI	micro hardness or bond ball mill work index on SAG ground material
SEDEX	sedimentary exhalative deposits
SG	specific gravity
TEM	transient electromagnetic
TMF	tailings management facility
UG	underground
UTM	Universal Transverse Mercator coordinate system
UV	ultraviolet
VLF-EM	very low frequency electromagnetic
VMS	volcanogenic massive sulphide
Zn	Zinc

3 RELIANCE ON OTHER EXPERTS

3.1 Environmental, Permitting, Closure, and Social and Community Impacts

The QPs have fully relied upon, and disclaim responsibility for, information supplied by Rokmaster Resources and experts retained by Rokmaster Resources for information related to environment, permitting, closure planning and related cost estimation, and social and community impacts as follows:

- BC Conservation Data Centre. (2023). BC Species and Ecosystems Explorer. BC Government, Victoria, British Columbia, Canada. Available: http://a100.gov.bc.ca/pub/eswp/ (Accessed November 2023).
- Government of BC. (2009). Order – Ungulate Winter Range #U-3-005 Mountain Caribou – Revelstoke Shuswap Planning Unit.
- EcoLogic Consultants Ltd. (2022). Revel Ridge: Terrestrial Ecosystem Mapping Report. Prepared for Masse Environmental Consultants Ltd.
- EcoLogic Consultants Ltd. (2022a). Wildlife Data Collected During the TEM Field Survey. Prepared for Masse Environmental Consultants Ltd.
- Equinox Operations Group, (1990). Geochemistry and Hydrology Report on Carnes and McKinnon Creeks. Revelstoke Mining Division. British Colombia.
- Golder Associates. (2008). J&L Mine 2008 Fish Habitat Assessments. Prepared for Merit Mining Corporation.
- Golder Associates. (2008a). J&L Mine Summer 2008 Vegetation and Wildlife Field Surveys. Prepared for Merit Mining Corporation.
- Golder Associates. (2008b). J&L Mine 2008 Winter Wildlife Tracking. Prepared for Merit Mining Corporation.
- Golder Associates. (2008c). J&L Mine 2008 Spring Surveys. Prepared for Merit Mining Corporation.
- Government of BC. (2009). Order – Ungulate Winter Range #U-3-005 Mountain Caribou – Revelstoke Shuswap Planning Unit.
- Government of BC: Consultative Areas Database [web application]. (2023a). Victoria, British Columbia, Canada. Available: https://maps.gov.bc.ca/ess/hm/cadb/ (Accessed November 2023).
- Government of BC: iMapBC [web application]. (2023). Victoria, British Columbia, Canada. Available: https://www2.gov.bc.ca/gov/content/data/geographic-data-services/web-based-mapping/imapbc (Accessed November 2023).

- Masse Environmental. (2020). Water Sampling Program – Revel Ridge Discharge Application #110409. Prepared for Rokmaster Resources Corp.
- Masse Environmental. (2022). Fish Surveys Completed for Revel Ridge Project. Prepared for Rokmaster Resources Corp.
- Masse Environmental. (2023). Fish/benthic Invertebrate Surveys Completed for Revel Ridge Project – 2022. Prepared for Rokmaster Resources Corp.
- Masse Environmental. (2023a). Revel Ridge Drill Project: Wildlife and Species at Risk Management Plan. Prepared for Rokmaster Resources Corp.
- MESH Environmental Inc. (2007). Monitoring and Management Plan for Continued Underground Exploration Development in the 832 Level Adit, J&L Project. Prepared for Merit Mining Corporation.
- Rokmaster Resources Corp. (2021). Draft Initial Project Description.
- Rokmaster Resources Corp. (2023). Reclamation and Closure Plan on the Revel Ridge (formerly J&L) Property.
- Rokmaster Resources Corp. (2023a). Water Quality Monitoring Data.

This information was relied upon in Section 1.13, 20, and 25.11.

3.2 Taxation

The QPs have fully relied upon and disclaim responsibility for information supplied by Independent tax consultant Wentworth Taylor relating to the tax model used in the economic analysis, according to the file “107110-01 Revel Ridge PEA Financial Model_Rev D.xlsx” received via email on December 28, 2023.

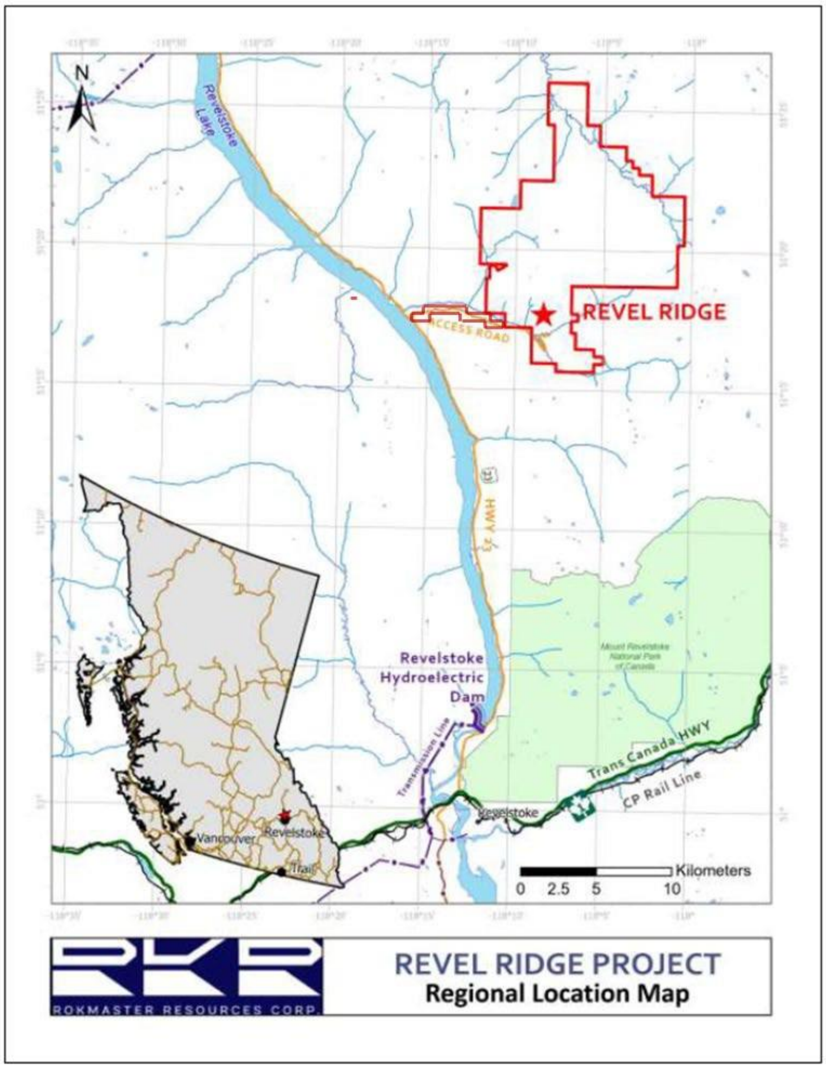
This information was relied upon in Section 1.15, 22, and 25.14.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The Revel Ridge Property is located in the Revelstoke Mining Division in southeastern British Columbia approximately 32 km northeast of Revelstoke, BC, 420 km northeast of Vancouver, BC, and 290 km west of Calgary, AB. The Property is within the 082M-030 NTS map sheet. The location of the portal, that is located near the center of the Property, is UTM 11 U 420,719 m E, 5,681,811 m N (51° 16' 56" N and 118° 08' 12" W) shown in Figure 4-1.

Figure 4-1: Property Location Map



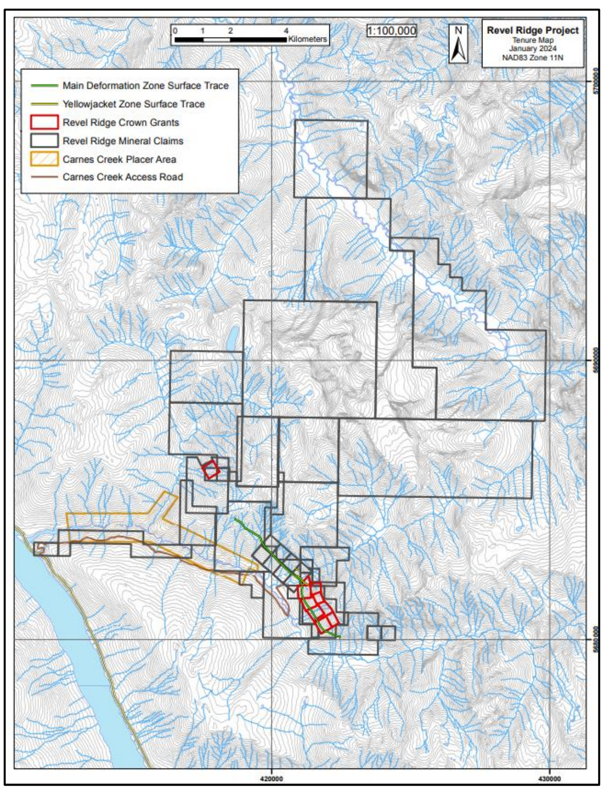
Source: P&E (2021).

4.2 Property Description and Tenure

The Revel Ridge Property is composed of 35 mineral claims and 10 Crown Grant Lots covering a total area of 14,722 ha (Figure 4-2, Table 4-1, and Table 4-2). The mineral claims cover approximately 14,715 ha and Crown Grant Aberdeen covers an additional 7.5 ha. Eighteen of the mineral claims are held by Huakan International Mining Inc. (Huakan), all of which are in good standing until 2026. The remaining 17 claims on the Property are held Rokmaster Resources Corp., all of which are in good standing until 2026. A legal land survey of the mineral claims has not yet been undertaken. However, the Crown Grant Lots are legally surveyed. All of the Crown Grants are entirely covered by mineral claims, except for the small portion of Aberdeen. The annually applied tax payment due date for Crown Grants is June 30 and is payable to the B.C. Government. Payment is required by the due date to ensure each Crown Grant Lot is held in good standing.

The MRE described in Section 14 of this technical report is covered by mining claims 398402, 398403, 398410, 399181, 606405, and 1073475, all of which are in good standing, as of the effective date, of this technical report. The mineral resources are also covered by nine of the ten Crown Grants (except 9332040). The surface rights over the property are owned by the Crown and administered by the Government of BC and would be available for any eventual mining operation. The ownership of the other rights (Aboriginal, placer, timber, water, grazing, trapping, outfitting, etc.) affecting the property were not investigated by the author.

Figure 4-2: Property Claim Map



Source: P&E (January 2024).

Table 4-1: Revel Ridge Property Mineral Claims

Tenure Number	Claim Name	Area (ha)	Owner (100%)	Issue Date	Expiry Date
398402	J1	25.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398403	J2	25.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398404	J3	25.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398405	J4	25.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398406	J5	25.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398407	J6	25.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398408	J7	25.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398409	J8	25.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398410	J9	225.00	Huakan International Mining Inc.	November 18, 2002	January 20, 2026
398411	J10	300.00	Huakan International Mining Inc.	November 19, 2002	January 20, 2026
398412	J11	25.00	Huakan International Mining Inc.	November 19, 2002	January 20, 2026
398413	J12	25.00	Huakan International Mining Inc.	November 19, 2002	January 20, 2026
399179	SAGE	375.00	Huakan International Mining Inc.	January 12, 2003	January 20, 2026
399180	J13	500.00	Huakan International Mining Inc.	January 12, 2003	July 1, 2026
399181	J14	500.00	Huakan International Mining Inc.	January 13, 2003	July 1, 2026
399182	J15	375.00	Huakan International Mining Inc.	January 13, 2003	August 1, 2026
401774	BRUSH	300.00	Huakan International Mining Inc.	April 18, 2003	January 20, 2026
606405	RRYZ	161.69	Huakan International Mining Inc.	June 21, 2009	January 20, 2026
1070395	J&L 2	20.21	Rokmaster Resources Corp	August 16, 2019	January 20, 2026
1070401	J&L 1	606.17	Rokmaster Resources Corp	August 16, 2019	January 20, 2026
1073472	CARNES 1	504.90	Rokmaster Resources Corp	December 25, 2019	January 20, 2026
1073473	CARNES 2	545.23	Rokmaster Resources Corp	December 25, 2019	January 20, 2026
1073474	CARNES 3	222.26	Rokmaster Resources Corp	December 25, 2019	January 20, 2026
1073475	CARNES 4	262.84	Rokmaster Resources Corp	December 25, 2019	January 20, 2026
1078024	DOWNIE 1	484.46	Rokmaster Resources Corp	August 16, 2020	January 20, 2026
1078025	DOWNIE 2	1998.14	Rokmaster Resources Corp	August 16, 2020	January 20, 2026
1078026	DOWNIE 3	1938.91	Rokmaster Resources Corp	August 16, 2020	January 20, 2026
1078027	DOWNIE 4	725.58	Rokmaster Resources Corp	August 16, 2020	January 20, 2026
1078028	DOWNIE 5	1997.22	Rokmaster Resources Corp	August 16, 2020	January 20, 2026
1078029	DOWNIE 6	2018.13	Rokmaster Resources Corp	August 16, 2020	January 20, 2026
1089245		262.72	Rokmaster Resources Corp	January 20, 2022	January 20, 2026
1089251	SOFT	20.20	Rokmaster Resources Corp	January 20, 2022	January 20, 2026
1089352		40.42	Rokmaster Resources Corp	January 20, 2022	January 20, 2026
1089040	HARD	20.20	Rokmaster Resources Corp	January 20, 2022	January 20, 2026
1089047		60.64	Rokmaster Resources Corp	January 20, 2022	January 20, 2026
Total		**14,714.92**			

Notes:
1) Claim status information effective June 6, 2023.

Table 4-2: Revel Ridge Crown Grant Lots

Lot Number	Pin ID	Claim Name	Mining Division
L 14821	8907110	Goat Fraction	Revelstoke
L 14822	8907240	Goat No. 2 Fraction	Revelstoke
L 14823	8907370	Goat No. 3 Fraction	Revelstoke
L 14824	8907400	Goat No. 4 Fraction	Revelstoke
L 14825	8907530	Goat No. 5 Fraction	Revelstoke
L 14826	8907660	Goat No. 6 Fraction	Revelstoke
L 14827	8907790	View Fraction	Revelstoke
L 14828	8907820	View No.2 Fraction	Revelstoke
L 14829	8907850	Creek Fraction	Revelstoke
L 7408	9332040	Aberdeen	Revelstoke

Information relating to land tenure was verified by the QP on June 6, 2023, utilizing the public information available through the Mineral Titles Online (MTO) system at https://www.mtonline.gov.bc.ca/mtov/home. The QP has relied on this public information, and information from Rokmaster, and has not undertaken an independent verification of title and ownership of the roperty claims.

4.3 Huakan - Rokmaster Agreement Terms

Huakan owned claims that overlay the mineral resource described in Section 14 of this technical report. Rokmaster has an exclusive option to earn a 100% interest in the Huakan claims by paying Huakan an aggregate of C$44,200,000 in cash on the following schedule (the Option Period):

1. C$200,000 within five business days of the date on which Rokmaster has obtained TSX Venture Exchange (TSXV) acceptance of the Huakan-RKR Agreement (the Effective Date). Now paid – see below.
2. An additional C$1,000,000 within five business days of the first anniversary of the Effective Date. Now paid – see below.
3. An additional C$4,000,000 within five business days of the second anniversary of the Effective Date. Now paid – see below.
4. An additional C$6,000,000 within five business days of the third anniversary of the Effective Date.
5. An additional C$13,000,000 within five business days of the fourth anniversary of the Effective Date.
6. An additional C$20,000,000 within five business days of the fifth anniversary of the Effective Date.

In addition, to maintain the Option, Rokmaster is to complete an updated PEA on the Project on or before the first anniversary of the effective date (now complete). If and when Rokmaster has satisfied the aforementioned Option exercise conditions, Rokmaster would have the right and option, in lieu of acquiring the Project assets, to instead acquire all of Huakan's issued and outstanding shares from Huakan's shareholders.

Furthermore, Huakan has indemnified Rokmaster in the event of any failure to deliver title to the Property and if Huakan fails to do so, Huakan will refund all payments and expenditures made by Rokmaster during the Option period.

There are no underlying net smelter return (NSR) royalties on the Property.

On February 25, 2020, Rokmaster announced that it had received regulatory approval to pay, and had paid, the first C$200,000 option payment to Huakan. On February 25, 2021, Rokmaster announced that the Company made its second option payment to Huakan in the amount of C$1 million. On February 25, 2022, Rokmaster made its third option payment to Huakan in the amount of C$4 million.

On February 2, 2023, Rokmaster announced that it entered into an amending agreement with Huakan to extend the fourth option payment due on February 25, 2023, by 12 months to February 2024, at which time a penalty of $400,000 will also be due as consideration for the extension. Accordingly, the total payment due on February 25, 2024, is C$19,400,000. Pursuant to the amending agreement, the Company also agreed to complete an updated PEA and an updated MRE on the Revel Ridge Project on or before December 31, 2023. Failing that, the Company shall pay Huakan the penalty no later than December 31, 2023, and such payment shall be deductible from the total option payment due on February 25, 2024.

4.4 Mineral Claims

To maintain British Columbia mineral claims in good standing, assessment or development work is required on a claim, on or before the set expiry date. Effective July 1, 2012, all mineral claims in the province were set back to a Year 1 requirement, regardless of how many years had elapsed since their original staking. As of that date, annual work commitments were set on a four-tier schedule, as follows:

- $5.00/ha for anniversary years 1 and 2
- $10.00/ha for anniversary years 3 and 4
- $15.00/ha for anniversary years 5 and 6
- $20.00/ha for subsequent anniversary years.

Assessment work in excess of the annual requirement may be credited towards future years. Companies are permitted to pay cash in lieu of work expenditures; however, the cost is double the scheduled rate above. Before their expiry, the mineral claims will require assessment work at a rate of $20.00/ha.

4.5 Permitting and Liabilities

The Revel Ridge Property is currently covered by exploration permit MX-4-500 (valid until October 30, 2025), with an $80,000 bond (placed by Huakan) in place with the Ministry of Energy, Mines and Petroleum Resources, BC, to facilitate any required reclamation. The reclamation liabilities covered by the bond include removing the camp and workshop, covering the PAG pile with soil and seed, scarifying and seeding the campsite, portal laydown areas and access roads, and barricading the two portals.

4.6 Armex Statement of Claim

On January 17, 2018, Armex Mining Corp. (Armex) filed a statement of claim with the British Columbia Supreme Court (Vancouver Registry). Armex claims that it has a valid letter of intent with Huakan covering Huakan's J&L property, now named the Revel Ridge Property. Huakan also filed a counterclaim against Armex on March 13, 2018. Huakan has notified the Company that it intends to defend the Armex action. Rokmaster and the TSX Venture Exchange have both been informed by Armex of their statement of claim. The lawsuits have not been resolved as of the effective date of this technical report.

4.7 First Nations within the Revelstoke Region

According to the First Nations Consultative Boundaries Map (2005), the claim areas of five First Nations overlap the Revel Ridge Property. As the map demonstrates, the Little Shuswap Indian Band, Neskonilth Indian Band, Adams Lake Indian Band, Okanagan Indian Band, and the Ktunaxa Kinbasket Tribal Council assert interests in the region embracing the Revel Ridge Property. The Property is on the periphery of all five claim areas.

In 2010, the Province of British Columbia introduced a new web application to assist with the identification of First Nation claim areas. This web tool is called the Consultative Areas Database (CAD, public database), and by accessing it users can generate a list of First Nations with potential interests in lands within the province. In this instance, the CAD (Public) generates a report indicating that two political organizations and twelve First Nations have potential interests in the Revel Ridge Property. In the list below, the First Nations have been grouped according to their affiliations with political organizations:

- Shuswap Indian Band (Teit's Kinbasket band on Windermere Lake)
- Little Shuswap Indian Band (Teit's Lake Shuswap band at Salmon Arm aka Squilax)
- Splats'in First Nation (Spallumcheen)
- Neskonlith Indian Band
- Adams Lake Indian Band
- Okanagan Nation Alliance
- Okanagan Indian Band (Northern Okanagan)
- Penticton Indian Band (Northern Okanagan)
- Lower Similkameen Indian Band (Northern Okanagan)
- Ktunaxa Nation Council
- Akisqnuk First Nation (Upper Kutenai on Windermere Lake).

4.8 Risks

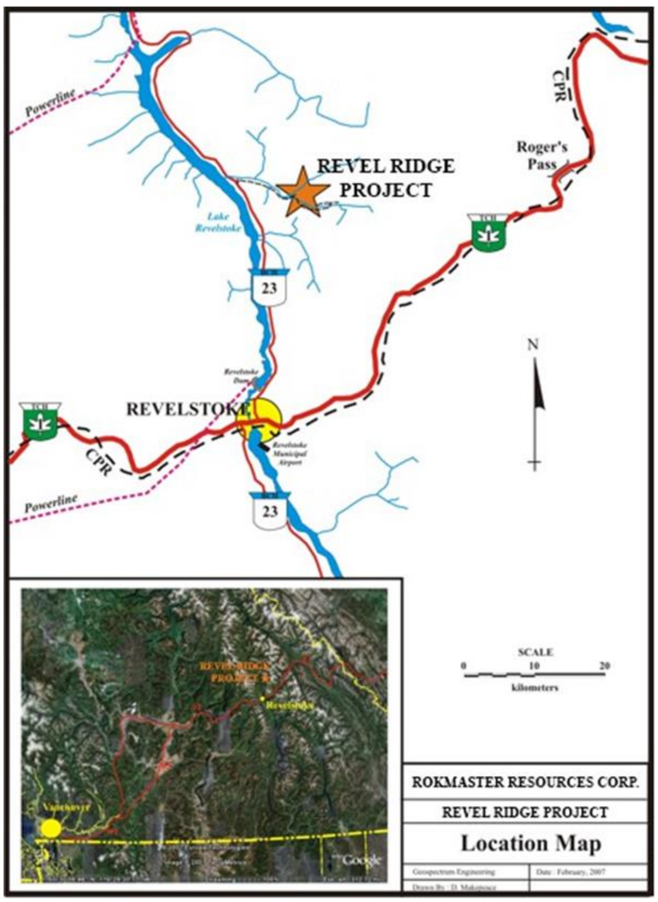
No other significant factors or risks are known that affect access, title or right or ability to perform the exploration work recommended on the property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Property is located 32 km north of the town of Revelstoke in British Columbia. Vehicle access to the Property is via Provincial Highway 23, north of the City of Revelstoke and Trans-Canada Highway 1 (Figure 5-1). 32 km north of Revelstoke, Highway 23 intercepts the Carnes Creek Forest Service Road (CC FSR). The Property is then reached by travelling eastward 13 km along the CC FSR to the Revel Ridge Mine camp. The road travel time to the camp is approximately 45 minutes from Revelstoke. The Forest Service Road is radio controlled, however, currently is not being used for logging activities. Due to lack of activity by logging companies, road maintenance has been undertaken by Huakan and Rokmaster. Helicopter access from Revelstoke takes approximately 15 minutes. There are three helicopter bases in Revelstoke from which flights can be chartered.

Figure 5-1: Road Access Map



Source: P&E (2020).

Access to the Property from Revelstoke is via the paved Highway 23 and an accessible year-round,regardless of weather, the Carnes Creek Forest service road. The road to the camp and the 832 m level portal and shop are in serviceable condition. Several overgrown trails access the majority of the workings on the Property. The original bridges over Carnes Creek and over McKinnon Creek were destroyed by a flood in 2008. In 2008, a detour was built to another bridge over Carnes Creek providing access to the camp. The detour starting at kilometre 10 has a locked gate controlled by the Company. The road to the original 830 m level portal is not drivable, due to slumping and erosion.

5.2 Climate

Revelstoke has a humid continental climate with the Koppen-Geiger classification Dfb. The average annual temperature is 6ºC https://en.climate-data.org/north-america/canada/british-%20columbia/revelstoke-714868/. The summer weather is moderate with July average temperatures of 18.7°C. The average annual precipitation is 103 cm/year. Winters are long and characterized by heavy snowfalls (1 m to 4 m) with cool temperatures. Average January temperatures are -6.5ºC. Snowfall typically occurs between October and May at higher elevations and between November and April at lower elevations, such as at the camp and portals elevation. Exploration, development, and production activities can be carried out year-round.

5.3 Local Resources and Infrastructure

As of the 2021 census, the City of Revelstoke has a population of 8,275 and is located on the Trans-Canada Highway and the Canadian Pacific Railway (CP). The economy of Revelstoke is forestry, construction, tourism, hydroelectric operations, transportation (mainly CP Rail), and public services. There is a large, skilled workforce of trades, technical professionals, and equipment suppliers available throughout the region.

The Revelstoke Hydroelectric Dam, located on the Columbia River, is 2 km north of Revelstoke and produces power for a large portion of British Columbia. There are no power lines running along Highway 23, although there is an underground telephone line.

5.4 Infrastructure

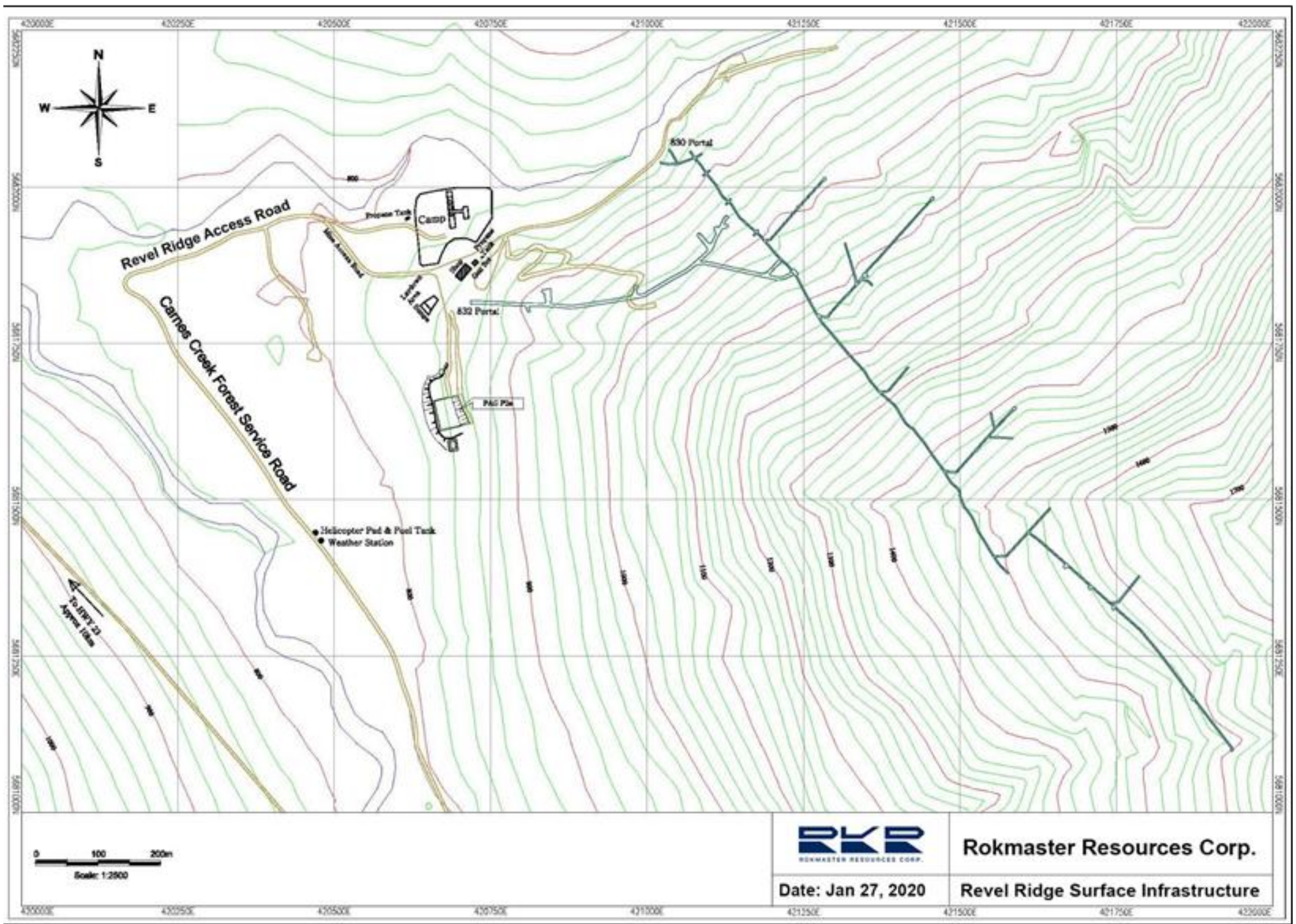
Revelstoke and surrounding area are well serviced by the Trans Canada Highway No. 1 and the CP rail line. Highway No. 1 provides access to Calgary, located 407 km east, and Kamloops, 212 km to the west. Revelstoke has a commercial airport. The nearest airports with scheduled flights are Kamloops, BC, Kelowna, BC, and Calgary, AB.

The Project assets include a rail siding and load-out facility for the CP Rail in Revelstoke. A fleet of formerly utilized underground mining equipment is stored in the company yard north of Revelstoke, with a locked warehouse full of mining equipment, supplies, parts and spares that serviced the underground drifting and drilling programs from 2008 to 2012.

The Property has a 40-man camp with an effective snow roof near the 832 m level portal (Figure 5-2). A water treatment plant was installed in the camp, was removed in 2014 and stored in a yard north of Revelstoke. There is a large maintenance shop, dry, lunchroom, first aid and office facility, all in excellent condition, located in the immediate vicinity of the 832 m level portal. Electric power was produced by on-site diesel generators, enabling the operation of a satellite phone and internet system, all of which have been removed to the storage yard north of Revelstoke. The generator shed is still intact. A 40,000 litre Enviro-tank is currently located next to the generator shed.

The Property hosts several portals and drifts (Figure 5-3). Only two portals (830 m and 832 m level portals) are accessible and are currently locked due to safety requirements. A total of 3.1 km of operational underground workings are present on the Property, although access is restricted without ventilation and due to local flooding. The 1,400 m long 830 m level track drift (2.4 m x 2.4 m profile) has exposed the RRMZ for approximately 800 m in length. This track drift commenced development in 1965 and has since been extended on numerous occasions by subsequent owners.

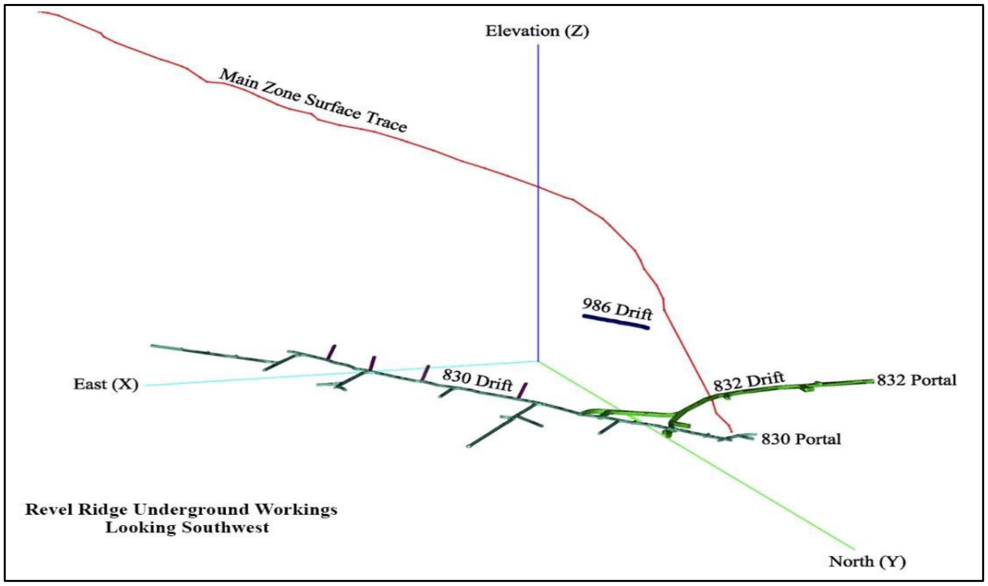
Figure 5-2: Plan View of Roads, Camp, Shop, PAG Pile and Surface Projection of Underground Workings



Source: P&E (2020).

Huakan extended the underground track drift system between 2011 and 2012 by 450 m. The 830 m level track drift has not deteriorated over time and was inspected in 2012. The 830 m level track drift was driven on the RRMZ, exposing the RRMZ for approximately 800 m. Approximately 50 m from the 830 m level portal, this drift has a dip in the track which has accumulated approximately 30 cm of water for a 25 m stretch. The drift is not ventilated but is potentially accessible with proper equipment and supervision. Five tracked crosscuts totalling 1,150 m run northeast from the main 830 m level track drift (into the hanging wall) provided drill stations for diamond drilling that define the mineralized zones. Several raises off the 830 m level track drift have aided in the extraction of several bulk samples since the 1990s. Side dumping mining cars, used for drifting in 2008-2012, are parked outside the 832 m level portal area.

Figure 5-3: 3D View of Underground Workings



Source: P&E (2020).

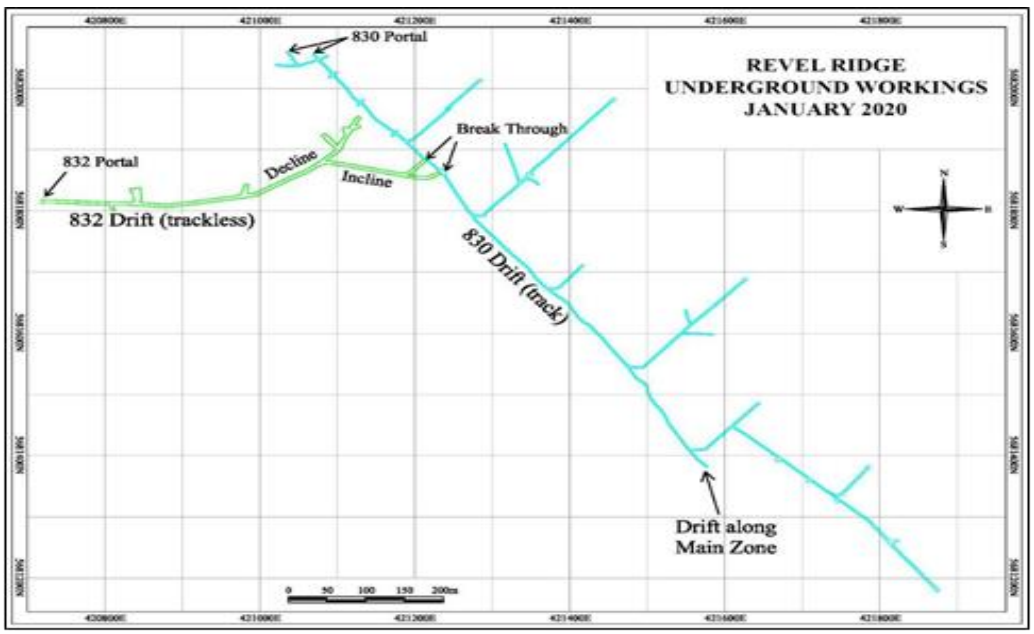
The 550-m long (5 m x 5 m profile) 832 m level trackless drift was installed by Merit in 2008 and connects to the track drift, thereby providing year-round underground access to the 830 drift as shown in Figure 5-4. Approximately 350 m from the 832 Portal, the ramp connects to the track drift. Due to this configuration, the 832 drift is dewatered by a submersible electric pump placed in a re-muck bay near the 830 drifts. An approved ventilation system currently provides fresh air from the 832 Portal to the 830 underground workings. The 832 m level trackless drift also extended approximately 50 m further as a decline from the point of the inclined ramp. This decline could be extended an additional 100 m to drift through the RRYZ.

According to Micon (2021), “Water drains from the 832 m level portal into a two-compartment settling pond outside of the portal. During the Fall of 2020, the daily average flow rate from the 832 m level portal was approximately 5 L/s. The overflow from the settling ponds gravitates 200 m away to a flat area 350 m from Carnes Creek where it permeates into the forest floor. Water samples collected from the settling pond discharge contained an average of 0.041 mg/L total arsenic (cf. an average of 0.037 mg/L As between 2012 and 2019). However, during the same period, no arsenic was detected in samples collected from Carnes Creek at the old bridge crossing below the 832 Portal.”

200 m south from the 832 m level portal exists a lined Potentially Acid Generating (PAG) waste rock storage area that was created by Huakan in 2011shown in Figure 5-2. The PAG pile is covered by tarps and was built to drain to one corner and piped out into a seepage pond. Generally, the outflow pipe from the lined PAG pad is dry throughout the year. However, after some rains, there was a trickle of outflow that facilitated a sample collection. Water quality testing of this flow indicated below acceptable levels for BCWQ Criteria for Freshwater Aquatic Life, except for cadmium.

Selkirk Helicopters will occasionally use the Property as a re-fueling station for their operations. A skid mounted fuel tank is located approximately 300 m from the 832 m level portal on the Forest Service Road. There is a helicopter-accessible ski chalet located 5 km east of the Property at the lower portion of the Durrand Glacier. This chalet is used for heli-skiing in the winter and alpine hiking in the summer.

Figure 5-4: Plan View of the Underground Workings of 832 m and 830 m Level Drifts

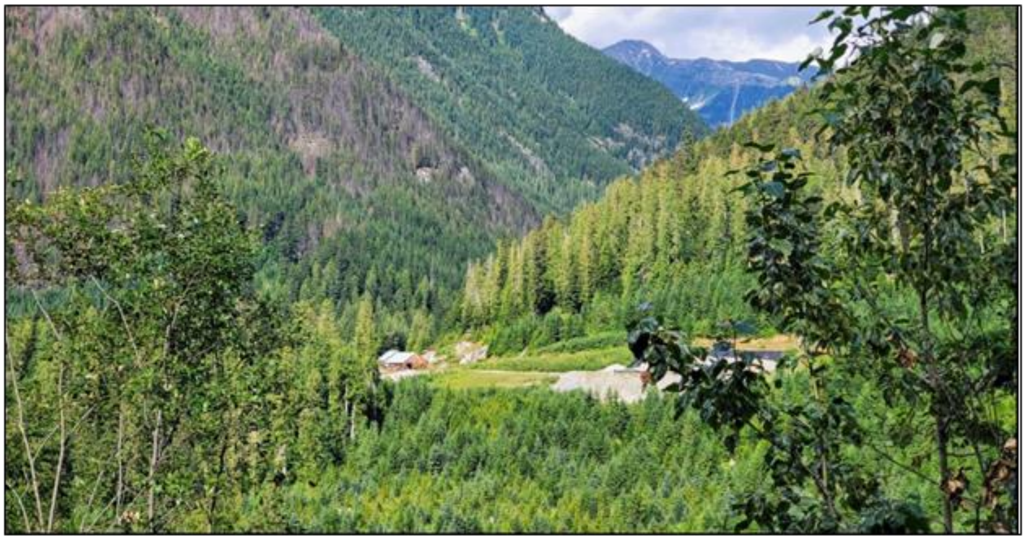


Source: P&E (2020).

5.5 Physiography

The Revel Ridge Property topography is characteristic of the Selkirk Mountains (Figure 5-5). The elevation ranges from 700 m to 3,050 m above mean sea level. The topographic relief is a result of recent alpine glaciation. Incised creeks, such as McKinnon Creek, created narrow valley floors, whereas major creeks, like Carnes Creek, exhibit a broader U-shaped appearance with the potential for deep valley-bottom overburden. The talus covered slopes are steep, ranging from 28° to 40°, whereas bedrock slopes grade up to near vertical, depending on lithology.

Figure 5-5: Revel Ridge Property Physiography



Source: Rokmaster Resources Corp. (2021).

All of these conditions make traversing the Property somewhat hazardous and time consuming. Numerous avalanche chutes occur in the area. An avalanche chute occurred beside the original 830 m portal and prompted the driving of the 832 m level trackless drift, which allows safe year-round access to the underground workings. Flat ground is limited on the Property and there appears to be a sufficient area for a process plant site and waste rock storage piles to the north and south of McKinnon Creek, should the Project advance to production. There is a tributary valley 3-4 km upstream on Carnes Creek that may be serviceable as a SWSF, however, further study would be required for permitting.

The main watercourse on the Property is Carnes Creek, which transects the area and is from 10 to 25 m across and fast-moving. Its main source is the Durrand Glacier, which is east of the Property. McKinnon Creek is a tributary of Carnes Creek and is a more juvenile watercourse that is between 10 to 15 m wide and can change its flow volume rapidly. These watercourses enter the Columbia River, which flows southwest through Washington State to the Pacific Ocean.

The area surrounding the intersection of McKinnon and Carnes Creeks has been the focus of the majority of the work over the life of the Property and is where the camp, shop and 832 m level portal are located.

Vegetation on the Property changes from alder, devil's club, stinging nettles and deadfalls in the valley floor, through stands of cedar, hemlock and minor fir on the mountainsides, to sub-alpine to alpine at approximately 1,980 m above sea level (asl). The Carnes and Tumbledown Glaciers are immediately east of the Property boundary.

6 HISTORY

This technical report section is summarized from the technical reported by P&E (published July 2023).

6.1 Discovery

The Revel Ridge Property area was first explored as early as 1865 when placer miners discovered gold in Carnes Creek. In 1896 prospectors, Jim Kelley and Lee George, staked the first claims at the junction of Carnes and McKinnon Creeks. The earliest work (1896-1900) carried out at the Roseberry Mineral Zone, 4.5 km northwest of where the RRMZ was later discovered. The Property was historically referred to as the J&L Property since its discovery by these two prospectors, Jim and Lee.

Since discovery, exploration programs involving geological mapping and mineral prospecting, geochemistry, geophysics, trenching, and underground drifting and drilling have been carried out and are summarized in the sections that follow.

6.2 Geological Mapping and Mineral Processing

The initial recorded mapping and prospecting of the J&L Property was done by Dr. Gunning of the Geological Survey of Canada (GSC) in 1928. Companies that have mapped and prospected the J&L Property include Piedmont Mines Ltd. (1929), Westairs Mines Ltd. (1963-1965), BP Selco (1981 to 1985), Equinox Resources Ltd. (Equinox) (1989) and Weymin Mining Corporation (1996 to 1997). The results of these mapping programs led to the identification of the surface trace of the RRMZ and several additional parallel mineralized structures. Geological mapping and mineral prospecting on the Property were not carried out on the Property by Huakan.

6.3 Geochemistry

Geochemical surveys were conducted on the J&L Property by BP Selco (1981 to 1985), Equinox Resources Ltd. (1989) and Weymin Mining Corporation (1996 to 1997). Geochemical soil anomalies (Zn, Pb and As) identified the surface trace of the RRMZ and the Copper Queen Zone. Geochemical soil sampling surveys were not carried out by Huakan on the J&L Property.

6.4 Geophysics

The first geophysical survey on the J&L Property was a helicopter-based input electromagnetic survey completed in May 1982 by BP Selco Inc. The centre of the Questor survey was located at latitude 51° 22’ N and longitude 118° 15’ W and totalled 699 km flown covering an area 232 km^2 in size. The main purpose of the survey was to delineate the structure that hosts the J&L Zone and to trace any extension to the known mineralization. Approximately 22 anomalous responses were picked up from the Questor survey, 11 of which were found within the Property claim boundaries at that time.

Nine of these responses were in potentially favourable geological settings and three were considered priority targets. A response was not detected over the J&L Zone itself, although the survey did not adequately cover the extent of the known surface trace of the J&L (RRMZ).

Due to the incomplete coverage of the Questor Input survey, a helicopter based Dighem II electromagnetic survey was flown in August 1982 that did overlap part of the area covered by the preceding Questor survey. The Dighem II survey was carried out along 396 km of flight lines covering an area of 396 square km (km^2). During the Dighem II survey, only three new anomalies were recognized, and comparisons were made between the Questor and Dighem surveys to delineate any anomaly commonalities between the two surveys. A weak response was detected approximately along strike with the RRMZ, 1 km south of the McKinnon Creek Valley.

During July 1991, a program of ground transient electromagnetic (TEM) surveying was carried out on the J&L Property by Frontier Geosciences Inc. on behalf of Equinox Resources Ltd. The survey entailed 7.2 km of coverage testing 700 m of the surface strike expression of the RRMZ. A base line was established along the northwest-southeast projected axis of the target and perpendicular lines were established every 100 m. A transmitter loop was laid out downslope and to the southwest of the survey grid.

Two electromagnetic (EM) anomalies typical of the proposed geological target were observed as a result of this survey. The stronger of the two anomalies, occurred at the southwest corner of the northwest end of the survey gird near the valley bottom, and appeared unrelated to the location/strike of the RRMZ. No geologic explanation was given for this anomaly, which was speculated to be caused by graphite content as found in an outcrop 400 m to the northwest of the anomaly.

The second EM anomaly was clearly attributed to the RRMZ. Responses to the target zone were observed on all lines surveyed across the main grid. The Zone is typically evident as a strong anomaly, observed into the middle time channels. Although the overall response reflects a large, tabular zone, particularly on the more northwesterly lines, there is evidence which suggests that the Zone may contain multiple conductors.

Huakan did not complete any geophysical work on the J&L Property.

6.5 Trenching

A total of 52 trenches have been excavated on the J&L Property from 1925 to 1982. In 1925, Mr. E. McBean excavated 30 trenches and pits along the surface trace of the RRMZ on Goat Mountain. 20 trenches were excavated by Westairs Mines Ltd. between 1962 and 1967. The trenches assisted in delineating the surface expression of the RRMZ over Goat Mountain. The primary documentation related to surface trenching on the J&L Property is found in the 1982 Summary Report on the J&L Option by R. Pegg for BP Selco Inc. In Pegg's report, there is detailed documentation regarding the geological description of 26 individual closely spaced surface trenches following approximately 1.2 km of strike length along the RRMZ. That report also provides the assay data for each of the sampled mineralized trench intervals and descriptions of 11 mineral showings, located mainly between trench 24 and 26, at the southeast end of the surface expression of the RRMZ. P&E (2011) noted that at least 545 samples that were taken from the trenches on the J&L Property. Huakan did not undertake any trenching work on the J&L Property.

6.6 Development and Drilling 1912 to 2017

6.6.1 1912 to 1996 Work

Development on the RRMZ mineralization commenced in 1912 with the collaring of the 986 m level portal and two shallow shafts (each 46 m deep). By 1924, metallurgical tests were attempting to resolve problems due to the high arsenic content of the mineralization. During 1924 to 1927, Porcupine Aufields Development and Finance Company completed 43 m of underground drifting on two levels. In the following year, 26 kg of RRMZ mineralized rock were shipped to the Department of Mines in Ottawa for metallurgical testing. By 1927, the Big Bend Road had reached the mouth of Carnes Creek, improving the access to the Property.

Mr. T. Arnold acquired the Crown Grants and mineral claims in 1934. He, and subsequently his estate, had controlled these claims and Crown Grants until August 2010 (when Merit exercised its option to own 100% interest in the Property). Between 1929 to 1933, significant development was completed on the A & E prospect, to the northwest of the RRMZ.

In 1935, Raindor Au Mines optioned the Property and extended the 986 m level adit to 152 m long on the RRMZ. . In 1946, the two shafts were deepened, collectively to 117 m. Asarco optioned the Property in 1952 and completed several trenches on the RRMZ. . In 1962, Westairs Mines Ltd. optioned the J&L, A & E and Roseberry prospects. Westairs collared a new portal, the 830 m level (tracked) adit in 1965 to explore the RRMZ. Its total length was 297 m. This portal has become one of the major underground assets on the Property. A road (12.4 km) was finally built onto the Property from the Big Bend Road (now Hwy 23) that same year.

In 1980, Pan American Minerals (Pan American) leased the Property from T. Arnold. In 1981, the Property was optioned by BP Minerals Ltd., Selco Division (BP-Selco) who commenced a large surface and underground exploration program. BP-Selco extended the 830 m level (tracked) adit an additional 1,333 m by drift and crosscuts. They completed 64 underground drill holes (2,640 m) over the next four years. In 1986 to 1987, Noranda Mines Ltd. optioned the Property and completed metallurgical studies on the RRMZ. In 1987-1988, Pan American extended the 830 m level (tracked) adit with an additional 250 m of drift and crosscuts and completed four raises totalling 120 m.

Equinox optioned the Property from Pan American in 1988 and completed 32 underground drill holes for a total of 2,985 m between 1988 and 1989. A 270-tonne bulk sample was mined from three take-down-backs (TDBs) for metallurgical studies. Cheni Au Mines Ltd. (Cheni) became part of the joint-venture group in 1991 with the discovery of the RRYZ mineralization from 32 surface drill holes. The newly discovered mineralization occurs in the hanging wall of the RRMZ and was considered to be a blind deposit (i.e., there is no surface evidence, although boulders of the RRYZ mineralization are present in McKinnon Creek).

In 1991, Cheni also collared a new trackless 832 m level portal (3.0 m x 3.5 m), with an adit that ran 170 m long, stopping short of linking it to the 830 m track drift. In 1991, Equinox announced a MRE (historical resource estimate) for both the RRMZ and RRYZ. The historical resources are not reported here since they have not been relied upon. Metallurgical testing continued on RRMZ material through the early 1990s.

6.6.2 1996 to 2010 Work

In 1996, Weymin Mining Corporation (Weymin) optioned the Property from Equinox. Three surface drill holes (503 m) were completed shown in Table 6-1 and a 120-t underground bulk sample was retrieved from the 830 m level for metallurgical studies from six sample locations.

Table 6-1: 1996 RRYZ Zone Drill Highlights

Drill Hole ID	From (m)	To (m)	Core Width (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
S-97-1	92.42	95.28	2.86	0.09	18.08	0.89	3.22
S-97-1	95.28	97.28	2.00	0.00	5.66	0.29	0.08
S-97-1	98.28	99.28	1.00	0.00	40.46	0.83	0.95
S-97-2	67.15	68.22	1.07	0.07	64.46	3.05	11.94
S-97-2	75.72	80.50	4.78	0.24	63.06	2.38	14.92
S-97-2	84.05	86.05	2.00	0.15	33.09	1.98	5.68
S-97-3	75.06	75.54	0.48	0.00	27.77	1.63	3.80
S-97-3	82.54	87.02	4.48	0.09	52.71	2.43	11.10
S-97-3	93.55	94.38	0.83	0.34	121.78	5.69	15.19
S-97-3	96.07	98.92	2.85	0.23	29.10	1.58	5.87

In 1996, Weymin commissioned H.A. Simons of Vancouver to complete two detailed reports; "Technical Review of the J&L Property" and "Project Opportunities for the J&L Property". In March 1998, H. A. Simons completed the "McKinnon Creek Property Scoping Study". Simons provided analyses of six cases, exclusively on the RRMZ. The RRYZ was not analyzed. The two favoured cases are not reported here since they are historical and are not relied upon.

BacTech Mining Corporation (BacTech) optioned the Property in 2004. BacTech carried out further metallurgical tests, engineering and environmental studies. A minor drilling program was carried out that year. Due to the financial collapse of BacTech, the drilling details have never been made available.

On April 13, 1997, Merit Mining Corp. (Merit) entered into an option agreement with the Estate of T. Arnold to acquire a 100% interest in the Property. By December 2007, a 40-man camp was installed, construction of a shop/mine dry complex was completed, and mining equipment was procured. A late-fall 2007 surface diamond drilling program of nine drill holes totalling 1,363.37 m was completed, with the objective of verifying historical drilling over a portion of the RRYZ. The program successfully achieved this objective by intercepting multiple Zn-Pb-Ag zones similar in grade and width to previous drilling, summarized in Table 6-2.

The 2007 surface drilling program also intercepted RRMZ material. However, the RRMZ is not strongly developed adjacent to the RRYZ north area and ranges from between 0.25 and 3.75 m wide with lower metal values.

Rehabilitation of the 832 m portal and underground development commenced in January 2008. The original 170-m long Cheni 832 drift was slashed out to a 5 m by 5 m profile to allow for the passage of 30 t trucks. The 832 m level drift was extended 550 m farther with the 5 m by 5 m profile and connected to the 830-track drift approximately 310 m from the original 830 m level portal. This allowed for easy underground access. This drifting was completed by

September 2008, at which time the program was suspended, due to financial constraints and a major downturn in world metal prices.

Table 6-2: 2007 RRYZ Drill Highlights

Drill Hole ID	From (m)	To (m)	Length (m)	Ag (g/t)	Pb (%)	Zn (%)	Combined Pb-Zn (%)
M07SJ-01	22.00	25.00	3.00	11.80	0.65	2.83	3.48
M07SJ-01	27.50	30.00	2.50	25.92	1.32	6.83	8.15
M07SJ-01	33.10	34.85	1.75	84.55	3.01	12.07	15.08
M07SJ-01	39.35	41.15	1.95	61.00	3.49	3.39	6.88
M07SJ-01	43.90	63.30	19.40	27.85	1.10	5.19	6.29
Including	43.90	49.50	5.60	27.06	1.12	8.54	9.66
Including	50.90	57.55	6.65	22.01	0.93	4.40	5.33
Including	58.80	63.30	4.50	52.19	1.89	5.06	6.95
M07SJ-01	67.50	69.00	1.50	58.13	3.63	9.65	13.28
M07SJ-02	23.15	28.00	4.85	44.58	1.75	7.22	8.97
M07SJ-02	31.30	36.10	4.80	47.31	1.97	4.77	6.74
M07SJ-02	40.90	43.00	2.10	22.72	1.13	3.91	5.04
M07SJ-02	50.15	58.00	7.85	9.98	0.38	4.11	4.49
M07SJ-02	68.60	73.00	4.40	55.40	2.47	9.65	12.12
M07SJ-02	98.00	99.00	1.00	66.20	1.64	9.54	11.18
M07SJ-03	34.00	37.00	3.00	55.57	1.91	8.43	10.34
M07SJ-03	46.00	46.75	0.75	108.00	4.33	7.21	11.54
M07SJ-03	52.00	54.70	2.70	65.08	1.89	12.71	14.60
M07SJ-03	61.05	61.55	0.50	66.20	1.64	9.54	11.18
M07SJ-03	68.00	70.00	2.00	19.15	1.04	10.75	11.79
M07SJ-03	72.00	73.50	1.50	30.53	1.80	8.01	9.81
M07SJ-04	48.30	49.65	1.35	104.36	4.97	7.75	12.72
M07SJ-04	109.75	111.15	1.40	0.80	0.03	4.83	4.86
M07SJ-04	116.00	120.00	4.00	156.88	0.56	1.09	1.65
M07SJ-05	40.60	43.00	2.40	38.82	1.57	4.50	6.07
M07SJ-05	45.00	49.05	4.05	11.57	0.64	2.93	3.57
M07SJ-05	52.00	55.20	3.20	44.94	1.98	20.05	22.03
M07SJ-05	58.00	59.50	1.50	102.73	2.83	17.93	20.76
M07SJ-05	98.00	99.35	1.35	38.30	1.23	5.78	7.01
M07SJ-06	31.00	47.00	15.52	56.08	2.28	6.11	8.39
Including	31.00	36.00	5.00	74.14	2.70	8.66	11.36
Including	38.90	47.00	8.10	62.85	2.73	6.61	9.34
M07SJ-06	61.25	63.00	1.75	66.55	2.72	10.14	12.86
M07SJ-08	95.75	98.40	2.65	41.30	1.69	4.14	5.83
M07SJ-09	91.00	92.30	1.30	113.23	0.77	3.64	4.41
M07SJ-09	100.20	101.500	1.30	13.40	0.87	5.08	5.95

6.6.3 2010 to 2017 Work (Huakan International Mining Inc.)

Merit Mining Corp. changed its name to Huakan International Mining Inc. (Huakan) in 2010.

6.6.3.1 Huakan Drilling Program

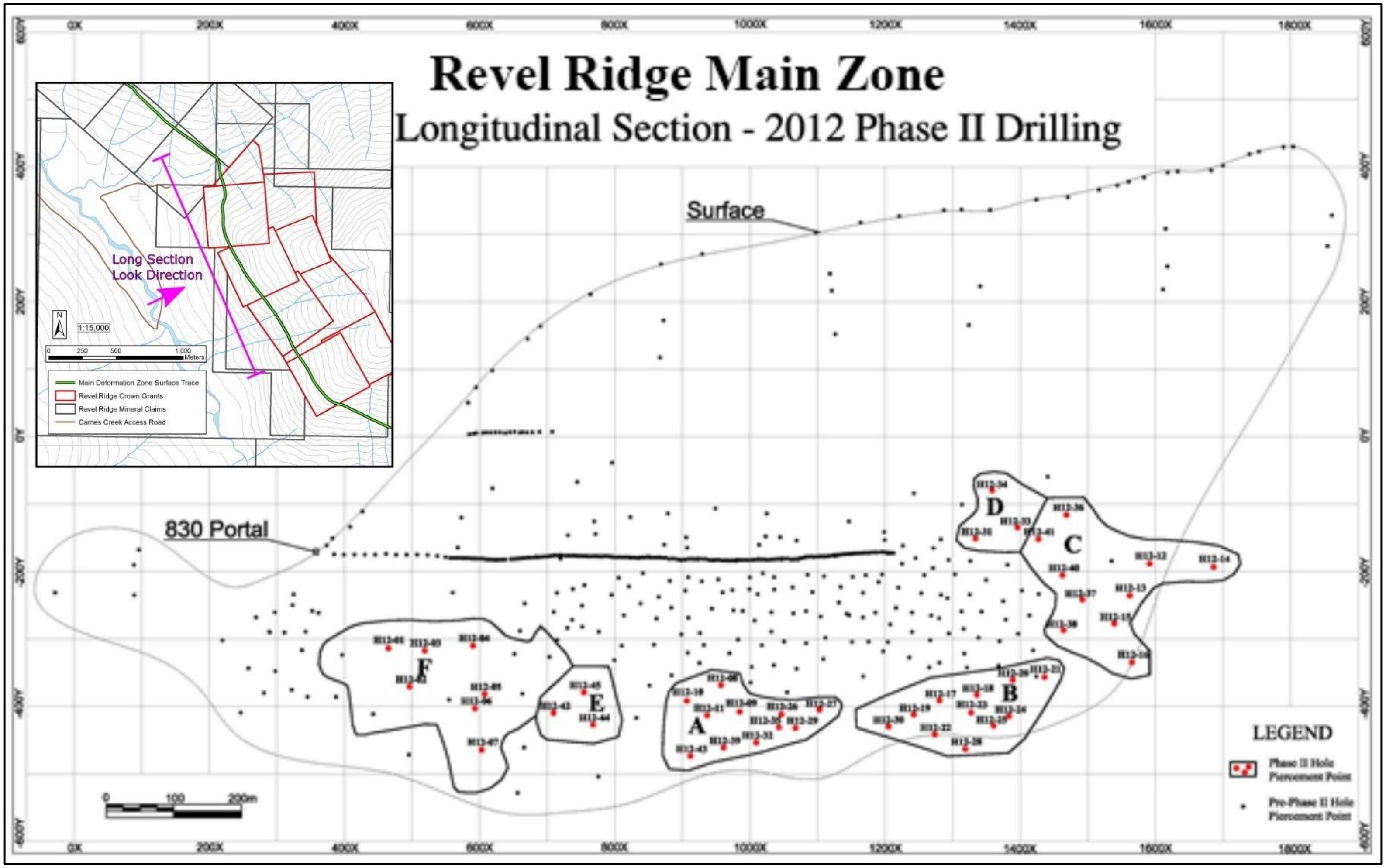
Resumption of mineral exploration activity at the Property by Huakan began in November 2010, with the completion of the 2010-2011 winter underground drill program aimed at verifying historical drilling and generating an NI 43-101 MRE.

Between November 15, 2010, and January 30, 2011, Huakan completed 60 underground diamond drill holes for a total of 7,873.74 m of BQTW drill core. The program started as a 12 hole in-fill drill program, which was extended to expand the edges of the RRMZ deposit at 30 m centres. On May 16, 2011, Huakan announced an NI 43-101 MRE on the RRMZ with a technical report prepared by P&E Mining Consultants Inc., filed June 23, 2011 (P&E, 2011). Huakan subsequently engaged Micon International Limited (Micon) to prepare a PEA technical report, based on the May 16, 2011, MRE. The results of the PEA were announced on April 24, 2012, with the PEA technical report filed on SEDAR on June 6, 2012 (Micon, 2012).

In 2012, Huakan conducted a 450-m drifting and a 45-hole, 9,725 m underground drill program to expand the RRMZ Indicated mineral resources and infill the RRYZ. All Huakan 2012 drilling was done with wireline BQTW diamond core. True widths were approximately 75% of downhole intercept lengths (the mineralization dips 60º NE). Drill core recovery was >90% and commonly >95%. Hole spacing in this campaign averaged 60 m centres. The program was successful in intersecting similar grade and thickness of mineralization as in previously drilled holes nearby.

The entire 2012 program tested six target areas, A through F (Figure 6-1). Eleven holes in Area A covered a 200-m long by 130-m down-dip area of the RRMZ. . Drill hole intercepts ranged between 0.56 m and 8.48 m of typical RRMZ. The length-weighted average Au grade for all intercepts in this area was 5.55 g/t Au. In this drilling, there were commonly multiple intercepts per hole. Assay highlights are presented in Table 6-3.

Figure 6-1: Inclined Longitudinal Projection Showing All Drill Hole Pierce Points and 2012 Drilling Area



Source: P&E (2020).
Note: Coordinates are UTM Zone 11U

Table 6-3: Drill Programs Summary RRMZ Drill Highlights in Area A

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
DDH12-08	171.75	174.74	2.99	2.88	73.29	3.63	9.35
DDH12-09	192.38	193.61	1.23	4.13	71.88	3.03	2.68
DDH12-09	206.55	208.11	1.56	1.94	20.94	0.21	0.06
DDH12-10	207.70	216.18	8.48	9.41	101.39	2.17	4.31
DDH12-11	207.58	211.85	4.27	3.61	89.77	2.00	1.66
DDH12-26	212.35	214.27	1.92	7.36	191.31	6.58	3.97
DDH12-27	225.54	226.34	0.80	4.44	72.16	2.77	5.32
DDH12-27	227.75	228.31	0.56	2.18	24.30	1.19	8.06
DDH12-27	238.90	239.57	0.67	3.01	22.10	1.25	0.42
DDH12-29	221.52	222.49	0.97	4.64	93.32	2.91	8.81
DDH12-29	225.80	227.37	1.57	8.32	90.61	2.82	5.89
DDH12-32	232.08	233.96	1.88	1.47	26.28	1.06	3.47
DDH12-32	246.31	248.11	1.80	2.93	35.74	0.38	1.12
DDH12-32	250.39	251.52	1.13	1.48	92.88	1.73	3.89
DDH12-35	222.29	224.70	2.41	8.51	54.02	2.12	2.69
DDH12-39	240.67	242.60	1.93	7.03	70.92	3.32	6.32
DDH12-43	262.10	265.42	3.32	7.88	65.2	2.17	2.84
DDH12-43	273.40	274.00	0.60	4.98	113.00	2.56	2.88

Eleven drill holes in Area B covered a 250 m long by 120 m down-dip area of the RRMZ. In this area, there were commonly one or two RRMZ intercepts per drill hole, with intercept widths between 0.50 m and 2.69 m of typical RRMZ mineralization. The length-weighted average Au grade for all intercepts in this area was 5.66 g/t Au. Highlights of RRMZ interceptions for this area are tabulated in Table 6-4.

Table 6-4: RRMZ Drill Highlights in Area B

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
DDH12-22	244.95	245.64	0.69	11.30	71.30	1.38	1.13
DDH12-23	204.20	206.89	2.69	7.66	82.58	3.44	6.30
DDH12-24	211.44	213.55	2.11	9.79	22.96	0.78	1.81
DDH12-24	217.83	218.70	0.87	6.25	41.68	0.87	0.39
DDH12-25	218.69	220.68	1.99	6.84	36.46	1.51	2.20
DDH12-28	245.06	247.65	2.59	2.45	16.79	0.63	1.20
DDH12-28	256.45	258.44	1.99	4.32	9.08	0.32	0.10
DDH12-30	253.33	255.20	1.87	3.47	51.00	0.64	3.66

Ten drill holes were completed in Area C covering an area 150-m long by 250-m down-dip on the RRMZ in the far southeast end of the deposit. The RRMZ continued throughout this area. Drill hole intercepts ranged from 0.42 m to 5.82 m of typical RRMZ mineralization. The length-weighted average Au grade for all intercepts (excluding DDH12-14) was 4.67 g/t Au. Highlights of RRMZ interceptions for this area are tabulated in Table 6-5.

Table 6-5: Drill Programs Summary RRMZ Drill Highlights in Area C

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
DDH12-12	107.27	108.72	1.45	7.32	21.88	0.51	0.48
DDH12-13	102.07	102.77	0.70	3.58	11.00	0.24	0.05
DDH12-14	161.67	162.31	0.64	1.24	1.60	0.02	0.01
DDH12-15	103.30	109.12	5.82	4.20	14.15	0.31	0.51
DDH12-16	136.10	137.40	1.30	3.86	10.52	0.41	0.67
DDH12-16	141.93	142.95	1.02	4.34	13.44	0.11	0.05
DDH12-36	176.12	176.91	0.79	15.6	51.60	1.65	2.44
DDH12-37	104.96	105.38	0.42	6.13	156.00	3.97	4.05
DDH12-40	98.57	100.19	1.62	6.50	30.48	0.71	1.48
DDH12-41	129.24	133.30	4.06	2.88	36.79	1.56	1.40

Three drill holes were completed in Area D covering an area 80 m long by 100 m down-dip on the RRMZ. Drill hole intercept widths ranged from 1.39 m to 1.41 m of typical RRMZ mineralization. The length-weighted average Au grade for all drill hole intercepts was 4.69 g/t Au. Highlights of RRMZ interceptions for this area are presented in Table 6-6.

Table 6-6: Drill Programs Summary RRMZ Drill Highlights in Area D

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
DDH12-31	121.57	122.96	1.39	8.52	78.02	2.89	3.01
DDH12-33	125.88	127.29	1.41	3.65	41.91	2.59	2.53
DDH12-34	180.15	181.55	1.40	1.92	16.63	0.61	1.00

Three drill holes were completed in Area E covering an area 100 m by 80 m down-dip on the RRMZ. This area fills in the gap between Area F and the area of the previous MRE. The length-weighted average Au grade for all the drill hole intercepts in this area was 5.78 g/t Au. Highlights of RRMZ interceptions for this area are presented in Table 6-7.

Table 6-7: Drill Programs Summary RRMZ Drill Highlights in Area E

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
DDH12-42	237.13	240.33	3.20	6.00	26.24	1.12	8.00
DDH12-44	260.87	262.48	1.61	6.17	14.68	1.04	4.86
DDH12-45	222.63	223.03	0.40	2.00	51.80	0.25	0.68
DDH12-45	233.99	234.35	0.36	7.26	35.70	0.30	0.07
DDH12-45	238.66	239.15	0.49	0.34	23.80	1.68	10.65
DDH12-45	242.98	245.08	2.10	3.68	31.40	1.74	2.31
DDH12-45	254.25	255.17	0.92	8.29	31.49	1.56	0.46
DDH12-45	262.36	262.63	0.27	28.9	80.10	2.34	2.50
DDH12-45	271.17	271.94	0.77	3.34	26.90	0.56	0.22

Seven drill holes were completed in Area F covering an area 180 m long by 180 m down-dip on the RRMZ. RRMZ drill hole intercept widths ranged from 0.93 to 6.65 m of typical RRMZ mineralization. The length-weighted average Au grade for all intercepts in this area was 5.59 g/t Au. Highlights of RRMZ interceptions for this area are tabulated in Table

6-8. These same seven drill holes intercepted multiple RRYZ (Ag-Pb-Zn) zones farther up in the drill holes, with intercept widths ranging from 1.04 to 3.25 m shown in Table 6-9.

Table 6-8: Drill Programs Summary RRMZ Drill Highlights in Area F

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
DDH12-01	149.58	151.22	1.64	2.94	28.3	1.46	1.94
DDH12-02	182.57	183.95	1.38	2.69	41.7	1.84	1.82
DDH12-03	75.56	76.89	1.30	6.17	23.6	1.20	3.08
DDH12-04	139.90	146.55	6.65	5.23	34.6	0.90	2.18
DDH12-05	187.49	189.62	2.13	11.73	85.6	2.87	2.92
DDH12-06	198.68	199.61	0.93	5.28	62.1	3.08	2.77

Table 6-9: Drill Programs Summary RRYZ Drill Highlights in Area F

Drill Hole ID	From (m)	To (m)	Length (m)	Ag (g/t)	Pb (%)	Zn (%)
DDH12-01	103.81	105.50	1.69	92.0	3.40	13.50
DDH12-01	115.86	117.46	1.60	98.0	4.90	8.80
DDH12-02	116.41	117.50	1.09	52.2	3.07	16.91
DDH12-02	129.16	132.28	3.12	99.4	4.75	14.51
DDH12-03	93.68	95.19	1.51	51.7	1.88	13.79
DDH12-03	103.89	105.92	2.03	75.9	3.91	14.53
DDH12-04	120.83	121.92	1.09	59.9	3.28	4.66
DDH12-05	97.83	100.43	2.60	58.0	2.20	3.50
DDH12-05	131.94	134.28	2.34	31.3	1.20	10.44
DDH12-06	103.91	105.93	2.02	106.7	2.90	10.57
DDH12-06	130.16	133.62	3.46	33.0	1.80	4.80
DDH12-06	143.35	146.40	3.05	43.3	2.75	9.40
DDH12-06	158.05	159.09	1.04	78.3	3.05	3.29
DDH12-07	179.78	181.05	1.27	119.0	7.90	7.70
DDH12-07	197.20	200.45	3.25	100.0	5.50	2.60

The 2012 drilling program was successful in increasing mineral resources and resulted in an Updated MRE by P&E were reported in a news release by Huakan dated September 18, 2012. The updated MRE significantly increased indicated mineral resources in the RRMZ and for the first time included a MRE of the RRYZ.

6.6.3.2 Huakan Drilling Procedures

6.6.3.2.1 Drill Hole Collar Surveying

At the completion of the 2007 surface and the 2010-2011 and 2012 underground drill programs, collar locations of all drill holes were marked and surveyed by B.C. professional land surveyors.

6.6.3.2.2 Downhole Surveying

During the 2007 surface diamond drill program downhole surveys were carried out using an Easy-Shot tool, taking measurements at the bottom and midway for the first three holes. Due to a defective tool, the final three drill holes utilized acid tests at the bottom of each drill hole.

Downhole surveying in the 2010-2011 and 2012 underground drill programs utilized the FLEXIT SmartTool Drill Hole Survey system. Measurements were taken every 30 m down the drill hole, generally including a near to collar test and a near to bottom drill hole test. All azimuth readings taken during the downhole surveys had a magnetic declination factor of 17º added to them to give true azimuth readings for this region of British Columbia. Other data collected were dip angles recorded at the various downhole reading sites and magnetic susceptibility.

6.6.3.2.3 Drill Core Recovery and Storage

Drill core recoveries throughout the 2010/2011 and 2012 underground J&L (now Revel Ridge) drill programs were normally >90% and commonly >95%. All drill core from the 2007 and the 2010/2011 drill programs are securely stored on the Property, near the camp facility. All non-mineralized drill core from the 2012 drill program is securely stored on the Property, near the camp facility. All drill core that had mineralized intercepts from the 2012 drill program is securely stored in the warehouse just north of Revelstoke.

6.6.3.2.4 Drill Core Size and Orientation

ll Huakan drilling discussed in this technical report section was done with wireline BQTW diamond drill core. True widths are approximately 75% of downhole intercept lengths. The mineralization dips 60º NE.

6.6.3.2.5 Contractors

The 2007 diamond drill program was carried out by Elite Drilling Ltd. of Revelstoke, B.C. from October 23 to November 13, 2007. DMAC Drilling of Aldergrove, BC was the drilling contractor for the 2010-2011 and 2012 program. For the 2010/2011 campaign, drilling took place between November 11, 2010, to January 31, 2011. For the 2012 campaign, drilling took place between May 6, 2012, and June 16, 2012. Drilling was carried out on two ten-hour shifts using two Hydracore drill rigs mounted on steel wheels, thus providing drill access to the tracked 830 main drift and crosscuts.

6.7 2018 Auen Dawn Minerals Inc. Options

Auen Dawn Minerals Inc. (Auen Dawn) signed a three-stage option agreement on December 18, 2017, to earn 100% interest in the J&L Property from Huakan, subject to a net smelter return (NSR) Royalty.

In 2018, Auen Dawn contracted P&E to provide an Updated MRE for the Revel Ridge Property. On February 6, 2018, Auen Dawn reported that a legal action had arisen between Armex Mining Corp. (Armex) and Huakan, whereby Armex claimed that it had a valid letter of intent with Huakan covering Huakan's J&L Property. Huakan notified Auen Dawn that it intended to defend the Armex action. Auen Dawn dropped its Option in 2019 without conducting any work on the Property.

6.8 2019 Rokmaster Option

Rokmaster announced in a Company press release dated December 30, 2019, that it had executed a Definitive Option Agreement with Huakan to acquire 100% interest in the J&L Project. Rokmaster renamed the latter as the Revel Ridge Project.

6.9 Historical Mineral Processing and Metallurgical Testwork

Historical mineral processing and metallurgical testwork is summarized in Section 13 of this technical report, in order to provide proper context for more recently completed testwork.

6.10 Historical Mineral Resource Estimate

This section contains information on resource estimates made prior to Rokmaster entering into an agreement to acquire the Revel Ridge project. The authors of this technical report, independent QPs, have not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and the issuer is not treating the historical estimate as current mineral resources or mineral reserves. They are reported to maintain the Project history. The historical estimates have been superseded by the MRE in Section 14.

An historical MRE for the Property by P&E, with an effective date of May 16, 2011, was reported at an NSR cut-off grade of C$110.00/t (Table 6-10).

Table 6-10: Historical 2011 Mineral Resource Estimate

Classification	Tonnes	Au (g/t)	Au (oz)	Ag (g/t)	Ag (oz)	Pb (%)	Zn (%)
RRMZ							
Measured	1,202,000	6.71	259,200	69.00	2,664,600	2.40	4.46
Indicated	1,165,700	6.92	259,200	64.90	2,432,100	2.01	3.86
Meas + Ind	2,367,700	6.81	518,400	66.95	5,096,700	2.21	4.16
Inferred	4,538,100	5.19	757,500	67.80	9,887,800	2.16	2.99
RRFZ							
Inferred	292,800	4.54	42,700	49.00	461,900	0.91	0.73

A QP has not done sufficient work to classify the above historical estimate as a current mineral resource. The Issuer is not treating the historical estimate as a current mineral resource and it should not be relied upon.

The May 16, 2011, the MRE was updated by P&E for Huakan and published by a press release on September 18, 2012, to include the results of the 2012 drilling program (Table 6-11).

Table 6-11: Historical 2012 Mineral Resource Estimate

Classification	Tonnes	Au (g/t)	Au (oz)	Ag (g/t)	Ag (oz)	Pb (%)	Zn (%)
RRMZ							
Measured	1,313,000	6.37	268,800	65.1	2,747,000	2.26	4.22
Indicated	2,640,000	5.34	453,200	52.2	4,432,000	1.78	3.23

Classification	Tonnes	Au (g/t)	Au (oz)	Ag (g/t)	Ag (oz)	Pb (%)	Zn (%)
Meas + Ind	3,953,000	5.68	722,000	56.5	7,179,000	1.94	3.56
Inferred	4,337	4.16	580,200	57.8	8,057,000	1.82	2.72
RRFZ							
Inferred	363,000	3.65	42,500	25.4	296,000	0.55	0.51
RRYZ							
Indicated	1,003,000	0.21	6,900	64.1	2,068,000	2.77	9.08
Inferred	35,000	0.35	400	81.9	91,000	3.18	6.26

A QP has not done sufficient work to classify the above historical estimate as a current mineral resource. The issuer is not treating the historical estimate as a current mineral resource and it should not be relied upon.

The September 18, 2012, the MRE was updated by P&E for Auen Dawn Mineral Inc. and published in a company press release dated January 23, 2018 (Table 6-12).

Table 6-12: Historical 2018 Mineral Resource Estimate

Total All Zones	Tonnes (kt)	Au (g/t)	Au (koz)	Ag (g/t)	Ag (koz)	Pb (%)	Zn (%)	AuEq (g/t)	AuEq (koz)
Measured	1,337	6.19	266	63.3	2,721	2.21	4.12	9.69	417
Indicated	3,823	4.03	495	53.0	6,509	1.98	4.73	7.60	934
Meas + Ind	5,160	4.59	761	55.6	9,231	2.04	4.57	8.14	1,351
Inferred	4,808	4.35	672	60.6	9,367	1.84	2.55	6.95	1,075

Note: k = thousands; koz = thousands of ounces.

All the historical MREs are superseded by the updated estimate that is the subject of this current technical report. This technical report updates the previous mineral resource estimate by incorporating changes in the commodity prices. No additional drilling or sampling information was used.

A QP has not done sufficient work to classify the above historical estimate as a current mineral resource. The issuer is not treating the historical estimate as a current mineral resource and it should not be relied upon.

The January 2018 MRE was updated and published in a technical report dated February 25, 2020 (P&E, 2020) (Table 6-13).

Table 6-13: Historical 2020 Mineral Resource Estimate

Mineral Zone	Classification	Tonnes (kt)	Au (g/t)	Au (koz)	Ag (g/t)	Ag (koz)	Pb (%)	Zn (%)	AuEq (g/t)	AuEq (koz)
RRMZ	Measured	1,352	6.13	266	62.8	2,730	2.19	4.09	9.14	397
	Indicated	2,848	5.33	488	49.0	4,487	1.72	3.11	7.56	692
	Meas + Ind	4,200	5.59	755	53.4	7,216	1.87	3.43	8.07	1,089
	Inferred	4,562	4.36	639	61.8	9,064	1.88	2.59	6.55	961
RRHZ	Indicated	298	0.91	9	55.3	530	2.50	5.72	4.70	45
	Inferred	38	0.22	0	75.0	92	3.08	5.44	4.34	5

Mineral Zone	Classification	Tonnes (kt)	Au (g/t)	Au (koz)	Ag (g/t)	Ag (koz)	Pb (%)	Zn (%)	AuEq (g/t)	AuEq (koz)
RRFZ	Inferred	341	3.91	43	25.3	277	0.53	0.48	4.20	46
RRYZ	Indicated	771	0.09	2	62.6	1,552	2.60	9.93	5.98	148
	Inferred	23	0.11	0	55.4	41	2.65	7.68	4.91	4
All Zones	Measured	1,352	6.13	266	62.8	2,730	2.19	4.09	9.14	397
	Indicated	3,917	3.96	499	52.2	6,568	1.95	4.65	7.03	885
	Meas + Ind	5,269	4.52	765	54.9	9,298	2.01	4.51	7.57	1,283
	Inferred	4,964	4.28	683	59.4	9,474	1.80	2.49	6.36	1,015

Notes[1]: k = thousands, koz = thousands of ounces.

1) Mineral resources, which are not mineral reserves, do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

2)The inferred mineral resource in this estimate has a lower level of confidence than that applied to an Indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of the inferred mineral resource could be upgraded to an Indicated mineral resource with continued exploration.

3) The mineral resources in this estimate were calculated using the CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.

4) The following parameters were used to derive the NSR block model cut-off values used to define the mineral resource: December 31, 2019, US$ two-year trailing average metal prices:

- Pb $0.96/lb, Zn $1.24/lb, Au $1,331/oz, Ag $15.95/oz
- Exchange rate of US$0.76 = C$1.00
- Process recoveries of Pb 74%, Zn 75%, Au 91%, Ag 80%
- Smelter payables of Pb 95%, Zn 85%, Au 96%, Ag 91%
- Refining charges of Au US$10/oz, Ag US$0.50/oz
- Concentrate freight charges of C$65/t and Smelter treatment charge of US185/t.
- Mass pull of 5% and 8% concentrate moisture content.

5) NSR cut-off of C$110 per tonne was derived from $75/t mining, $25/t processing, $10/t G&A.

6) AuEq= Au g/t + (Ag g/t x 0.011) + (Pb % x 0.422) + (Zn % x 0.455)

7) Above parameters derived from 2012 PEA and other similar benchmarked projects.

8) Effective date January 29, 2020

All the historical mineral resource estimates are superseded by the updated mineral resource estimate that is the subject of this current technical report. This technical report updates the previous mineral resource estimates by incorporating changes in the commodity prices. No additional drilling or sampling information was used.

A QP has not done sufficient work to classify the above historical estimate as a current mineral resource. The Issuer is not treating the historical estimate as a current mineral resource and it should not be relied upon.

The January 2020 MRE was updated and published in a technical report dated January 17, 2022, (P&E, 2022) (Table 6 14).

Table 6-14: Revel Ridge 2022 MRE (Effective Date November 15, 2021)

Classification	Cut-off NSR (C$/t)	Tonnes (kt)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	Pb (%)	Zn (%)	NSR (C$/t)	AuEq (ppm)	AuEq (koz)
Totals for All Mineralized Zones											
Measured	110	2,033.4	57	3,723	5.09	332.6	2.05	3.77	451.18	7.8	510.9
Indicated	110	4,701.2	48	7,187	3.09	467.0	1.88	3.64	317.07	5.6	846.9
Meas + Ind	110	6,734.5	50	10,911	3.69	799.7	1.93	3.68	357.56	6.3	1,357.8

Classification	Cut-off NSR (C$/t)	Tonnes (kt)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	Pb (%)	Zn (%)	NSR (C$/t)	AuEq (ppm)	AuEq (koz)
Inferred	110	5,996.7	37	7,098	4.70	906.1	1.19	2.20	361.41	6.3	1,220.4
Totals for RRMZ											
Measured	110	1,830.0	59	3,452	5.17	304.0	2.11	3.80	459.01	7.9	467.4
Indicated	110	2,874.8	47	4,295	4.14	382.3	1.82	2.77	359.95	6.3	582.6
Meas + Ind	110	4,704.8	51	7,747	4.54	686.3	1.93	3.18	398.48	6.9	1,050.0
Inferred	110	5,395.5	37	6,485	4.85	842.0	1.20	2.26	372.87	6.5	1,130.8
Totals for RRFZ											
Measured	110	95.4	44	136	7.92	24.3	1.43	2.36	569.60	9.78	30.0
Indicated	110	454.5	24	345	3.54	51.8	0.55	0.68	236.41	4.26	62.2
Meas + Ind	110	549.9	27	480	4.30	76.1	0.70	0.97	294.20	5.22	92.2
Inferred	110	381.8	23	276	3.92	48.1	0.62	0.82	262.29	4.69	57.5
Totals for RRYZ											
Measured	110	0.0	0	0	0.00	0.0	0.00	0.00	0	0.00	0.0
Indicated	110	914.6	59	1,745	0.44	12.9	2.38	7.47	256.51	4.64	136.5
Meas + Ind	110	914.6	59	1,745	0.44	12.9	2.38	7.47	256.51	4.64	136.5
Inferred	110	125.0	61	245	2.57	10.3	2.30	4.59	319.33	5.70	22.9
Totals for RRHZ											
Measured	110	108.0	39	135	1.26	4.4	1.70	4.44	214.02	3.9	13.5
Indicated	110	457.2	55	803	1.36	20.0	2.61	4.35	248.78	4.5	65.6
Meas + Ind	110	565.2	52	939	1.34	24.4	2.44	4.37	242.13	4.4	79.1
Inferred	110	30.2	82	80	0.98	0.9	3.60	3.61	250.48	4.5	4.4
Totals for RRMEX											
Measured	110	0.0	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Indicated	110	0.0	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Meas + Ind	110	0.00	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Inferred	110	64.2	6	12	2.27	4.7	0.05	0.02	122.00	2.4	4.9

Notes [1-4]:

1) Mineral resources, which are not Mineral Reserves, do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

2) The inferred mineral resource in this estimate has a lower level of confidence than that applied to an Indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of the inferred mineral resource could be upgraded to an indicated mineral resource with continued exploration, however there is no certainty an upgrade to the inferred mineral resource would occur or what proportion would be upgraded to an indicated mineral resource.

3) The mineral resources in this estimate were calculated using the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards on mineral resources and Reserves, Definitions and Guidelines (2014) prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council and CIM Best Practices Guidelines (2019).

4) Totals may not sum due to rounding.

This technical report updates the previous mineral resource estimates by incorporating changes in the commodity prices and the results of recent drilling. Note that all the historical mineral resource estimates and the previous mineral resource estimates presented above are superseded by the updated mineral resource estimate in Section 14 that is the subject of this current technical report.

6.11 Past Production

The Revel Ride Deposits have never been mined.

7 GEOLOGICAL SETTING AND MINERALIZATION

The nature of gold-polymetallic mineralization at Revel Ridge is best understood through a clear knowledge of:

- Regional geological and stratigraphic features and structural history at a district scale
- Deposit or property scale stratigraphic features and structural history.

Relevant stratigraphic and structural characteristics of mineralized zones at Revel Ridge at the regional, property and deposit scales are summarized in the following sections of this technical report.

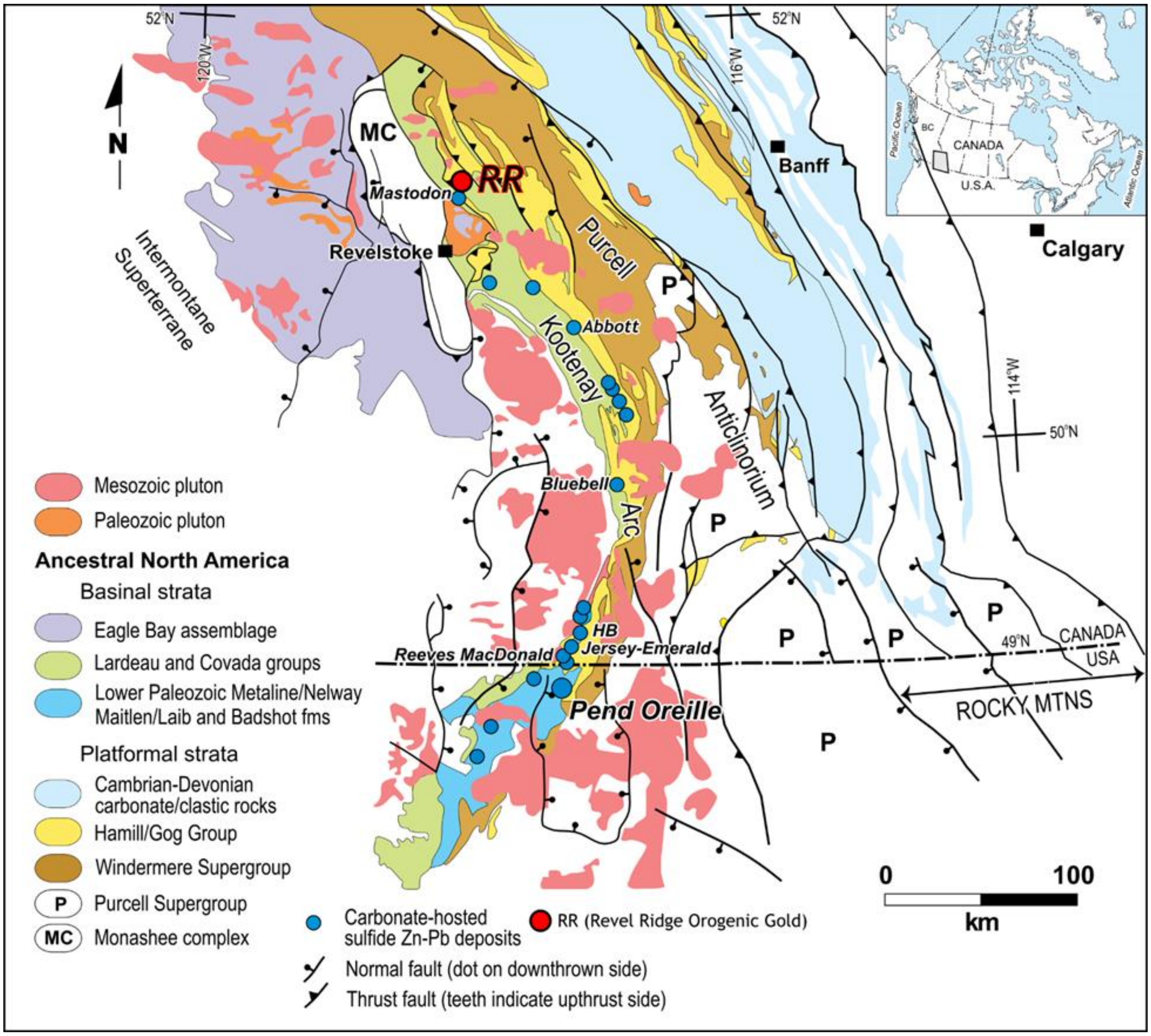
7.1 Regional Geology

The Property lies near the northern apex of the Kootenay Arc, which is a curvilinear belt of metamorphosed and deformed rocks extending from the southwest in Washington State to north of Revelstoke, British Columbia. The early work of Fyles (1964, 1970) demonstrated that rocks of the Kootenay Arc lie between the Purcell anticlinorium to the east and the Monashee metamorphic complex to the west. The arc consists of a series of thrust bounded, typically west verging, stacked slices of Proterozoic to early Mesozoic sedimentary and volcanic rocks that represent deformed platformal to basinal rocks forming the western margin of continental North America (Brown et al., 1981, Colpron and Price, 1995; Nelson et al., 2013). One of the thrust bounded lithotectonic packages, the Goldstream slice, hosts Rokmaster Resource’s orogenic Au project, Revel Ridge. The Goldstream slice occurs in the hanging wall to the Columbia River Fault zone and contains a deformed package of rocks encompassing Neoproterozoic to Cambrian, quartz dominant sedimentary rocks of the Hamill Group to Lower Proterozoic, dominantly fine-grained clastic sedimentary rocks of the Index Formation (Logan and Rees, 1997).

Regionally, all rocks lie within the Selkirk Allochthon and have experienced at least three deformation events. Three broad deformation events are documented beginning at approximately 170 Ma, at approximately 90 Ma, and the last between 60 Ma and 55 Ma (Parrish, 1995; Glombick et al., 2006). As a consequence of these deformation events, all rock units are deformed into west-verging, north-plunging, and overturned isoclinal synclines and anticlines. Early folds and thrusts are truncated by young, very large-scale extensional faults, including the north-northwest striking, east-dipping Columbia River Fault (CRF), which juxtaposes greenschist facies regionally metamorphosed rocks directly above high-grade, amphibolite facies rocks, of the Monashee Metamorphic Complex (Logan et al., 1996). Regionally, the CFR is the largest extensional fault within the western Selkirks and is also likely the youngest, forming between 60 Ma and 55 Ma (Parrish, 1988). The CRF lies approximately 5 km to the west of the Revel Ridge Property boundary.

Lower Paleozoic rocks of the Kootenay Arc, principally the Cambrian age Badshot Limestone in British Columbia and the Metaline Formation in Idaho, have historically been associated with numerous Ag-Pb-Zn carbonate hosted mineral deposits (Paradis et al., 2020). In contrast, significant Au deposits within the western margin of the Kootenay Arc are less well documented. The precious metal-enriched Revel Ridge orogenic Au deposit is potentially an example of this deposit type in lower Paleozoic rocks that form the western margins of this arc (Figure 7-1).

Figure 7-1: Geological Map of Kootenay Arc Rocks in British Columbia



Source: Rokmaster (September 2021).
Description: The location of carbonate hosted Pb-Zn deposits and the Au dominant Revel Ridge (RR) deposit. Excerpted and modified from Paradis et al. (2020).

7.2 Property Geology

Property-scale geological and structural relationships have been developed over a nearly a 60-year period by both government and industry geoscientists. Significant contributions to the property-scale geology of the Revel Ridge Property area have been made by Sullivan (1967), Pegg (1983, 1985), Pegg et al., (1984), Pegg and Grant (1985), Weicker (1991) and Makepiece (1998).

The work of these geoscientists, along with their government counterparts, principally Logan et al., (1996) have established the regional stratigraphic and structural framework for the Revel Ridge area. Rocks within the Revel Ridge

Property range in age from the lower Devonian (uncertain) (Akoloklex Formation) to the Neoproterozoic (Hamill Group). The regional stratigraphic Section is dominated by Cambrian age limestones of the Badshot Formation and older fine-grained siliciclastic rocks. The rocks are deformed into west-verging, north-plunging, overturned isoclinal synclines and anticlines, and the contacts of these isoclinal folds are superbly outlined by fold repetitions within the Badshot Limestone (see Figure 7-1). Large panels of rock are bounded by west-verging thrusts that stack and generally repeat the stratigraphy across their trace. One of these, the Akolkolex Thrust, is a regional-scale, northwest-trending thrust that forms approximately 500 m into the footwall of the deformation zone which hosts Au mineralization at Revel Ridge. Early folds and thrusts are truncated by the young, very large-scale extensional faults, including the north-northwest striking, east-dipping CRF.

7.2.1 Supracrustal Rocks

Five major lithotectonic elements form the stratigraphic record at Revel Ridge, with the distribution and contact relationships between these rock units illustrated in Figure 7-2 and the regional stratigraphic column for these rocks in Figure 7-3. Summary descriptions of these rock units, from youngest to oldest are briefly outlined below:

- Akolkolex Formation (lower Paleozoic-lower Devonian): The Akolkolex Formation is a group of moderately to strongly micaceous quartz rich sediments, rusty brown weathering phyllites, and minor dolomite lenses and horizons. They are documented along the western Property boundary of the Revel Ridge Project area. The contact with the older Hamill and Badshot Formations occurs across an east-dipping, west-verging thrust fault.
- Index Formation (lower Paleozoic): The Index Formation is dominated by fine-grained, dark grey black phyllitic sedimentary rocks. Fine-grained black phyllites of the Index Formation may have significantly elevated graphite contents. Pale greenish grey chloritic phyllites, also part of the Index Formation, are sometimes interpreted as metamorphosed mafic volcanic rocks or as chlorite-rich fine-grained clastic sedimentary rocks. Narrow discontinuous limestone beds, a few metres to a few tens of metres wide, are identified. Rocks of the Index Formation are the principal host to Au-Ag-Zn mineralization at the Roseberry Mine in the northwestern corner of the Revel Ridge Property, and the Zn-Pb Locojo Occurrence located just to the southeast of the eastern border of the Revel Ridge Property.
- Badshot Formation (lower Cambrian): The Badshot Formation is characterized by thick, tens of metres to hundreds of metres, white to light grey limestones. Badshot Limestones are medium-grained and may support irregular marble and dolomite fronts, particularly near thin phyllite beds that commonly occur within the main limestone mass. Badshot Limestones are seldom bioclastic and are typically clean, medium-grained micritic limestones. The Badshot Formation is host to numerous Pb-Zn occurrences and mines within the Kootenay Arc. At Revel Ridge, the A&E occurrences are hosted within the Badshot Formation, as is the silver-rich carbonate replacement deposit, the RRYZ.
- Mohican Formation (lower Cambrian): The Mohican Formation is dominantly noted within a thrust bounded lithotectonic rock unit best documented in the eastern portions of the Revel Ridge Property. Within the Property, the Mohican Formation is characterized by its distinctive pale green phyllites, pale green volcaniclastic rocks, calcareous brown, phyllites and light grey to buff coloured weathering marbles. These rocks form marked orange-buff colour anomalies and are typically associated with base or precious metal occurrences. At the immediate hanging wall contact with the Badshot Formation, an unusual chloritoid-bearing schist may form a reliable stratigraphic marker.

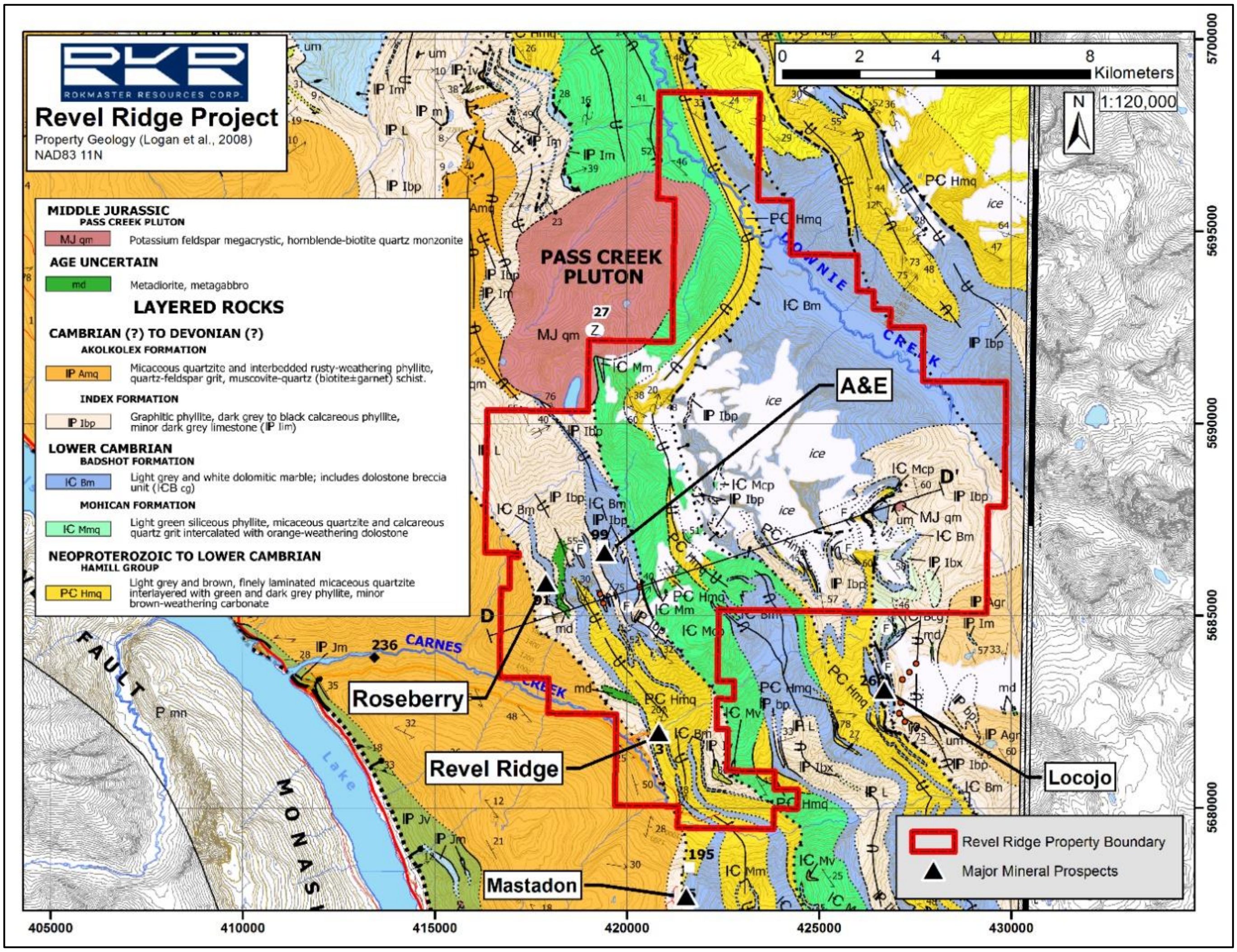
- Hamill Group (Neoproterozoic to Lower Cambrian): The base of the stratigraphic Section in the Revel Ridge area is dominated by massive to light cream to buff coloured quartzites, smaller amounts of white mica- and biotite-bearing quartzites to quartz wackes, light to medium green quartz-rich argillaceous quartz phyllites and buff to cream coloured limestone and dolomitic units, which are commonly argillaceous and contain numerous centimetre-scale, dark grey compositional bands. The structurally controlled RRMZ Au mineralization is commonly hosted within the limestones and quarzitic sedimentary rocks of the Hamill Group. The carbonate replacement Yellowhead Ag-Pb-Zn deposit is hosted within the silicified limestones and marbles of the Hamill Group.

7.2.2 Intrusive Rocks

Throughout the Revel Ridge Property area, intrusive rocks are conspicuous by their absence. Regionally, only two intrusive suites are recognized: the Pass Creek Pluton and metamorphosed diorites and gabbros.

- Pass Creek Pluton: In the extreme northwestern corner of the Revel Ridge Property, a mid- Jurassic age (168 Ma) pluton intrudes all the supracrustal rocks. The pluton is a potassium feldspar megacrystic, hornblende-phyric quartz monzonite (Logan et al., 1996). The form of the intrusion suggests that it is late tectonic and has been emplaced following regional-scale isoclinal folding of the supracrustal rocks.
- Metamorphosed Diorites and Gabbros (age indeterminate): Strongly foliated, medium green rocks whose contacts are discordant to stratigraphy are interpreted to be meta-diorites or meta-gabbros. These rocks may also contain unusual white porphyroblasts, which may be metamorphic albite. The units are exceptionally homogeneous, strongly foliated and exhibit no evidence of significant stratification or compositional changes. They are best documented in the Roseberry Mine area, where they outcrop as tens of metres to 100 m wide, northwest-trending intrusions.

Figure 7-2: Property Scale Geology and Principal Mineral Occurrences Revel Ridge



Source: Rokmaster (2021).
Notes: Coordinates in projection UTM NAD83 Zone 11 North

7.3 Local Geology

Rokmaster Resources exploration efforts during 2020 and 2021 focused on development of the Au-Ag-Zn mineral resources in either the RRMZ or the RRYZ. Principle lithological elements include rocks that are: A) dominantly related to argillaceous phyllites; B) quartz dominant sedimentary rocks; C) carbonate dominant sequences; and D) mineralized zones. The lithological groups and subdivisions correspond to the lithologic codes used on detailed geological cross sections and plan maps. The detailed stratigraphic column for these rocks is shown in Figure 7-3. Rocks within the Revel Ridge Mine area include components of both the Index, Badshot and Mohican/Hamill Formations. Clarification of the stratigraphic position of these units has been developed and constrained by semi-regional 1:5,000 scale mapping, which confirms the regional structural style and stratigraphic setting of the principal rock units.

7.3.1 Argillaceous Group

This group of fine-grained clastic sedimentary rocks is best developed within the Index Group and well represented in the distal hanging wall to the mineralized zone in the northwestern deposit area. Elsewhere, thin argillaceous phyllite horizons are intercalated with quartz-rich sediments of the Hamill Group.

The Argillaceous Group consists of six rock types:

- Argillaceous Phyllites (APh). Non-calcareous, dark grey black to dark grey-green, fine-grained argillaceous phyllites. Kink bands and syn-metamorphic quartz veins common. Texturally homogeneous and poorly bedded.
- Argillaceous Phyllites and Lesser Quartzite Interbeds (AQP). A dark grey to dark green-grey argillaceous phyllite with significant increases in quartz, with 30% to 40% quartz as discrete bands or matrix grains. Kink bands and crenulation cleavages commonly developed; syn-metamorphic quartz veins common.
- Biotitic Phyllites (BP). Strongly biotite bearing phyllites. Biotite forms discrete centimetre-scale bands, sometimes with diffuse margins, as well as ubiquitous disseminations.
- Chloritic Argillaceous Phyllites (CAP). Dark green, strongly chloritic argillaceous phyllites, may contain poorly defined centimetre scale, dark grey beds that are generally homogeneous. Well-developed sheeted syn-metamorphic quartz veins common.
- Calcareous Phyllites (CP). Exceptionally well foliated, homogenous, brown to dark grey, calcareous phyllite. Commonly containing relatively coarse biotite and white micas forming wispy centimetre-scale foliation surfaces. Millimetre-scale white carbonate bands, 30% to 50%, are wispy and non-planar. Syn-metamorphic quartz veins are effectively absent.
- Argillaceous Phyllites Minor Limestone Interbeds (APBL). Fine grained argillaceous phyllites containing discrete, highly planar limestone lamella, usually a few centimetres in width.

7.3.2 Quartzite Group

The bulk of the rocks of the Quartzite Group occur within the core of the Carnes Creek Anticline, where they may form thick and laterally extensive units. These rocks are typically be interpreted as part of the Hamill and or Mohican Groups.

The Quartzite Group consists of the five rock types:

- Quartzites (Q): Massive, clean, poorly bedded, cream – grey to white quartzites containing less than 20 – 30% argillaceous bands or lamella. White micas are poorly developed in the rock matrix.
- Quartzites lesser Argillaceous Interbeds (QAP): A quartz dominant sediment containing dark grey micas to black, centimetre to decimetre scale, argillaceous bands. Matrix chlorite and white mica contents may be elevated.
- Quartz Wackes (QW): Dirty quartzites characterized by high quartz contents, poor bed development and a matrix containing fine grained micas which may embay quartz grains. The cored surface is commonly plucked around mica-quartz grain boundaries.

- Quartzite Minor Limestone Lamella (QML): Clean quarzitic sediments containing narrow, centimetre to decimetre scale, limestone bands or beds.
- Sericitic Quartz Phyllites (SQP): Strongly foliated and deformed quartz rich protoliths containing abundant fine grained yellow-cream micas and millimetre scale quartz rich lamella. Yellow sericite is strain or hydrothermally related and overprints metamorphic biotite and chlorite. This unit commonly hosts massive to semi-massive sulphide bands and aggregates.

7.3.3 Limestone Group

Carbonate rocks within the immediate area of the Revel Ridge Deposits include both thin limestone lenses within the Hamill or Mohican Groups, and significantly attenuated, strained and elongated Badshot Limestones that define the southwestern limb of the Carnes Creek Anticline.

The Limestone Group consists of two rock types:

- Argillaceous Limestone (AL): A medium to dark grey compositionally banded limestone, millimetre- to centimetre-scale, darker grey compositional lamella hosted within a micritic limestone are a characteristic feature. Quartz veins are absent, calcite veins are common.
- Marble (M): White marble overprints grey compositionally banded argillaceous limestones locally leading to complete textural replacement. Proximal to RRYZ Ag-Zn-Pb mineralization white marbles may be completely replaced to silica, silicified limestone (SL).

7.3.4 Mafic Post-metamorphic Mafic Dykes (Age Indeterminate)

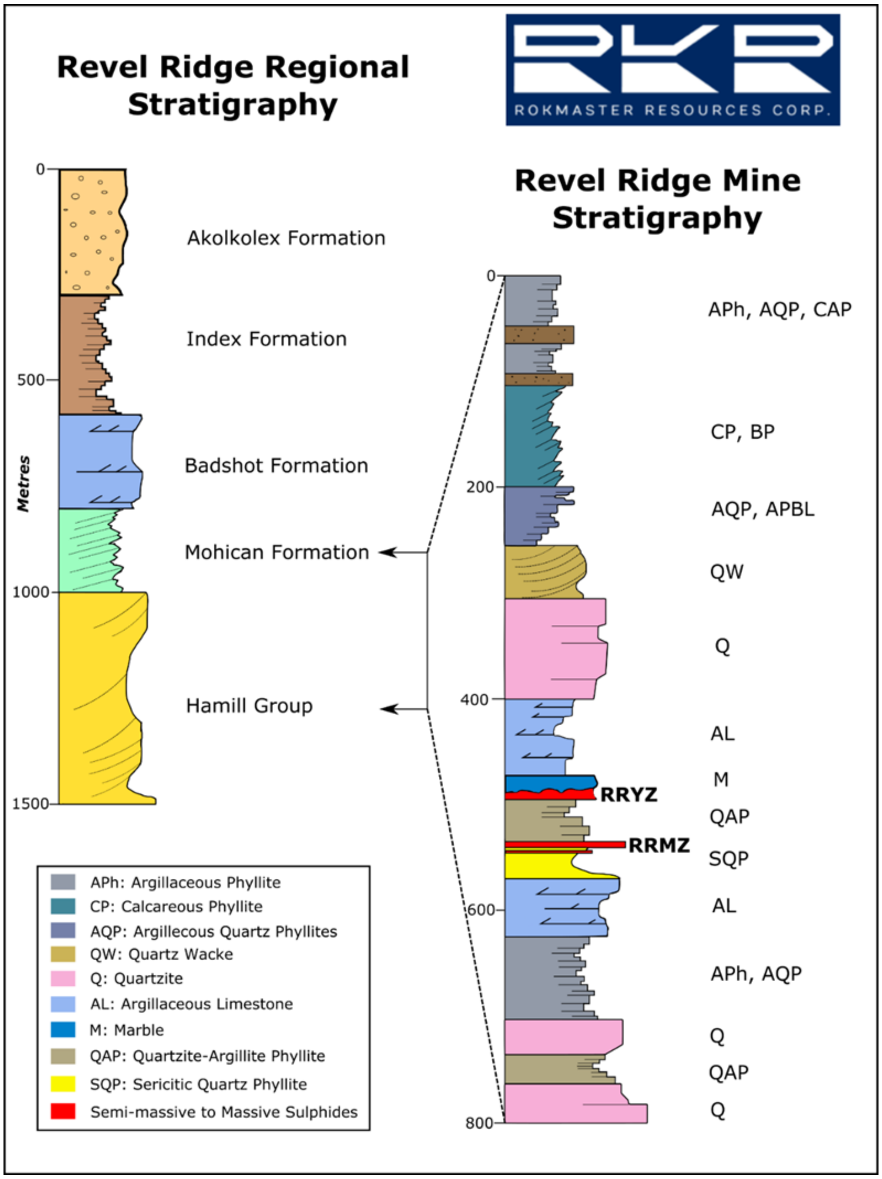
- Mafic Dykes (Md): Narrow dark green to black fine-grained mafic dykes are rarely observed in drill core or in underground workings. In the over 3 km of underground workings, on the 830 and 832 m levels of Revel Ridge Deposit area, small mafic dykes are only identified once. These dykes are typically <1 m to few m wide. Compositionally, they are dominated by fine-grained blunt pyroxenes and (or) biotite. These rocks lack a deformation fabric and are likely post-metamorphic in age. They are flanked by narrow, undeformed, bleached halos in wall rocks.

7.3.5 Mineralization (RRMZ – RRYZ)

The mineralization zones for the RRMZ and RRYZ consist of three sulphide bearing rock types:

- Massive Sulphides (MS): Centimetre to decimetre scale red-brown, massive sulphide bands containing sphalerite, pyrite, arsenopyrite and pyrrhotite in the RRMZ and massive sulphide bands of galena, sphalerite, and fluorite in the RRYZ. In the RRMZ, sulphide bands may contain rotated early quartz clasts and locally wall rock inclusions. Milled sulphide textures are common.
- Semi-massive Sulphides and Disseminated Sulphides (SMS): Sheeted millimetre- to centimetre-scale sulphide veins and veinlets and disseminated sulphide grains, principally arsenopyrite, pyrite and sphalerite.
- Sulphide-Bearing Quartz Veins and Breccias (QSX): Quartz shear, extensional and brecciated vein arrays containing clotted sulphide aggregates on the vein margins and internally. Quartz-rich boudins, embayed within massive sulphides suggests that this generation of quartz is early and pre-dates main stage massive sulphides.

Figure 7-3: Revel Ridge Regional and Mine Stratigraphy



Source: Rokmaster (2021).

7.4 Structure and Metamorphism

The protracted deformational history documented on regional-scale maps is duplicated at the Property and deposit scale. A series of observations from over 3 km of underground workings and from a series of reconnaissance scale surface traverses over an area of approximately 15 km2 have further clarified the Property-scale characteristics of folds, faults and deformation zones, and the details of metamorphism. Unless otherwise stated, the structural convention used in the measurement of data is dip direction/dip angle.

7.4.1 Folds

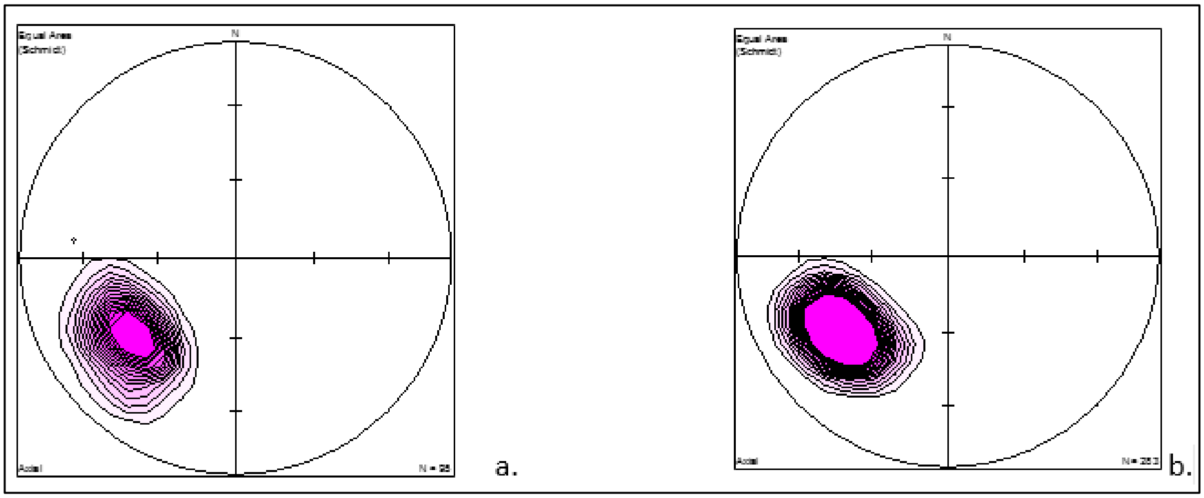
The development of large west-verging thrust sheets with spectacularly developed isoclinal to recumbent folds are common throughout the map area. These folds have shallow north to northwest plunging closures and axial surfaces with shallow northeast dips. They are anticipated to have developed early in the tectonic evolution of the Property: that is, 190 Ma to 170 Ma or mid-Jurassic and may be rooted in west-verging regional scale thrusts (Brown and Larrys, 1988). Some workers suggest that regional-scale folds (e.g., the Carnes Creek Anticline) are second generation (D2) folds superimposed on early nappes (D1). D1 structures are postulated based on the presence of weakly preserved foliations observed in the cores of early nappes. At Revel Ridge, earliest deformation is characterized by a strong flattening fabric that is likely parallel to primary compositional lamella, which are locally deformed into centimetre-scale intrafolial rootless isoclines. Outcrop or property scale D1 folds are not identified. A similar deformational sequence has been defined in the Ruddock Creek area by Lewis and Gray (2001).

The hinge line of one of these regional-scale isoclinal D2 folds, the Carnes Creek Anticline, passes through the centre of the Revel Ridge Deposit area (Logan et al., 1997). Most outcrop-scale folds at Revel Ridge are related to the northwest striking, west-verging, D2 isoclinal folds. These folds have beds which are invariably coplanar with foliation and which have modest 44° /09° plunges (Figure 7-4). Significantly, the plunge of property-scale megascopic folds may in part control the juxtaposition of permissive lithologies against the deformation zone that hosts the RRMZ.

All rock in the Revel Ridge area have been affected by at least two additional contractional deformational events. Well developed, shallow east-plunging lineations are indicative of the formation of box to chevron style kink folds and centimetre-scale crenulation cleavages.

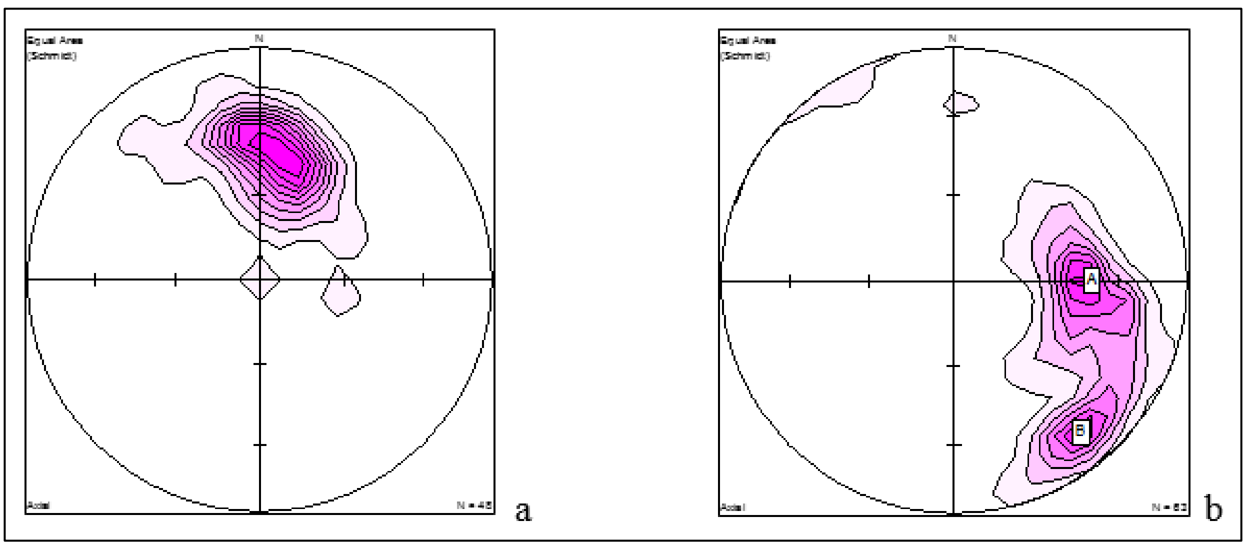
These folds deform S2 fabric and are centimetre- to decimetre-scale. Kink and crenulation D3 folds either have modest east or southeast directed plunges (Figure 7-5 and Figure 7-6).

Figure 7-4: Structural Characteristics of Bedding and Foliation Revel Ridge Area



Source: Rokmaster (2021).
Figure Description: a) Contoured poles to 95 bedding measurements; and b) contoured poles of S2 foliations. Based on 283 measurements that are nearly identical, with dip direction of beds noted at 055°/51° and dip direction of S2 foliation at 056°/52°. These effectively identical bedding and S2 foliation measurements support the isoclinal nature of D2 folds.

Figure 7-5: Plunge Orientation of D2 And D3 And Younger Folds



Source: Rokmaster (2021).
Figure Descriptions: a) D2 folds have north directed plunges, 44°009°; some dispersion of the early fold linears are noted with pole position of early folding lineations dispersed, with D2 fold plunges ranging from 38° 356° to 50° 018°. Average pole position based on 48 measurements; all structural measurements collected from over 3 km of underground rock exposures at the Revel Ridge Mine; and b) two dominant poles for late D3, and younger, folds are recognized. Pole A is orientated at A 43° 090° and pole B: 17° 140°. Folds with moderate east to northeast directed plunges are most commonly associated with D3, and younger, kink and chevron folds. Based on 62 measurements collected from underground exposures.

Figure 7-6: D2 and D3 Fold Plunges

Source: Rokmaster (2021).
Figure Description: a) Early D2 intersection lineations demonstrate modest to the north plunges 44° 09° (location 530 drift near No.5 Crosscut); and b) Late D3 folds form tight crenulation and chevron style folds with an average plunge orientation of 43° 090° and 17° 140° (location 532 drift, 85 m from portal).

7.4.1.1 Brittle Faults and Brittle Ductile to Ductile Mylonitic High Strain Zones

Two fault or deformational styles are noted at Revel Ridge: (1) late, post-metamorphic, non-mineralized brittle faults characterized by clay- and quartz-rich gouge zones; and (2) early brittle-ductile to ductile deformation zones that may be mineralized.

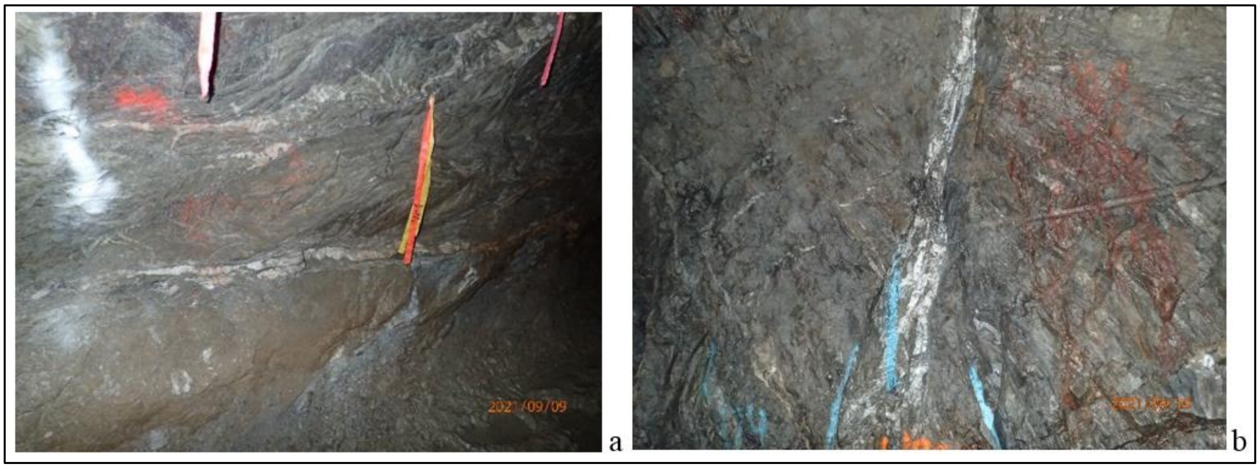
7.4.1.2 Brittle Faults

At Revel Ridge, brittle faults are rare, small and most typically lack significant offsets. These faults are characterized by their green chlorite – clay gouge zones and are locally plugged or healed by sulphide deficient quartz veins. Small drag folds and rotated beds may be noted along fault margins. Ductile strain fabrics are never identified. Two fault types are present:

- Shallow to flat-dipping faults. Most flat faults are a few centimetres to decimetres wide and are locally plugged with either quartz veins or clay gouge (Figure 7-7a); and
- Steeply-dipping, sub-vertical faults are normal to high-angle reverse faults with limited, centimetre to decimetre scale offsets (Figure 7-7b). Most steeply dipping faults are less than 30 cm to 75 cm wide.

Neither brittle fault type appears to either localize or terminate mineralized zones. In a few cases, chlorite-clay rich fault and breccia zones occur proximal to the hanging wall contacts of the RRYZ. Orientations between steep and flat, late brittle faults, suggests that they are likely conjugate pairs.

Figure 7-7: Late Brittle Faults



Source: Rokmaster (2007).
Figure Descriptions: a) shallow-dipping late fault healed with barren quartz veins, orientated at 264°/28°. Location due southeast of the 530 drift and 532 drift junctions; and b) steeply dipping clay-chlorite-quartz lined fault orientated at 218°/84°, location 189 m 832 drift.

7.4.1.3 Brittle-Ductile to Ductile Mylonitic High Strain Zones

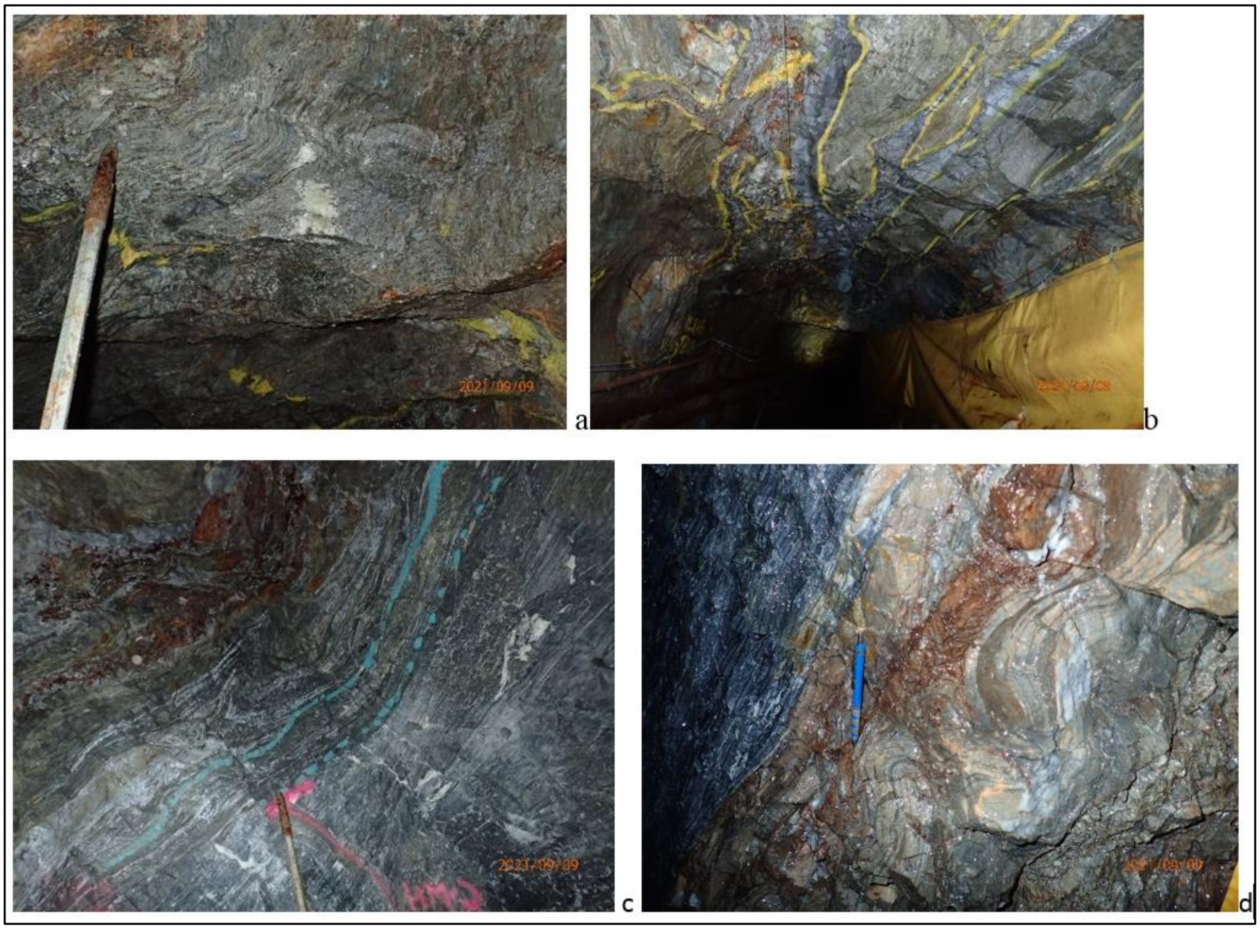
At the Revel Ridge Property, ductile shear zones are relatively common. These ductile shear zones formed in three lithologic and structural environments: (1) ductile deformation zones in major fold closures; (2) ductile deformation zones at lithologic contacts; and (3) ductile deformation zones and mineralized reverse faults.

- Ductile Deformation Zones in Major Fold Closures. Within the cores of larger D2 folds, strong flattening fabrics, sericitic development and grain size reduction are common. Although these structures may be associated with euhedral development of disseminated pyrite grains, enhancement of base and precious metals has not yet been identified with fold related strain zones. These zones are recognized locally in drill core and are well exposed in the regional scale closure of the Carnes Creek Anticline. This exposure is present 600 m to 800 m to the northeast of the Roseberry Mine workings.
- Brittle-Ductile Deformation Zones at Lithologic Contacts. Well-developed high stain zones, which may be mineralized, are commonly documented near lithologic boundaries. Contacts between thick massive beds of the Badshot Limestone and thin phyllite units form mineralized ductile stain zones and are particularly well developed in the A & E areas. In this rock environment, bands of precious metals enhanced sulphides form within a sub-mylonitic phyllite host and abruptly decrease within the enclosing carbonate rocks. These zones are also associated with enhanced fine-grained yellow cream micas, iron carbonates and foliation parallel quartz-sulphide stringers and laminations. Ductile deformation zones at lithologic contacts may have long strike lengths. The A & E brittle-ductile deformation zone, and associated vein and sulphide arrays, has a strike length >2 km.
- Ductile Deformation Zones – Mineralized Reverse Faults. Gold mineralization at Revel Ridge is spatially related to a property-scale deformation zone that ranges in width from approximately 5 m to 25 m and has a strike length >8 km. The Revel Ridge Deformation Zone forms approximately 500 m into rocks of the hanging wall of the Akolkolex Thrust, which is an arc parallel regional-scale thrust fault. Formation of the mineralized

deformation zone may in part be related to the development of the larger regional scale thrust. Gold mineralization within the Revel Ridge mineralized ductile strain zone has several relevant characteristics:

- The deformation zone is defined by greatly enhanced strain fabrics, including the development of S/C fabrics, mylonitic foliations and non-coaxial folds (Figure 7-8 and Figure 7-9);
- S/C fabrics clearly indicate a reverse sense of movement (in cross section view) along the deformation zone that hosts orogenic gold mineralization at Revel Ridge;
- The bulk of the kinematic indicators indicate that at the time of mineralization, the deformation zone that hosts the Revel Ridge gold rich polymetallic deposit had sinistral movement (in plan view);
- The combined kinematic data strongly suggest that the Revel Ridge gold deposit is hosted in a high strain zone that has reverse and sinistral movement history;
- The deformation zone is not associated with complex shear and extensional vein patterns or arrays. The nature of mylonitic fabrics, relative to the strain zone boundaries, indicates that at the time of mineralization, this deformation zone formed at relatively deep crustal levels. As a consequence, most of the vein arrays formed parallel to the main strain fabric. Extensional vein arrays and complex vein breccias are effectively absent from this deformation zone. This characteristic feature permits drill testing of the mineralized zone using relatively broad step-out patterns;
- Structural data clearly indicates that the orientation of the mineralized RRMZ is slightly discordant to the enclosing stratigraphy (Figure 7-10a), with an average dip direction of the deformation zone of 52°/58°, in contrast to the dip direction of beds in the same underground exposures of 55°/51°; and
- In most mineralized deformation zones, the extension direction within the mineralized zone corresponds to the rake of dilatant zones and potentially the orientation of thicker, higher-grade mineralized zones. Extension or stretching lineation's within the RRMZ deformation zone are orientated at 54° / 033° and 56° / 099° degrees (Figure 7-10b).

Figure 7-8: Deformational Characteristics RRMZ



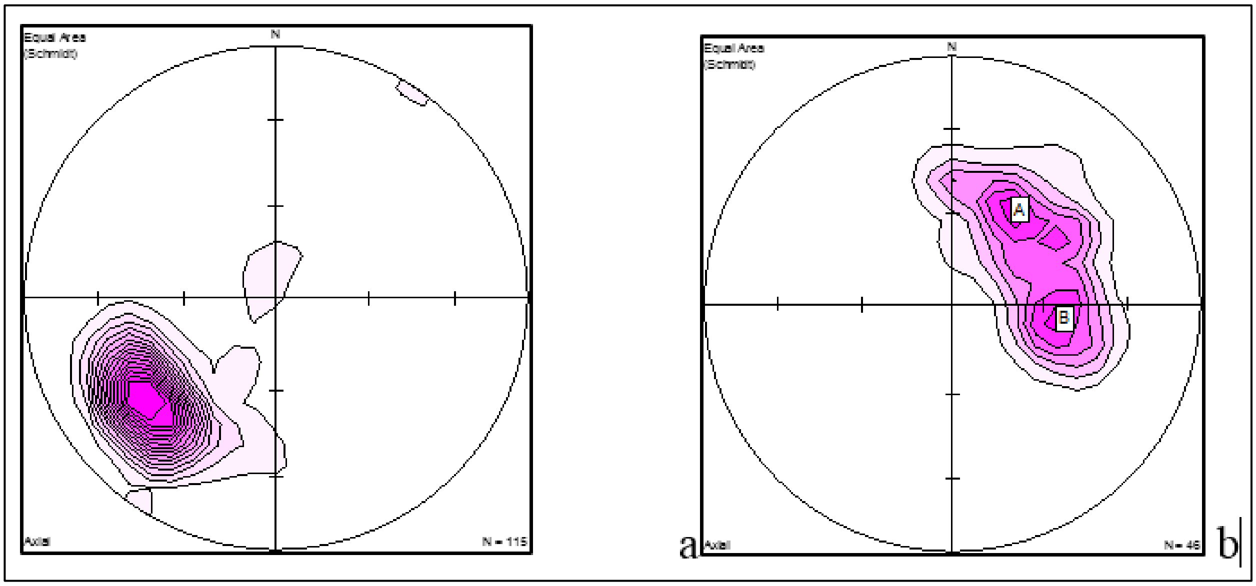
Source: Rokmaster (2021).

Figure Description: a) Well developed grain size reduction and mm scale mylonitic shear bands increase towards the core of the RRMZ; b) Sulphide bands may be deformed into stope scale closures. Folded sulphide bands are common, but formation of these folds does not terminate sulphide bands at closures. Sulphide bands re-emerge a few m along strike from the closure position; c) Strong variation in rock strain defines the RRMZ. Within the RRMZ tight, non-coaxial shear folds are common and indicate "tops to the southwest" or reverse; and d) Twenty-five m into the footwall of the RRMZ rock strain at identical limestone phyllite contacts is much lower and consists of small, warped buckle folds, which also demonstrate tops to the northwest.

Figure 7-9: RRMZ Kinematic Indicators

Source: Rokmaster (2021)
Figure Description: a) and b) S/C fabrics within the RRMZ shear clearly indicate reverse movement with moderate to steep extension, defined by shear stretching lineations, to northeast; and c) sinistral offset in plane view based on asymmetry of shear related folds in the core the deformation zone.

Figure 7-10: Shear Plane Orientation and Direction of Shear Extensional Lineations



Source: Rokmaster (2021)
Figure Description: a) Average dip direction shear planes of the Revel Ridge RRMZ shear are: 052°/58°.
Data are based on 115 shear plane observations measured from underground locations; and b) within the deformation zone, two extension directions or stretching lineations are noted at 54° ⍰ 033° (pole A) and 56° ⍰ 099° (pole B). 46 shear lineations points measured from underground locations.

7.4.2 Metamorphism

Stable metamorphic assemblages in the Revel Ridge area suggest that much of the Property lies at the transition from upper Greenschist to lower Amphibolite facies metamorphic fields. The rocks are characterized by the metamorphic assemblage chlorite-biotite-white mica-quartz.

The presence of both chlorite and biotite suggests that the conversion of chlorite to biotite, which occurs under greenschist lower amphibolite conditions, is incomplete. In the abundant,

fine-grained argillaceous phyllites, kyanite has never been recognized, which limits burial to relatively shallow crustal levels. In addition, metamorphic amphiboles, garnets, and sillimanite are not identified. These data would suggest that the rocks may be straddling the greenschist – amphibolite metamorphic boundary. This boundary will occur at temperatures of around 450°C and pressures ranging from 4 kb to 6 kb or depths of 15 km to 20 km of burial (Spear, 1993).

Consideration of metamorphic conditions is relevant in evaluation of structurally controlled gold deposits. Under conditions of amphibolite metamorphism, rocks behave in a dominantly ductile fashion and typically fail to dilate, and therefore, veins or replacement zones of minable widths are seldom formed. Globally, the number of gold deposits hosted in amphibolite facies rocks is small. At Revel Ridge, orogenic veins and replacement zones formed at or near the brittle – ductile transition, or under upper Greenschist facies conditions. Under such conditions, significant mineralized dilatant zones are hosted by deformation zones of long strike lengths and down-dip dimensions.

7.5 Mineralization

At Revel Ridge, two main styles of mineralization have been documented: (1) a structurally controlled orogenic gold-polymetallic deposit; and (2) a silver-zinc rich carbonate hosted replacement deposit. The bulk of the economic resource within this deposit is hosted by the orogenic gold-polymetallic deposit, or the RRMZ.

Additional mineralized zones (see Figure 14-3)are principally mineralogic and spatial variations on the RRMZ, namely the RRHZ, RRFZ and RR28Z. Significant differences in mineralogy and deformational history suggests that the carbonate hosted silver-zinc-lead rich RRYZ did not developed contemporaneously with the RRMZ. Both the RRMZ and RRYZ have significant potential for expansion.

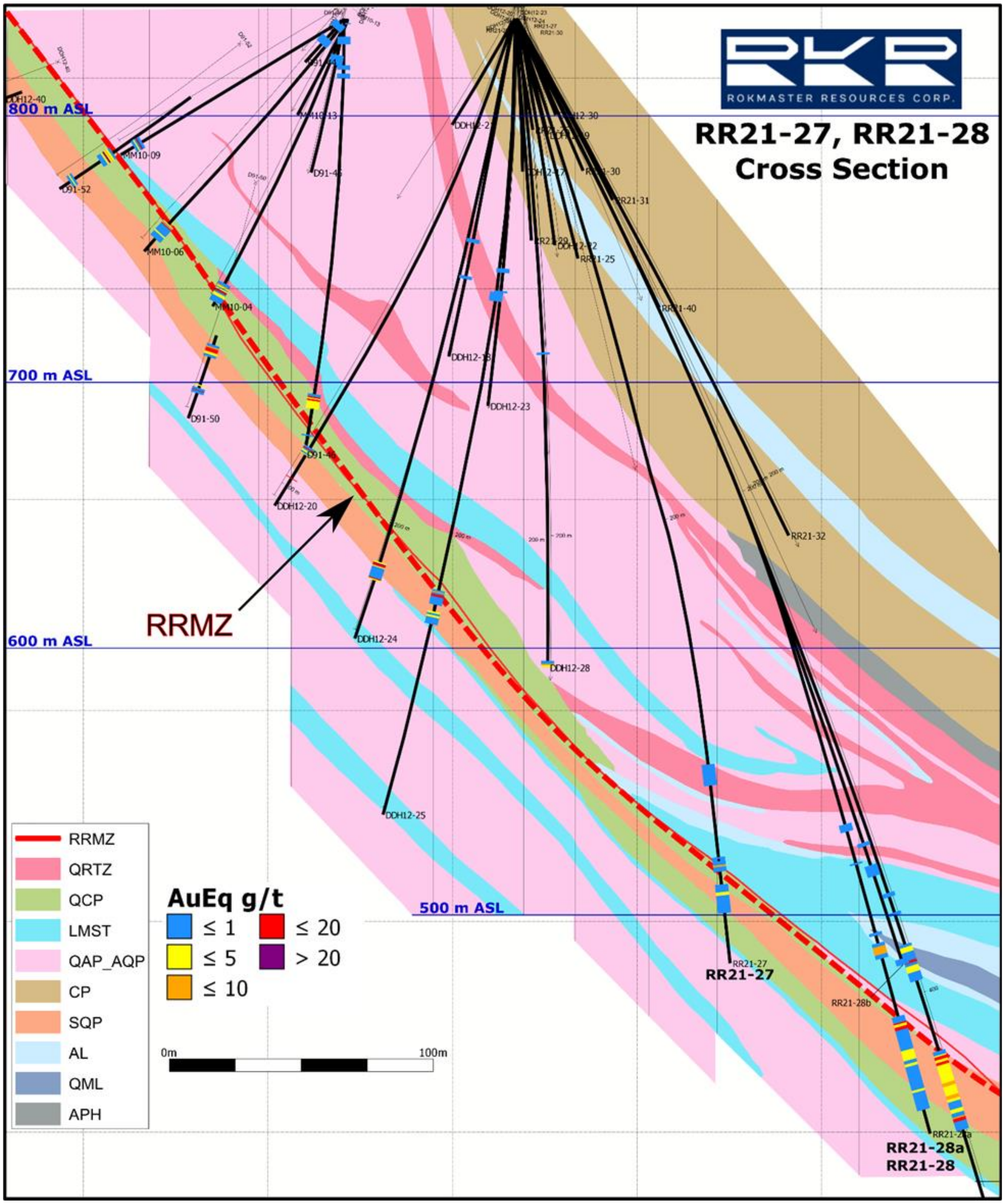
7.5.1 Revel Ridge Main Deformation Zone

The RRMZ is a structurally controlled orogenic precious and polymetallic (Au-Ag-Pb-Zn-As) deposit. The deformation zone that hosts the RRMZ has been traced along strike for >8 km and down-dip for at least 1,200 m. The deformation zone is effectively a mylonitic shear zone with a dominantly reverse and sinistral movement history. The zone has an average dip direction of 052°/58°. Mineralization occurs over an average true width of approximately 2.5 m.

As is characteristic of most near ductile strain and mylonitic deformation zones, discrete discontinuities and gouge surfaces are only locally developed along the footwall or hanging wall contacts of the zone. The definition of the boundaries of the deformation zone is based on the interpretation of enhanced planar strain fabrics, enhanced millimetre to centimetre scale quartz and sulphide lamella, and a slight discordance in dip between the Footwall and Hanging wall Contacts. The deformation zone Hanging Wall contact is commonly 5º to 10º steeper than the Footwall contact. The deformation zone differs in strike from individual units by approximately 5º to 10º and is commonly 3º to 5º steeper than the dip of the enclosing stratigraphy. The deformation zone is well developed at major lithologic contacts, for example at limestone/quartzite and quartzite/phyllite contacts (Figure 7-11). The zone appears to narrow and tighten in incompetent black argillaceous phyllites or in the interiors to massive limestone units. Although a significant percentage of gold in the RRMZ is contained within arsenopyrite, the volume of free gold in sheeted quartz veinlets is significant, and may be zoned with respect to elevation.

Within the RRMZ, folded sulphide bands and aggregates commonly re-emerge past their closure points; however, the walls of the deformation zone are not folded. These observations suggest that much of the intense deformation within the shear zone is constrained within the planar boundaries of the shear zone. This feature is a critical attribute of the Revel Ridge deformation zone and suggests that intense, non-coaxial deformation occurs in the interior of the deformation zone, but the overall boundaries of the deformation zone remain highly planar. Consequently, the RRMZ mineralization may be very reliably and successfully targeted with diamond drill holes using broad step-out distances.

Figure 7-11: Geological Cross-Sectional Projection: Diamond Drill Holes RR21-27 and RR21-28



Source: Rokmaster (2021).
Description: The highly planar RRMZ occurs across the entire length of the section. The RR28Z and RRYZ are localized to the hanging wall of the RRMZ.

Three styles of mineralization are associated with the RRMZ:

1. Early mineral quartz veins. Both in drill core and in underground workings, white quartz veins locally containing moderately coarse-grained black sphalerite occur throughout the Revel Ridge Mine area. The veins appear to boudinaged and embayed into fine-grained massive sulphide bands and appear to pre-date them. These veins range from a few centimetres up to 1.0 m in true width. They are locally boudinaged and are commonly mineralized at modest to lower gold equivalent grades (e.g., < 4 g/t AuEq). The veins do not form complex shear and extensional vein arrays, which are most typically foliation and shear parallel planar to partially boudinaged veins. These veins significantly post-date and are unrelated to the formation of syn-metamorphic barren quartz veins (Figure 7-12).

Figure 7-12: Early Mineral Quartz – Sulphide Veins

Source: Rokmaster (2021).
Figure Description: a) Early quartz-sulphide veins are commonly characterized by relatively coarse-grained quartz veins containing mesh to irregular aggregates of sphalerite and sometimes pyrrhotite; and b) the veins are boudinaged, imbricated and may be incorporated into later semi-massive to massive sulphide bands and aggregates.

2. Syn-mineral banded massive to semi-massive sulphides – main stage mineralization. Massive sulphide bands consisting of compact grains of arsenopyrite, red-brown sphalerite, pyrite and minor galena form the dominant sulphide phases and are one of the principal hosts to gold mineralization, and higher-grade gold mineralization. Massive sulphide bands range from a few centimetres to decimetre wide and may continue for tens of metres unabated. The bands are commonly best developed at or near major lithologic changes, including quartzite-limestone contacts and quartzite-phyllite contacts. The abundance of milled well-rounded sulphide grains is a common feature. Intense variations in rock strain are evident and textural differences suggest more than one generation of sulphide deposition (Figure 7-13). Rounded and milled quartz and sulphide clasts within the sulphide bands are known as "durchbewegung structures" (Vokes, 1969; Marshall and Gilligan, 1989). The clasts that are typically a few centimetres in size consist of strongly foliated and deformed fragments produced by the dismemberment of more competent layers within the sulphides and wall rock fragments during progressive and repeated deformation. More than one sulphide band is commonly observed, and these have significant on-strike continuity. Sulphide bands are locally strongly deformed into non-coaxial folds. Termination of sulphide zones at fold closures does not occur. Instead, the sulphide bands simply "re-start" a few m past the closure and continue along strike (Figure 7-14).

3. Sheeted quartz – sulphide veins and veinlets. Narrow, cm- to mm-scale quartz-sulphide veinlets are noted throughout the RRMZ. These veinlets formed parallel to the dominant shear fabric and may contain sphalerite, arsenopyrite and pyrite along their margins (Figure 7-15). These veins and veinlets may carry significant base and precious metals and serve to increase the width of mineralized zones beyond that which would solely be accounted for by massive sulphide veins and replacements.

Figure 7-13: Textural Characteristics RRMZ Sulphide Bands

Source: Rokmaster (2021).

Figure Description: Massive sulphide bands in the RRMZ are characterized by fine, to coarse-grained bands and aggregates of red brown sphalerite, arsenopyrite and pyrite (Plate 6a, sample length 9 cm). Significant variations in sulphide textures are noted ranging from compact, very fine-grained milled sulphides displaying well developed shear bands and rotational fabrics to much coarser grained arsenopyrite grains developing at sulphide wall rock contacts (Plate 6b, sample length 15 cm).

Figure 7-14: Planar and Deformed Sulphide Bands RRMZ

Source: Rokmaster (2021).
Figure Description: a) and b) Dark grey, highly planar sulphide bands are noted forming at or near lithologic contacts, quartzite – limestone; and c) and d) Shear related non-coaxial folds indicate sinistral and reverse movement within the deformation zone. All photographs, taken in the central to southeast portions of 830 drift, average field of view, 2.5 m.

Figure 7-15: RRMZ Sheeted Foliation Parallel Quartz Sulphide Veins and Veinlets

Source: Rokmaster (2021).

Figure Description: a) Mm- to cm-scale sheeted quartz veins may be flanked principally by sphalerite and arsenopyrite (sample from DDH RR20-11 @ 284 m); and b) Narrow mm-scale sphalerite quartz lamella is deformed synchronously with the strong shear fabric within the RRMZ (sample from DDH RR21-28b @ 442.8 m).

7.5.2 Revel Ridge 28 Zone (RR28Z)

The Revel Ridge 28 Zone is an unusual, mineralized zone that typically occurs between the RRMZ and Footwall mineralized zones. The RR28Z is known largely from information in the extreme southeastern portions of the Revel Ridge Deposit. This zone is well exposed in the terminus face of the original 830 drift and in drill holes RR21-25, RR21-28, RR21-28a, RR21-28b, and RR22-94. Individual drillhole intersections of the RR28Z are on the scale of 5-10 m in width, although continuity between drillholes at this stage appears to be limited. The RR28Z Zone has not been modelled for Mineral Resource purposes, therefore width, legth and continuity are uncertain.

The RR28Z is characterized by:

- An abundance of yellow orange to red-brown millimetre- to centimetre-scale sphalerite bands.
- The zone is base metal dominant with weak arsenopyrite bands and typically contains only low grade, <2 g/t Au.
- The RR28Z is relatively thick ranging from 3 to >10 m in apparent thickness.
- The hallmark characteristic of the zone is the abundance of fine grained very dark grey to black silica which forms the dominant gangue mineral which highlights the yellow orange sphalerite grains (Figure 7.16).
- Milled semi-massive sulphide bands are absent and early quartz sulphide veins are not identified; and
- Unlike the silver and zinc rich RRYZ, the RR28Z lacks affiliation with limestone units.

Figure 7-16: Banded Sphalerite – Black Silica RR28Z

Source: Rokmaster (2021).
Figure Description: Yellow-orange, mm- to cm-scale sphalerite bands form a thick mineralized interval locally >10 m in apparent thickness. The RR28Z distinctive characteristic is the presence of abundant fine-grained black silica as the principal gangue mineral. Sphalerite is the dominant sulphide phase. DDH 21-28b @ 438.0 m.

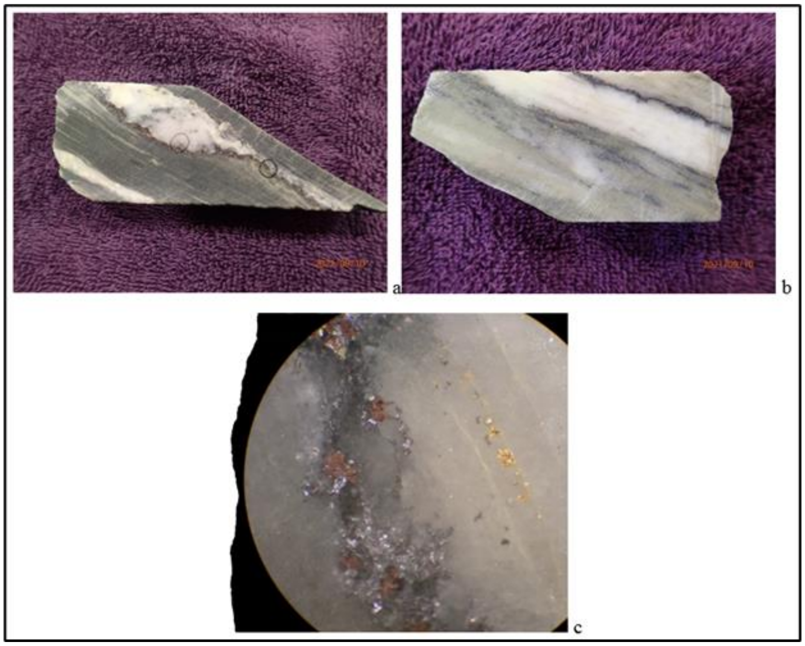
7.5.3 Revel Ridge Hanging Wall and Foot Wall Zones (RRHZ – RRFZ)

Although not always encountered, RRMZ mineralization may by sometimes be flanked on both the Hanging Wall and Footwall positions by structurally controlled mineralized zones that approximately parallel it. Both zones are typically characterized by sheeted millimetre- to centimetre-scale quartz sulphide veins and quartz-iron carbonate veins and veinlets. Drillhole intersections of both the RRHZ and RRFZ typically range from 0.50 to 2.00 m in width. Sheeted arsenical veinlets are more common in both the RRHZ and RRFZ; heavy massive sulphide bands and lamella are poorly developed. Veins within the RRFZ may have higher iron carbonate contents manifest as sheeted quartz - iron carbonate veins (Figure 7-17). Both zones are associated with enhanced strain fabrics and enhanced fine grained foliation parallel yellow cream micas. Relative to the RRMZ strain fabrics, the width of the enhanced strain envelop and the volume of sulphides are significantly lower in the Footwall and RRHZs compared to the RRMZ. The RRHZ is typically formed within a 5 m to 30 m into the hanging wall of the RRMZ. The RRFZ has a similar spatial relationship to the RRMZ and occurs 5 m to 30 m into the footwall of the RRMZ. Both the RRHZ and RRFZ commonly occur parallel to the RRMZ at all depths and positions throughout the deposit and the relative strength of the sulphide mineralization appears to be laterally continuous between drillholes on a scale of 50-200 m.

The RRHW Zone has a continuous length of 1.3 km, average width of 1.1 m and a vertical depth of 800 m. The RRFW Zone has a continuous length of 2.1 km, average width of 1.1 m and a vertical depth of 600 m.

Limited data suggests the veins within the RRFZ may preferentially carry macroscopic free gold. The presence of free gold in metallically screened samples also confirms the visual estimates. When present, free gold is forming along the margins of quartz-carbonate ± sulphide veins or occurs as discrete grains flanking arsenopyrite grains within quartz carbonate veinlets. Many of these gold grains are >100 µm in size (Figure 7-17). The presence of significant amounts of free gold within the RRFZ should be considered as a highly significant metallurgical development, as historically the Revel Ridge Deposit has been viewed as refractory gold deposit.

Figure 7-17: Footwall Mineralized Zones (RRFZ) And Macroscopic Gold



Source: Rokmaster (2021).
Figure Description: Within the RRFZ, free gold is associated with small, sheeted quartz-iron carbonate veins and veinlets (Plate 10a DDH 21-36 @ 535.9 m.) Macroscope gold grains are typically >100 µm and may occur as either macroscale grains within the matrix or flanking sphalerite-galena and arsenopyrite grains (Plate 10b and Plate 10c, DDH 21-40 @ 519.8 m). Field of view Plate 10c is approximately 5 mm.

7.5.4 Revel Ridge Yellowjacket

The RRYZ mineralized zone (RRYZ) differs radically from all other styles of mineralization documented at Revel Ridge. This mineralized zone is characterized by:

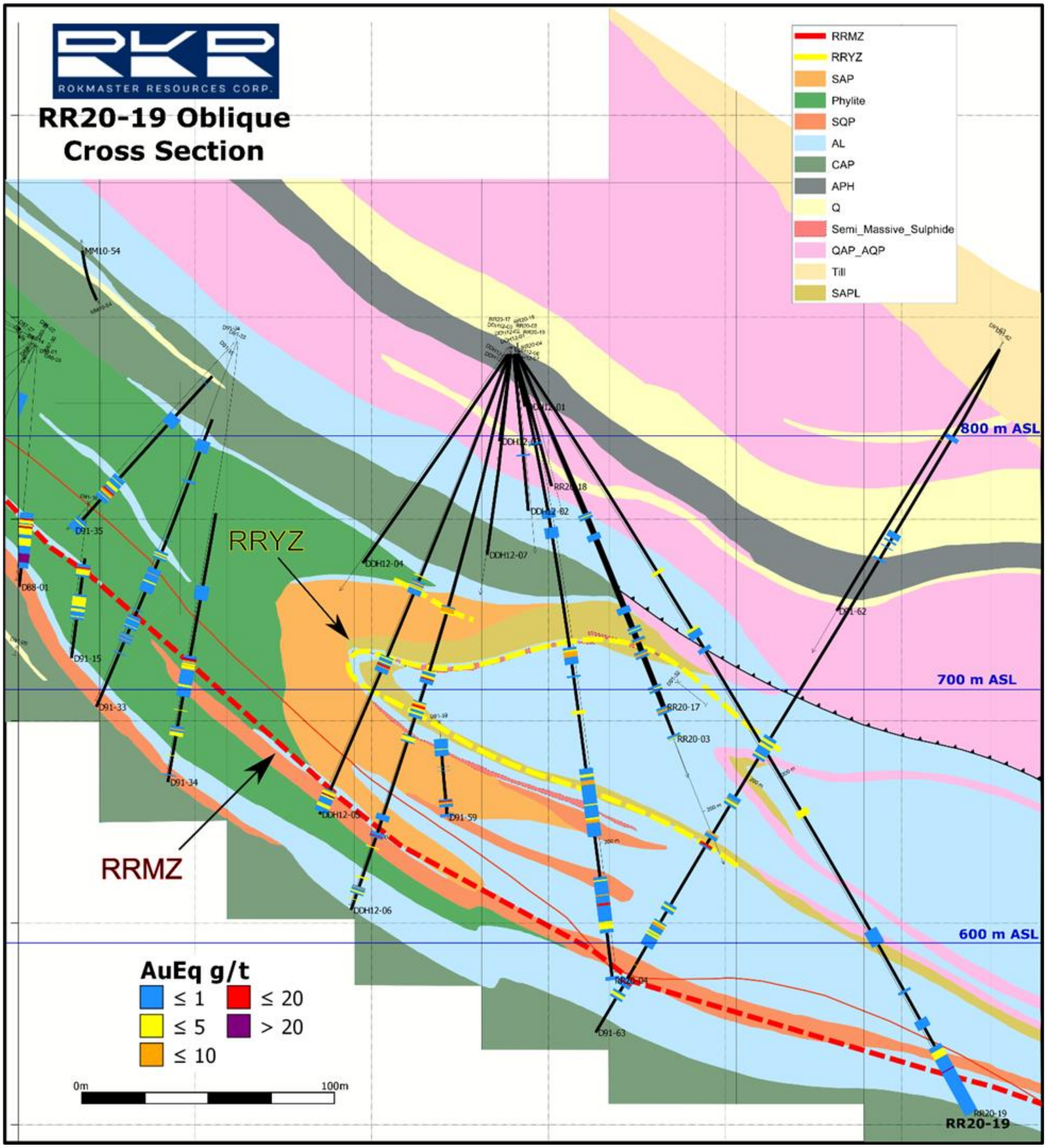
- Coarse-grained sphalerite and galena replacement zones are only formed within silicified and marbleized limestone horizons (Figure 7-18). The RRYZ is stratigraphically controlled and is always associated with thin carbonate beds that are potentially correlated with the Badshot Limestone.
- Assay values in the range 8% to 15% Pb + Zn over several metre widths is common. The grades are much higher than the 6% to 8% combined Pb + Zn values for most Pb-Zn deposits within the Kootenay Arc (e.g., HB, Jersey-Emerald, and Reeves MacDonald (Nelson, 1991; Paradis, 2007).
- The RRYZ contains significant silver values, typically in the range 40 g/t to 60 g/t Ag. Much of the silver within the RRYZ is likely contained within argentiferous galena. The high grades of silver within the RRYZ are unusual, as most Pb-Zn deposits in the Kootenay Arc, except for the Bluebell Mine, have silver grades in the 2 g/t to 4 g/t Ag range (Paradis, 2007).
- Ag-Pb-Zn mineralization is invariably associated with a marble or secondary silica front that replaces fine grained dirty micritic, argillaceous limestones.

- Fluorite is a very significant gangue mineral and occurs as thick clots and aggregates and discrete bands and veins. Fluorite is not present in the RRMZ.
- The net iron content of these zones is low. Pyrite and pyrrhotite are very poorly developed. Sphalerite is most typically low iron sphalerite. Arsenopyrite is effectively absent.
- Although bands of lead-zinc sulphides occur, the intense deformation characteristics within the RRMZ are absent. Commonly, coarse-grained sphalerite forms angular, undeformed reaction fronts that are deeply sculpted and embayed into the host limestones and marbles.
- The RRYZ occurs well into the hanging wall, 30 m to 75 m above the deformation zone that hosts the RRMZ.
- The presence of stacked Pb-Zn sulphide zones is likely related to sulphide replacement zones forming along the hinges of limestone units that are deformed into isoclinal, recumbent folds (Figure 7-19).
- In comparison to the RRMZ, the RRYZ tends to have shorter strike lengths and shorter down-dip lengths, typically in the range of 500 m of strike and 200 m down-dip. The zones may demonstrate periodicity with mineralization re-starting at permissive lithologic and structural points and potentially folded repetitions of carbonate stratigraphy.

Figure 7-18: Representative RRYZ – RRYZ Style Mineralization

Source: Rokmaster (2021).
Figure Description: RRYZ mineralization is characterized by massive to semi-massive replacement of marbleized and silicified limestone by argentiferous galena and either yellow – honey sphalerite or deep red brown sphalerite. Textures are diverse and range from moderately banded and foliated sulphides to dog – tooth euhedral crystals with very limited evidence of post or syn-deposition deformation. a) sample DDH RR21-40 @ 73.4 m; b) sample DDH RR21-40 @ 62.3 m; and c) sample DDH 21-28b @ 442.8 m.

Figure 7-19: Cross-Sectional Projection of Style and Form of RRYZ Mineralized Zones and Relation to RRMZ



Source: Rokmaster (2021).
Figure Description: The RRYZ follows the hinge line of an overturned isoclinally folded limestone rock unit.
Galena-sphalerite rich zones formed at the hanging wall contact of the marbleized carbonates and track the folded limestone unit across its closure. This Zone is located 30 m to 75 m structurally above the RRMZ.

The RRMZ appears flatter than its normal 55° dip, because the cross-sectional projection is oblique to the plane of the RRMZ.

7.5.5 Other Showings

The large (>14,000 ha) Revel Ridge Property contains several dozen mineral showings and occurrences. These range in scope from those occurrences with significant underground workings, e.g., Roseberry and A & E, to those which are less well documented surface trenches and rock sample sites. Discussion of these occurrences, all of which are within the Property boundaries, is arranged geographically beginning in the extreme northwest Property area and extending to the extreme southeast Property boundary.

7.5.5.1 The Roseberry Occurrence

The Roseberry Mine was the first significant mine to be discovered in the Revel Ridge district and was initially mentioned in the Annual Reports of the British Columbia Minister of Mines in 1898 (Sibbold, 1898). Most recently, the Roseberry workings have been well documented by Weicker (1991). Roseberry is located approximately 4.5 km to the northwest of the 830 Portal at the RRMZ. The occurrence is the site of four small adits, three of which are collapsed. The Roseberry No. 2 Adit remains open and was briefly examined by Rokmaster's geologists in August 2021.

The Roseberry No. 2 Adit is located in the black clastics of the Index Formation, 100 m to 200 m stratigraphically above the contact with the main Badshot Limestone package. The adit is a narrow, 1.5 m x 1.5 m, partially water filled and is open for approximately 90 m. The adit is collared in friable black clastics of the Index Formation. A crosscut at the collar of the adit extends for approximately 30 m whereby the adit turns to the southeast for another 40 m to 60 m and follows a contact between a narrow quartzite unit, and a thin limestone unit, both under 1.0 m, which are embayed within highly sheared, strongly graphitic black clastics. The southeast trend of the adit can be followed for approximately 50 m. Beyond this point, ground conditions become very poor, with significant rock failures occurring from the back and the northwest rib. In this portion of the adit ground "support" occurs through the extensive use of 100-year-old timbers which no longer have structural integrity. The sheared graphitic contact with quartzites on the hanging wall side is orientated at 078°/51° which is slightly discordant to the main S2 foliation at 048°/56°.

Although this shear zone is almost perfectly on strike with the RRMZ, massive sulphide bands were not recognized within the Roseberry No. 2 Adit. Weickers (1991) samples may have significantly downgraded the exploration potential of the No. 2 Adit as of nine chip samples taken from the main deformation zone only one contained significant gold and arsenic values, 2.54 g/t Au and 1.36% As. This sample was taken from the 57 m mark of the No. 2 Adit over 1.5 m, near the point where ground conditions do not permit further safe access. The samples appear to have been taken from the northeast rib of the adit, parallel to the strike of the zone and are unlikely to represent the actual width of the zone.

The principal significance of the adits and mineralized zones in the Roseberry area lies in the observation that the deformation zone which hosts the RRMZ persists for >4.5 km to northwest of the 830 Portal at RRMZ. As this deformation zone traverses to the southeast, the zone passes from the relatively incompetent rocks of the Index Formation to competent rocks of the Badshot – Hamill Formations, potentially aiding in the development of additional dilatant sites and stronger mineralized zones.

7.5.5.2 The A & E and Related Occurrences

The A & E occurrences are located approximately 5 km to the northwest of the 830 portal and the RRMZ. The A & E occurrences include the Westairs upper and lower adits, the North A & E adit, the Cirque Zone, and the A & E South Zone. Mineralization at these occurrences is related to the formation of dilatant zones that form along the contacts of thin phyllite units, which formed internally within the Badshot Limestone. The deformation zones that host the mineralization at

A & E are located stratigraphically much higher (Badshot Limestone – Phyllite contacts) than mineralization associated with the RRMZ hosted by Hamill Group rocks (Figure 7-11).

Iron carbonate-quartz veins and breccias are associated with this zone and may be traced with significant regularity over strike distances of >2 km.

At the A & E South Zone, a series of channel samples were collected in massive sulphide zones formed at phyllite limestone contacts. Mineralization closely resembles that noted in the RRMZ and consists of bands of pyrite, arsenopyrite and sphalerite forming at or near limestone phyllite contacts. At the A & E South Zone, the sulphide bands are deformed into a north-plunging intraformational D2 anticline with one limb dipping 126°/46° and the other at 042°/46°.

Regional plunges occur at 32° ▯ 342°. Late D3 kink folds plunge nearly orthogonal to D2 folds at 22° / 120°. Representative samples from this zone indicated that the quartz sericite schists in the hanging wall carried 4.55 g/t Au, 24 g/t Ag, 1% Pb, 0.5% Zn and 5.97% As. Representative massive sulphide bands in this zone carried 2.05 g/t Au, 60 g/t Ag, 1.59% Pb, 3.89% Zn and 4.33% As. This newly discovered mineralized zone was tested in 2021 by two NQ drill holes DDH RR21-72 and RR21-73.

The A & E South Zone is one of at least three mineralized occurrences at or near thin phyllitic sedimentary rocks with the Badshot Limestones. These occurrences include the North A & E adit, the Westairs Adit (Figure 7-20d), and the Trench Zone. This Zone becomes strongly manganiferous, weathering to dark brown-black oxides approximately 1,200 m along strike to the southeast near the Trench Zone. Semi-massive sphalerite-galena boulders are locally identified along the strike of this contact to the southeast. These occurrences formed over strike length distances of at least 2,000 m and may represent an under-valued exploration target.

Figure 7-20: A&E South Occurrence

Source: Rokmaster (2021).

Figure Description: Most of the A & E Occurrences are located at thin phyllite members formed within the Badshot Limestone. a) The red line trace indicates the position of the mineralized phyllite contact at the A & E South Zone; b) The zone likely consists of two principle sulphide bands which are likely fold repetitions of each other; c) Characteristics of mineralization at A & E South, closely mirror those at the RRMZ ; and d) The lower Westairs Adit is collared within limestones in the footwall to a deformed light buff phyllite in the central lower field of view. This Adit is located a few hundred m along strike to the northwest of the A & E South Zone.

7.5.5.3 RS-2 Adit

The RS-2 Adit is located 3.5 km to the northwest of the RRMZ 830 portal and 1,300 m to the east of the Roseberry Adits. The RS-2 Adit is collared on a series of massive quartzite to quartz wacke sedimentary rocks in which the dominant S2 foliation is orientated at 068°/30°. A deep orange-brown gossanous zone approximately 2 m to 4 m wide has a surface expression of approximately 200 m (Figure 7-12). At this locale, the quartzite unit is a few tens of metres wide with both the hanging wall and footwall contacts obscured by talus. A small adit extends for approximately 8 m to 10 m into the quartzitic sedimentary rocks that host this silica rich, orange-brown gossan, which is sporadically stained with malachite. Quarzitic sedimentary rocks at RS-2 are present as an embayment of Hamill or Mohican quarzitic sedimentary rocks formed dominantly on the eastern, upright limb of the Carnes Anticline. Rock samples collected in 2012 were assayed using a partial extraction method, Aqua Regia, which is unlikely to accurately report silica encapsulated sulphides and in addition has high thresholds for gold. These samples, which were collected over 2 m intervals, contain up to 324 ppm Cu, 530 ppm Zn, and 92 ppm Pb. Gold was below detection and highest silver grades were 2.6 ppm. Strong strain fabrics are not recognized within the competent quartzitic sedimentary rocks that host this occurrence.

Figure 7-21: RS-2 Adit

Source: Rokmaster (2021).
Figure Description: The adit is located within quartzites and quartz wackes of the Hamill or Mohican groups that are entirely embayed with limestones of the Badshot Formation. These rocks have been deformed along small-scale closures along the upright eastern limb Carnes anticline of the Badshot Formation.

7.5.5.4 The North Showing

The North Showing is the first definitive exposure of the RRMZ to the northwest of McKinnon Creek, approximately 700 m to the northwest of the 830 Portal. The North Showing consists of several 1 cm to 5 cm wide arsenopyrite, galena, sphalerite and pyrrhotite stringers and bands hosted within sericitic quartz phyllites and m-scale limestone bands. The Showing was discovered by BP Selco in 1984. The results of channel samples suggested that at surface the Showing carried 3.1 g/t Au, 20.8 g/t Ag, 0.007% Zn, 1.88% As and 0.27% Pb over 2.1 m. Portions of this Showing have been hand trenched with an open cut of approximately 15 m extending along the strike of the zone, which has a dip direction of 032°/55°. Carbonate lenses associated with this occurrence area are thin limestone and dolomite bands within the Mohican or Hamill Groups. The main Badshot Limestone contact is several hundred of m up-topography to the northeast. In the North Showing area, historical soil samples are significantly gold enriched and the North Showing area was tested by Rokmaster in 2021 with four surface NQ drill holes over a strike distance of 200 m (DDHs RR21-55 to RR21-58). Mineralization within this zone is associated with bright green micas and sheeted quartz arsenopyrite veinlets that form over 2 m to 3 m core lengths. Semi-massive sulphide bands are absent, but green chrome-rich micas may be particularly well developed in this zone (Figure 7-13).

Figure 7-22: North Zone Vein and Alteration Characteristic

Source: Rokmaster (2021).
Figure Description: The North Zone is hosted in fine grained competent quartz rich sediments and thin, m scale, limestone horizons. Sheeted quartz-arsenopyrite ± sphalerite veins form a zone with an approximate 3 m apparent width. The core sample is taken from DDH 21-58 @ 271 m.

7.5.5.5 The Far East Zone

The Far East Zone is located approximately 900 vertical m above the 830 Portal, at an elevation of approximately 1,700 m, a few hundred m below the peak of Goat Mountain. An upper and lower zone are documented with the best assay results coming from the lower Far East Zone; 1.75 m of 1.1 g/t Au, 3.1 g/t Ag, 1.24% As and < 0.01% Pb and Zn. The zone is hosted by fractured quartzites of the Hamill Group, which vary in composition from clean orthoquartzites to dirty quartz wackes.

Quartzite in the Far East Zone >75 m thick and highly homogenous with no other significant lithologic variations. The Far East Zone has an estimated strike length of 26 m and a maximum width of 3.6 m (Pegg and Grant, 1984).

7.5.5.6 The Copper Zone

The Copper Zone appears on several vintage geological maps and has been documented as a series of centimetre scale quartz-chalcopyrite veins and narrow arsenopyrite bands hosted in quartz-rich sedimentary rocks of the Hamill Group. The zone is located approximately 150 to 180 m into the footwall of the RRMZ and has a known strike length of approximately 225 m. Preliminary chip sample results reportedly taken by Equinox (P&E, 2020) were reported as carrying 3.55 g/t Au, 21.7 g/t Ag and 0.19% Cu over 1.0 m.

Careful underground mapping and sampling were conducted over an approximate 250 m distance, beginning at the collar of the 832 Portal. Relative to historical maps, the 832 Portal should easily cut the trace of the Copper Zone, <50 m to 75 m sub-surface. Mapping and sampling of numerous small quartz veins and shears within the west rib of the 832 Adit fails to identify the on-strike or down-dip continuation of this zone. Based on these data, the potential for the Copper Zone to develop into a significant mineralized target appears to be limited.

7.5.5.7 Zinc and Y Creek Occurrences

The Zinc Creek occurrences are well documented by Makepiece (1998). The Zinc Creek showings are located approximately 2 km to the southeast of the 832 Portal and over 1,000 m to the southeast of any historical drilling. The occurrences are defined by a series of small planar, centimetre-scale, locally arsenical sulphide bands that are the outcrop expression of the southeastward continuation of the RRMZ.

The Y Creek Occurrences are located another 500 m to 700 m to the southeast of the Zinc Creek Occurrences. Similar to Zinc Creek, these Occurrences are defined by sheeted centimetre-scale sulphide bands locally associated with a larger orange-brown oxide zone deeper into the footwall of the mineralization. Although both the Zinc and Y Creek Occurrences have narrow sulphide widths at surface, the available technical data including the extensive results from Rokmaster's 2020 and 2021 surface and underground exploration programs, suggests that the RRMZ routinely strengthens at depth.

8 DEPOSIT TYPES

8.1 Introduction

The Revel Ridge Property area contains two distinctly different styles of mineralization: (1) highly planar, arsenical- and Au-rich, structurally controlled polymetallic sulphide zones and with no definitive host rock association, exemplified by the RRMZ ; and two Ag-Zn-Pb deposits hosted only in marbleized and silicified limestone units, exemplified by the RRYZ. The technical data developed by Rokmaster's geological teams have served to significantly clarify the origin of each of these two deposit types.

8.2 RRMZ – Structurally Controlled Orogenic Au Deposit

Most of the Revel Ridge technical data suggests that the RRMZ is an orogenic Au deposit. Using the model developed Groves et al. (1998) and summarized by Sillitoe (2020), orogenic Au deposits are characterized globally by:

- Formation in the late stages of regional scale orogenic events.
- Commonly hosted in accretionary or collisional orogens at relatively deep paleo-depths of 5 km to 20 km below surface.
- Association with low salinity, Au- and arsenic-bearing fluids generated during the transition from the greenschist to amphibolite metamorphic grades.
- Productive mineralized zones forming over very significant vertical distances, potentially exceeding 2.0 km; and
- Association with the dilatant points of deep structural zones within segments of orogen-parallel, deep crustal faults (Sillitoe, 2020).

The RRMZ exemplifies many of the characteristics that define orogenic Au models including:

- The RRMZ is associated with a long strike length deformation zone that parallels major lithologic and terrain boundaries. The host deformation zone exceeds 8 km in length and is likely related to an even larger thrust fault located approximately 500 m to the southwest and forming at the Akolkolex Thrust contact or boundary between Hamill and Akokolex Formations.
- Detailed underground mapping clearly indicates that the RRMZ is discordant to the strike and dip of lithology.
- Mineralogical data indicate that the deposit formed at or near the Greenschist – Amphibolite transition.
- Mineralization in the RRMZ may be shown to extend vertically over distances of 1.2 km.
- Mineralization within the RRMZ evolved late in the orogenic cycle of the Selkirk allochthon. Re-Os data suggests, within broad limits, that the formation of the auriferous arsenical deposits at Revel Ridge occurred around 84 Ma (Creaser, 2021). That late to mid-Cretaceous age of mineralization is approximately 460 Ma younger than the enclosing stratigraphy; and
- The potential for mineralogical zonation within the RRMZ suggests that a further analogy to the orogenic deposit model may be appropriate. In the regional Revel Ridge environment, large-scale metamorphic and unroofing events occur at three principal time frames: 170 Ma, 90 Ma to 100 Ma, and 60 Ma to 75 Ma (Parrish, 1995). If

the RRMZ experienced additional uplift, the system may be telescoped and evolve from an arsenical deposit to one which at depth becomes free milling. The exact analogue of that occurs with the Fosterville orogenic Au deposit in Australia, which shifts from highly arsenical mineralization near surface to increasingly free milling mineralization at depth (Voisey et al., 2020).

Based on these data, the RRMZ deposit is best represented as an orogenic Au deposit and as such, is one of the largest undeveloped Au deposits of this type within the western Canadian cordillera.

8.3 RRYZ Ag-Pb-Zn Occurrence – Deposit Model

At Revel Ridge, the second style of mineralization is associated with Ag enriched Zn-Pb deposits. Two deposit models have been used to describe Pb-Zn deposits in the northwestern portions of the Kootenay Arc, such as: (1) Shuswap Metamorphic Complex Pb-Zn Deposits; and (2) Kootenay Arc Carbonate Replacement Deposits. The similarities and differences between the two deposit models may be briefly summarized.

8.3.1 Shuswap Metamorphic Complex Pb-Zn Deposits

This deposit type is characterized by the Cotton Belt, Jordon River, Big Ledge, Wigwam, Ruddock Creek, and similar occurrences. The deposits have been described by Hoy (1982), Fyles (1970) and Nelson (1991), and have the following hallmark characteristics:

- The deposits are laterally extensive forming thin sulphide sheets or horizons extending over several km,
- Sulphide bands consist of pyrrhotite-red brown sphalerite-galena and pyrite-magnetite,
- The deposits are typically well layered with intercalated bands of quartzites,
- calc-silicate schists, marbles, pelitic schists, and sometimes barite,
- Non-metamorphosed deposits may be interpreted as forming in mixed carbonate-clastic rocks. The deposits are unlikely to share an identical stratigraphic section.
- Ag contents in some deposits (Jordan River) are significant whereas at other deposits (Ruddock Creek) Ag contents are negligible,
- The deposits are sometimes interpreted to be metamorphosed sedimentary exhalative deposits.

The reader is cautioned that the author of this technical report section has not verified the above information and the mineralization described may not necessarily be representative of the Revel Ridge Property.

8.3.2 Kootenay Arc Carbonate Replacement Deposits

Kootenay Arc Carbonate Replacement Deposits are a modification of Mississippi Valley-Type Pb-Zn deposits or Irish Type Ag-Pb-Zn deposits. Using the interpretation of Leach et al., (2010) and Nelson (1991) the deposits are characterized by:

- Dominantly Pb-Zn sulphides with relatively low Fe sulphide contents,
- Dolostone and marble host rocks in platformal environments within orogenic forelands,

- Stratabound, to stratiform, to vein-like characteristics,
- Quartz, iron-magnesium carbonates, barite, and fluorite as important gangue minerals,
- Lack of spatial association with intrusive rocks,
- Phanerozoic age host rocks, <20% of the deposits occur in Cambrian and older rocks.

8.3.3 Revel Ridge Yellowjacket – RRYZ Ag-Zn Deposit Kootenay Arc Carbonate Replacement Deposit

The characteristics of the RRYZ may be examined in comparison to Shuswap type Pb-Zn deposits and Kootenay Arc carbonate replacement deposits, as follows:

- In contrast to Shuswap type Pb-Zn deposits, the RRYZ is not associated with thin laterally extensive sulphide layers,
- The primary lithologic host for the RRYZ is always a limestone unit,
- The deposits are intimately associated with dolomitization, silicification and carry fluorite as a significant gangue mineral,
- In contrast to the high iron, red-brown sphalerites, and abundant magnetite and pyrrhotite of Shuswap type Pb-Zn deposits, low-iron yellow sphalerite is normal in the RRYZ,
- Both deposit models, and the RRYZ, are stratabound, but formed at different stratigraphic positions,
- The high Ag content of the RRYZ is anomalous, particularly compared to the other Kootenay Arc deposits, and
- The net volume of Fe-sulphides in the RRYZ is low, in contrast to the much higher Fe-sulphide and Fe oxide contents of Shuswap type Pb-Zn deposits.

The bulk of the data suggests that the RRYZ is best interpreted as a carbonate-hosted replacement deposit forming within altered limestones of the Kootenay Arc.

9 EXPLORATION

9.1 Introduction

Rokmaster exploration programs completed on the Revel Ridge Property from 2019 to 2021 include soil and rock sampling, geological mapping, a LiDAR Survey, channel sampling and diamond drilling (Puritch et al., 2021). The majority of the exploration work completed on the Revel Ridge Property since 2021 was diamond drilling, which is described in Section 10 of this technical report. During this time, channel sampling was conducted on the Revel Ridge Property, which is described below.

Channel and rock samples were collected with notes of the lithology, alteration and sulphide mineralization with available structural information. Channel sampling cut continuous 5 by 5 cm strips of rock from outcrop perpendicular to the strike of the mineralized horizon using a gas powered concrete saw. The three channel sample locations were located later in the field season using RTK GPS. The prospecting rock samples are grab samples representative of the mineralization observed with coordinates provided by handheld GPS. All rock samples were subject to preparationof crushing to 70% passing 2 mm, splitting 500 g, then pulverizing to 85% passing 75 µm. Geochemical analysis was conducted by 50 gram fire assay with AAS finish and four acid digestion with ICP-AES finish for 30 elements. Standard reference material samples were inserted sporadically throughout the sample sequence and all passed within three standard deviation threshold of the expected value.

Soil samples were collected using dutch augers from the B-horizon in nearly all cases with A-horizon collected where the soil profile was juvenile. Samples were logged by sample depth, soil horizon, and relevant comments with position logged by handhelf GPS units. Soil samples were all collected on 25 m along-line spacing with 100-200 m between lines. All of the soil samples were subject to both roapid X-ray fluorescence (XRF) analysis and aqua regia-ICP-MS geochemical analysis with results within an acceptable threshold between thte two methods. The silt sediment samples collected silt from various showing creeks across the property. The sit samples were collected from fine-grained clay-silt sediment near the edge of each creek and prepared by drying the samples and screening to 80 mesh. 20 g of the -80 mesh fraction was then digested by dilute aqua regia and finished with ICP-ES/MS for 39 elements.

9.2 2020 Exploration Programs

In a Company press release dated July 27, 2020, Rokmaster announced plans to initiate reconnaissance below treeline and on-ground field assessment, including sampling, prospecting and geological mapping of the 44 other known and newly discovered Au-Ag occurrences over the 7 to 8 km planar deformation structure hosting the RRMZ, commencing the first week of August 2020. Encouraging results from its surface prospecting and geological mapping led Rokmaster to stake additional mineral claims and significantly expand the Revel Ridge Property (see Section 4).

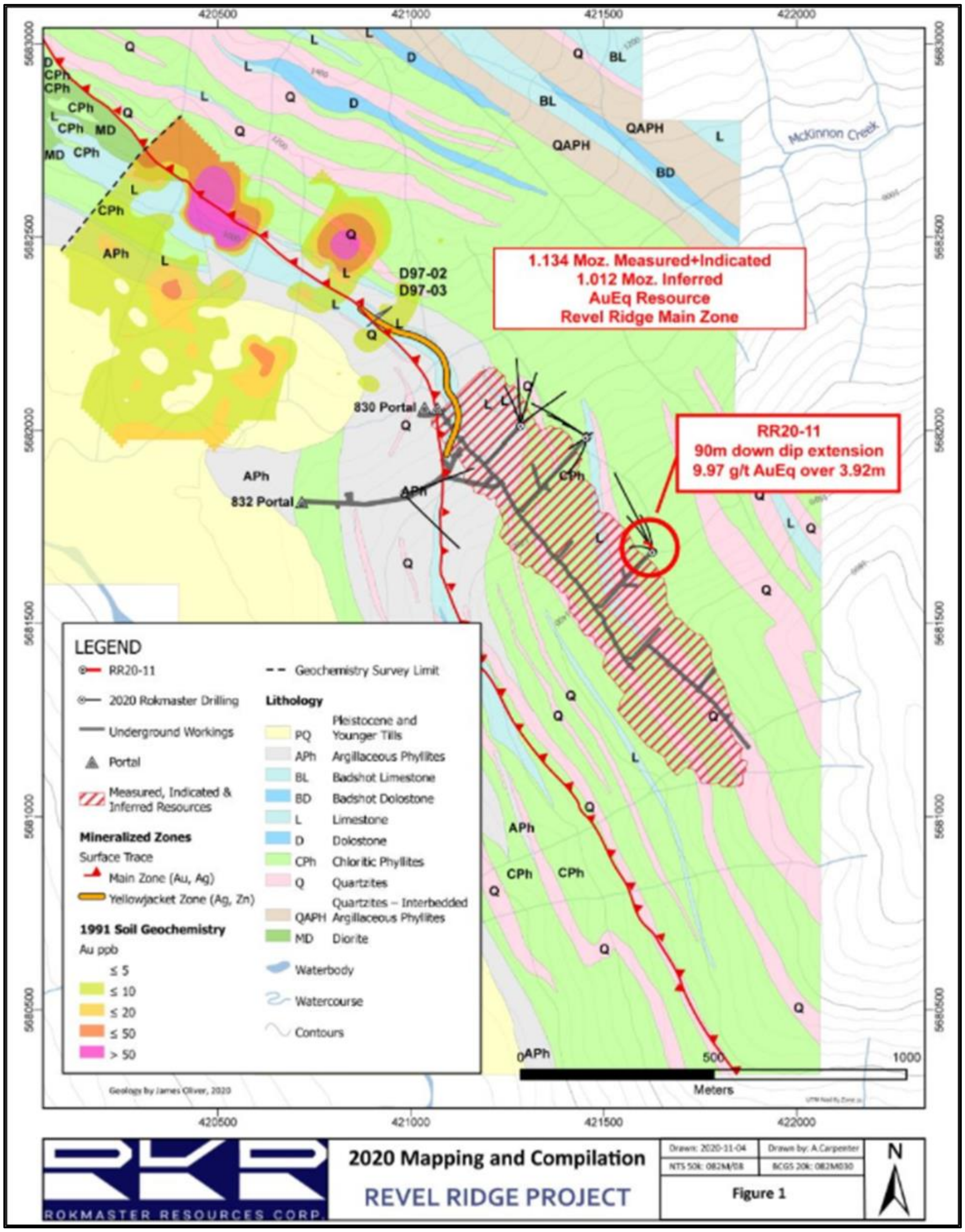
Rokmaster reported in a Company Press Release dated November 10, 2020, that the 2020 reconnaissance scale geological mapping, prospecting program and archival soil geochemical data and surface drilling data have been used to construct a revised structural and lithological model for the RRMZ Au-Ag-Zn-Pb deposit and the adjacent RRYZ Ag-Zn-Pb deposit. The model clearly demonstrated the potential for significant expansion of each of the mineralized zones (Figure 9-1). The data suggested that:

- The deformation zone that hosts the RRMZ Au mineralization has been traced for a minimum of 1,700 m to the northwest of the RRMZ 830 level portal. The remaining 1,500 m of the strike length of this zone, traced to the northwest across McKinnon Creek, proximal to the existing mineral resources, had not been drill tested.
- 1991 soil geochemical data indicated that much of northwestern strike length of the RRMZ has a definitive Au, Ag, and Pb geochemical signature over a strike length of approximately 700 m. Termination of this soil geochemical anomaly coincides with the boundaries of the 1991 soil grid. Drill testing had never been undertaken in this area. The soil geochemical data may also outline the presence of a second Au mineralized zone in the hanging wall of the northwestern extension of the RRMZ.

Geological mapping and integration of historical drill data onto this map, strongly indicates that the carbonate stratigraphy which hosts the Ag-rich RRYZ continues for at least 1,000 m to the northwest of the last three historical drill holes collared on this zone, drill holes 97-01, 97-02 and 97-03 (Weymin Mining Corporation) in 1997. Drill hole 97-02 intersected 4.78 m (from 75.72 m to 80.50 m) of 63.06 g/t Ag, 14.92% Zn and 2.88% Pb. Drill hole 97-03 intersected 4.48 m (from 82.54 m to 87.02 m) of 52.71 g/t Ag, 11.1% Zn and 2.43% Pb. All widths are drill hole lengths, not true widths.

Results from the first phase of Rokmaster's 2020 reconnaissance rock sampling program also highlighted the exploration potential of the A&E trend, five km north-northwest of the RRMZ. The 2020 sampling program identified exposures of Au-Ag-Pb-Zn mineralization along a 1,700 m strike length on trend with A&E. Occurrences, which form the A&E trend are hosted in interbedded limestone and argillaceous phyllite units located between the Hamill Group quartzites and Badshot Formation limestone. Massive sulphide mineralization containing arsenopyrite, pyrite, sphalerite and galena, including Au-rich quartz-arsenopyrite veins, are associated with contact zones between the phyllite and limestone (Figure 9-2). The A&E Zone has three historical adits and numerous trenches. The first adit was driven in 1929 and two more were driven between 1962 and 1967. The A&E Zone is strongly Au enriched and has historically been traced along strike for 400 m. Potential strike extensions of the mineralized trend to the northwest and southeast are largely obscured by glacial tills and talus boulder fields. Highlights of the 2020 sampling program are compiled on Table 9-1. The A&E Zone area has significant exploration potential and exhibits the continuity of sulphide mineralization and structural style similar to the RRMZ mineralization.

Figure 9-1: Revel Ridge 2020 Mapping and Compilation

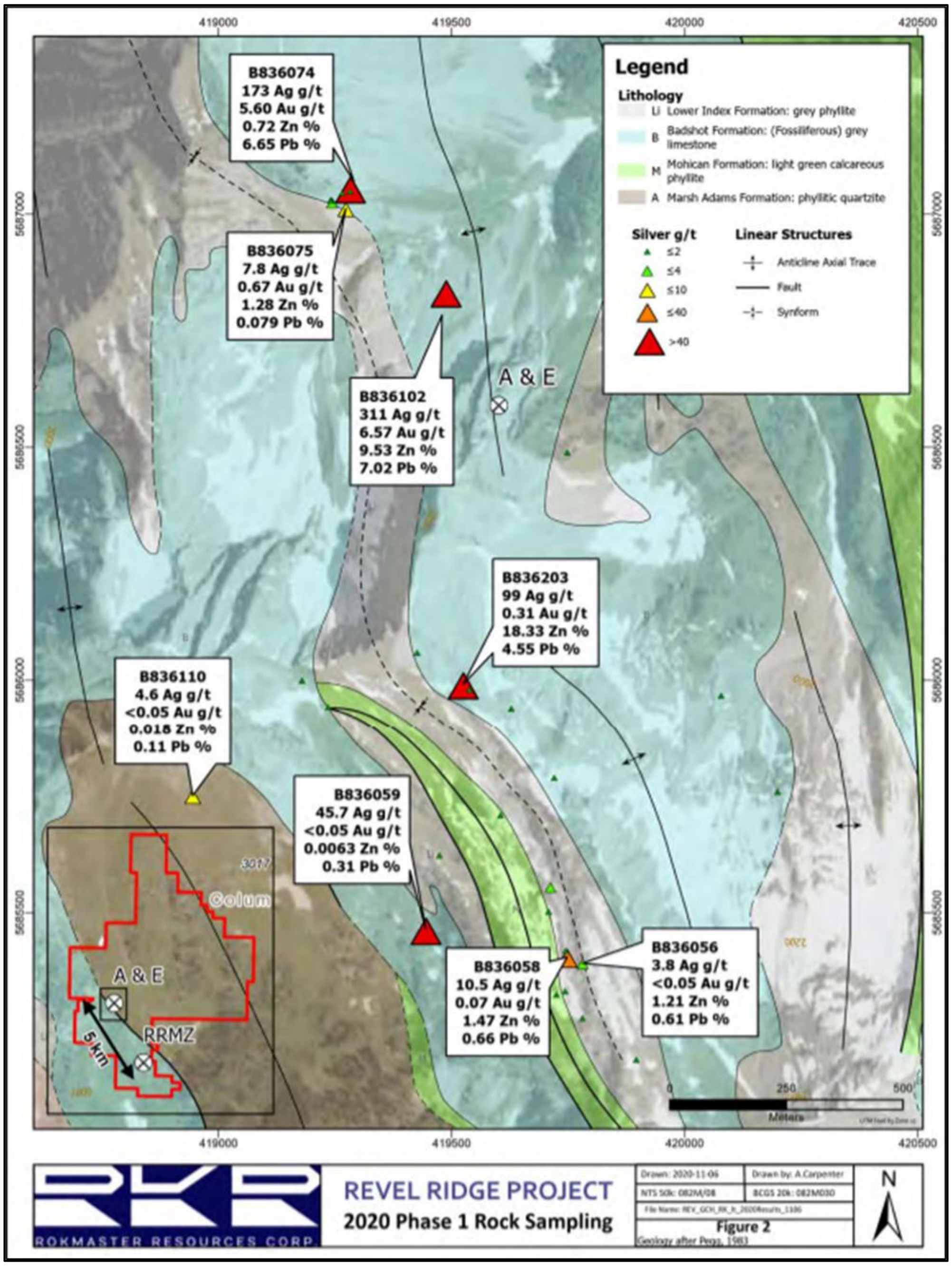


Source: Rokmaster (2021).

Notes: The figure shows an historical estimate for the Revel Ridge RRMZ from P&E (2020).

Refer to Table 6-13 and footnotes for Historical Mineral Resource information. The QP has not done sufficient work to classify the historical estimate as current mineral resources or reserves and the Company is not treating the historical estimate as current mineral resource or mineral reserves. Please see section 14 for the current mineral resource for the Property.

Figure 9-2: A&E November 2020 Surface Rock Samples



Source: Rokmaster (2021).
Notes: In addition to A&E (and Roseberry), several occurrences external to the claim group were reviewed and sampled in the field as part of the 2020 Reconnaissance Program.

Table 9-1: 2020 Grab Sample Assays

Sample ID	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	Description
B836056	<0.05	3.8	1.21	0.61	2.0 m chip - dolomitic limestone with narrow sphalerite bands
B836058	0.07	10.5	1.47	0.66	0.5 m chip - rusty argillite west of first contact
B836059	<0.05	45.7	0.01	0.31	siliceous carbonates - grab of mineralized pods from 5 m x 20 m outcrop exposure
B836074	5.6	173	0.72	6.65	0.3 m chip from vein at A&E Adit No. 3, qtz-aspy vein at limestone contact
B836075	0.67	7.8	1.28	0.08	composite grab across 1.5 m. A&E Adit No. 3 stringers in footwall phyllite
B836102	6.57	311	9.53	7.02	composite grab from upper adit dump. Semi-massive pyrite, arsenopyrite. Sporadic copper oxides
B836110	<0.05	4.6	0.02	0.11	1.0 m composite chip, sericitic phyllite plus quartz
B836203	0.31	99	18.33	4.55	1.0 m chip in old working across zone. Phyllite with massive galena, pyrite, and black sulphides
B836207	0.05	8.9	0	0.03	massive fine grain sulphides – grab

Note: The reader is cautioned that grab samples are typically constrained to visibly mineralized areas and may not be representative of all mineralized rock.

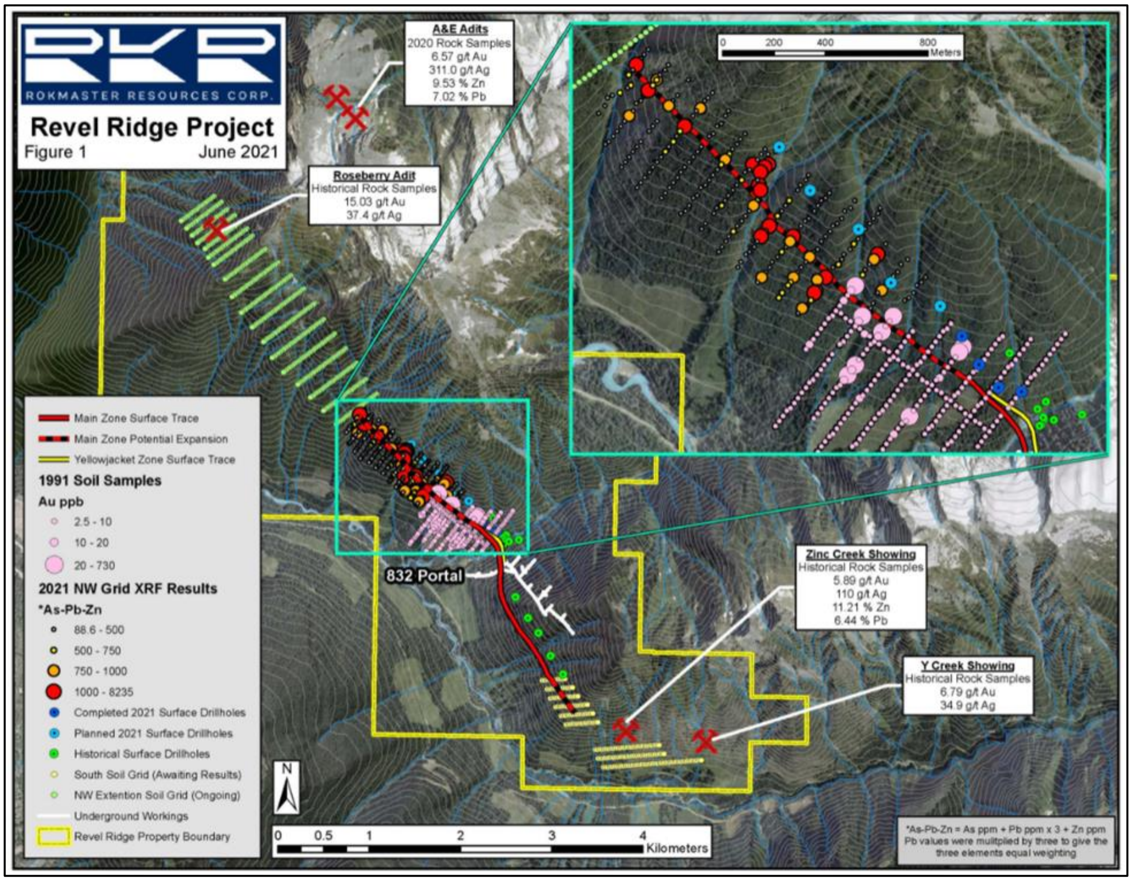
In addition to the rock sampling work in 2020, surface geological mapping at 1:5,000 scale was completed in August and September 2020, which covers much of the strike length of the RRMZ, a distance of approximately 7 km from southeast of the 830 Level portal to northwest of the A&E and Roseberry Adits.

9.3 2021 Exploration Programs

The exploration plan for 2021 included expansion of soil geochemical sampling, geological mapping, prospecting and rock sampling coverage over the strike extensions of the Main and RRYZs and the A&E and Roseberry Occurrences, >5 km on strike to the northwest of the RRMZ. Dutch augers were used to collect soil samples from the B-horizon in nearly all cases with A-horizon collected where the soil profile was juvenile. Soil samples were all collected on 25 m along-line spacing with 100-200 m between lines. All of the soil samples were subject to both rapid X-ray fluorescence (XRF) analysis and later aqua regia-ICP-MS geochemical analysis with results within an acceptable threshold between the two methods. Targeting these potential mineralized zones was guided by additional geological and geochemical surveys and a LiDAR (Laser Light Detection and Ranging survey). The follow-up drill programs are described in Section 10 of this technical report.

In addition to that work, geological mapping at a scale of 1:250 was completed of exposures in the 830 Level drifts and crosscuts. Historical mapping of the 830 underground workings ceased in 1984, such that 50% of the >3,000 m of the underground workings had not been mapped. A revised geological interpretation in both plan and cross-sectional views was meant to better define the geological controls on the development of high-grade and thicker mineralized shoots.

Figure 9-3: 2021 Soil Geochemistry Compilation Map



Source: Rokmaster (2021).

The 2021 geochemical and structural mapping programs results indicate that:

- Completed soil geochemical surveys conclusively demonstrate that geochemical signatures exist along trend for at least two km to the northwest of the 830 m Level portal (Figure 9-3). The location of the 1991 Au in-soil anomalies and the 2021 As-Pb-Zn soil anomalies appear to have a strong linkage to the RRMZ and RRYZ.
- The strength of the As-Pb-Zn geochemical signatures of the Au-rich RRMZ and Ag-rich RRYZ, obtained from the historical soil geochemical grid, resulted in a major expansion of this grid. Additional soil geochemistry grids were established along strike to the northwest for an additional 2.8 km. The Northwest soil geochemical grids have a combined strike length of 4.2 km, all of which lay beyond historical drill testing.
- Structural and geochemical vectors were obtained along strike to the southeast of the historical drilling at the RRMZ (Figure 9.4). The Southeastern grid covers a strike length of 1.5 km.
- The collection of 880 soil samples along a total strike length of 5.7 km indicates that the mineralized trends have a strike length >8 km (Figure 9-4 and Figure 9-5). Additional soil geochemistry surveys were completed over parts of the A&E trend.

- Rock sampling and prospecting along the A&E trend resulted in new discoveries of massive to semi-massive polymetallic sulphides near the footwall of the Badshot Limestone (Figure 9-5). These sulphide-rich zones and host structures have been traced along strike for at least 525 m.
- In order to assess the regional-scale potential of mineral occurrences and stratigraphy distant to the better-known mineralized trends, 62 stream sediment samples were collected in an area of 144 km^2, in conjunction with regional prospecting and rock sampling programs. These reconnaissance surveys were designed to evaluate the mineral potential for Au and base metal occurrences in the Cambrian and older rocks that host many Au and base metal occurrences in the region.
- Completion of a LiDAR survey over an area of 26 km^2. The LiDAR survey results will provide Rokmaster with a precision digital elevation model to guide future advanced engineering and mine planning studies.

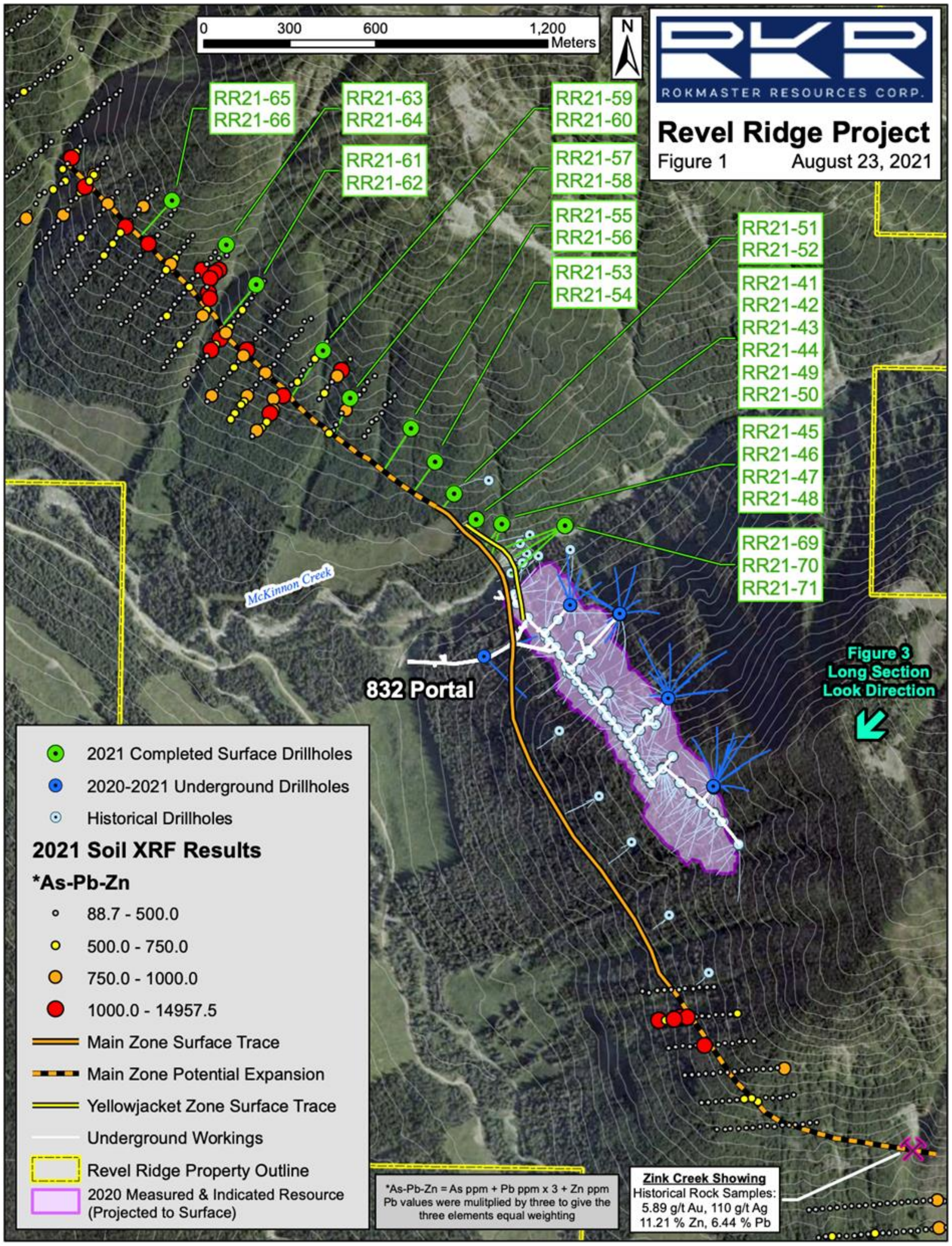
In a Company press release dated November 12, 2021, Rokmaster presented the results of recent progress at its Revel Ridge Project, including: 1) further characterization of the southeastern Au-rich extension of the RRMZ; and 2) delineation of a second mineralized trend in the A&E Occurrence area, which is potentially characterized by the carbonate-hosted style of the Ag-Pb-Zn rich RRYZ.

In regards to southeast extensions to the RRMZ, soil geochemical surveys outlined strong As-Pb-Zn soil and talus fines anomalies striking along the trend of the RRMZ to the southeast (Figure 9-6). Here, anomalous rock and soil samples extend for an additional 1,900 m beyond the limits of historical surface diamond drilling and >2,000 m farther than the 2020 NI 43-101 Mineral Resources (P&E, 2020). This southeast extension area is characterized not only by the persistent presence of the favourable deformation zone that hosts Au at Revel Ridge, but also the re-emergence of thick, permissive limestone rock units proximal to the deformation zone. Representative historical rock samples from the interpreted RRMZ in the southeast target area include:

- Zn Creek: 7.20 g/t Au, 121 g/t Ag, 6.55% Pb and 12.99% Zn; and
- Y Creek: 6.47 g/t Au and 36 g/t Ag.

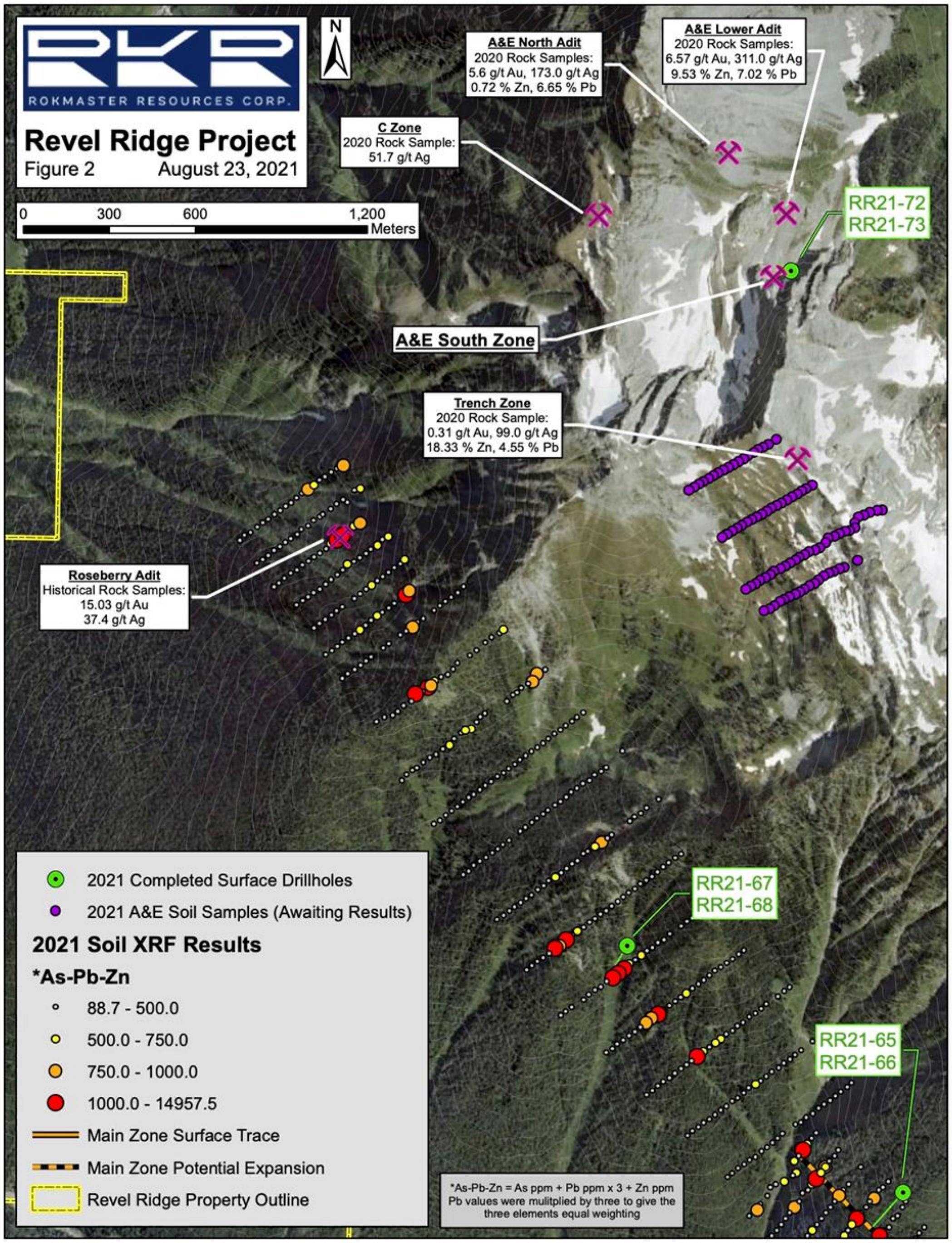
The A&E South Zone is defined by a series of rock and soil geochemical samples that delineate a near-continuous surface zone of strongly enhanced As-Pb-Zn soil geochemistry over a distance >1,000 m (Figure 9-6). Massive sulphide boulders and float samples in this area contain up to 473 g/t Ag, 13.39% Pb and 37.14% Zn. Massive sulphide boulders and enhanced soil talus fine geochemistry occurs within a few tens of metres of the contact of the Badshot Limestone with fine-grained black clastic sedimentary rocks of the Index Formation. Arsenic and Au values in this area are modest and the geochemical signatures and mineralogy of the A&E South Zone has more in common with the Ag-rich RRYZ than the Au-rich RRMZ. This target had yet to be drill tested and remained open to the southeast.

Figure 9-4: Geochemistry Compilation Map – South Extension



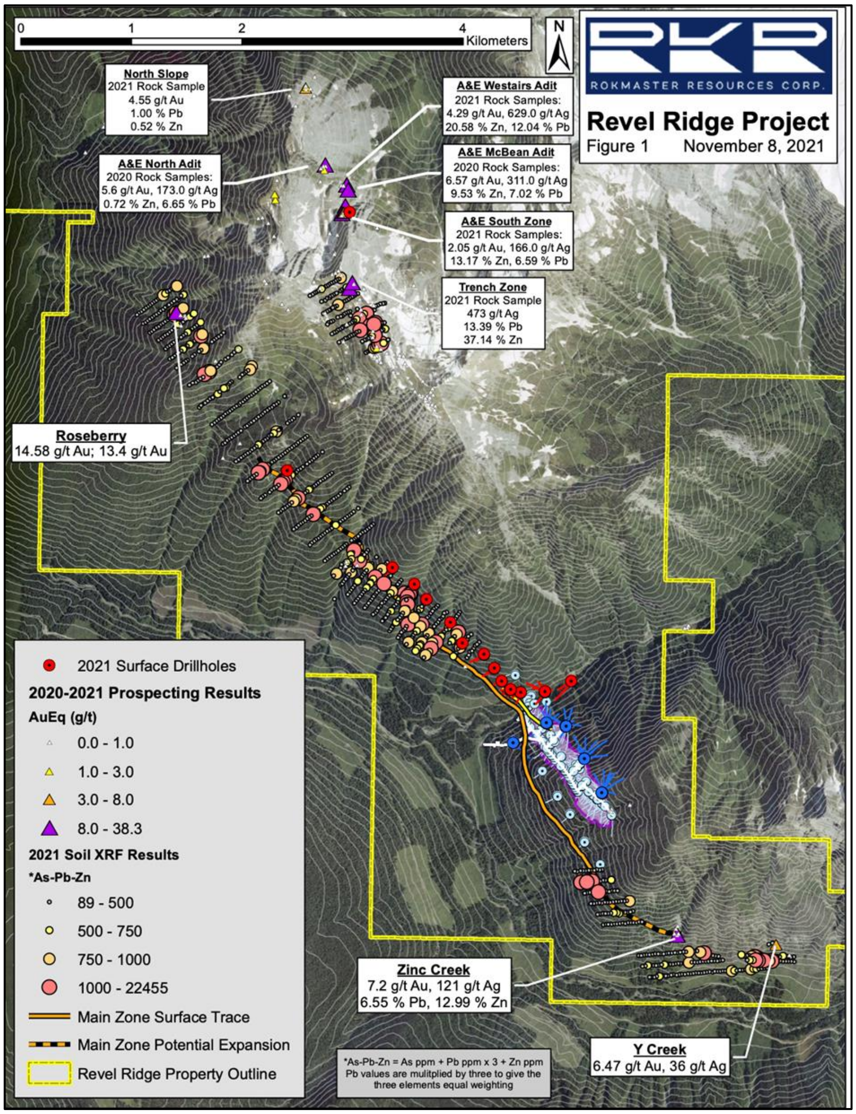
Source: Rokmaster (2021).

Figure 9-5: Revel Ridge Project North Extension



Source: Rokmaster (2021).

Figure 9-6: Revel Ridge Property 2021 Prospective Compilation



Source: Rokmaster (2021).

9.4 2022 Exploration Program

9.4.1 Introduction

In 2022, Rokmaster performed field work on the Revel Ridge Property including channel sampling, prospecting, and soil sampling using the same procedures as the work completed in 2021. Work was completed between July 8, 2022, and September 20, 2022. Field crews resided in Revelstoke during the work periods and drove to the Property each day using pickup trucks. The Company provided a rented house or hotel rooms for staff and meals were either prepared at the house or ordered from local restaurants. Selkirk Helicopters skillfully delivered and retrieved crews daily across the rugged Property.

The 2022 channel sampling and mineral prospecting and the 2022 soil geochemistry programs and results are summarized from Malek (2023) and presented below.

9.4.2 Channel Sampling and Mineral Prospecting Program

9.4.2.1 Sampling and Analytical Procedures

A total of 24 channel samples, including QAQC samples, were collected in 2022. Prospecting programs collected a total of 17 rock samples that were submitted for assay. Channel and rock samples were collected with notes of the lithology, alteration, and mineralization with available structural information. Channel sampling cut continuous 5 x 5 cm strips of rock from outcrop perpendicular to the strike of the mineralized horizon, using a gas-powered concrete saw. The three channel sample locations were located later in the field season using RTK GPS. The mineral prospecting rock samples are grab samples representative of the mineralization observed with coordinates provided by handheld GPS.

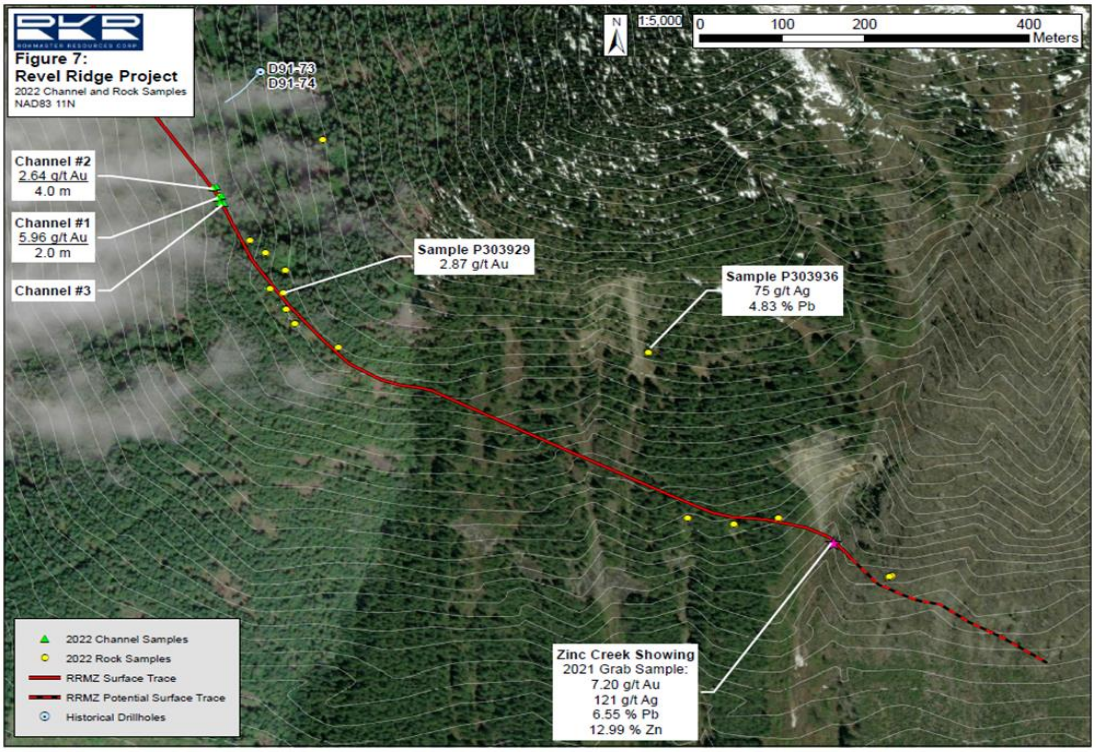
All rock samples were subject to preparation of crushing to 70% passing 2 mm, splitting 500 g, then pulverizing to 85% passing 75 µm (MSALABS Code: PRP-915). Geochemical analysis was by 50-gram fire assay with AAS finish (MSALABS Code: FAS-221) and four-acid digestion with ICP-AES finish for 30 elements (MSALABS Code: ICP-240). Standard reference material samples were inserted sporadically throughout the sample sequence, and all passed within a three standard deviation threshold of the expected value.

9.4.2.2 Results

The channel sampling conducted in 2022 was focused on the southeastern extension of Revel Ridge Main Zone. This area was chip-sampled by B.P Selco in 1984 as Showings No. 12-14 and occurs approximately 93 m southeast along strike of the RRMZ from the intersection achieved by drill hole D91-73.

Three channel sample cuts spaced 10 m along strike collected 6 to 8 m-scale samples in each channel. Each channel sample was along a ~30° northwest facing slope of outcrop near the top of a larger scarp oriented parallel to the RRMZ. The long axis of each channel samples was oriented as follows and kept as straight as possible: Channel No. 1 (060°-240°), Channel No. 2 (065°/245°), Channel No. 3 (090°/270°) (Figure 9-7 and Figure 9-8).

Figure 9-7: 2022 Channel and Rock Sample Locations and Grades



Source: Malek (2023).

Strongly sericite-altered buff-colored quartzite hosts dm-scale seams of massive coarse grained arsenopyrite-pyrite mineralization. The well-developed foliation is highly strained and averages an orientation of 310°/50° from multiple measurements. Highly strained chloritic phyllite with quartz veins hosting disseminated pyrite occurs in the immediate footwall of Channel No. 1. Up-slope from the area suffers from poor outcrop exposure although limestone float rock was noted.

As shown in Table 9-2, Channels No. 1 and No. 2 sampled significant intervals of Au-rich arsenopyrite mineralization. Given the slope of the exposure and orientation of the channels, the intervals can be approximated to represent the true width of the RRMZ .

Figure 9-8: 2022 Channel No. 1 Sample P303904 Photos

Source: Malek (2023).

Table 9-2: 2022 Channel Sample Assays

Sample	Length (m)	Weighted Average Au (g/t)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	As (%)
Channel Number 1							
P303901	1.6		0.02	<1	<0.01	0.01	0.06
P303902	1		0.03	<1	<0.01	0.01	0.03
P303903	1		0.41	<1	<0.01	0.01	0.74
P303904	1		8.84	0.5	0.05	0.04	12.5
P303905	1		3.08	0.5	0.06	0.02	4.62
Channel No. 1 Highlight	2	5.96					
P303906	1		0.1	<1	<0.01	0.01	0.18
P303907	1		0.06	<1	<0.01	<0.01	0.12
P303908	1.8		0.16	<1	<0.01	<0.01	0.94

Sample	Length (m)	Weighted Average Au (g/t)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	As (%)
Channel Number 2							
P303910	1		2.56	5	0.08	0.03	4.24
P303911	1		0.68	5	0.23	0.09	1.44
P303912	1		5.36	2	0.12	0.02	8.25
P303913	1		1.97	0.5	0.03	0.04	3.09
Channel No. 2 Highlight	4	2.64					
P303914	1		0.04	<1	<0.01	<0.01	0.04
P303915	1		0.06	<1	<0.01	<0.01	0.01
Channel Number 3							
P303917	1		0.01	<1	<0.01	0.01	<0.005
P303918	1		1.22	<1	0.02	<0.01	2.05
P303919	1		0.39	<1	0.01	<0.01	0.94
P303920	1		<0.01	2	<0.01	<0.01	0.02
P303921	1		0.03	<1	<0.01	0.02	0.03
P303922	1		0.06	<1	<0.01	<0.01	0.14
P303923	1.1		0.09	<1	<0.01	<0.01	0.15

Mineral prospecting in 2022 involved collection of 17 grab samples from the area of the projected southeastern extension of the RRMZ (Figure 9-7). Approximately 150 m southeast of Channel No. 1, an exposure of sheared sericite-altered quartzite was found hosting cm-scale bands of arsenopyrite over ~50 cm that returned 2.87 g/t Au in assays (sample P303929). Approximately 880 m southeast of Channel No. 1, the Zinc Creek Showing was sampled during the 2021 exploration program and shares many characteristics with the RRMZ. In 2022, two showings of quartz veins hosting in sericitic schist strong hematite- and limonite-alteration were found ~80 m to the east and west of the Zinc Creek Showing that retuned weak assay values, which require follow-up investigation. Sample P303936 was collected from sericite-altered argillaceous phyllite hosting strong pyrrhotite mineralization at approximately 160 m in the hanging wall of the RRMZ and returned anomalous Ag and Pb assays.

9.4.3 Soil Geochemistry Program

9.4.3.1 Sampling and Analytical Procedure

The A&E area was subject to 210 soil samples and the Pad 12 area saw 65 soil samples, bringing the total of soil samples collected in 2022 to 275. Dutch augers were used to collect soil samples from the B-horizon in nearly all cases, with A-horizon collected where the soil profile was juvenile. Soil samples were all collected on 25 m along-lines spaced 100 to 200 m apart.

All of the soil samples were subject to both X-ray fluorescence (XRF) and aqua regia-ICP-MS geochemical analysis. Following the collection and adequate drying of the soil samples, each sample was analyzed on-site using a Thermo Scientific™ Niton™ XL2 Plus Handheld XRF Analyzer. Standard reference and calibration materials were checked once per day to ascertain the accuracy of the XRF unit. Each soil sample was sieved to -20 mesh and analysed three times for 60 seconds each. The analytical results were then averaged for each sample. This method afforded Rokmaster rapid geochemical results, primarily for arsenic, zinc, and lead, much sooner than the laboratory could provide.

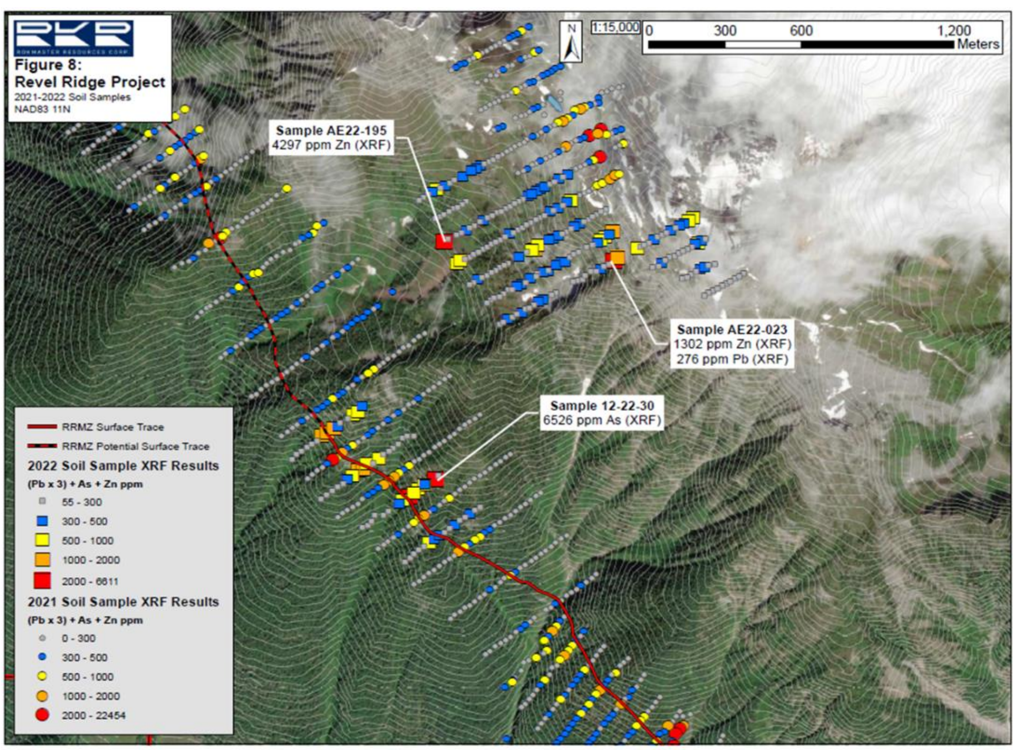
9.4.3.2 Results

The Revel Ridge Property received a significant number of soil samples during the 2021 exploration program that produced multiple anomalies spatially related to extensions of mineralized zones.

In the Pad 12 area along the surface projection of the RRMZ northwestern extension, a significant linear anomaly, was generated by 2021 soil samples across four lines spaced 200 m apart. This anomaly occurs at a substantial distance of 3.2 km northwest of the 830 Portal at the J&L Mine. Three shorter infill soil sample lines were completed in 2022, on which a total of 65 soil samples were collected along a similar 25 m sample spacing. Moderate anomalies were generated along the surface trace of the RRMZ, increasing confidence in the anomaly. Notably, sample 12-22-30 returned a value of 6,526 ppm As in XRF analysis at the northeastern end of the central soil line. This highly anomalous value requires follow-up soil sampling and prospecting in the future, although the less interesting 2021 soil sample results on either side slightly limit the upside potential.

The 2021 A&E soil grid generated a linear soil anomaly spatially related to an argillaceous phyllite-Badshot limestone contact southeast of numerous anomalous 2020-2021 rock samples. This soil anomaly was at the southeastern end of the 2021 soil grid, which was expanded in 2022 by collecting 210 soil samples on 100 m x 25 m sample spacing. With the 2022 samples, the soil anomaly was extended to a length of approximately 700 m. Soil sample AE22-023 returned elevated values of 1,302 ppm Zn and 276 ppm Pb in XRF analysis at the current southern limit of this anomaly. Another sample collected in 2022 at the southwestern limit of the grid returned anomalous Zn (Figure 9-9).

Figure 9-9: Soil Sampling 2021-2022



Source: Malek (2023).

9.5 Conclusion

The Revel Ridge Property was subject to extensive field work in 2022. Field crews collected a total of 41 rock samples and 275 soil samples on the Revel Ridge Property.

Channel sampling on a historical showing located approximately 93 m southeast of the southernmost drill holes, with grades of up to 5.96 g/t Au over 2.0 m, effectively extended the strike length of the Revel Ridge Main Zone. Mineral prospecting work discovered additional Au mineralization 150 m farther to the southeast of the channel sampling, found anomalous Ag in the hanging wall, and improved the understanding of the Zn Creek Showing.

Soil sampling in 2022 enhanced the soil anomaly in the Pad 12 area, which currently occupies 800 m of strike length along the projected Revel Ridge Main Zone. This anomaly significantly occurs over 3.0 km northwest of the underground workings near the current mineral resources. The southeastern A&E area was also improved with soil sampling in 2022, where extending the grid also extended the main anomaly which now measures 700 m in length.

Soil sample anomalies in concert with geological mapping indicate that the potential strike length of the MDZ exceeds 5,600 m. This highly prospective ductile deformation zone hosts the Revel Ridge Deposit over a drill-defined strike length of approximately 2,200 m. Other areas on the Revel Ridge Property that are proximal to crustal-scale structural features remain highly prospective for additional orogenic-style Au mineralization, and carbonate replacement deposits similar to the RRYZ remain as an important target in carbonate units on the Property.

10 DRILLING

10.1 Introduction

In total, at least 453 underground and surface drill holes totalling 82,931 m have been completed on the Revel Ridge Property (Table 10-1). Historically, a total of at least 40,948 m were completed in 332 drill holes prior to 2020. Rokmaster completed a total of 41,983 m of drilling in 121 drill holes in 2020-2021 and 2022.

True thickness is estimated to be 60% of drill interval thickness. A comparison of the apparent thickness and true thickness within Leapfrog using a 1.0 economic composite at various cut-offs.

Table 10-1: Historical and Current Drilling Summary

Years	Total Drill Holes1	Total Metres[1]	Companies
1962 to 2012	332	40,948	historical[2]
2020 to 2022	121	41,983	Rokmaster
Total	**453**	**82,931**	

Notes:
1. Total surface and underground diamond drill holes.
2. Westairs Mines Ltd. (1962-1967), BP Selco Ltd. (1983-1984); Pan American Minerals (1987-1988); Equinox Resources Ltd. (1988-1991); Cheni Au Mines Ltd. (1990-1991); Weymin Mining Corp. (1997); BACTECH Mining Corp. (2006); Merit Mining Corp. (2007); Merit/Huakan (2010-2011); and Huakan (2011-2012).

The pre-2020 drilling is summarized in Section 6 of this technical report. Rokmaster drilling programs in 2020-2021 and 2022 are described below.

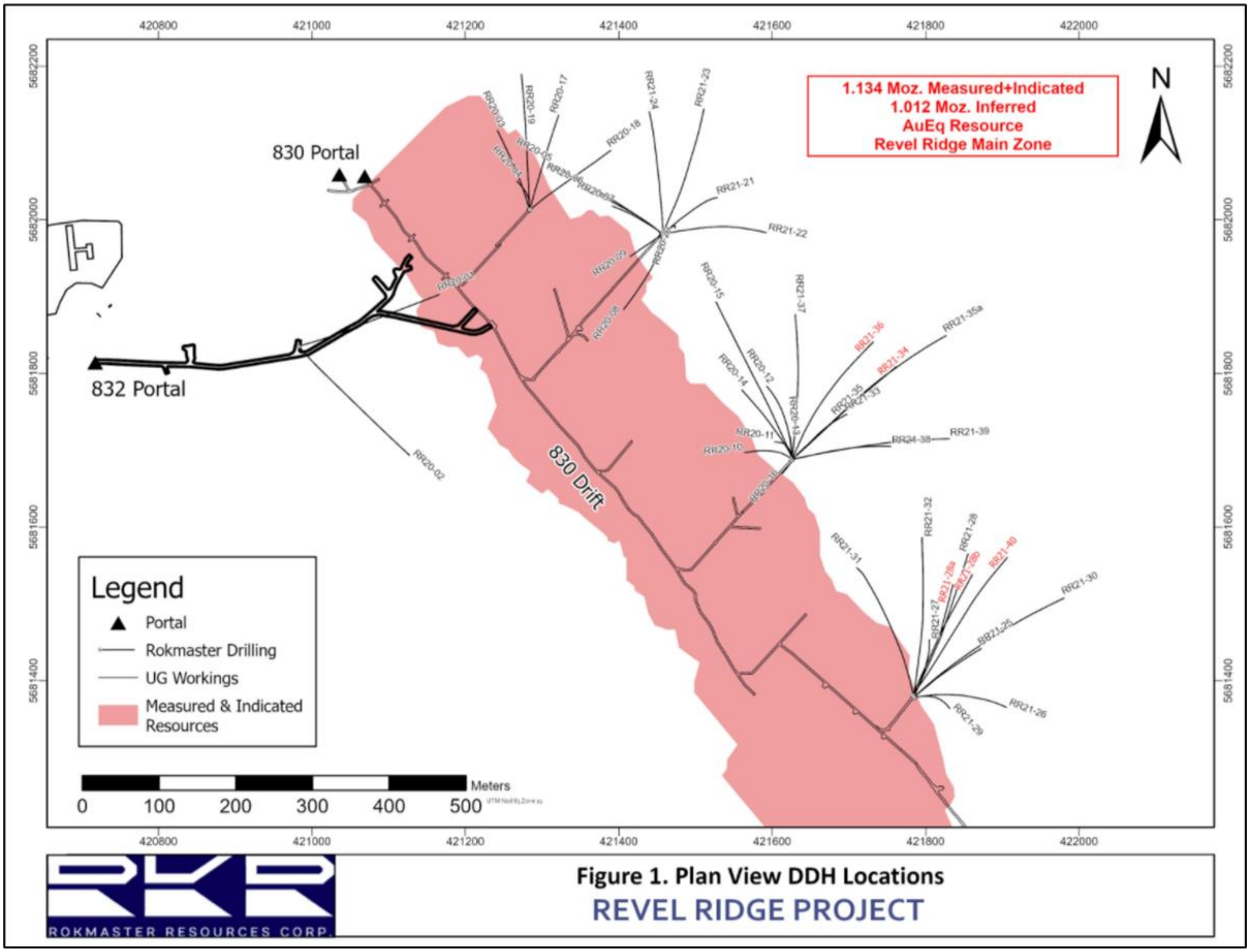
10.2 Rokmaster Drilling 2020-2021

Rokmaster completed a major underground drill program in 2020 and 2021 and a successful surface drill program in 2021.

10.2.1 2020-2021 Underground Drilling Program

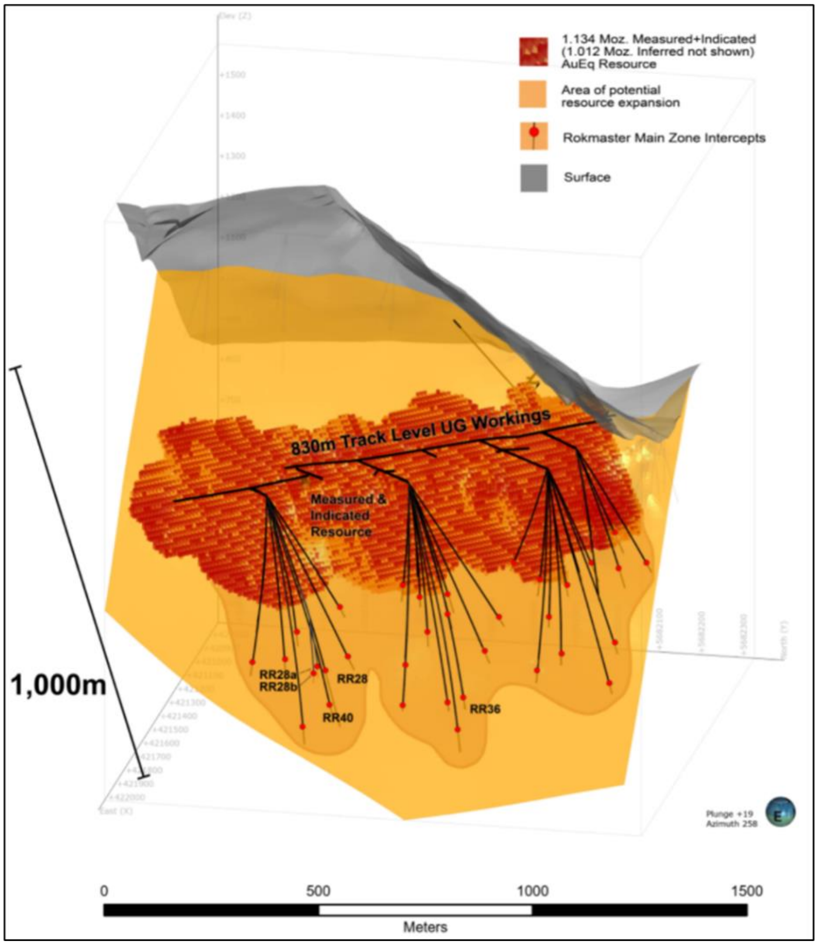
Between July 2020 and September 2021, Rokmaster completed 52 underground drill holes totalling 19,929 m at Revel Ridge. These drill holes cover approximately 1,200 m to 1,500 m of strike length of the RRMZ and RRYZ and extended the mineralized zones as far as 500 m below the 830 drifts. The underground drill program was designed to test for the presence of mineralization outside the Inferred mineral resources defined by previous exploration (P&E, 2020). Maps showing the locations of the drill holes completed in the 2020 and 2021 underground drill program are presented in Figure 10-1 and Figure 10-2. The assay results are compiled in Table 10-2.

Figure 10-1: 2020-2021 Underground Drill Program at Revel Ridge



Source: Rokmaster (2021).

Figure 10-2: Location of Underground Drill Holes Relative to the Previous RRMZ Resource Block Model



Source: Rokmaster (2021).

Table 10-2: Summary of Selected 2020-2021 Underground Drill Hole Assay Results*

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Mineralized Zone	AuEq (g/t)	AgEq (g/t)
RR20-03	227.12	230.55	3.43	0.82	107.4	7.9	0.3	RRMZ	5.53	--
including	228.75	230.55	1.80	1.50	158.4	13.9	0.6	RRMZ	9.41	--
RR20-03	239.80	242.50	2.70	2.30	7.3	0.5	1.0	RRFZ	3.06	--
RR20-04	118.95	121.85	2.90	0.17	68.0	2.0	12.3	RRYZ	--	580
including	118.95	124.75	5.80	0.09	35.5	1.1	6.5	RRYZ	--	307
RR20-04	168.80	173.06	4.26	0.12	47.2	2.4	4.7	RRYZ	--	296
including	171.30	173.06	1.76	0.21	70.5	3.0	10.5	RRYZ	--	551
RR20-04	217.13	221.55	4.42	2.74	5.8	0.2	0.6	RRMZ	3.18	--

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Mineralized Zone	AuEq (g/t)	AgEq (g/t)
including	220.55	221.55	1.00	9.51	16.0	0.8	2.2	RRMZ	11.07	--
RR20-05	306.95	312.55	5.60	1.71	9.5	0.4	0.7	RRMZ	2.32	--
including	306.95	308.25	1.30	4.16	21.7	1	1.1	RRMZ	5.36	--
RR20-06	305.38	306.40	1.02	5.41	54.0	2.8	3.8	RRMZ	9.02	--
RR20-07	261.50	264.13	2.63	0.12	67.1	3.3	15.3	RRYZ	--	721
including	262.54	264.13	1.59	0.19	109.0	5.3	25.2	RRYZ	--	1182
RR20-07	307.26	321.55	14.29	1.12	31.3	1.4	2	RRMZ	3.03	--
including	307.26	308.75	1.49	0.51	74.4	4.1	5.2	RRYZ	5.56	423
and including	310.16	317.30	7.14	1.66	45.5	1.9	2.8	RRMZ	4.33	--
including	314.00	317.30	3.30	3.05	78.9	3.3	3.9	RRMZ	7.23	--
RR20-09	267.10	272.00	4.90	0.66	72.0	3.4	1.9	RRYZ	--	293
RR20-09	297.65	301.60	3.95	5.28	119.1	4.7	4.9	RRMZ	11.02	--
including	298.65	300.60	1.95	10.48	234.5	9.2	9.4	RRMZ	21.65	--
including	299.45	300.60	1.15	14.57	231.0	10.4	10.6	RRMZ	26.73	--
RR20-10	253.35	255.55	2.20	5.39	41.6	2.1	5.2	RRMZ	9.21	--
RR20-11	286.40	294.77	8.37	2.76	23.35	0.95	3.39	RRMZ	5.09	--
including	288.64	292.56	3.92	5.28	43.22	1.95	6.96	RRMZ	9.97	--
including	288.64	290.47	1.83	9.54	75.66	3.81	10.91	RRMZ	17.3	--
RR20-12	337.30	341.90	4.60	2.67	17.96	0.92	1.51	RRMZ	3.98	--
including	339.88	340.93	1.05	11.29	77.0	3.96	6.03	RRMZ	16.71	--
RR20-12	358.50	362.30	3.80	3.72	7.99	0.14	0.24	RRFZ	3.99	--
including	358.50	359.45	0.95	12.94	9.0	0.13	0.51	RRFZ	13.35	--
RR20-13	hole abandoned due to extreme azimuth deviation									
RR20-14	250.00	251.75	1.75	8.85	11.5	0.38	0.81	RRHZ	9.53	--
including	250.00	250.70	0.70	21.77	28.0	0.95	2	RRHZ	23.46	--
RR20-14	305.82	314.00	8.18	2.15	15.54	0.51	1.83	RRMZ	3.41	--
including	305.82	308.75	2.93	5.73	36.77	1.36	4.69	RRMZ	8.95	--
and including	305.82	306.35	0.53	10.84	141.0	5.58	7.59	RRMZ	18.48	--
RR20-15	407.43	410.10	2.67	7.34	63.2	3.943	2.87	RRMZ	11.1	--
RR20-16	259.50	270.38	10.88	0.93	23.1	1.1	3.22	RRMZ	3.18	--
including	259.50	263.45	3.95	0.08	40.84	2.01	5.82	RRMZ	4.15	--
and including	267.90	269.38	1.48	5.80	20.13	0.8	1.61	RRMZ	7.14	--
RR20-16	285.38	289.20	3.82	3.78	15.31	0.28	0.97	RRFZ	4.55	--
including	288.55	289.20	0.65	10.80	43.0	1.44	5.56	RRFZ	14.55	--
RR20-18	264.20	267.10	2.90	0.08	44.57	2.64	8.98	RRYZ	5.93	450.4

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Mineralized Zone	AuEq (g/t)	AgEq (g/t)
RR20-18	343.55	347.50	3.95	2.88	26.58	0.96	2.05	RRMZ	4.58	
including	347.05	347.50	0.45	19.67	0.5	0.05	0.01	RRMZ	19.7	--
RR20-19	330.35	337.30	6.95	2.78	3.5	0.17	0.47	RRFZ	3.11	--
including	330.35	330.80	0.45	39.25	29.0	1.81	6.08	RRFZ	43.21	--
RR20-20	358.70	361.11	2.41	2.81	19.57	0.96	4.34	RRMZ	5.49	--
including	359.73	361.11	1.38	4.33	31.94	1.49	7.45	RRMZ	8.84	--
RR21-21	441.40	443.50	2.10	2.08	23.1	1.28	3.19	RRMZ	4.39	--
RR21-22	472.22	479.85	7.63	2.40	7.91	0.3	1.15	RRMZ	3.16	--
including	472.22	474.84	2.62	5.74	19.58	0.81	3.14	RRMZ	7.79	--
RR21-23	526.05	527.05	1.00	7.22	4.0	0.32	0.41	RRMZ	7.59	--
RR21-25	385.60	398.30	12.70	0.71	9.51	0.36	2.29	RRMZ	2.05	--
including	385.60	395.12	9.52	0.70	10.92	0.41	2.79	RRMZ	2.32	--
and including	392.50	395.12	2.62	0.05	10.62	0.49	7.36	RRMZ	3.83	--
RR21-26	386.70	388.80	2.10	4.29	33.43	0.69	0.44	RRMZ	5.21	--
RR21-28	382.20	392.12	9.92	0.06	19.04	1.34	3.73	RRYZ	2.6	197.3
including	387.50	392.12	4.62	0.12	37.67	2.66	6.83	RRYZ	4.88	370.4
and including	387.50	388.50	1.00	0.34	116	8.94	17.48	RRYZ	13.63	1035.5
RR21-28	425.10	451.30	26.20	1.73	14.38	0.75	4.95	RRMZ	4.53	344.3
including	425.60	428.90	3.30	5.11	15.5	0.68	9.61	RRMZ	10.09	766.4
and including	449.50	451.30	1.80	12.93	19.67	0.56	0.5	RRMZ	13.65	1036.6
RR21-28a	378.82	381.90	3.08	0.10	49.64	2.43	11.65	RRYZ	7.19	545.38
RR21-28a	407.30	411.55	4.25	2.55	26.92	1.09	4.21	28 Zone	5.31	398.08
including	408.75	411.55	2.80	3.60	40.6	1.64	6.37	28 Zone	7.78	583.38
and including	410.28	411.55	1.27	5.82	26	1.38	10.34	28 Zone	11.57	866.37
RR21-28a	419.50	423.45	3.95	0.18	23.66	1.32	2.65	28 Zone	2.26	171.42
including	419.50	422.5	3.00	0.23	27.67	1.52	2.79	28 Zone	2.51	189.99
RR21-28b	389.00	393.85	4.85	0.03	10.18	0.62	9.68	RRYZ	4.95	375.29
RR21-28b	431.72	457.30	25.58	0.84	14.88	0.66	4.89	28 Zone	3.6	271.16
including	431.72	451.10	19.38	1.02	15.89	0.71	5.81	28 Zone	4.24	319.66
and including	433.20	435.50	2.30	7.10	36.87	2.14	5.34	28 Zone	10.95	816.95
and including	439.90	443.00	3.10	0.10	14.81	0.51	10.14	28 Zone	5.26	398.2
and including	454.70	457.30	2.60	0.59	20.92	0.91	4.04	28 Zone	3.12	235.54
RR21-29	299.53	302.73	3.20	4.88	13.89	0.54	0.4	RRMZ	5.46	--

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Mineralized Zone	AuEq (g/t)	AgEq (g/t)
including	299.53	300.23	0.70	19.67	19	0.92	0.42	RRMZ	20.48	--
RR21-30	541.85	545.85	4.00	0.88	26.95	2	2.42	RRMZ	3.17	--
including	542.85	543.65	0.80	4.24	105	8.11	9.03	RRMZ	13.09	--
RR21-31	334.05	336.45	2.40	1.71	43.49	2.98	3.29	RRMZ	5.02	--
RR21-32	348.85	351.00	2.15	0.10	23.77	1.08	5.82	RRMZ	3.57	--
RR21-32	428.00	431.90	3.90	1.31	12	0.61	2.96	RRYZ	3.1	--
RR21-33	349.35	355.22	5.87	2.65	21.19	0.21	0.01	RRMZ	3.02	--
including	353.30	355.22	1.92	4.76	50.48	0.46	0.03	RRMZ	5.62	--
RR21-34	513.96	518.60	4.64	2.84	14.26	0.46	1.56	RRMZ	3.94	--
including	514.96	517.17	2.21	4.88	26.89	0.84	3.27	RRMZ	7.1	--
and including	514.96	515.78	0.82	7.79	64	1.96	5.38	RRMZ	11.93	--
RR21-36	470.05	475.55	5.50	0.04	17.81	0.94	6.39	RRYZ	3.65	276.57
including	472.10	474.65	2.55	0.07	36.1	1.98	12.7	RRYZ	7.3	553.43
RR21-36	511.11	513.90	2.79	3.38	24.68	0.73	0.38	RRMZ	4.17	--
RR21-36	534.15	538.04	3.89	9.92	3.66	0.03	0.03	RRFZ	9.99	--
including	535.85	538.04	2.19	16.78	4.18	0.03	0.04	RRFZ	16.86	--
RR21-40	516.00	520.50	4.50	8.17	18.7	0.99	1.79	RRMZ	9.65	--
including	517.50	520.50	3.00	11.48	2.5	0.14	0.14	RRMZ	11.63	--
and including	519.50	520.50	1.00	27.19	6	0.32	0.18	RRMZ	27.48	--

Notes: *Assumptions used in USD for the Au equivalent calculation were metal prices of $1,561/oz Au, $20.55/oz Ag, $1.07/lb. Zn, $0.91/lb. Pb and $2.61/lb. copper with assumed 100% recovery. The formula used to calculate Au equivalence is: AuEq = Au (g/t) + (Ag (g/t) x 0.013) + (Zn (%) x 0.47) + (Pb (%) x 0.4) + (Cu (%) x 1.26). Reported widths of mineralization are drill hole intervals or core length recovered. Insufficient data exists to permit the calculation of true widths of the reported mineralized interval at this time. The assay results obtained from drill holes RR21-35A, RR21-37 and RR21-39 lie below the threshold required for inclusion in this table.

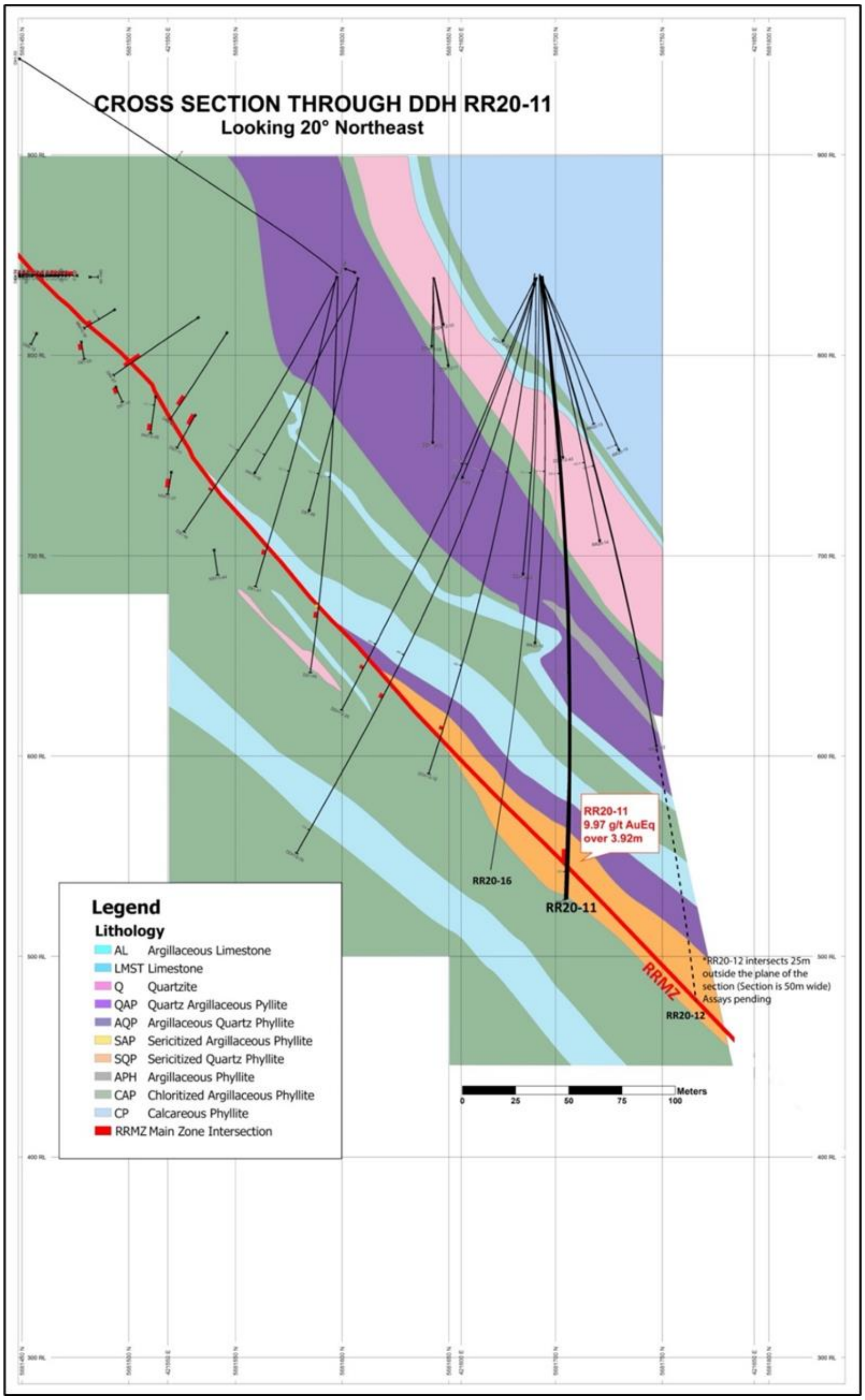
The drilling results clearly demonstrate strong lateral and vertical continuity of the Au-enriched massive sulphides of the RRMZ, the Ag-Zn mineralization hosted in the RRYZ, and additional mineralized zones. Specifically, the results for these drill holes demonstrate:

- Expansion potential for the RRMZ. Examples of RRMZ intercepts in step-out drill holes beyond the 2020 mineral resources are as follows:
    - 5.09 g/t AuEq over 8.37 m in drill hole RR20-11, including 9.97 g/t AuEq over,
    - 3.92 m and 17.30 g/t AuEq over 1.83 m,
    - 3.94 g/t AuEq over 4.64 m in drill hole RR21-34,
    - 3.65 g/t AuEq over 5.50 m in drill hole RR21-36.

DDH RR20-11 intersected RRMZ mineralization approximately 90 m down-dip from the last hole drilled on this sectional plane and, together with results of DDH RR20-12, suggests that, on this section, the Zone forms a near continuous mineralized sheet with a currently known down-dip extent exceeding 600 m (Figure 10-3).

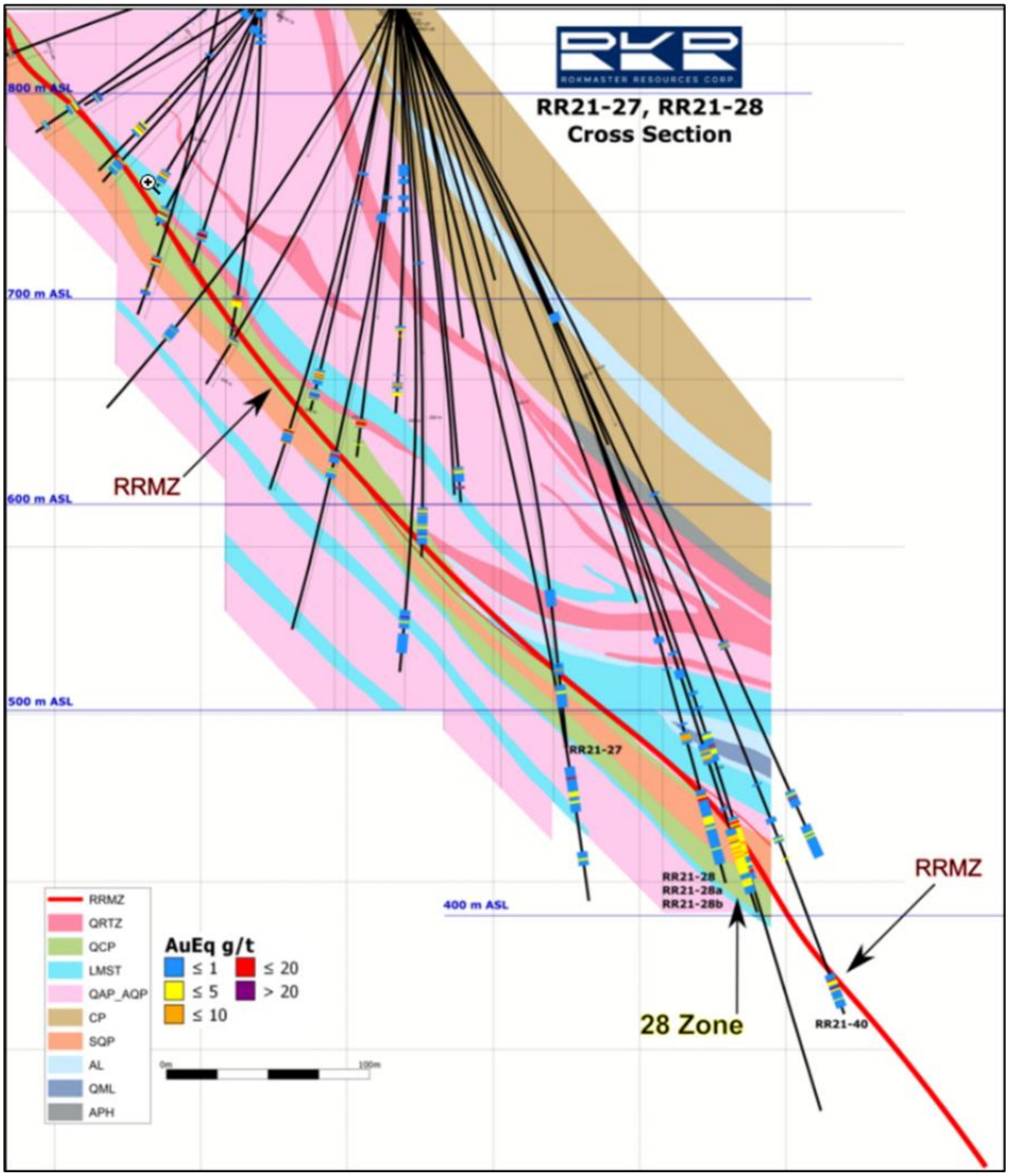
- Significant expansion of the known RRYZ Ag-Zn mineralization. Highlight drill hole intercepts include:
  - 7.19 g/t AuEq or 545.38 g/t AgEq over 3.08 m in drill hole RR21-28a
  - 4.95 g/t AuEq or 375.29 g.t AgEq over 4.85 m in drill hole RR21-28b
- Presence of a third mineralized Ag-Zn rich sulphide zone in the southeastern deposit area between the RRMZ and RRFZ, identified as the 28 Zone (Figure 10-4). Ag-Zn mineralization here may occupy much of the interval between the RRMZ and RRFZ, and ultimately connect the latter two zones to produce a single thick, precious metals enhanced sulphide zone. Highlight intercepts in drill holes RR21-28a and RR21-28b include:
  - 5.31 g/t AuEq or 398.09 g/t AgEq over 4.25 m in drill hole RR21-28a,
  - 3.60 g/t AuEq or 271.16 g/t AgEq over 25.58 m in drill hole RR21-28b, including 10.95 g/t AuEq or 816.95 g/t AgEq over 2.30 m,
- Higher-grade mineralized zones form strongly consistent, predictable shapes at production stope scale (validated by the use of controlled drilling practices and wedged drill holes),
- Significant Au intersections have also been obtained in the RRFZ, which are typically located 20 m to 30 m below the RRMZ,
- Potential mineralogical zonation, with the occurrence of strong Au mineralization in the absence of arsenical sulphide phases within the Revel Ridge hydrothermal and structural system, as indicated in drill hole DDH RR21-40.

Figure 10-3: Drill Hole RR20-11 on Cross Section Projection



Source: Rokmaster (2021).

Figure 10-4: Drill Holes RR21-27 and RR21-28 on Cross Section Projection



Source: Rokmaster (2021).

In a Company press release dated June 7, 2021, Rokmaster reported the presence of coarse visible, particulate Au grains lacking significant associated sulphides in deeper underground drill holes at the RRMZ. The assay results of the metallic screened samples are presented in Table 10-3 and demonstrate that:

- The identification of visible, particulate Au grains in drill holes where significant Au assays are reported and further associated with substantially reduced arsenic concentrations. Drill hole intersections with these characteristics include underground drill holes RR21-28, RR21-36, and RR21-40 (11.48 g/t Au over 3 m with no apparent association with arsenical sulphides (0.04% As).
- Metallic screening indicates that "free Au" in these samples may occur in grains >106 µm in size, which for metallurgy purposes would be classified as coarse particulate grains.
- Three drill holes containing macroscale Au grains are separated along strike by 330 m, all at relatively deep depths within the laterally and vertically persistent RRMZ.
- Particulate Au was intersected approximately 380 m to 490 m vertically below the 830 m drift. The spatial relationships between these drill holes are illustrated in Figure 10-5.
- Of the six samples submitted for metallic screen assay analysis, three had significantly higher Au contents than the initial analysis, one sample was approximately equivalent, and two samples had lower Au assay values (Table 10-3). Increased analytical variability may be endemic to particulate Au assays.

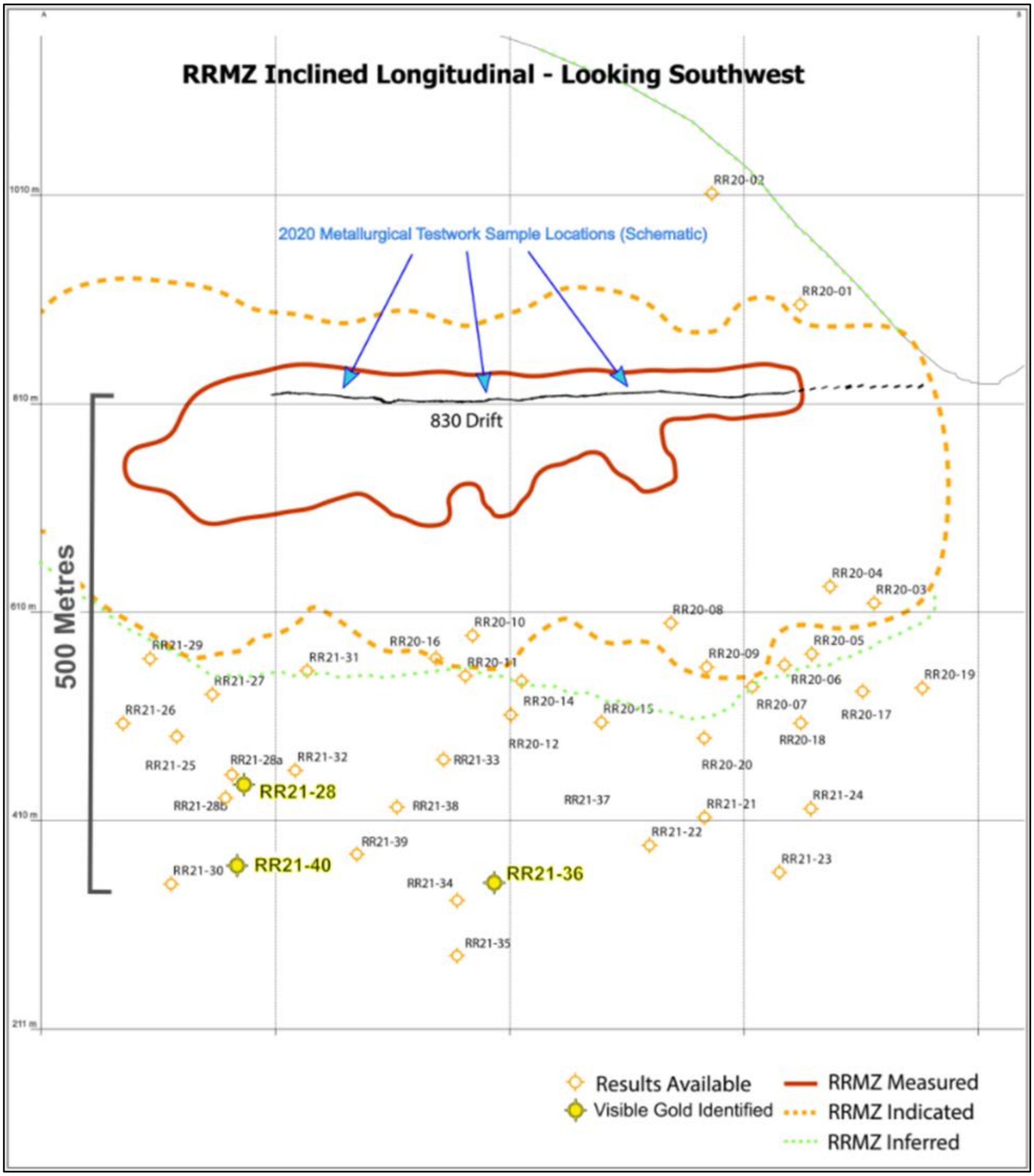
In all three of the drill holes, particulate Au is associated with quartz and (or) quartz ± carbonate foliation parallel veins that locally contain base metal phases (galena) and sparse arsenopyrite (Figure 10-6 and Figure 10-7). Qualitative, textural and mineralogical characteristics suggest that the veins containing coarse Au grains may post-date the formation of the auriferous-arsenical high sulphide orogenic veins. Such coarse Au is not held within a sulphide phase, and therefore has a high probability of recovery by standard, lower cost metallurgical processes, including gravity concentration.

Table 10-3: Selected Underground Drill Hole Screened Metallic Fire Assay Results vs Fire Assay Results for RRMZ

Drill Hole ID	From (m)	To (m)	Length (m)*	Au g/t (30 g FA AAS)[1]	Au g/t (1.0 kg Metallic Screen)[2]	Au g/t (+106 µm Fraction)[3]	Au g/t (-106 µm Fraction)[4]
RR21-28	450	451.3	1.3	15.01	16.8	207.3	11.63
RR21-36	535.85	536.75	0.9	22.22	18.4	181.8	14.46
RR21-36	536.75	538.04	1.29	12.98	13.6	303	5.79
RR21-40	517.5	518.5	1	7.14	1.1	44.5	0.47
RR21-40	518.5	519.5	1	0.1	<0.90	<0.90	0.11
RR21-40	519.5	520.5	1	27.19	51	985.7	21.8

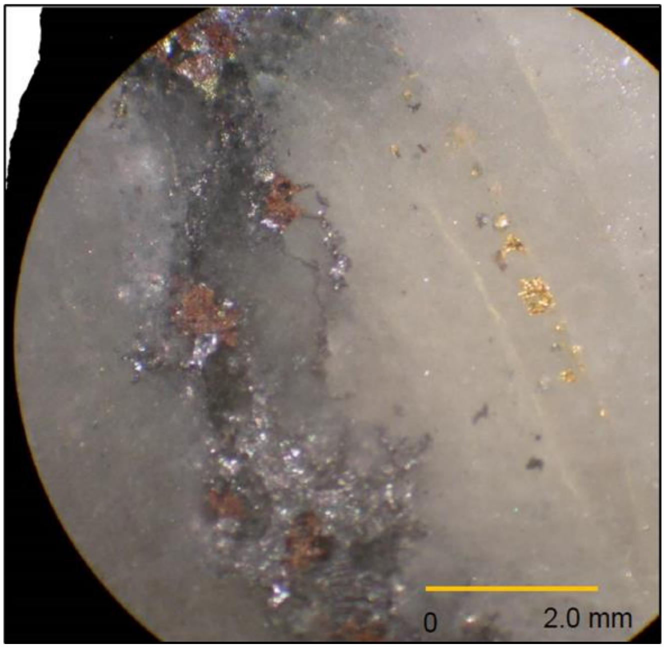
Notes: *Reported widths of mineralization are drill hole intervals or core length recovered. Insufficient data exists to permit the calculation of true widths of the reported mineralized interval at this time.
1) Au g/t (30 g FA – AAS) is the original fire assay of the original drill hole sample collected prior to metallic screening.
2) Au g/t (1.0 kg Metallic Screen) is a 1.0 kg sample which contains the calculated weighted average Au content of both the oversize (+) and undersize (-) samples or the total metallically screened Au in the sample.
3) Au g/t (+106 µm Fraction) is the result of a fire assay gravimetric finish (FAS – 415) of all grains greater than or equal to 106 µm.
4) Au g/t (-106 µm Fraction) is all Au grains in the sample which is less than or equal to 106 µm and is analyzed by instrument finish (FAS-211).

Figure 10-5: Location of Particulate Au-Bearing Drill Holes on Inclined Longitudinal Section Projection of RRMZ



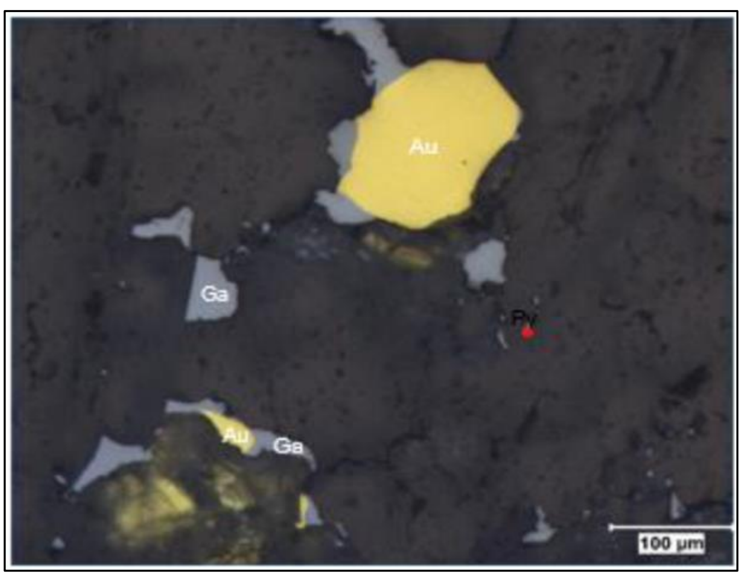
Source: Rokmaster (2021)

Figure 10-6: Au in Sheeted Quartz Veinlet in Deeper RRMZ



Source: Rokmaster (2021).
Notes: Visible Au grains observed in drill holes RR21-28, 36, and 40.
Au occurs as 50 µm to 250 µm size grains in quartz veinlets.
Three samples average 38% of Au grains >106 µm in size.

Figure 10-7: Au Mineralization in Quartz Veins at Deeper RRMZ



Source: Rokmaster (2021).

10.2.2 2021 Surface Drilling Program

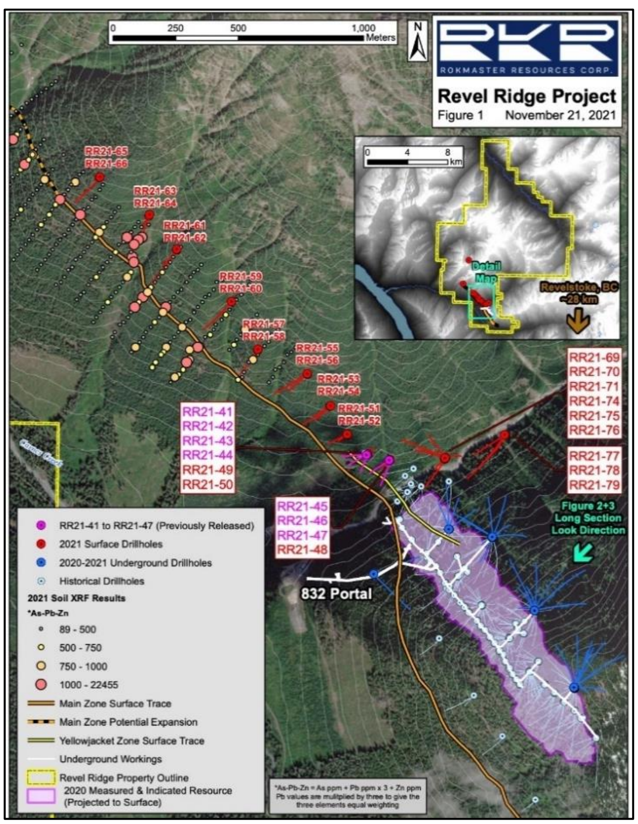
In a Company press release dated May 4, 2021, Rokmaster announced that surface drilling commenced on receipt of permits for 56 drill pads. Rokmaster aimed to expand on its previous underground drill program success with an 8,000 m surface drill program.

The initial ~7,000 m first phase of drilling targeted near-surface mineral resource immediately on-strike to both the Main and RRYZs and tested several additional high-grade occurrences four to five km north and northwest of the 832 m Level Portal. Overall, the drilling was planned to explore for Au-Ag-Pb-Zn mineralization over an approximate seven km strike-length of the Revel Ridge orogenic deformation zone.

In a Company Press Release dated October 25, 2021, Rokmaster announced completion of its surface drilling program. Overall, the program consisted of 39 diamond holes totalling 10,753 m. The drilling results demonstrated that the Ag-enriched RRYZ mineralization and the Au-enriched RRMZ mineralization continue to the northwest beyond the limits of the 2020 mineral resources.

The surface drill hole locations are shown in plan view (Figure 10-8). Assay results are listed in Table 10-4.

Figure 10-8: 2021 Surface Drill Hole Location Compilation Map



Source: Rokmaster (2021).

Table 10-4: Selected 2021 Assay Results from Surface Drill Holes RR21-41 to RR21-79[1-4]

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Mineralized Zone	AuEq (g/t)	AgEq (g/t)
RR21-41	61.76	76.14	14.38	0.1	83.12	2.36	8.98	RRYZ	6.35	482.4
including	61.76	65.65	3.89	0.08	55.77	1.98	9.8	RRYZ	6.2	470.7
and including	71	74.6	3.6	0.19	244.28	6.25	18.09	RRYZ	14.39	1093
RR21-41	92.7	93.25	0.55	1.23	2	0.13	0.25	RRMZ	1.43	108.3
RR21-42	85	86.6	1.6	0.02	17.25	1.51	6.24	RRYZ	3.78	286.8
RR21-42	107.05	108.66	1.61	0.22	21.5	0.7	2.81	RRYZ	2.11	160
RR21-42	118.33	122.06	3.73	1.38	20.21	1.12	1.41	RRMZ	2.76	209.7
including	118.33	118.83	0.5	5.76	98	6.04	6.39	RRMZ	12.46	946.2
RR21-43	75.89	82.97	7.08	0.11	45.44	1.82	10.18	RRYZ	6.21	471.9
RR21-43	90	94.9	4.9	0.03	18.03	1.26	2.85	RRYZ	2.11	159.9
RR21-43	107.9	108.4	0.5	1.81	2	0.08	0.14	RRMZ	1.93	146.9
RR21-44	67.8	86.82	19.02	0.04	19.59	0.98	2.55	RRYZ	1.88	143
including	73.4	76.1	2.7	0.03	83.69	4.2	8.64	RRYZ	6.85	520.5
and including	79.8	82.87	3.07	0.04	15.67	0.89	4.22	RRYZ	2.59	196.4
RR21-44	99.05	99.55	0.5	0.7	21	0.74	2.72	RRMZ	2.55	193.5
RR21-45	90.5	93.3	2.8	0.06	25.39	1.34	6.16	RRYZ	3.82	290
RR21-45	110.6	116.6	6	0.05	30.55	1.08	3.56	RRYZ	2.55	193.7
including	110.6	113.25	2.65	0.1	50	1.87	7.7	RRYZ	5.11	388.5
RR21-45	144.37	145.2	0.83	2.85	49	1.87	3.09	RRMZ	5.69	432.3
RR21-46	98.15	98.84	0.69	0	7	0.42	1.55	RRYZ	0.99	75.3
RR21-46	110.05	112.35	2.3	0.06	3.93	0.68	1.25	RRYZ	0.97	73.9
RR21-46	121.15	121.65	0.5	4.79	149	7.66	13.46	RRMZ	16.12	1224.5
RR21-47	84.4	90	5.6	0.05	47	2.91	8.06	RRYZ	5.61	426.4
RR21-47	103.9	109.85	5.95	0.04	31.7	1.11	5.88	RRYZ	3.65	277.5
including	104.9	105.59	0.69	0.22	178	4.94	25.03	RRYZ	16.27	1,236.2
RR21-47	123.54	125.2	1.66	0.05	16.31	0.88	4.94	RRYZ	2.94	223
RR21-47	132.33	132.83	0.5	1.08	15	0.86	0.75	RRMZ	1.97	149.8
RR21-48	150.2	152.8	2.6	0.01	9.23	0.6	1.02	RRYZ	0.68	--
RR21-48	192.8	193.3	0.5	10.63	51	3.5	12.39	RRMZ	16.94	--
RR21-49	123.65	126.75	3.1	0.01	18.15	0.97	2.91	RRYZ	1.61	--
RR21-49	162.8	167	4.2	1.54	6.86	0.32	0.78	RRMZ	2.01	--
RR21-50	180.4	182.55	2.15	2.79	25.7	1.2	3.35	RRMZ	4.71	--
RR21-51	116	118.3	2.3	2.83	8.8	0.26	0.65	RRMZ	3.25	--
RR21-52	135.3	136.95	1.65	2.2	33	1.9	3.4	RRMZ	4.45	--
RR21-53	193.44	194.38	0.94	4.63	163.02	5.34	5.23	RRMZ	10.1	--
RR21-54	207.57	208.57	1	3.38	88	2.71	5.34	RRMZ	7.22	--

Drill Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Mineralized Zone	AuEq (g/t)	AgEq (g/t)
RR21-58	270.3	271.2	0.9	3.8	0.5	0	0	RRMZ	3.81	--
RR21-61	210.11	210.55	0.44	5.58	7	0.14	0.04	RRMZ	5.72	--
RR21-63	209.2	211.05	1.85	2.1	7.67	0.03	0.01	RRMZ	2.19	--
RR21-64	244.37	244.77	0.4	4.53	3	0.06	0.07	RRMZ	4.61	--
RR21-65	186.14	186.88	0.74	5.76	0.5	0.01	0.01	RRMZ	5.77	--
RR21-66	187.07	188.2	1.13	2.23	59.97	0.53	0.03	RRMZ	3.07	--
RR21-69	184.35	184.75	0.4	0.05	23	0.88	5.69	RRYZ	2.71	--
RR21-69	191.9	192.7	0.8	0.03	126	5.09	5.45	RRYZ	5.1	--
RR21-69	258.15	259	0.85	1.48	12	0.52	0.63	RRMZ	2.02	--
RR21-70	202.25	203.78	1.53	0.02	8	0.77	1.93	RRYZ	1.08	--
RR21-70	302.3	303.4	1.1	3.22	5	0.26	0.23	RRMZ	3.45	--
RR21-71	283.5	284.3	0.8	3.68	12	0.55	2.72	Hanging wall	5	--
RR21-71	299.45	300.45	1	3.07	28.2	1.41	7.44	RRMZ	6.61	--
RR21-71	318.73	319.45	0.72	1.85	133	4.48	4.26	Footwall	6.35	--
RR21-74	206.25	206.9	0.65	0.13	34	2.38	5.52	RRYZ	3.33	--
RR21-74	301.2	302.2	1	1.04	24	0.95	4.44	RRMZ	3.26	--
RR21-75	432	432.9	0.9	3.31	12	0.74	0.47	RRMZ	3.86	--
RR21-76	367	367.5	0.5	0.13	34	1.46	7.43	Hanging wall	3.74	--
RR21-77	472.8	474.9	2.1	5.58	11.52	0.74	0.44	RRMZ	6.11	--
including	473.8	474.32	0.52	18.37	45	2.87	1.65	RRMZ	20.41	--
RR21-78	501	502	1	4.59	0.5	0.01	0.01	Hanging wall	4.6	--
RR21-78	526	528.9	2.9	1.48	5.07	0.29	0.21	RRMZ	1.7	--
RR21-78	545.5	546	0.5	2.96	2	0.02	0	Footwall	2.99	--
RR21-79	539.3	541.48	2.18	1.36	14.09	1.16	2.75	RRMZ	2.91	--

Notes:
1) Reported widths of mineralization are drill hole intervals or core length recovered. Insufficient data exists to permit calculation of true widths.
2) The assay results obtained from drill holes RR21-55 to RR21-57, RR21-60, RR21-62, RR21-67, RR21-68, RR21-72 and RR21-73 lie below the threshold required for inclusion in this table.
3) AuEq values for drill holes RR21-41 to RR21-47 calculated from Micon (2021).
4) For drill holes RR21-48 to RR21-79, the metal values used in the AuEq calculations are US$1,625/oz Au, US$22.00/oz Ag, US$0.95/lb Pb and US$1.20/lb Zn, which are derived from Consensus Economics September 2021 long-term metal prices. The formula used to calculate Au equivalence is: AuEq = Au g/t + (Ag g/t x 0.011) + (Pb% x 0.325) + (Zn% x 0.372).

The significance of these surface drill hole results is summarized below:

- Significant Ag-Zn intersections of the RRYZ have been cored in drill holes RR21-41 to RR21-47. The drill holes intersected thick, semi-conformable zones of banded sphalerite and argentiferous galena. The mineralization is coarse-grained, hosted in silicified and marbleized limestones and may be considered to be free milling with no significant metallurgical challenges. Most of these drill holes lie outside of the 2020 PEA mineral resources (Micon, 2021).

- The RRYZ cored in these drill holes appears continuous with the Zone as outlined in pre-2020 drilling. The RRYZ typically consists of two to three stacked Ag-Zn carbonate hosted replacement zones, located in folded and marbleized limestone, which typically occur a few tens of metres into the structural hanging wall of the RRMZ.
- All the mineralized intervals in RR21-41 to RR21-47 are cored at shallow depths. Mineralization occurs from 52 m to 146 m subsurface. It has been established that Au mineralization at Revel Ridge occurs over vertical distances exceeding 1,200 m. Drill holes RR21- 41 to RR21-47 successfully tested only shallower parts of this orogenic Au system.

The RRMEX is the northwestern strike continuation of the RRMZ and applies to any intersection northwest of DDH RR21-54. This Zone has been traced in surface drilling for at least 1,800 m northwest of the 830 portals. Assay highlights for drill holes RR21-54 to RR21-79 are tabulated in Table 10-4.

The 2021 surface drill program results indicate that northwest of drill hole RR21-54, mineralization within the RRMEX Extension becomes Au dominant, with contents of base metals and Ag decreasing markedly, as exemplified by the assay results for drill holes RR21-65 and RR21-66 (Table 10-4). This change in the metal suite also corresponds to rising topography.

An increase in the elevation of drill collars suggests it may be a control on the distribution of base and precious metals. Drill holes RR21-65 and 21-66 are collared 1,800 m to the west of the 830 m portal and intersected the mineralized deformation zone at approximately 1,300 m elevation, or 470 m above the 830 m portal elevation.

10.3 Rokmaster Drilling 2022

10.3.1 Rokmaster Underground Drilling 2022

In the spring of 2022, Rokmaster completed 15 underground drill holes totalling 6,298 m. The drill holes successfully intersected the RRMZ. The drill program was designed to test the limits of, and extend, the volume of the Revel Ridge RRMZ and other zones, as defined by the 2021 NI 43-101 mineral resource Estimate.

Drill hole RR22-94 intersected 6.32 g/t AuEq over 4.25 m. This drill hole also intersected 12 m of well-developed sphalerite mineralization hosted in black silicified siltstone adjacent to the RRMZ which has similarities to the “28 Zone” encountered in drill hole RR21-28 (4.53 g/t AuEq over 26.20 m). Drill holes RR22-94 and RR21-28 are separated by a distance of 300 m. Drill hole RR22-95 intersected 5.77 g/t AuEq over 1.95 m in the RRMZ, approximately 122 m to the southeast of drill hole RR22-94.

Six drill holes tested the RRMZ to the southeast from the historical limit of the 830 m level underground development. Drill holes RR22-88 to RR22-93 have an average spacing of 167 m along the RRMZ plane and all successfully intersected the Main Deformation Zone structure over metre-scale intervals with variable degrees of banded massive sulphide mineralization. These drill holes expanded the RRMZ to the southeast. In these drill holes, the RRMZ was dominantly hosted by calcareous phyllites. This incompetent rock unit typically develops only weak dilatant sites within the RRMZ, and as a consequence, wide mineralized intersections were not obtained.

An additional objective of the program was to extend 2021 drill holes RR21-38 and RR21-39. Later drilling data in the area adjacent to these drill holes indicated that they ended prior to intersecting the RRMZ. In this area, and below 460 m elevation, the RRMZ steepens in dip and decreases in grade and continuity. By extending drill hole RR21-38 by 38.0 m and RR21-39 by 31.1 m, both drill holes successfully encountered RRMZ massive sulphide mineralization.

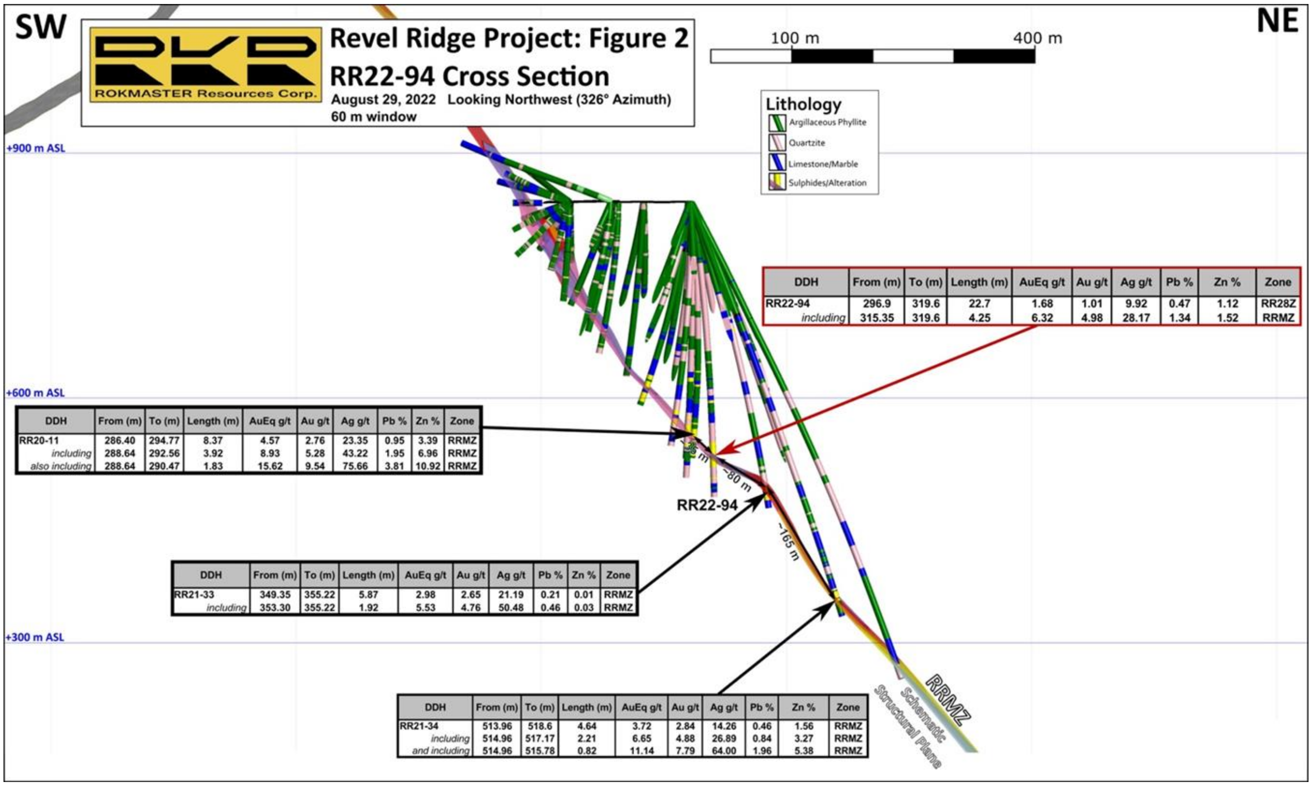
A cross-Section projection of drill hole RR22-94 is presented on Figure 10-9 and a longitudinal projection is presented on Figure 10-10. Significant intersections are presented in Table 10-5.

Table 10-5: Selected Assay Results From 2022 Underground Drilling Program

Drill Hole ID	From (m)	To (m)	Length (m) [1]	AuEq (g/t) [3]	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Zone [2]
RR22-88	268.7	269.42	0.72	1.71	1.31	12	0.42	0.32	RRMZ
RR22-88	300.2	300.75	0.55	1.2	1.12	5	0.05	0.01	RRFZ
RR22-89	481.5	482.1	0.6	3.28	3.24	0.5	0.04	0.06	RRMZ
RR22-89	487.4	487.88	0.48	1.87	0.01	8	0.51	4.5	RRMZ
RR22-90	304.6	305.9	1.3	3.02	2.48	8.95	0.35	0.9	RRMZ
RR22-91	459.7	460.5	0.8	0.44	0.28	6	0.19	0.07	RRMZ
RR22-92	338.3	339.45	1.15	2.45	2.39	1.87	0.02	0.09	RRMZ
including	338.95	339.45	0.5	5.4	5.29	3	0.03	0.19	RRMZ
RR22-92	393.75	394.25	0.5	2.17	1.93	4	0.29	0.25	RRFZ
RR22-93	386.68	388.1	1.42	2.08	0.18	51.54	1.29	2.37	RRMZ
including	386.68	387.2	0.52	5.39	0.27	139	3.43	6.41	RRMZ
RR22-93	403.9	405.45	1.55	2.2	1.2	51.68	0.78	0.29	RRFZ
including	404.65	405.45	0.8	3.43	1.73	87	1.31	0.56	RRFZ
RR22-94	296.9	319.6	22.7	1.68	1.01	9.92	0.47	1.12	RR28Z
including	315.35	319.6	4.25	6.32	4.98	28.17	1.34	1.52	RRMZ
RR21-38EXT	461.2	461.9	0.7	4.89	1.96	44	1.69	5.13	RRMZ
RR21-38EXT	486.5	487.4	0.9	2.52	2.28	13	0.14	0.1	RRFZ
RR21-39EXT	564.1	564.9	0.8	8.38	6.52	20	0.59	4.02	RRMZ
RR22-95	349.15	351.1	1.95	5.77	4.88	10	0.3	1.9	RRMZ

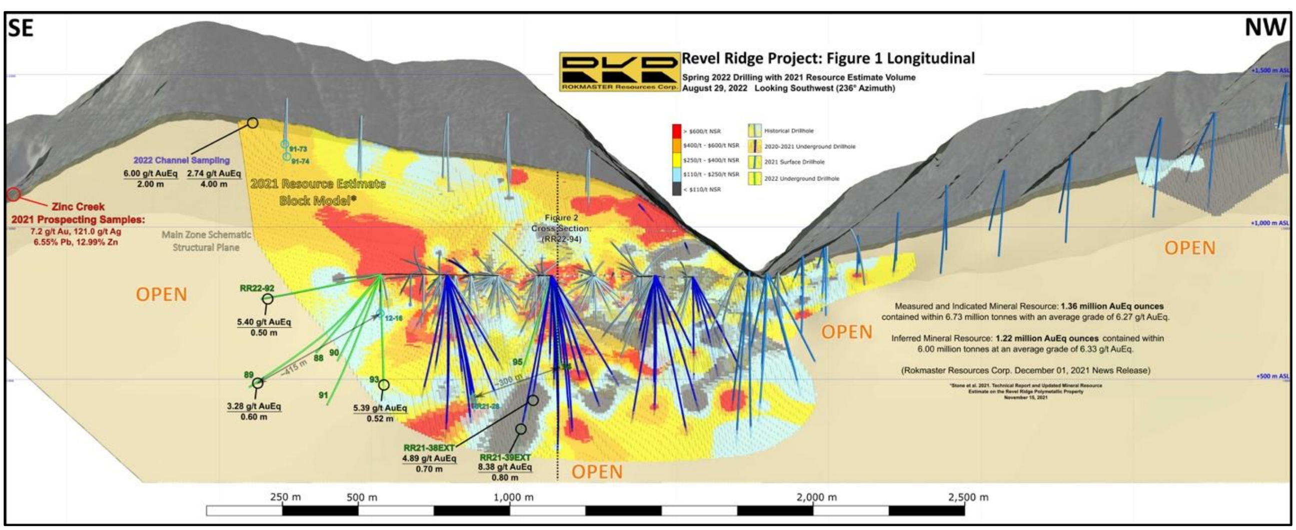
Notes:
1) Reported widths of mineralization are drill hole intervals or core lengths recovered. Insufficient data exists to permit the calculation of true width of the reported mineralized intervals.
2) Mineralized Zone abbreviations: RRMZ: Revel Ridge Main Zone.
3) AuEq calculations use: Metal prices of Au US$1,625/oz, Ag US$22/oz, Pb US$0.95/lb, Zn US$1.20/lb; RRMZ process recoveries of Au 92%, Ag 88%, Pb 80%, Zn 72%; RRMZ AuEq = Au g/t + (Ag g/t x 0.012) + (Pb% x 0.347) + (Zn% x 0.353); RRYZ process recoveries of Au 91%, Ag 80%, Pb 74%, Zn 75%

Figure 10-9: Cross Section Projection of Hole RR21-94



Source: Rokmaster (2023).

Figure 10-10: Longitudinal Projection Showing 2022 Underground Drilling



Source: Rokmaster (2023).

10.3.2 Rokmaster Surface Drilling 2022

Between August 2022 and October 2022, Rokmaster completed 15 surface drill holes totalling 5,004 m at Revel Ridge. These drill holes tested the northwestern extension of the RRMZ and RRYZ proximal to the 2021 mineral resource area. Seven drill holes were collared from two drill pads approximately 400 and 550 m to the northwest of the 830 Portal. Drill holes RR22-99 to RR22-105 cut RRMZ mineralization on approximately 120 m centres.

Drill holes RR22-99 and RR22-101 intersected the RRMZ as the deformation zone dilated at a favourable limestone-quartzite contact. A cross-Section is presented in Figure 10-11. Each drill hole also encountered the RRYZ approximately 30 m in the hanging wall to the RRMZ. This expands the RRYZ by approximately 115 m between drill holes RR21-50 and RR22-99.

The first three shallow drill holes of the summer 2022 drill program were intended to test the Zn Creek Showing. Drill holes RR22-96, RR22-97, and RR22-98 all intersected m-scale deformation zones with sericite alteration hosting cm-scale bands of massive sulphide mineralization. The strongest of the three drill holes, RR22-98, intersected the RRMZ 925 m along strike from previous drill holes. Drill hole RR22-98 cut narrow bands of polymetallic sulphides hosted within sericite and calcareous phyllites. Drill hole DDH RR22-98 confirmed the presence of the RRMZ almost 1 km to the southeast of previous drilling. Assay results from the 2022 surface drilling program are summarized in Table 10-6.

Drill hole RR22-102a was wedged to completion around the drill core barrel, which broke due to equipment wear at 222.5 m. The primary drill hole RR22-102 intersected strong sphalerite-galena mineralization in a silicified limestone between 206.90 m and 211.50 m, which represents the RRYZ. Notably, this intersection occurs 65 m from drill hole RR21-50, the nearest drill hole hosting RRYZ mineralization. The RRYZ was encountered a second time in the wedge hole RR22-102a.

The RRMZ is located at the base of a thick carbonate unit at 287.3 m. Similar to drill hole RR22-101, the RRMZ in drill hole RR22-102a is primarily developed in a footwall quartzite package. This favorable carbonate-quartzite contact, which hosts m-scale massive sulphide bands in the RRMZ, may be laterally extensive with a distance of 95 m between RR22-101 and RR22-102a. These step-outs are external to the 2021 MRE block model area.

Drill holes RR22-103 to RR22-105 were collared 150 m to the northwest of drill holes RR22-99 to RR22-102a. These three drill holes targeted a favourable limestone-quartzite contact which hosts strong RRMZ massive sulphide mineralization in drill hole RR22-102a and RR22-101. The RRMZ was intersected in each drill hole, with RR22-104 and RR22-105 encountering the RRMZ at this contact as it moderately plunges to the northwest.

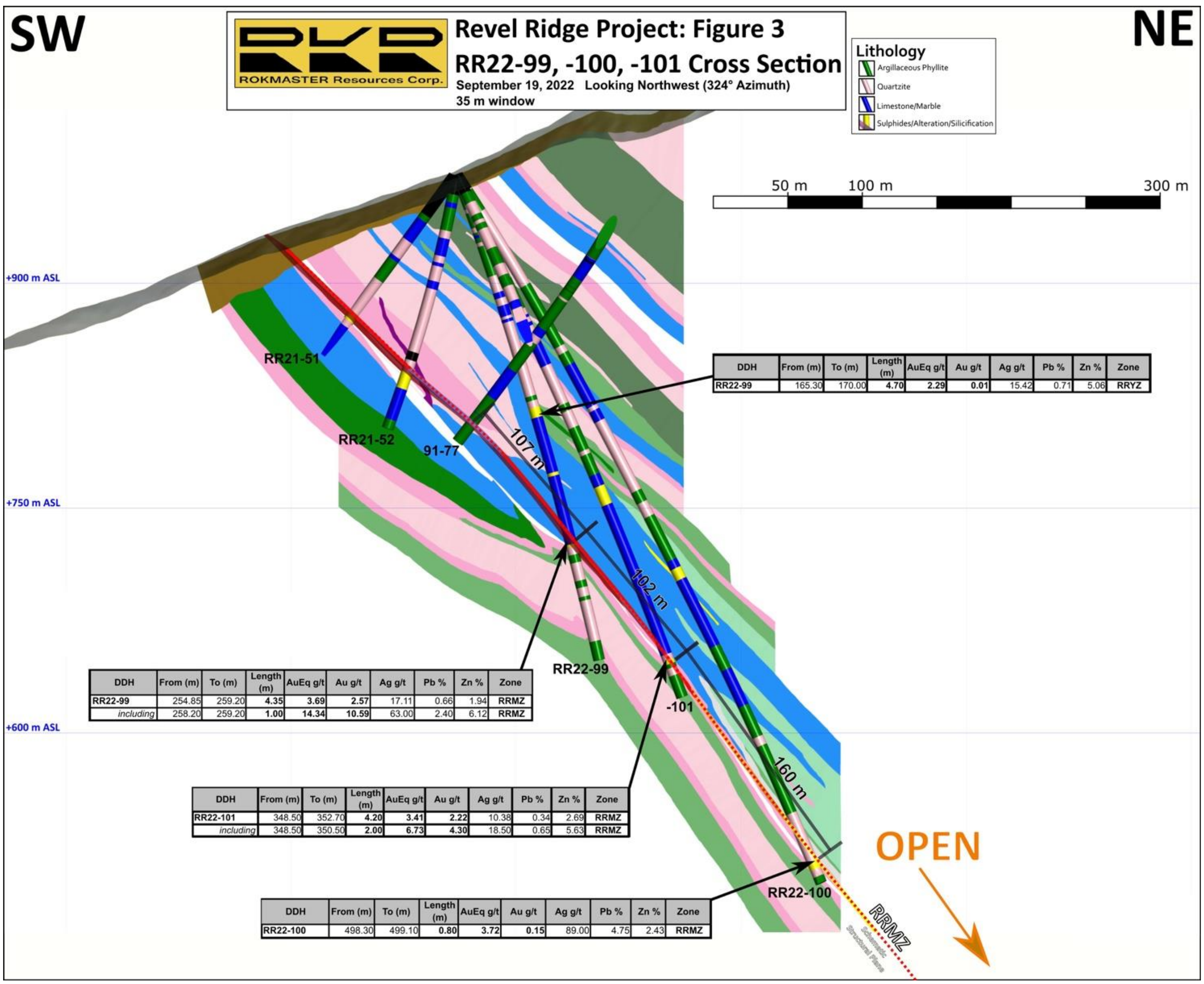
Drill holes RR22-107 to RR22-109 targeted the RRMZ below drill hole RR22-102a to test and expand the 2021 MRE to the northwest at deeper levels. Typical RRMZ structural and alteration features were successfully intersected in all three drill holes, with drill holes RR22-107 and RR22-109 hosting banded massive sulphide mineralization.

Drill hole RR22-106 was collared 3,075 m to the northwest of the drill holes RR22-103 to RR22-105, in an area where a soil geochemistry anomaly and coincident geological mapping suggested the continuation of the RRMZ. This contact was where the RRMZ was expected to occur when extrapolating the structural plane from the 2021 northwestern drill holes, all of which intersected the RRMZ ductile deformation structure and related alteration.

During this program, drill hole RR22-106 was completed as a shallow drill hole 250 m to the northwest of drill hole RR21-67, targeting a continuous and linear soil geochemical anomaly. In drill hole RR22-106 a similar limestone-phyllite contact was encountered, with the footwall graphitic phyllite hosting an anomalous assay of 0.26 g/t Au over 3 m. Due to topography, this intersection of the RRMZ is at an elevation approximately 770 m vertically higher than the 830 level underground workings, which potentially affects the strength of the sulphide mineralization.

Drill hole RR22-106 represents a significant strike extension to the RRMZ, with the distance to the Zn Creek drill holes to the southeast totalling 5,720 m. This drill hole, combined with the 2021 drilling, opens a significant area of the RRMZ to explore.

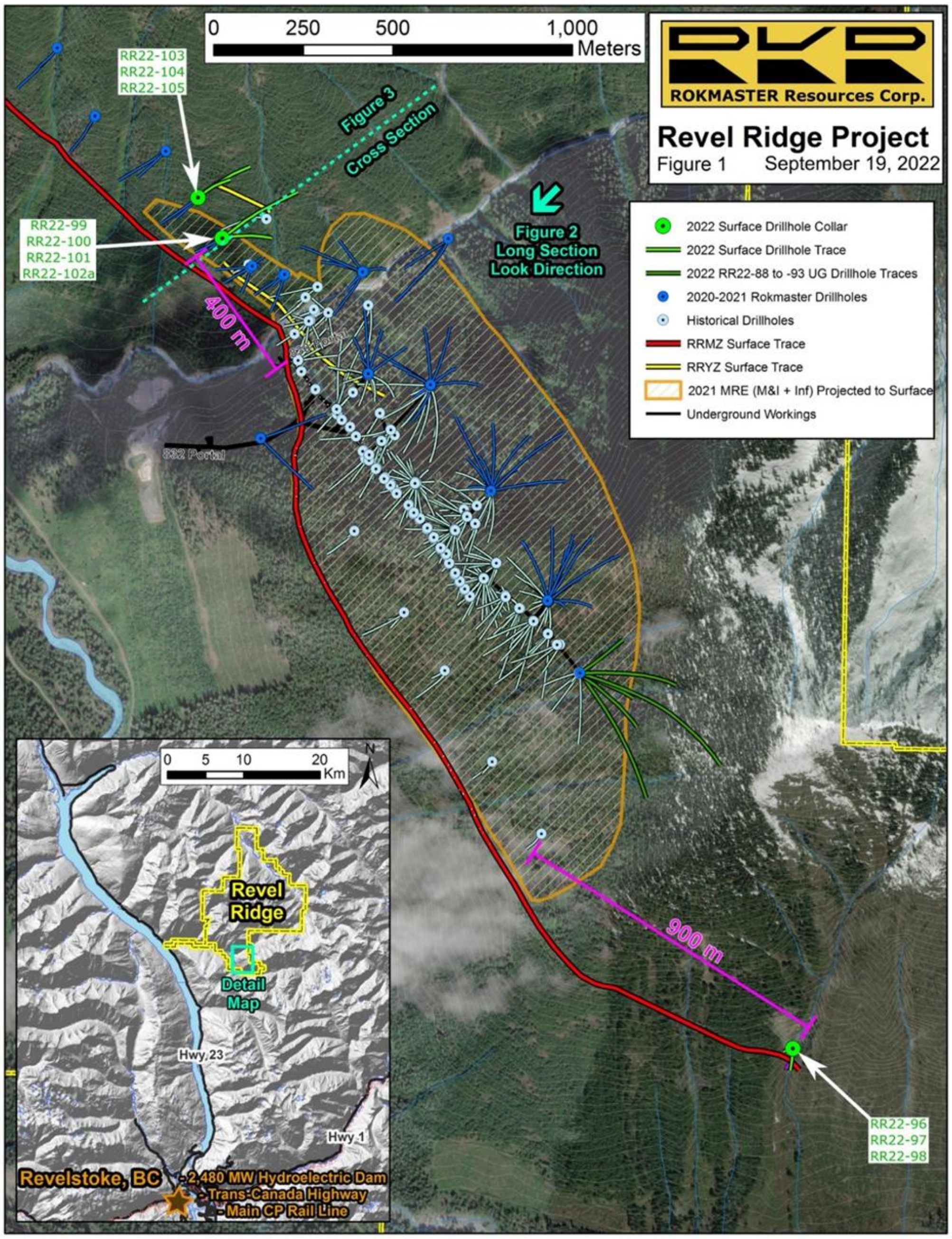
Figure 10-11: Cross-Section Projection RR22-99, -100, -101, Looking NW



Source: Rokmaster (2023).

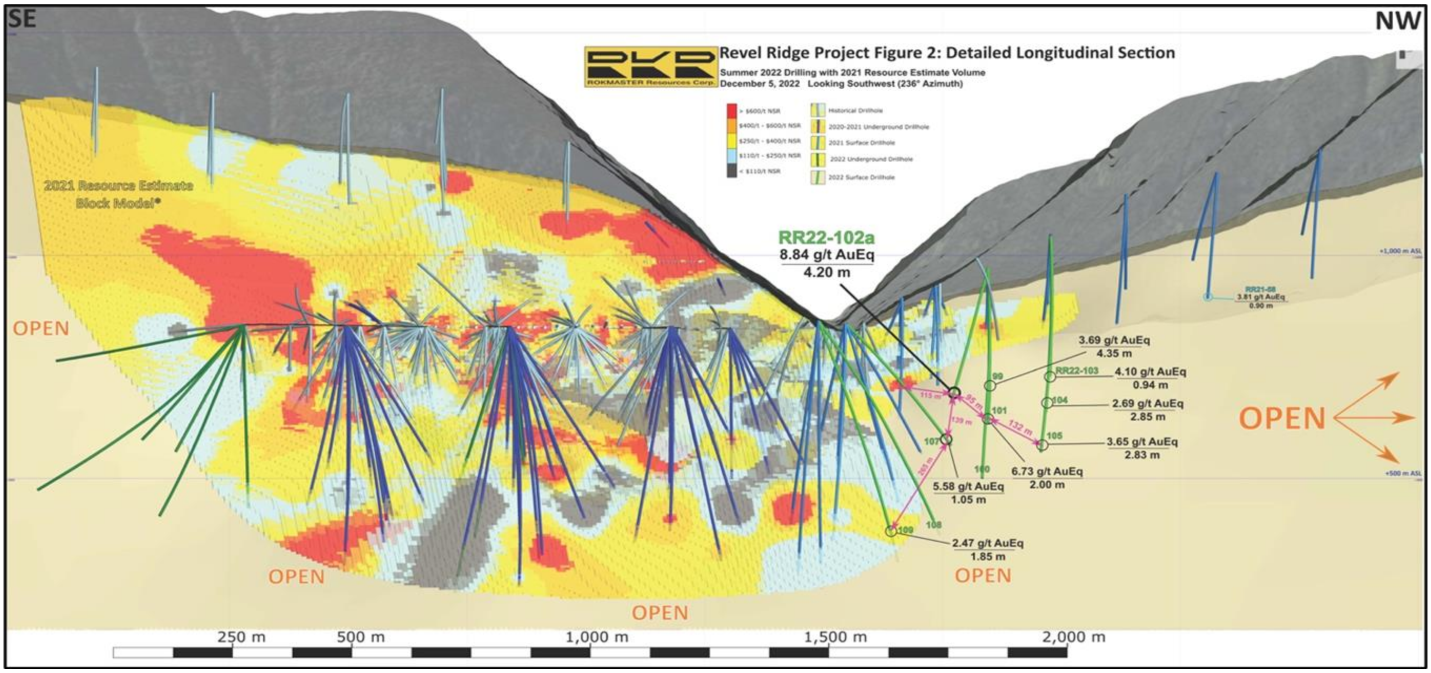
Drill hole locations are presented in Figure 10-12 and a longitudinal projection is presented in Figure 10-13. A detailed longitudinal projection of the 2022 drilling within the 2021 mineral resource area is presented in Figure 10-14.

Figure 10-12: 2022 Surface Drill Hole Location Map



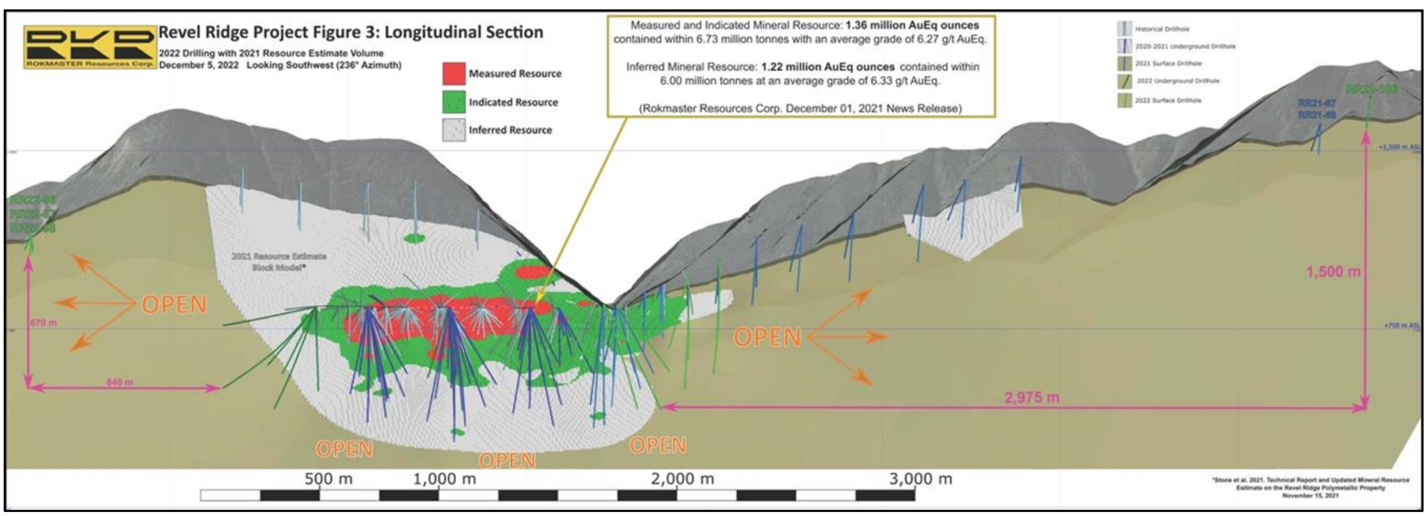
Source: Rokmaster (2023).

Figure 10-13: Longitudinal Projection Showing 2022 Underground Drilling



Source: Rokmaster (2023).

Figure 10-14: Longitudinal Projection Showing 2022 Drilling within the 2021 Mineral Resources



Source: Rokmaster (2023).

Table 10-6: Selected Assay Results From 2022 Surface Drilling Program

Drill Hole ID	From (m)	To (m)	Length (m)[1]	AuEq (g/t)[3]	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)	Zone [2]
RR22-99	165.3	170	4.7	2.29	0.01	15.42	0.71	5.06	RRYZ
RR22-99	254.85	259.2	4.35	3.69	2.57	17.11	0.66	1.94	RRMZ
including	258.2	259.2	1	14.34	10.59	63	2.4	6.12	RRMZ
RR22-100	300.2	304.65	4.45	0.41	0.01	5.32	0.06	0.87	RRYZ
RR22-100	498.3	499.1	0.8	3.72	0.15	89	4.75	2.43	RRMZ
RR22-101	348.5	352.7	4.2	3.41	2.22	10.38	0.34	2.69	RRMZ
including	348.5	350.5	2	6.73	4.3	18.5	0.65	5.63	RRMZ
RR22-98	44.7	45.2	0.5	1.3	0.89	7	0.33	0.59	RRMZ
RR22-102	206.9	211.5	4.6	2.91	0.06	42.67	1.24	5.32	RRYZ
RR22-102a	206.6	210.15	3.55	4.54	0.06	54.25	1.66	9.01	RRYZ
RR22-102a	287.3	291.5	4.2	8.84	5.24	63.83	4.06	4.04	RRMZ
including	288.5	290.65	2.15	16.01	9.73	107.19	6.74	7.52	RRMZ
RR22-103	295.5	296.44	0.94	4.1	1.65	35.34	1.45	4.3	RRMZ
RR22-104	360.8	363.65	2.85	2.69	1.11	25.72	0.72	2.9	RRMZ
	368.1	368.7	0.6	3.24	2.47	36	0.95	0.03	RRFZ
RR22-105	486.15	488.98	2.83	3.65	0.96	52.65	3.36	2.54	RRMZ
including	488.2	488.98	0.78	12.62	3.13	185	11.87	8.93	RRMZ
RR22-107	329.3	330.35	1.05	5.58	4.52	31	0.77	1.18	RRMZ
	353.6	354.2	0.6	4.72	2.56	38	1.43	3.43	RRFZ
RR22-109	500	501.85	1.85	2.47	0.02	30.89	2.44	3.5	RRMZ
	512.1	512.5	0.4	3.83	2.4	34	1.37	1.56	RRFZ
	524.9	525.2	0.3	3.17	3.09	2	0.13	0.02	RRFZ

Notes:
1) Reported widths of mineralization are drill hole intervals or core lengths recovered. Insufficient data exists to permit the calculation of true width of the reported mineralized intervals.
2) Mineralized Zone abbreviations: RRMZ: Revel Ridge Main Zone, RRYZ: Revel Ridge RRYZ.
3) AuEq calculations use: Metal prices of Au US$1,625/oz, Ag US$22/oz, Pb US$0.95/lb, Zn US$1.20/lb.
RRMZ process recoveries of Au 92%, Ag 88%, Pb 80%, Zn 72%; RRMZ AuEq = Au g/t + (Ag g/t x 0.012) + (Pb% x 0.347) + (Zn% x 0.353); RRYZ process recoveries of Au 91%, Ag 80%, Pb 74%, Zn 75%; RRYZ AuEq = Au g/t + (Ag g/t x 0.011) + (Pb% x 0.325) + (Zn% x 0.372).

11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

The following Section describes sampling carried out by Huakan at the Revel Ridge Property from 2010 to 2012 and Rokmaster from 2020 to 2022. The description related to the Huakan sampling is largely taken from P&E's technical report on the Property by Puritch et al. (2018).

11.1 Historical Sampling

11.1.1 Huakan – 2010 to 2012

11.1.1.1 Huakan Drill Core Sampling

A total of 956 split drill core samples from the Huakan 2010/2011 diamond drill program were collected by and analyzed for Huakan and a total of 895 split drill core samples from the 2012 diamond drill program. Sampling was carried out where visual sulphide concentrations were observed beyond non-mineralized host-rocks.

Sample intervals were generally <0.5 m where stronger sulphide concentrations were observed and ranged from 0.5 to 1.0 m intervals. Locally, narrower sample intervals ranged between 0.25 to 0.5 m, where intervals with massive veins were observed. The following summary presents the sampling procedures and steps taken during the 2010/2011 and 2012 drill programs by Huakan:

- Drill Core was first cleaned, organized, and photographed.
- Geotechnical logging was undertaken by a trained technician.
- Drill core boxes were labelled using scribed aluminium tags.
- Drill core logging and sample selection was performed by the site geologists.
- In areas of RRMZ mineralization, sampling intervals were determined by similar sulphide abundance.
- Sampling was carried out beyond the limits of the RRMZ sulphides, both into barren hanging wall and footwall rocks.
- Every 18th, 19th and 20th sample was designated as a duplicate, certified reference material (CRM) and blank, respectively. The duplicate sample was a fifty percent split of the sample preceding it.
- Drill core was logged, sampled, and stored on site. The logging geologist would place a colour crayon line along the desired sample cut to provide an even biSection of the core.
- Drill core was cut in half, bisecting fabric, or vein material evenly.
- Technicians were instructed to place the same side of drill core back into the box for every sample and the other side into a labelled clean plastic sample bag that was then sealed using a nylon cable tie.

11.1.1.2 Bulk Density Determinations

A total of 427 bulk density measurements were taken on-site using the 2010/2011 drill core and 86 measurements on the 2012 drill core. The Huakan-supplied database contained a total of 396 bulk density measurements. Measurements were carried out by competent company geological staff utilizing the wet immersion technique. Huakan personnel selected representative samples of dry halved drill core from within the RRMZ and the margins of the Main Zone. Bulk density was calculated from the ratio of the dry weight of the drill core to the volume of the displaced water. The 2010 site visit Qualified Person, Fred Brown, P.Geo., collected eighteen verification samples from drill core and sent the drill core samples for independent verification testing at ALS in North Vancouver, which included bulk density measurement determinations. The independently verified density determinations were found to agree with values reported by Huakan.

11.1.1.3 Sample Security and Storage

Sample bags were placed in address-labelled rice bags, sealed with a nylon cable tie and transported from Revelstoke, B.C., by Greyhound Bus to Eco Tech Laboratory Ltd., (Eco Tech) of Kamloops, BC. (later acquired and managed by ALS Minerals). Sample shipment records were maintained. Records were also kept of sample preparation, analysis requested, and the person intended to receive the results.

Drill core sampling was carried out by use of a diamond blade dill core saw. The drill core sampler was highly experienced and sampling work was closely monitored by on-site drill core logging geologists. No drill core samples were taken by an employee, officer, director or associate of Huakan.

11.1.1.4 Analytical and Test Laboratories

Analytical work for the 2010/2011 and 2012 drill programs was carried out by Eco-Tech of Kamloops, B.C. At the time of analysis, Eco Tech was independent of Huakan and registered for ISO 9001:2008 by KIWA International (TGA-ZM-13-96-00) for the provision of assay, geochemical and environmental analytical services. Eco Tech also participated in the annual Canadian Certified Reference Materials Project (CCRMP) and Geostats Pty., bi-annual round robin testing programs. Eco Tech operated an extensive quality assurance/quality control program that covers all stages of the analytical process from sample preparation through to sample digestion and instrumental finish and reporting.

Huakan archived all of the original assay certificates for the 2007, 2010/2011, and 2012 drill programs.

11.1.1.5 Sample Preparation and Analyses

Eco Tech's sample preparation and analysis procedures were as follows:

- Samples (minimum sample size is 250 g) are catalogued and logged into the sample-tracking database, when received by the lab, and checked for spillage, general sample integrity and that samples matched the sample shipment requisition. The samples are transferred into a drying oven and dried. Rock samples are crushed by a Terminator jaw crusher to -10 mesh, ensuring that 70% passes through a Tyler 10 mesh screen. This is verified for each batch.
- Re-splits are taken every 35 samples using a riffle splitter and tested to ensure the homogeneity of the crushed material. A 250-gram sub sample of the crushed material is pulverized on a ring mill pulverizer, each batch ensuring that 85% passes through a 200-mesh screen. The sub-sample is rolled, homogenized, and bagged in a pre-numbered bag. A barren gravel blank is prepared before each job in the sample preparation and analyzed for trace contamination along with the actual samples.

- Samples analyzed for Au (30-gram sample size) are fire assayed along with certified reference material using appropriate fluxes. The flux used is pre-mixed, purchased from Anachemia and contains Cookson Granular Litharge (Ag and Au Free). The ratios are 66% Litharge, 24% Sodium Carbonate, 2.7% Borax, 7.3% Silica. (These charges may be adjusted with borax or silica based on the sample). Flux weight per fusion is 120 g. Purified Ag Nitrate is used for inquartation. The resultant doré bead is parted and digested with aqua regia, and then analyzed by an atomic absorption instrument (Perkin Elmer/Thermo S-Series AA instrument, or AA). Au detection limits on AA are 0.03 (lower) and 100 g/t (upper). Any Au samples with >100 g/t are re-analyzed using a gravimetric analysis protocol. Each batch submitted is fire assayed as a batch.
- Appropriate CRMs and repeat/re-split samples (Quality Control Components) accompany the samples on the data sheet for quality control assessment. For 30 element ICP, a 0.5-gram sample is digested with a 3:1:2 (HCl:HNO3:H2O) for 90 minutes in a water bath at 95°C. The sample is diluted to 10 ml with water. All solutions used during the digestion process contain beryllium, which acts as an internal CRM for the ICP run. The sample is analyzed on a Thermo Scientific IRIS Intrepid II XSP/ICAP 6000 Series ICP unit. CRMs are used to check the performance of the machine and to ensure proper digestion in the wet lab. QC samples are run along with the client samples to ensure no machine drift or instrumentation issues occurred during the run procedure. Repeat samples (every batch of 10 or less) and re-splits (every batch of 35 or less) are also run to ensure proper weighing and digestion. Results are printed along with accompanying quality control data (repeats, re-splits, and CRMs). Any of the base metal elements that are overlimit (i.e., Ag >30 g/t, Cu, Pb, Zn >1.0%) are re-run as an assay.

11.1.1.6 Quality Assurance and Quality Control

Huakan geologists routinely insert Certified Reference Material (CRMs) and blanks into the sample stream during the 2010/2011 and 2012 drill programs. The CRMs and blanks were obtained from CDN Resource Laboratories (CDN) of Langley, B.C.

11.1.1.6.1 Certified Reference Materials

CRMs are inserted regularly into batches of samples sent to the lab for analysis, in order to monitor the accuracy (lack of bias) of the lab results. The CDN CRMs used were CDN-ME-7 and CDN-ME-11 in the 2010/2011 program and CDN-ME-8 and CDN-ME-11 in the 2012 program. CRMs were inserted into the sample stream at a rate of 1 in 20 by the Project geologists.

A total of 36 data points were available for the CDN-ME-7 CRM and 29 for the CDN-ME-11 CRM, for the 2010/2011 program. Both CRMs were certified for Au, Ag, Pb and Zn and both performed well, with all data points are within ±2 standard deviations of the mean certified value.

A total of 15 data points were available for the CDN-ME-8 CRM and 22 for the CDN-ME-11 CRM, for the 2012 program. Both the CDN-ME-8 and CDN-ME-11 CRMs were certified for Au, Ag, Pb and Zn. Both CRMs performed well, as the majority of data points plot within ±2 standard deviations from the mean certified value.

The majority of data points for the CDN-ME-8 CRM are within two standard deviations of the mean certified value. All data points for Zn are within +2 standard deviations from the mean, displaying a slight high bias. All data for Pb are within -3 standard deviations from the mean, displaying a slight low bias. For both Au and Ag, one data point is above

+3 standard deviations from the mean, and the remaining data points are below three standard deviations from the mean certified value. A slight high bias was also noted for Au and Ag for this CRM.

The majority of data points for the CDN-ME-11 CRM are within ±2 standard deviations from the mean certified value. All data points for Zn are within +2 standard deviations from the mean, displaying a slight high bias. All data points for Pb fell within -3 standard deviations from the mean, displaying a slight low bias. For both Au and Ag, one data point is above +3 standard deviations from the mean, and the remaining data points are within three standard deviations from the mean certified value. A slight high bias was also noted for Au and Ag for this CRM.

11.1.1.6.2 Blanks

Huakan purchased blanks consisting of pulverized river rock (predominantly granite) from CDN, for use in the 2010 to 2012 drilling programs. CDN's assaying of the blank material found it to contain <0.01 g/t Au. Blanks were inserted into the sample stream at a rate of 1 in 20.

All data points for Au, for 2010/2011 and 2012, and Ag, for 2010/2011, were below the upper threshold of three times the detection limit for the element in question, which was the upper threshold set for monitoring blank results. There were four outliers (out of a total of 40 data points) observed for Ag for the 2012 data. For the 2010/2011 drilling program, Pb returned an average value of 0.002% with a standard deviation of 0.0006%. Zn returned an average value of 0.005% with a standard deviation of 0.0005%. For the 2012 drilling program, Pb returned an average value of 0.001% with a standard deviation of 0.0008. Zn returned an average value of 0.006% with a standard deviation of 0.0014%. All results indicate no contamination present at the analytical level.

11.1.1.6.3 Duplicates

Field duplicates were implemented as part of the QA/QC sampling protocol for both the 2010/11 and 2012 drilling programs, in order to quantify precision (reproducibility) of analytical results at the field level. Drill core duplicates were inserted into the sample stream at a rate of 1 in 20. A duplicate sample consisted of a 50% split of the numbered sample interval immediately preceding the duplicate sample.

In addition, the QP examined the laboratory coarse reject duplicates and pulp duplicates for Au, Ag, Pb and Zn for the 2010/2011 program. The coarse reject data set contained on average 27 pairs, and the pulp data set contained 239 pairs for Au, 95 pairs for Ag, 100 pairs for Pb and 104 pairs for Zn. Simple scatter graphs for all elements were plotted for all available data. Precision was observed to improve steadily from the core duplicates through to the pulp duplicates. The precision at the pulp duplicate level for all four metals was excellent, with a 1:1 ratio.

11.1.1.7 Comment on Sample Preparation Analyses and Security

It is the QP's opinion that the sampling preparation, security and analytical procedures employed by Huakan were satisfactory to support the current mineral resource estimate.

11.2 Rokmaster Core Sampling

A total of 3,011 split drill core samples from the 2020-2022 diamond drill programs were collected by and analyzed for Rokmaster. A total of 516 QA/QC samples were dispersed throughout the sample sequence. Sampling was carried out where visual sulphide concentrations were observed beyond non-mineralized host-rocks.

Sample intervals were generally <0.5 m where stronger sulphide concentrations were observed and ranged between 0.5 to 1.0 m intervals. Locally, narrower sample intervals ranged between 0.25 to 0.50 m where intervals with massive veins were observed. Throughout broad intervals of disseminated mineralization sample widths of 1.5 to 2.0 m were used locally.

The following summary details the sampling procedures and steps taken during the 2020-2022 drill program by Rokmaster:

- Drill core was first cleaned, organized, and photographed.
- Geotechnical logging was undertaken by a trained technician.
- Drill core boxes were labelled using scribed aluminium tags.
- Drill core logging and sample selection was performed by the site geologists.
- In areas of RRMZ mineralization, sampling intervals were determined by similar sulphide abundance.
- Sampling was carried out beyond the limits of the RRMZ both into barren hanging wall and footwall rocks.
- Every 10th sample was alternatively designated as a lab duplicate or a CRM (i.e., a duplicate every 20th sample and CRM every 20th sample). Blank samples consisting of white landscape marble were strategically inserted following samples with high sulphide content.
- Drill core was logged, sampled, and stored on-site.
- The logging geologist would staple a sample tag to the drill core box above the sample interval and indicate the start and end point of each sample on the drill core with a crayon.
- The drill core was cut longitudinally in half, bisecting fabric, or vein material evenly.
- Technicians were instructed to place the same side of drill core back into the drill core box for every sample and the other side into a labelled clean plastic sample bag that was then sealed.

11.3 Bulk Density Determinations

Rokmaster supplied the QPs with a total of 772 bulk density measurements taken on-site from drill core by Huakan and Rokmaster personnel between 2010 and 2022. Measurements were carried out by competent company geological staff utilizing the wet immersion technique. Representative samples were selected from dry halved drill core from within known mineralized zones and the margins of these zones of mineralization. The dry weight of the drill core sample was measured, and then the volume of displaced water from submerged drill core determined. Bulk density was calculated from the ratio of the dry weight of the drill hole core to the volume of the displaced water. The average bulk density of the supplied bulk density data is 3.19 t/m^3 and the median bulk density is 2.88 t/m^3. A compilation of 55 bulk density determinations, independently sampled by P&E site visit Qualified Persons between 2012 and 2023 and measured at AGAT and Actlabs, compared relatively well with an average bulk density of 3.08 t/m^3 and a median bulk density of 2.95 t/m^3.

11.4 Sample Security and Storage

Drill core sample bags were placed in address-labelled rice bags, sealed with security tag nylon cable ties and transported from Revelstoke, B.C., by Rokmaster employees to MSALABS Ltd. (MSA) of Langley, BC. Sample shipment records were maintained. Records were also kept of sample preparation, analysis requested, and the person intended to receive the results.

Drill core sampling was carried out by use of a diamond blade drill core saw. The drill core sampler was highly experienced and sampling work was closely monitored by on-site drill core logging geologists.

11.5 Analytical and Test Laboratories

Analytical work for the 2020-2022 drill program was carried out by MSA of Langley, BC. At the time of analysis, MSA has met the requirements of AC89, IAS Accreditation Criteria for Testing Laboratories, and has demonstrated compliance with ISO/IEC Standard 17025:2017, General requirements for the competence of testing and calibration laboratories. This organization is accredited to provide the services specified in the scope of accreditation. MSA is independent of Rokmaster.

Rokmaster has archived all the original assay certificates for the 2007, 2010/2011, 2012, and 2020-2022 drill programs.

11.6 Sample Preparations and Analysis

MSA's sample preparation and analysis procedures were as follows:

- Samples were dried and crushed to 70% passing 2 mm, then 250 g was split and pulverized to 85% passing 75 µm (PRP-910). During the 2021 surface drilling program, the split sized was increased to 500 g with pulverizing to 85% passing 75 µm (PRP-915).
- Samples analyzed for Au are fire assayed along with CRMs using appropriate fluxes. A 30 g fusion with AAS finish (FAS-211) was used for the majority of the samples. During the 2021 surface drilling program the fusion size was increased to 50 g with AAS finish (FAS-221). Au detection limit on AA is 0.01-100 g/t. Any Au samples over 100 g/t are run using a gravimetric analysis protocol.
- For 30 element ICP-ES, samples were submitted for 4-acid digestion (ICP-240). Detection limits for each element are outlined in Figure 11-1.

Figure 11-1: Detection Limits for Analyses Undertaken at MSA

4-ACID DIGESTION

MULTI-ELEMENT ICP-ES (30 ELEMENTS)

DETECTION RANGE (IN % UNLESS OTHERWISE NOTED)						CODE
Ag	1 – 1,000 ppm	Cu	0.001 – 40	P	0.01 – 10	
Al	0.05 – 30	Fe	0.05 – 50	Pb	0.01 – 20	
As	0.005 – 10	K	0.1 – 30	S	0.05 – 10	
Ba	0.005 – 5	La	0.005 – 5	Sb	0.005 – 5	
Be	0.001 – 1	Li	0.005 – 5	Sr	0.01 – 10	
Bi	0.005 – 5	Mg	0.05 – 50	Ti	0.05 – 30	ICP-240
Ca	0.05 – 50	Mn	0.01 – 10	Tl	0.005 – 5	
Cd	0.001 – 1	Mo	0.001 – 5	V	0.001 – 10	
Co	0.001 – 5	Na	0.05 – 30	W	0.01 – 5	
Cr	0.001 – 10	Ni	0.001 – 10	Zn	0.01 – 40	

Source: MSA Labs (2021).

11.7 Quality Assurance and Quality Control

Rokmaster implemented and monitored a thorough quality assurance/quality control (QA/QC or QC) program for the diamond drilling undertaken at the Revel Ridge Project over the 2020 to 2022 period. QC protocol included the insertion of QC samples into every batch submitted for analysis, including CRMs, blanks and field duplicates. CRMs and field duplicates were inserted approximately every 1 in 20 samples. In addition, blanks were strategically placed after observed sulphide mineralization.

11.7.1 Certified Reference Materials

11.7.1.1 2020 – 2021 Drilling

CRMs were inserted into the sample stream approximately every 20 samples. Two CRMs were used during the 2020/21 drill program to monitor accuracy: the CDN-ME-1807 and CDN-ME-1808 CRMs. Both CRMs are certified for Au, Ag, Cu, Pb and Zn and were purchased from CDN of Langley, BC.

Criteria for assessing CRM performance are based as follows. Data falling within ±2 standard deviations from the accepted mean value pass. Data falling outside ±3 standard deviations from the accepted mean value, or two consecutive data points falling between ±2 and ±3 standard deviations on the same side of the mean, fail.

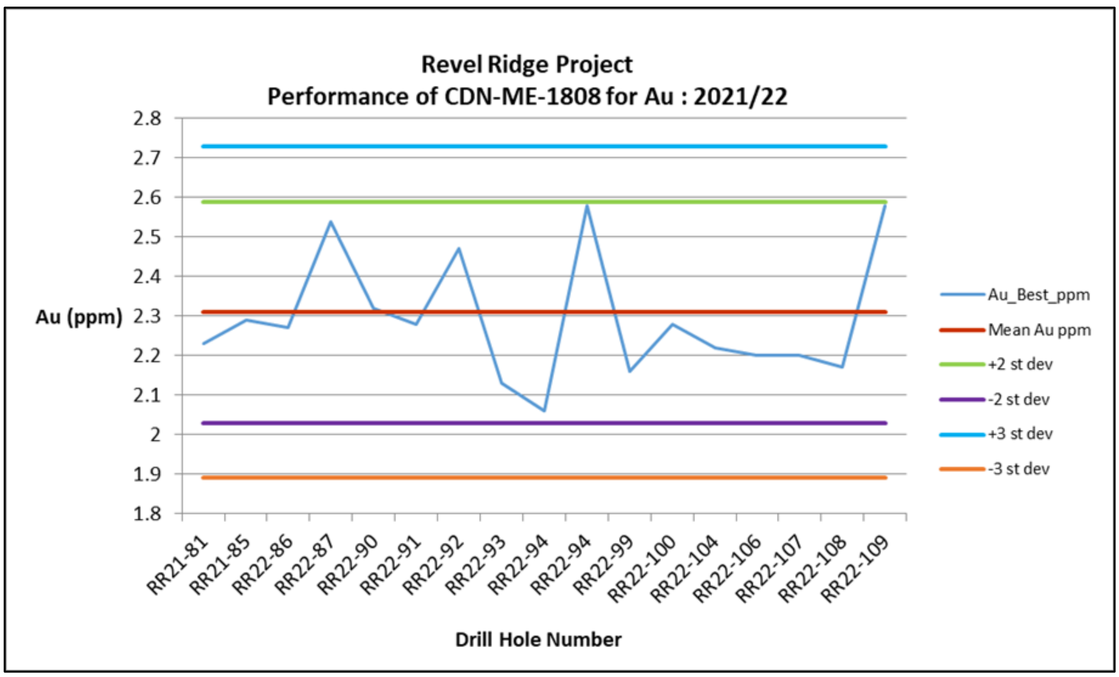
There were 48 data points for both the CDN-ME-1807 and CDN-ME-1808 CRMs. Both CRMs performed well, with the majority of data points falling within ±2 standard deviations from the mean certified value. There was a single failure noted for copper, which fell just above +3 standard deviations from the mean certified value. There were two samples falling -3 standard deviations from the mean certified value for the CDN-ME-1808 CRM. However, one failure for Ag, Cu, Pb and Zn (sample P301020) was swapped at the lab with the following sample (sample P301021) and not a true failure. The other result fell just below the acceptable range for Pb only. Slight low biases were noted for Pb in the CDN-MS-1808 CRM and for copper in the CDN-MS-1807 CRM. The QP considers that the CRMs demonstrate acceptable accuracy in the 2020/21 data.

11.7.1.2 2021 – 2022 Drilling

CRMs were again inserted into the sample stream approximately every 20 samples. Three CRMs were used during the 2021/22 drilling at the Project: the CDN-ME-1808, CDN-ME-1902 and CDN-ME-1903 CRMs. All three CRMs are certified for Au, Ag, Cu, Pb and Zn and were again purchased from CDN.

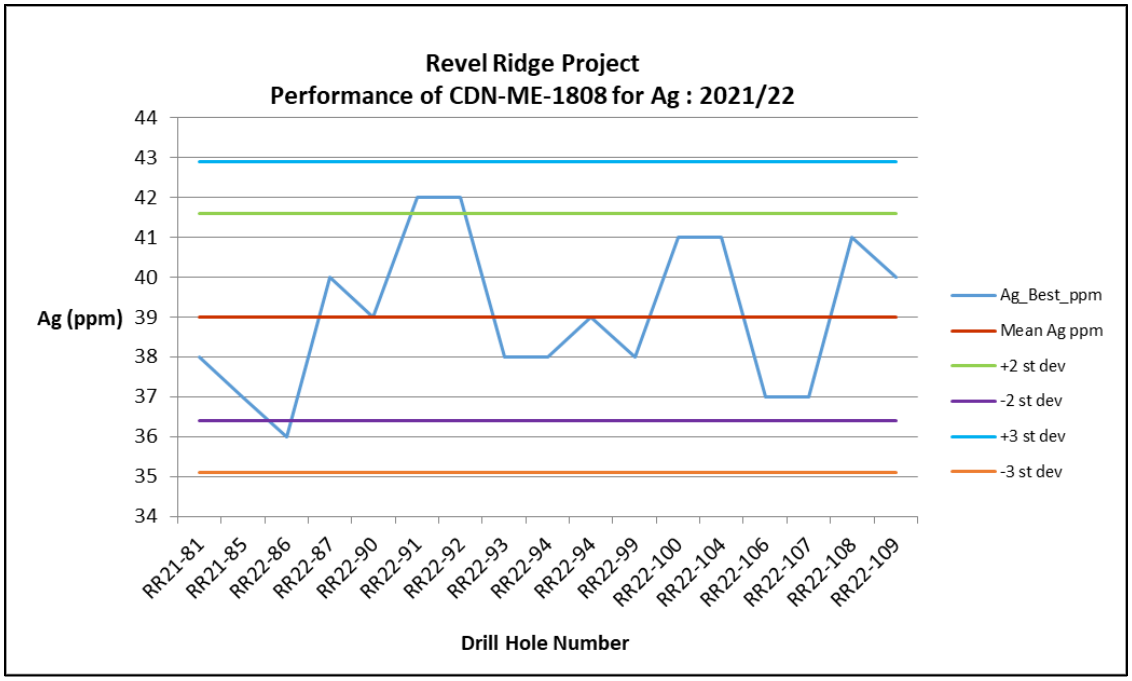
Criteria for assessing CRM performance are as described in Section 11.7.1.1 of this technical report. There were 17 data points for the CDN-ME-1808 CRM, 20 for the CDN-ME-1902 and five for the CDN-ME-1903. All CRMs performed well with no failures recorded, and the majority of data points falling within ±2 standard deviations from the mean certified value. Results for all CRMs are presented in Figure 11-2 to Figure 11-16.

Figure 11-2: Performance of CDN-ME-1808 CRM for Au for 2021/22 Drilling



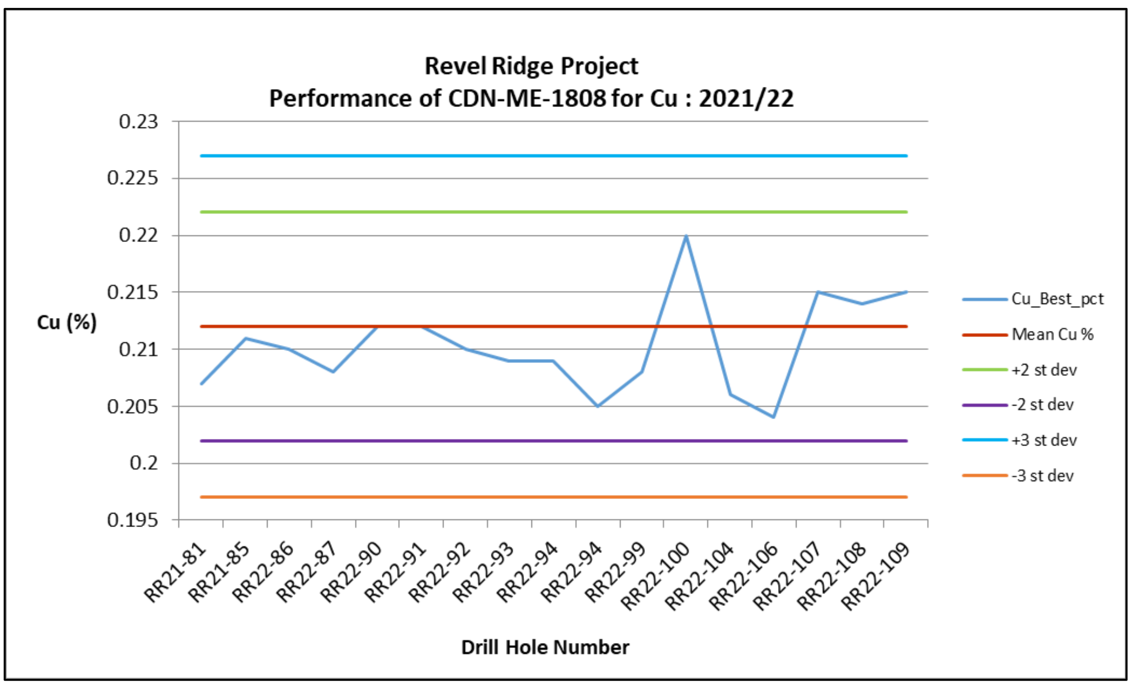
Source: P&E (2023).

Figure 11-3: Performance of CDN-ME-1808 CRM for Ag for 2021/22 Drilling



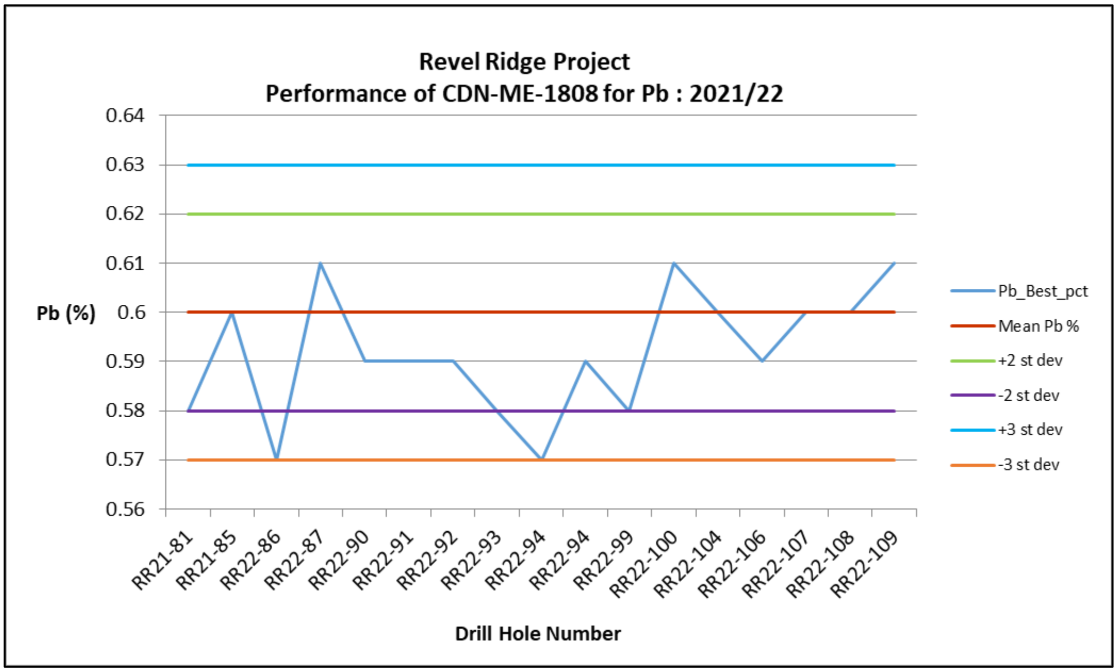
Source: P&E (2023).

Figure 11-4: Performance of CDN-ME-1808 CRM for Copper for 2021/22 Drilling



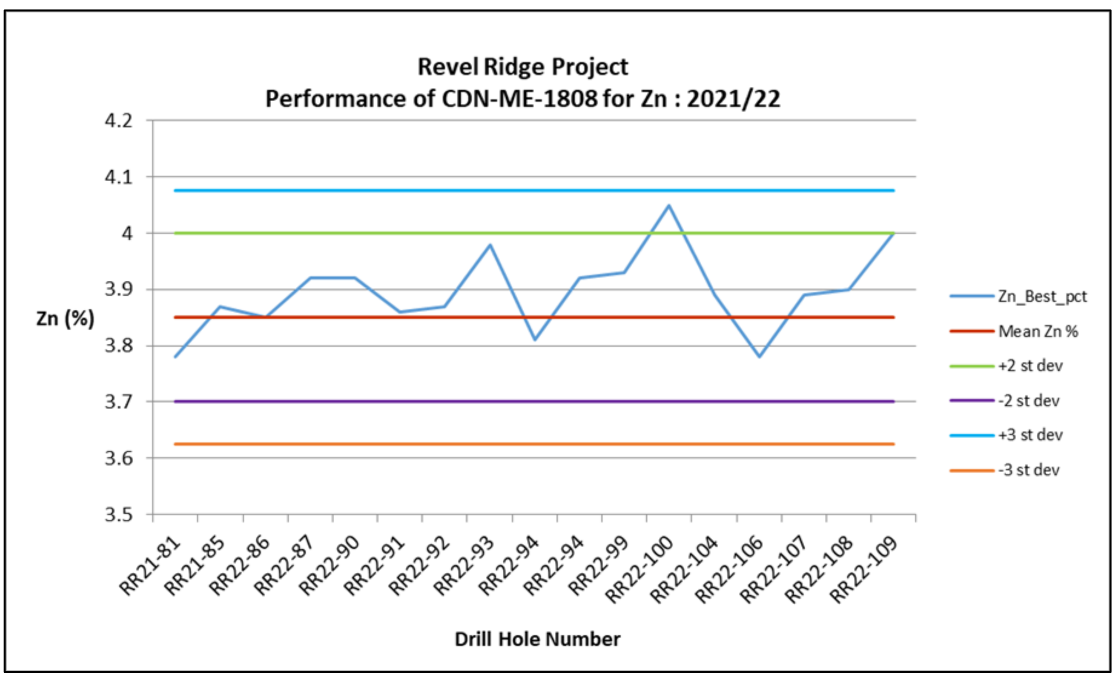
Source: P&E (2023).

Figure 11-5: Performance of CDN-ME-1808 CRM for Pb for 2021/22 Drilling



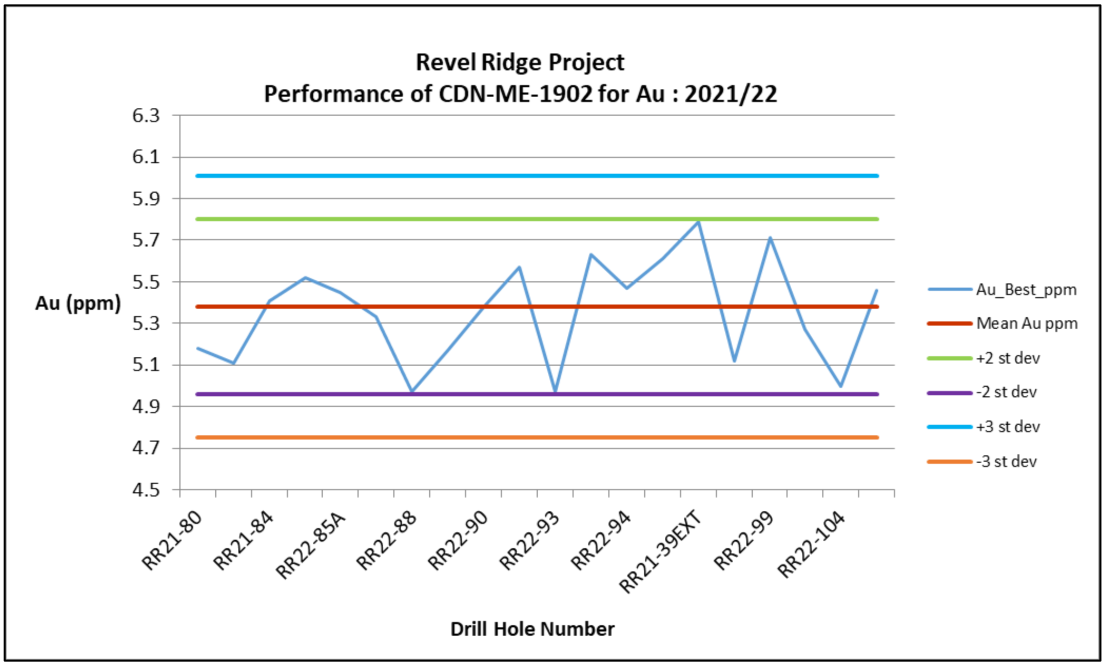
Source: P&E (2023).

Figure 11-6: Performance of CDN-ME-1808 CRM for Zn for 2021/22 Drilling



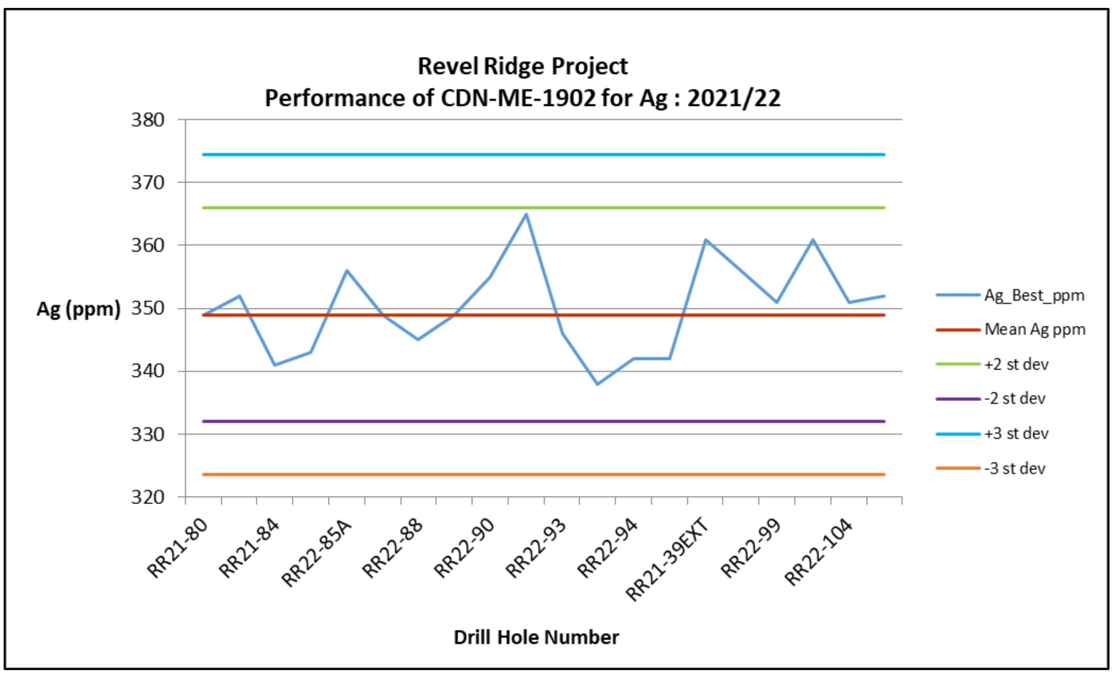
Source: P&E (2023).

Figure 11-7: Performance of CDN-ME-1902 CRM for Au for 2021/22 Drilling



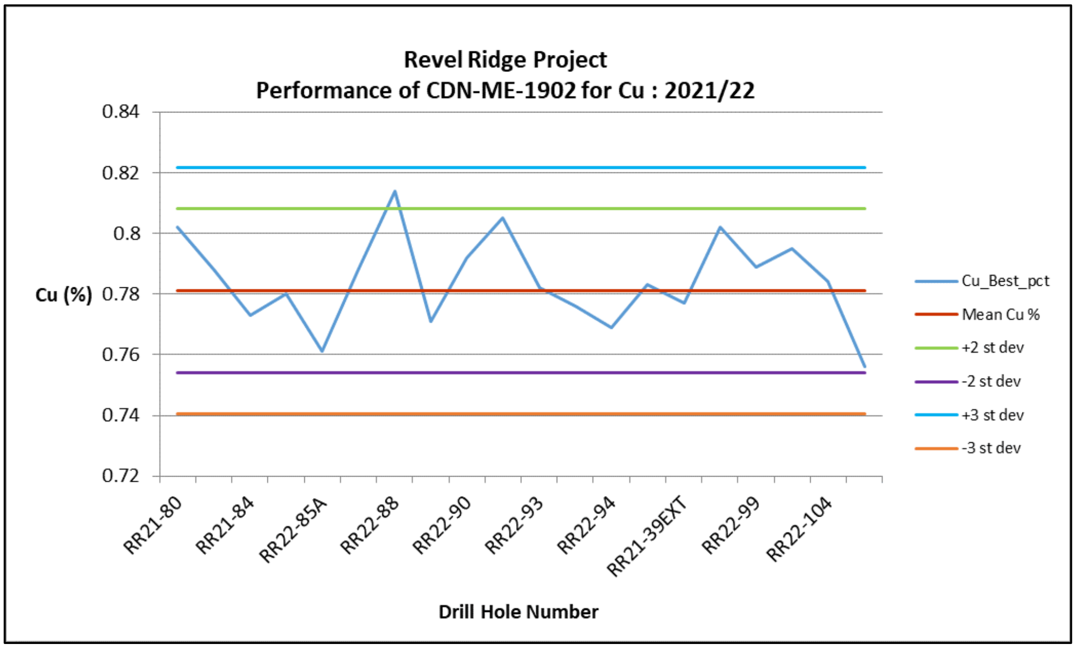
Source: P&E (2023).

Figure 11-8: Performance of CDN-ME-1902 CRM for Ag for 2021/22 Drilling



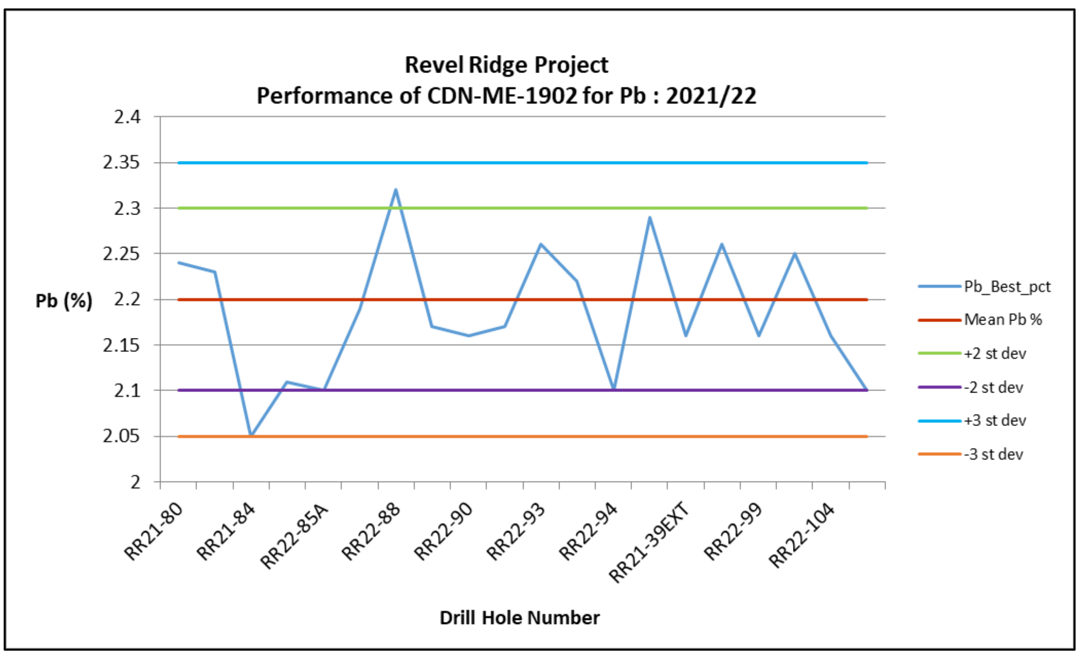
Source: P&E (2023).

Figure 11-9: Performance of CDN-ME-1902 CRM for Copper for 2021/22 Drilling



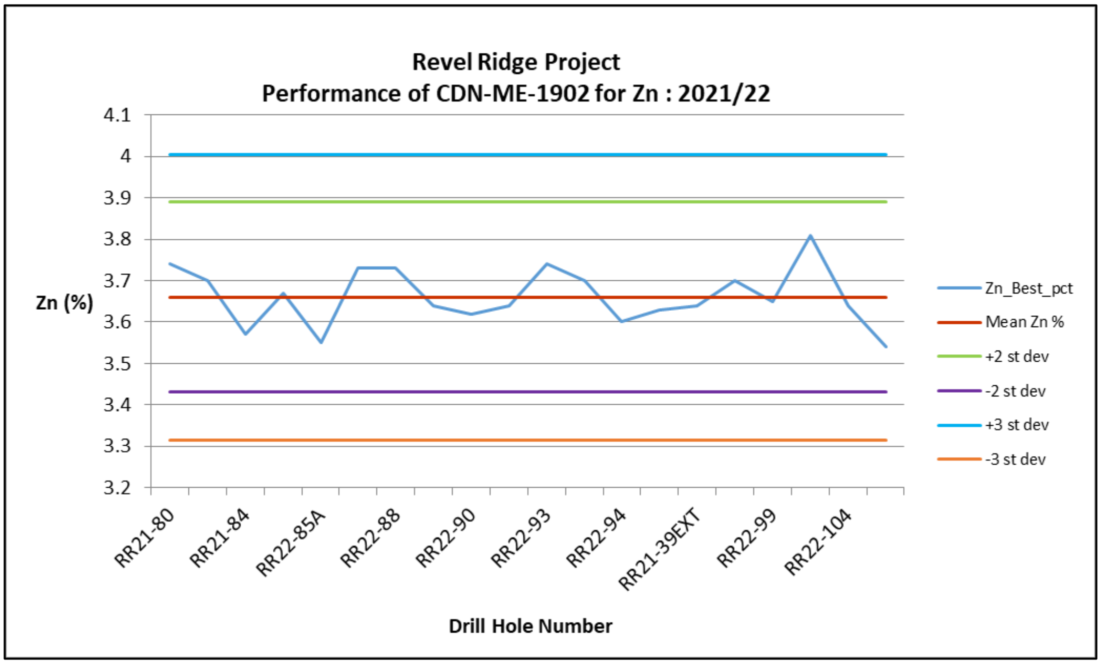
Source: P&E (2023).

Figure 11-10: Performance of CDN-ME-1902 CRM for Pb for 2021/22 Drilling



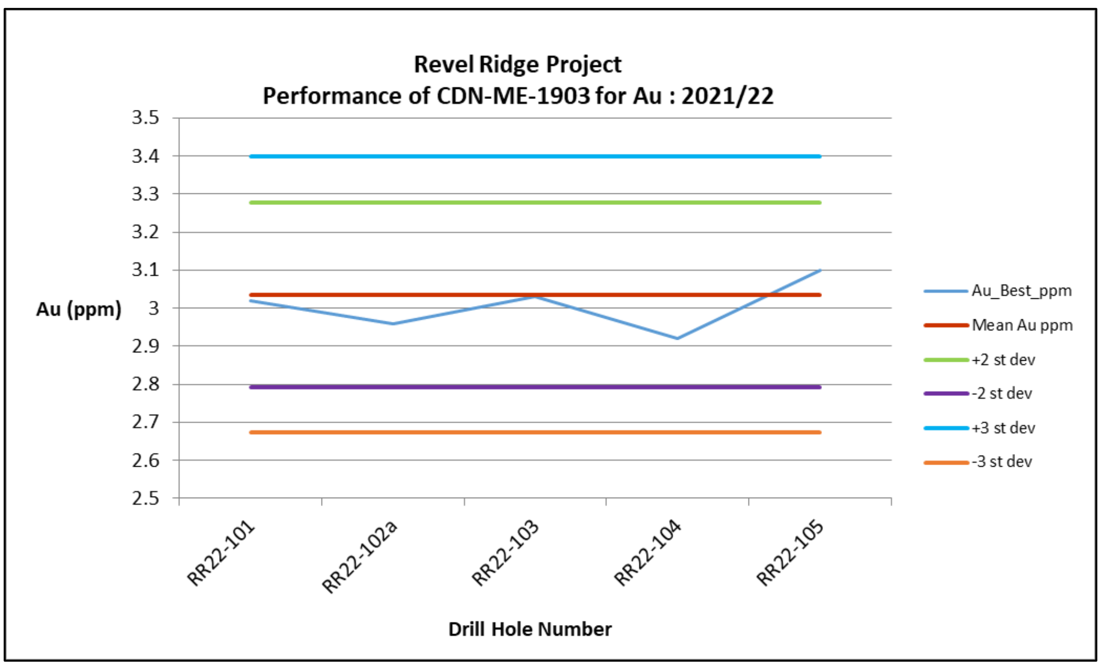
Source: P&E (2023).

Figure 11-11: Performance of CDN-ME-1902 CRM for Zn for 2021/22 Drilling



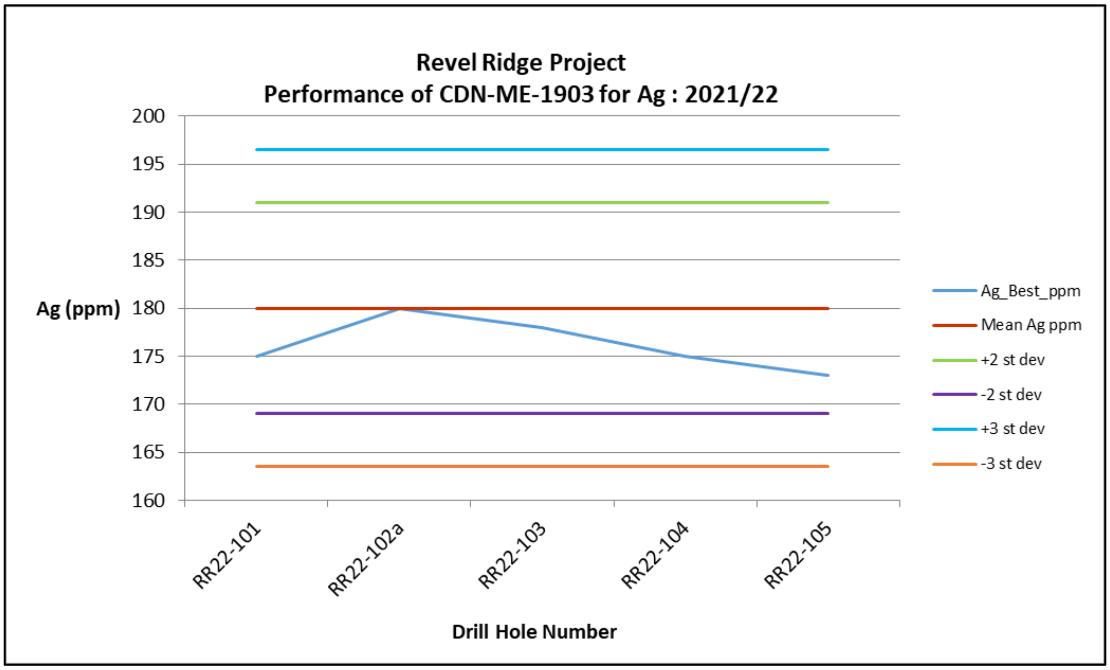
Source: P&E (2023).

Figure 11-12: Performance of CDN-ME-1903 CRM for Au for 2021/22 Drilling



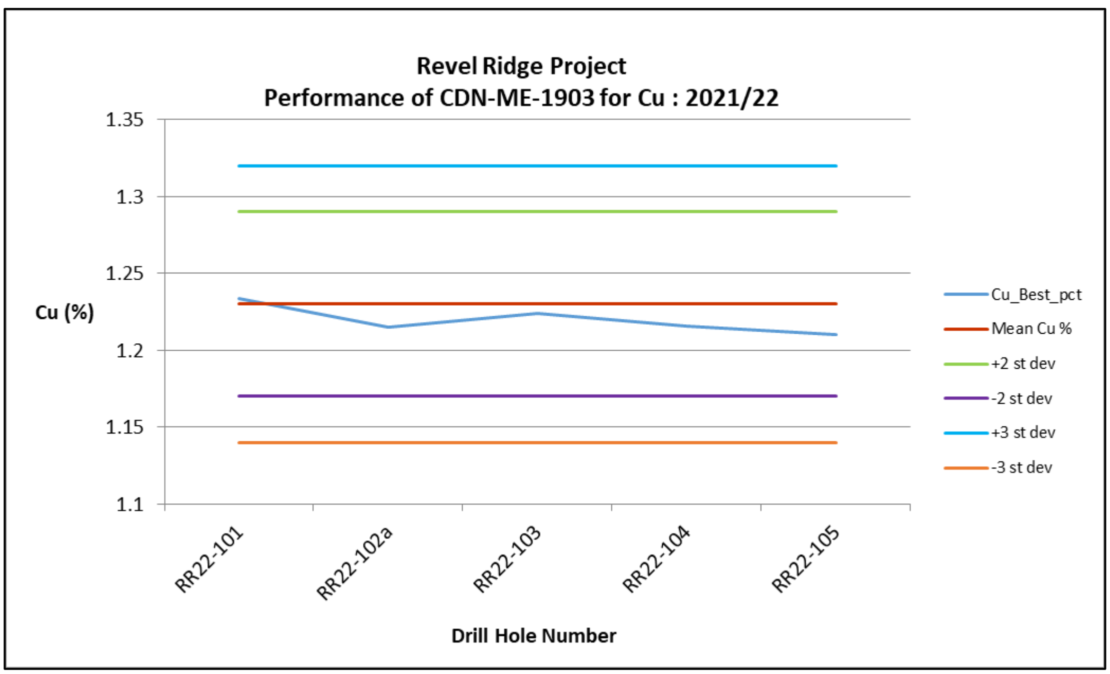
Source: P&E (2023).

Figure 11-13: Performance of CDN-ME-1903 CRM for Ag for 2021/22 Drilling



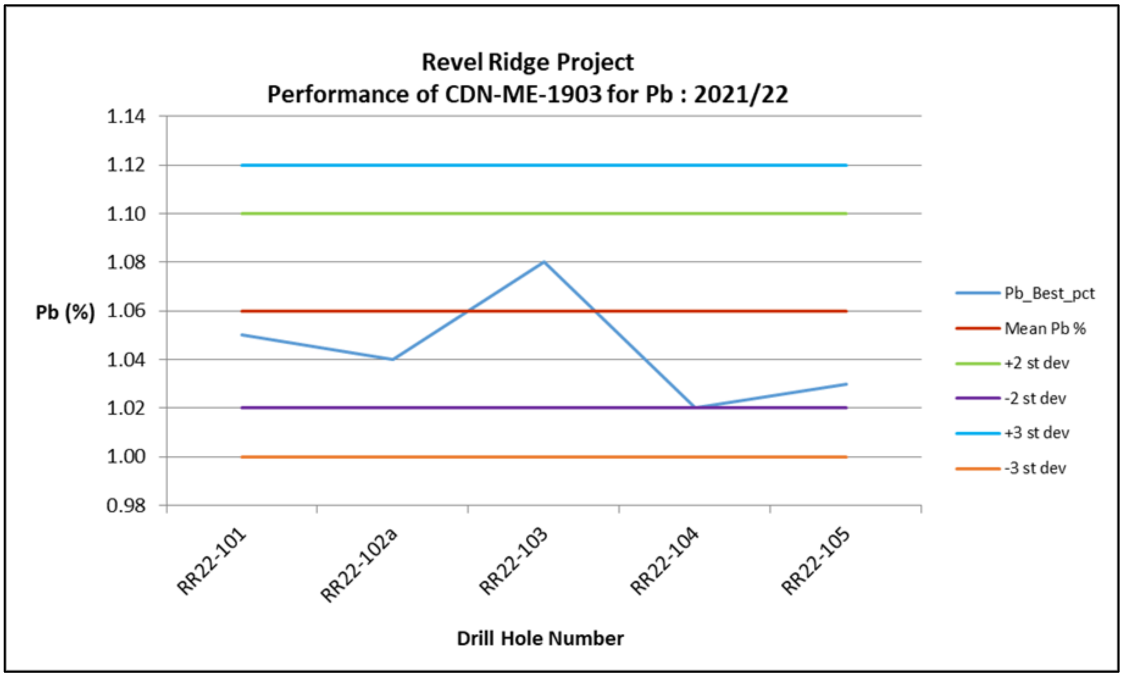
Source: P&E (2023).

Figure 11-14: Performance of CDN-ME-1903 CRM for Copper for 2021/22 Drilling



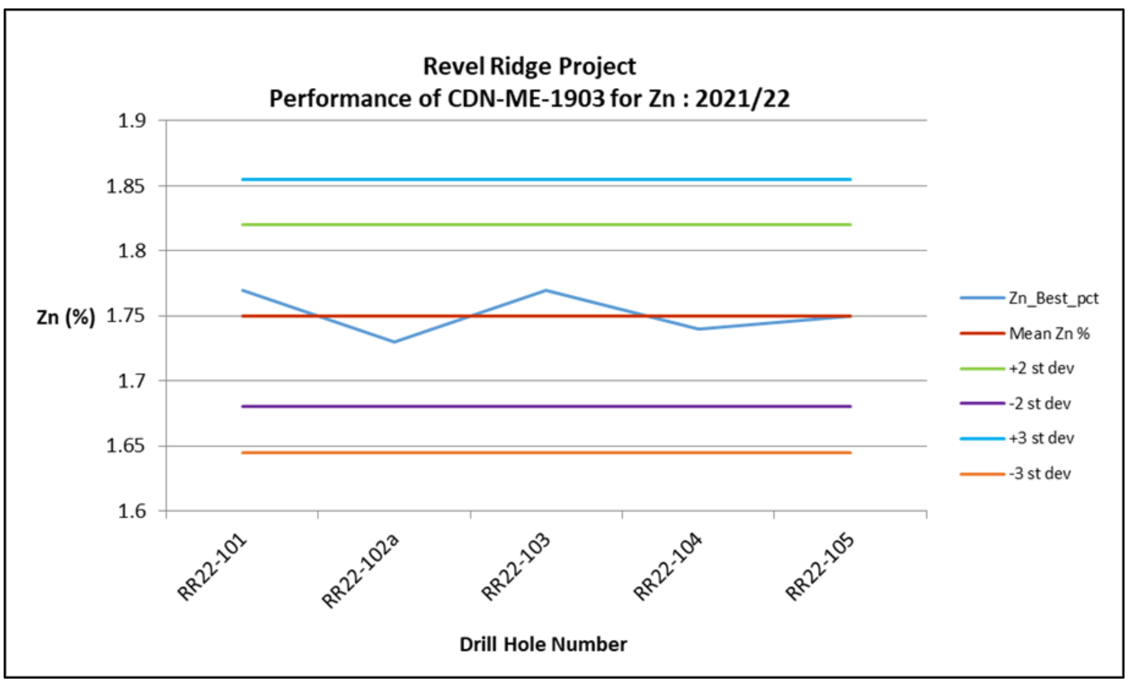
Source: P&E (2023).

Figure 11-15: Performance of CDN-ME-1903 CRM for Pb for 2021/22 Drilling



Source: P&E (2023).

Figure 11-16: Performance of CDN-ME-1903 CRM for Zn for 2021/22 Drilling



Source: P&E (2023).

The QP of this section considers that the CRMs demonstrate reasonable accuracy in the 2021/22 data.

11.7.2 Blanks

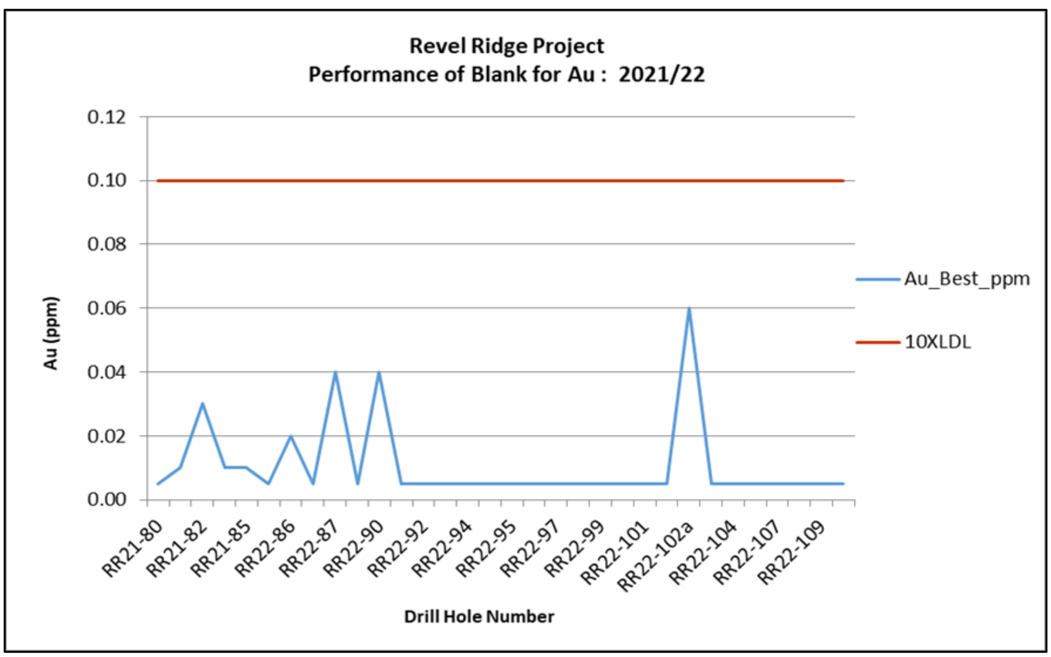
11.7.2.1 2020 – 2021 Drilling

Blank samples, composed of white landscape marble, were strategically placed after observed sulphide mineralization, at a rate of one blank for every 22 samples of drill core. All blank data for Au, Ag, Cu, Pb and Zn were reviewed by the Qualified Person. A total of 75 data points were examined. An upper tolerance limit of ten times the detection limit was applied, and all data are within the set tolerance limits. The QP does not consider contamination to be an issue for the 2020/21 drill data.

11.7.2.2 2021 – 2022 Drilling

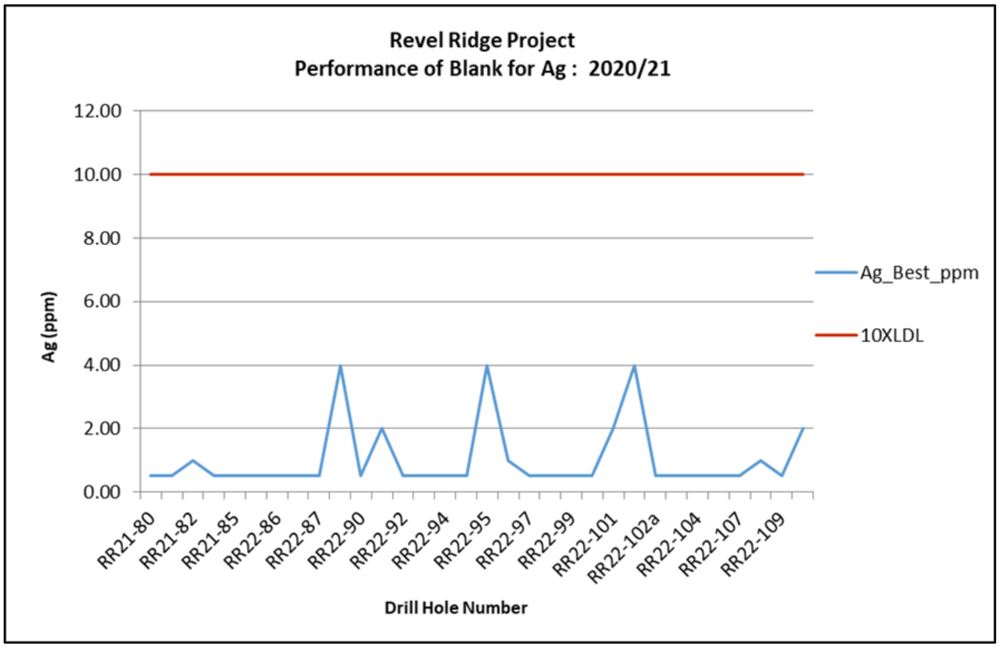
Blank samples, composed of white landscape marble, were strategically placed after observed sulphide mineralization, at a rate of around one blank for every 26 samples of drill core. All blank data for Au, Ag, Cu, Pb and Zn were graphed (Figure 11-17 to Figure 11-22). If the assayed value in the certificate was indicated as being less than detection limit, the value was assigned the value of half the detection limit for data treatment purposes. An upper tolerance limit of ten times the detection limit was set. There was a total of 32 data points to examine. All data plotted at or below the set tolerance limits and the QP does not consider contamination to be an issue for the 2021-2022 drill data.

Figure 11-17: Performance of Blanks for Au For 2021/22 Drilling



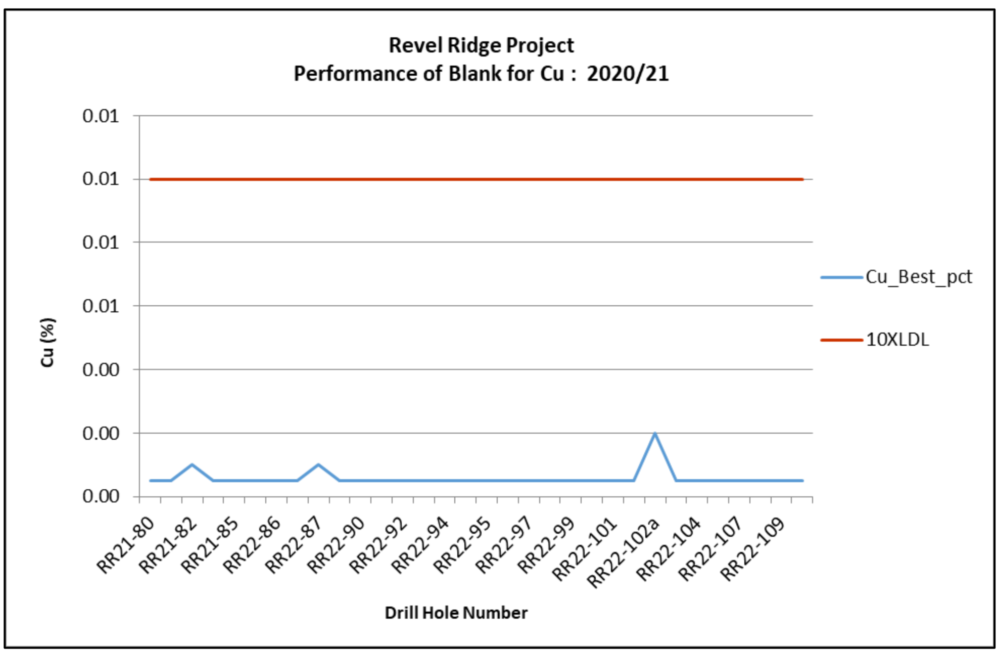
Source: P&E (2023).

Figure 11-18: Performance of Blanks for Ag For 2021/22 Drilling



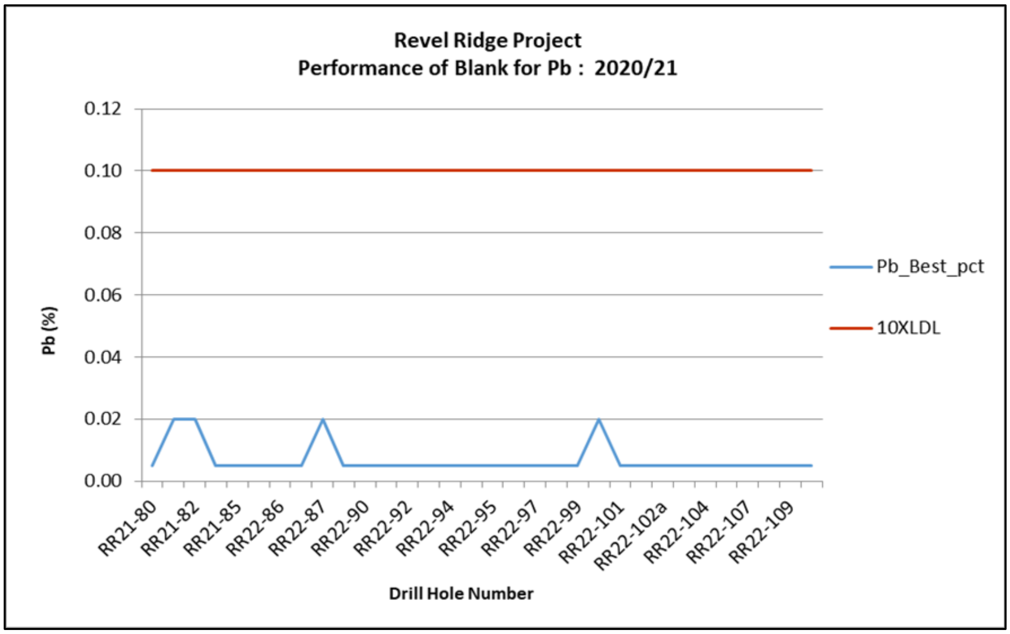
Source: P&E (2023).

Figure 11-19: Performance of Blanks for Copper For 2021/22 Drilling



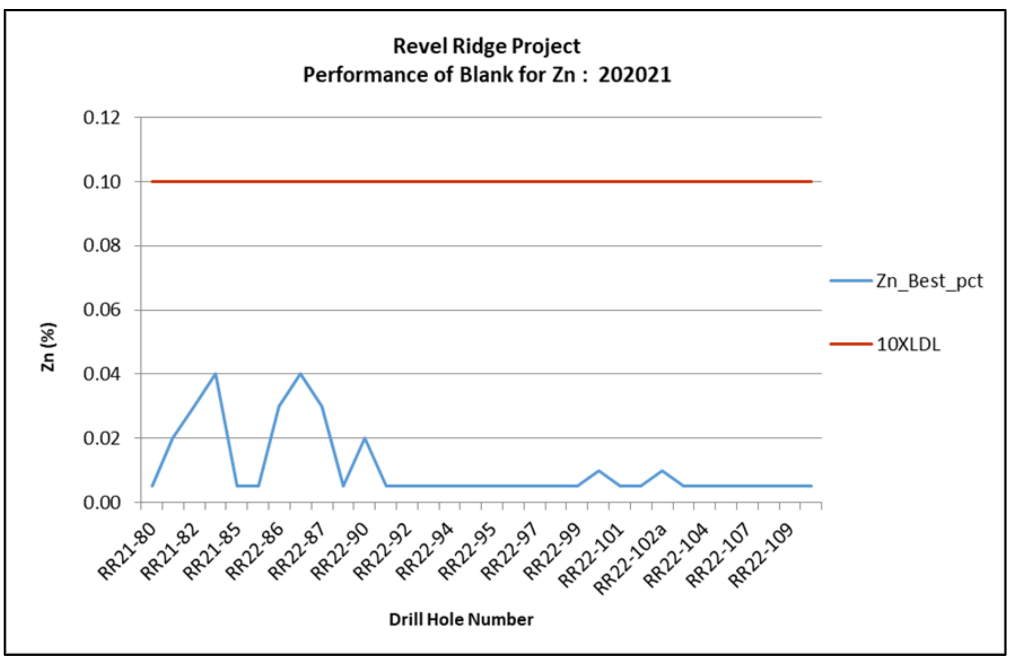
Source: P&E (2023).

Figure 11-20: Performance of Blanks for Pb For 2021/22 Drilling



Source: P&E (2023).

Figure 11-21: Performance of Blanks for Zn For 2021/22 Drilling



Source: P&E (2023).

11.7.3 Duplicates

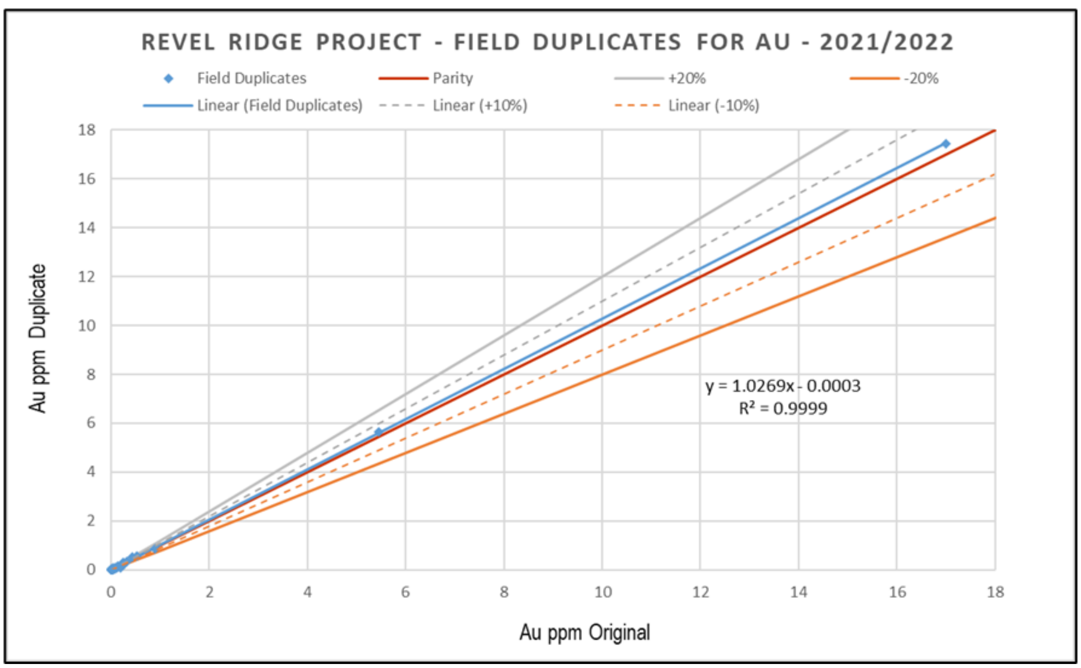
11.7.3.1 2020 – 2021 Drilling

Field duplicates were inserted at a rate of approximately one duplicate every 20 drill core samples. Field duplicate data for Au, Ag, Cu, Pb and Zn were examined by the QP for the 2020/21 drill program. There were 92 duplicate pairs in the dataset. Data were scatter graphed and R-squared values estimated for each element: Au returned an R-squared value of 0.759, Ag 0.762, Cu 0.938, Pb 0.976, and Zn 0.994. The QP considers the data to have acceptable precision at the field level for all elements.

11.7.3.2 2021 – 2022 Drilling

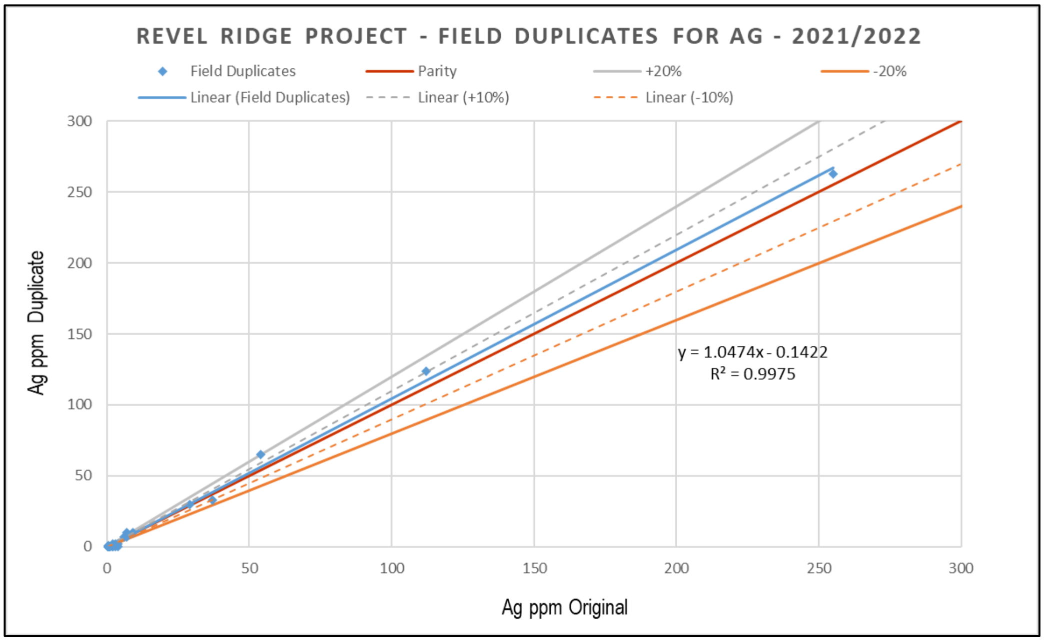
Field duplicates were again inserted at a rate of approximately one duplicate every 20 drill core samples. Field duplicate data for Au, Ag, Cu, Pb and Zn were examined by the QP for the 2021/22 drilling at the Project. There were 42 duplicate pairs in the dataset. Data were scatter graphed (Figure 11-22 through Figure 11-26) and R-squared values estimated for each element: Au returned an R-squared value of 1, Ag 0.999, Cu 0.994, Pb 0.998 and Zn 1. The QP considers the data to have acceptable precision at the field level for all elements.

Figure 11-22: Performance of Au Field Duplicates for 2021/22 Drilling



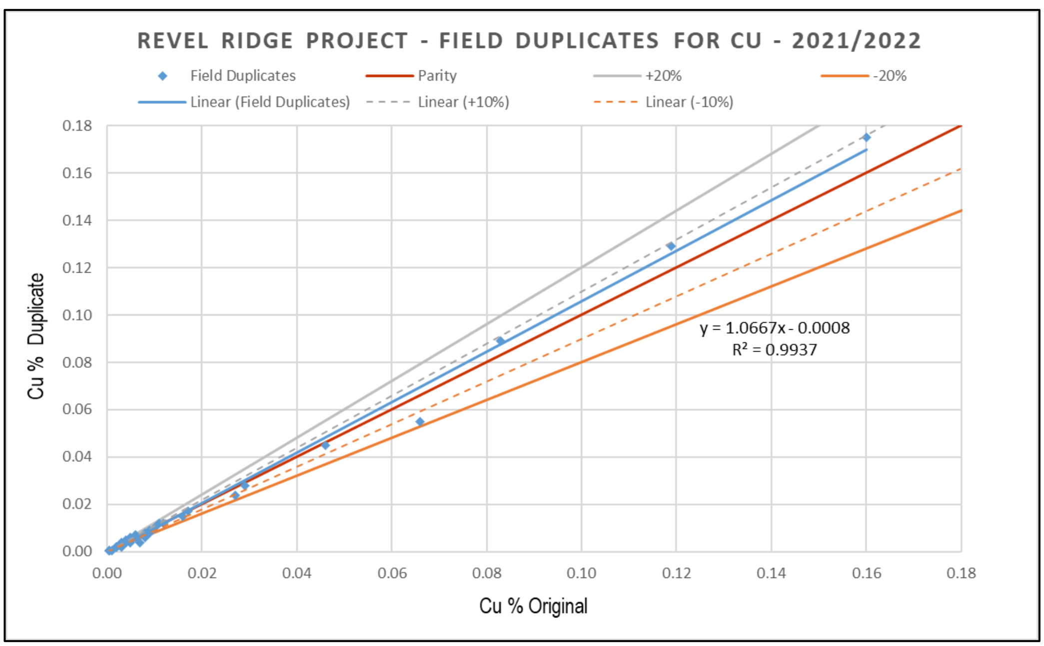
Source: P&E (2023).

Figure 11-23: Performance of Ag Field Duplicates for 2021/22 Drilling



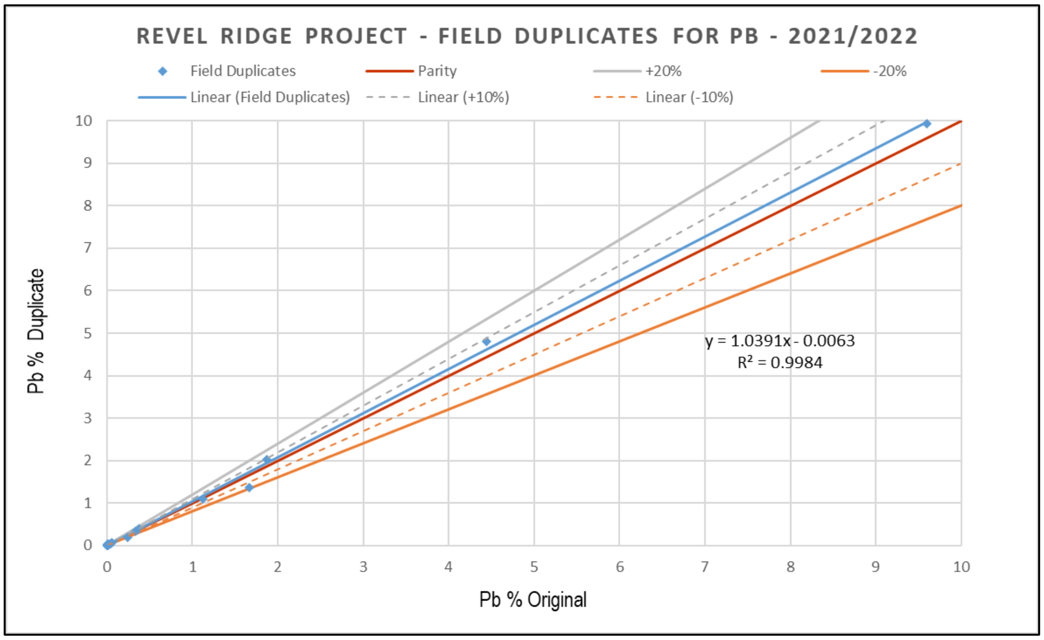
Source: P&E (2023).

Figure 11-24: Performance of Copper Field Duplicates for 2021/22 Drilling



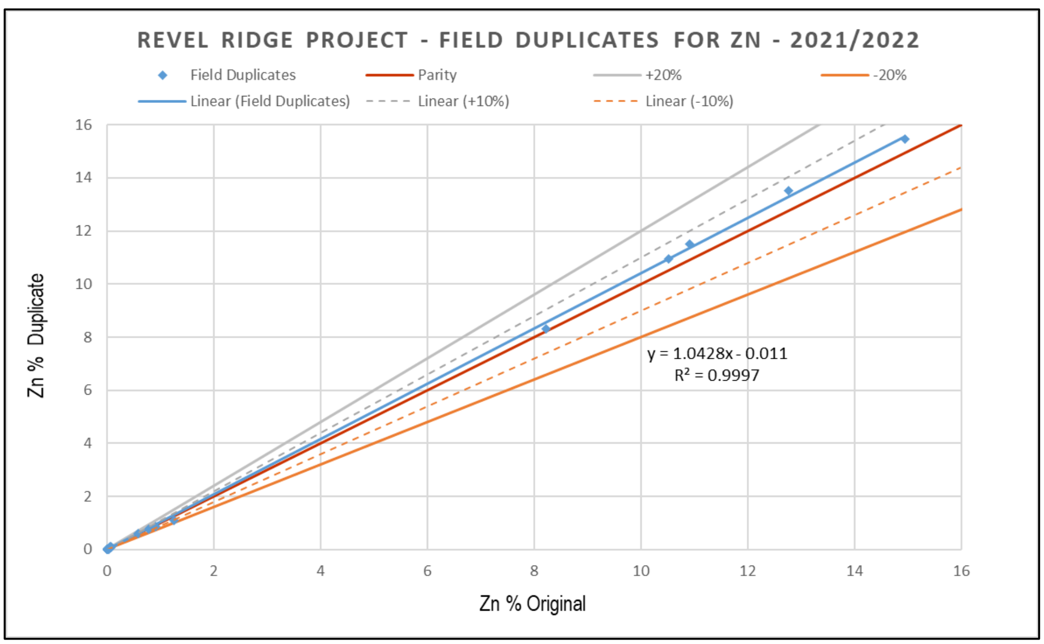
Source: P&E (2023).

Figure 11-25: Performance of Pb Field Duplicates for 2021/22 Drilling



Source: P&E (2023).

Figure 11-26: Performance of Zn Field Duplicates for 2021/22 Drilling



Source: P&E (2023).

11.7.4 Check Assaying

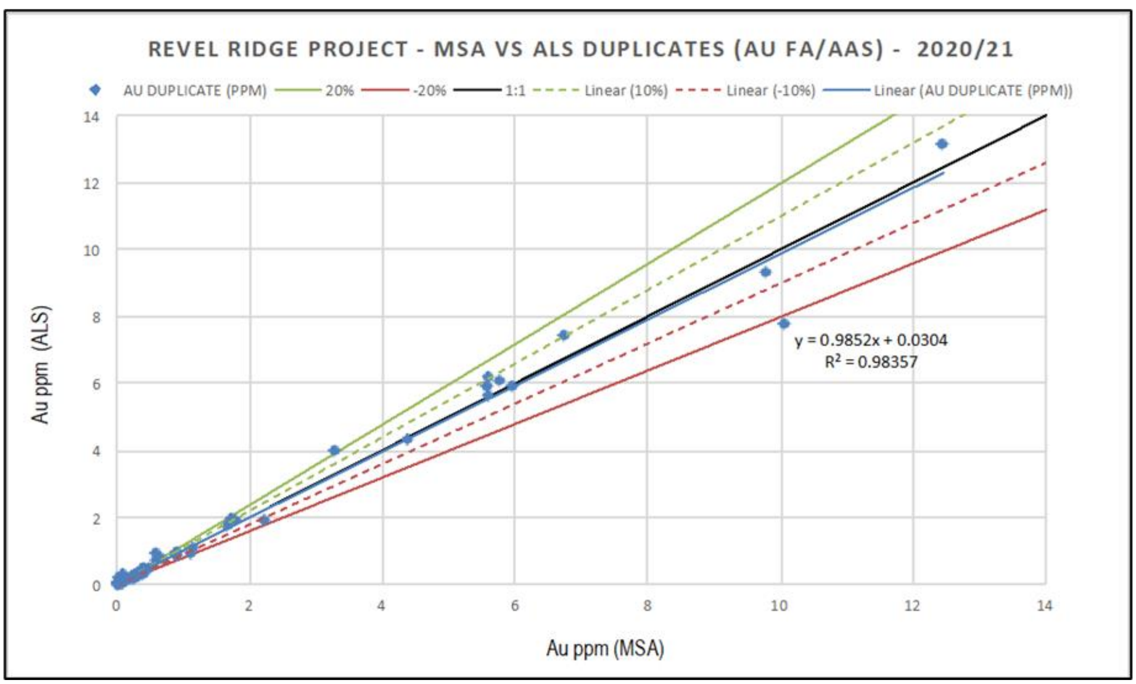
Rokmaster carried out an umpire sampling program of a selection of the 2020 and 2021 drill core samples, in early 2021. A total of 84 samples, selected from six drill holes, were sent to a secondary laboratory (ALS) to verify the primary laboratory (MSA) results. The samples submitted to ALS included 69 pulp samples from drill core, five CRMs, six blanks and four duplicate pulps from original MSA lab duplicate samples.

The QP has reviewed the umpire assay results for the 2020 and 2021 programs, and comparison was made between the primary lab results and the umpire lab results with the aid of line graph and scatter plots (Figure 11-27 to Figure 11-31).

Pb and Zn values are reasonably similar between labs. Variability is expected in Au concentrations between labs, however, overall concentrations are quite similar with an average mean difference of 3.8%. ALS is generally reporting higher Ag results compared to MSA, particularly obvious in lower-grade samples (from 5 to 10 g/t Ag). This is likely related to the higher lower detection limit of 1.0 g/t Ag at MSA, compared to 0.01 g/t Ag at ALS. The QP reviewed the QC samples analyzed with the umpire assays and no material issues were evident.

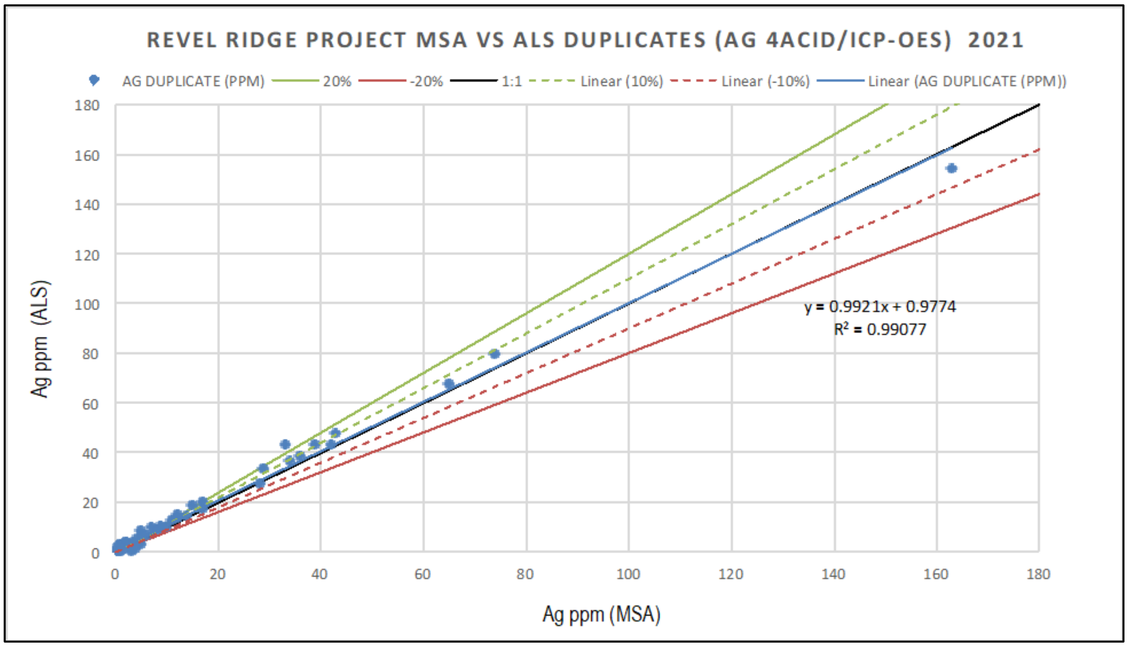
The data for ALS indicate no material biases between the umpire laboratory and analyses from the primary laboratory, MSA.

Figure 11-27: Performance of Au Umpire Assays for 2020/21 Drilling



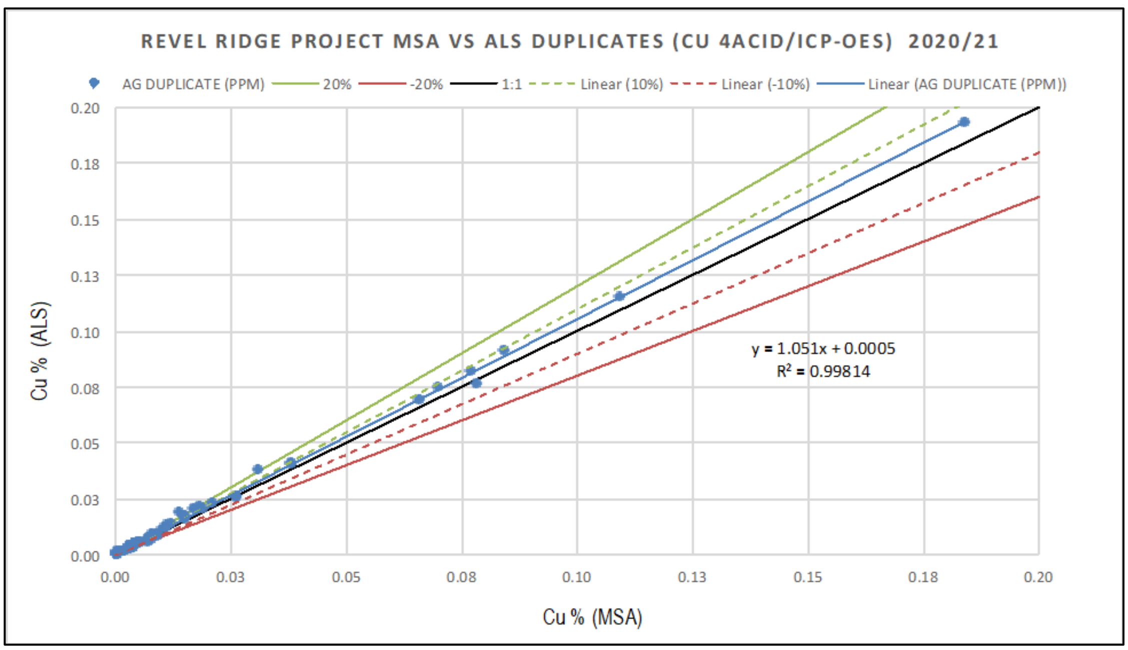
Source: P&E (2023).

Figure 11-28: Performance of Ag Umpire Assays for 2020/21 Drilling



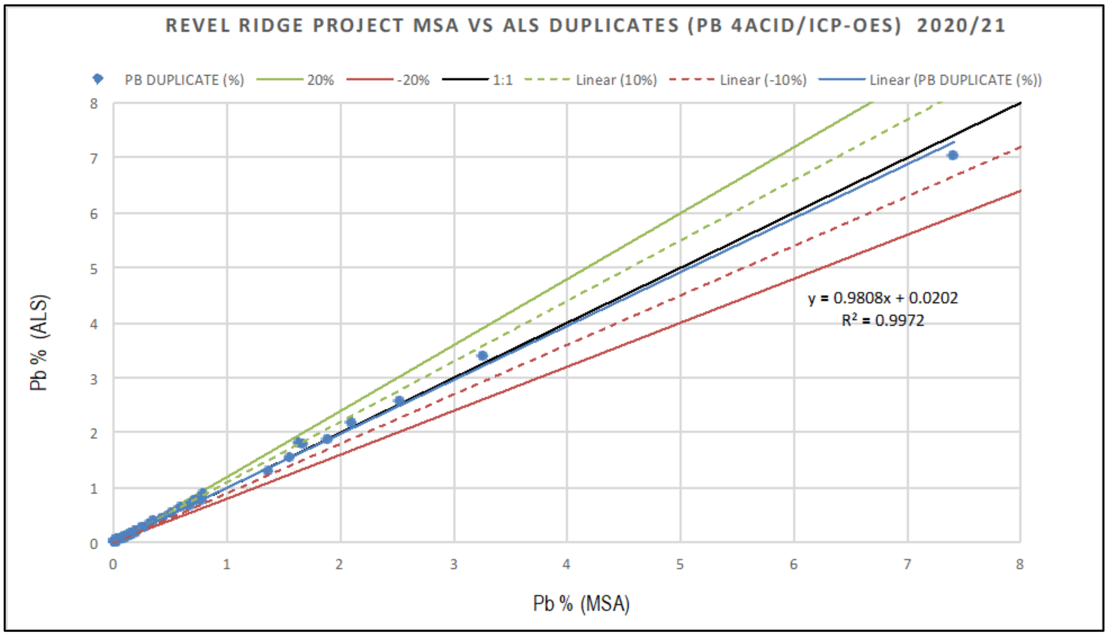
Source: P&E (2023).

Figure 11-29: Performance of Copper Umpire Assays for 2020/21 Drilling



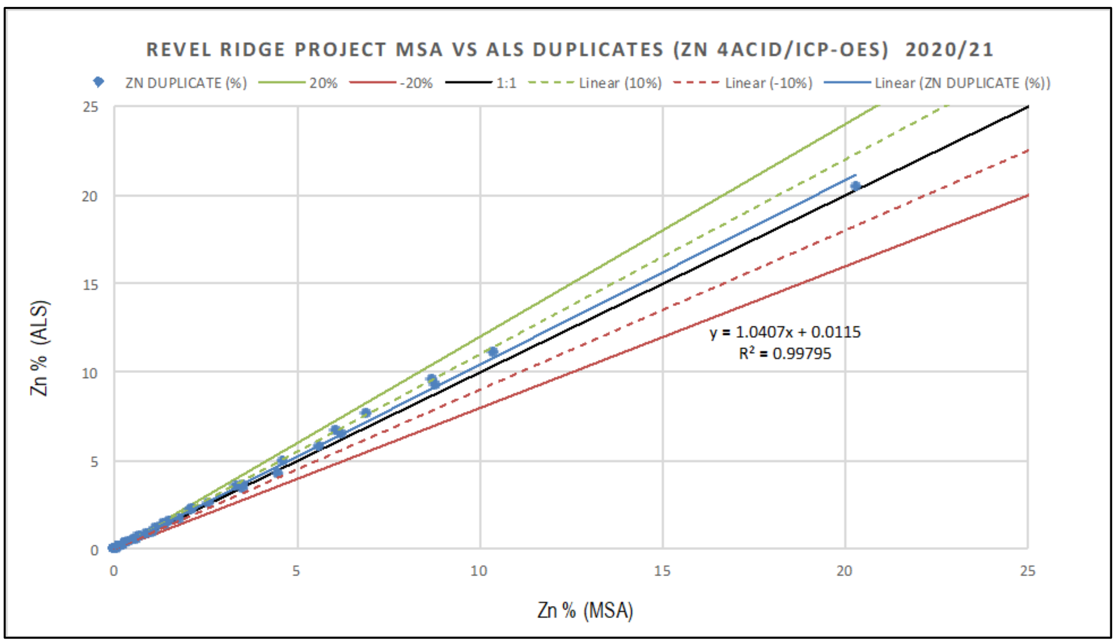
Source: P&E (2023).

Figure 11-30: Performance of Pb Umpire Assays for 2020/21 Drilling



Source: P&E (2023).

Figure 11-31: Performance of Zn Umpire Assays for 2020/21 Drilling



Source: P&E (2023).

11.8 Comments

It is the QP's opinion that the sample preparation, security, and analytical procedures employed by Huakan and Rokmaster for the Revel Ridge Project drill programs were adequate, and that the data are of good quality and satisfactory for use in the current MRE.

12 DATA VERIFICATION

12.1 Site Verification

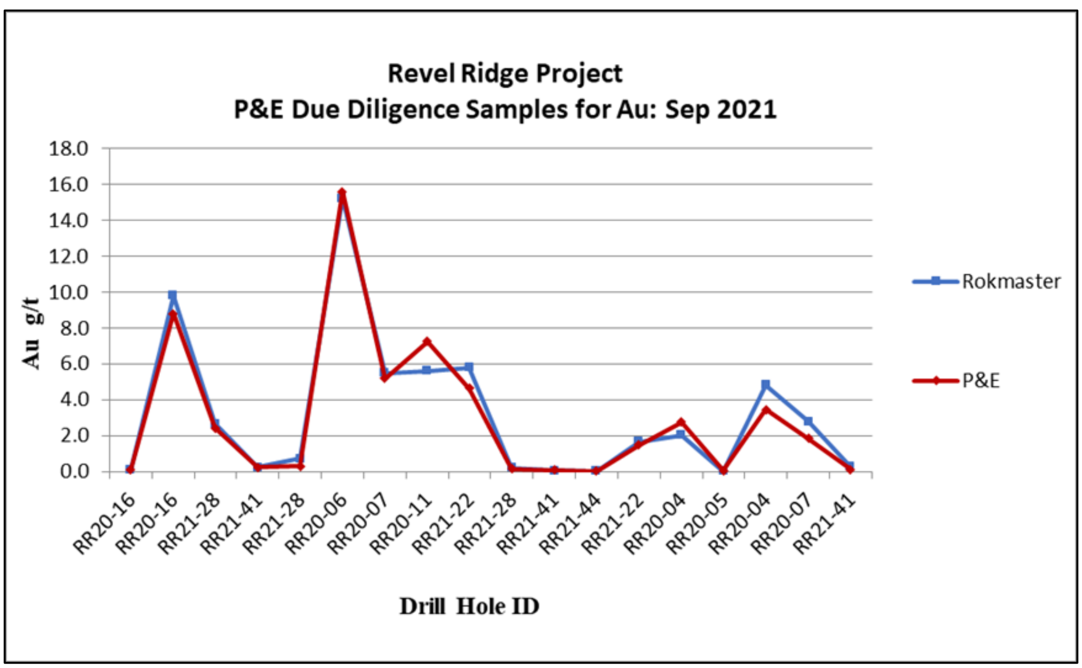
12.1.1 P&E 2021 Site Visit and Independent Sampling

The Revel Ridge Project was visited by Mr. David Burga, P.Geo., of P&E, September 8, 2021, for the purpose of completing a site visit and due diligence sampling. Mr. Burga collected 18 samples from ten diamond drill holes during the September 2021 site visit. All samples were selected from drill holes completed in 2020 and 2021.

A range of high-, medium- and low-grade samples were selected from the stored drill core. Samples were collected by taking a quarter with the other quarter drill core remaining in the drill core box. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag and delivered by Mr. Burga to AGAT in Mississauga, ON for analysis. AGAT is independent of P&E and Huakan and maintains ISO registrations and accreditations (ISO 9001:2015 and ISO/IEC 17025:2017).

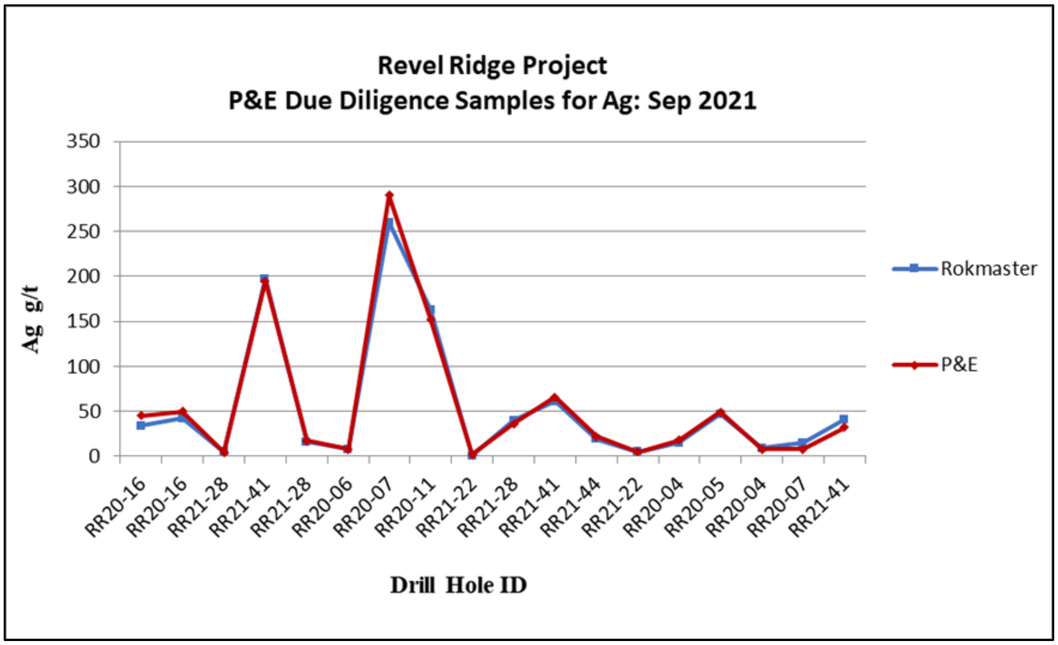
Drill core samples collected during the 2021 site visit were analyzed for Au by fire assay with AAS finish and for Ag, Cu, Pb and Zn by sodium peroxide fusion with an ICP-OES/ICP-MS finish. All drill core samples were also analyzed to determine bulk density by wet immersion. Results of the 2021 Revel Ridge Project site visit samples are presented in Figure 12-1 to Figure 12-5.

Figure 12-1: Results of September 2021 Au Verification Sampling by QPs



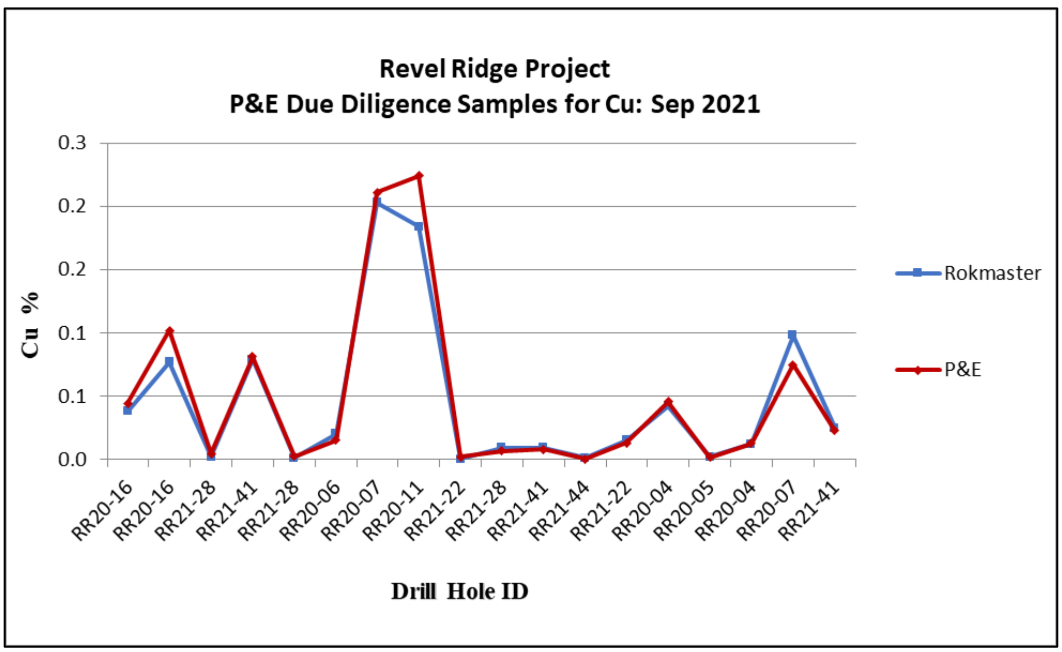
Source: P&E (2021).

Figure 12-2: Results of September 2021 Ag Verification Sampling by QPs



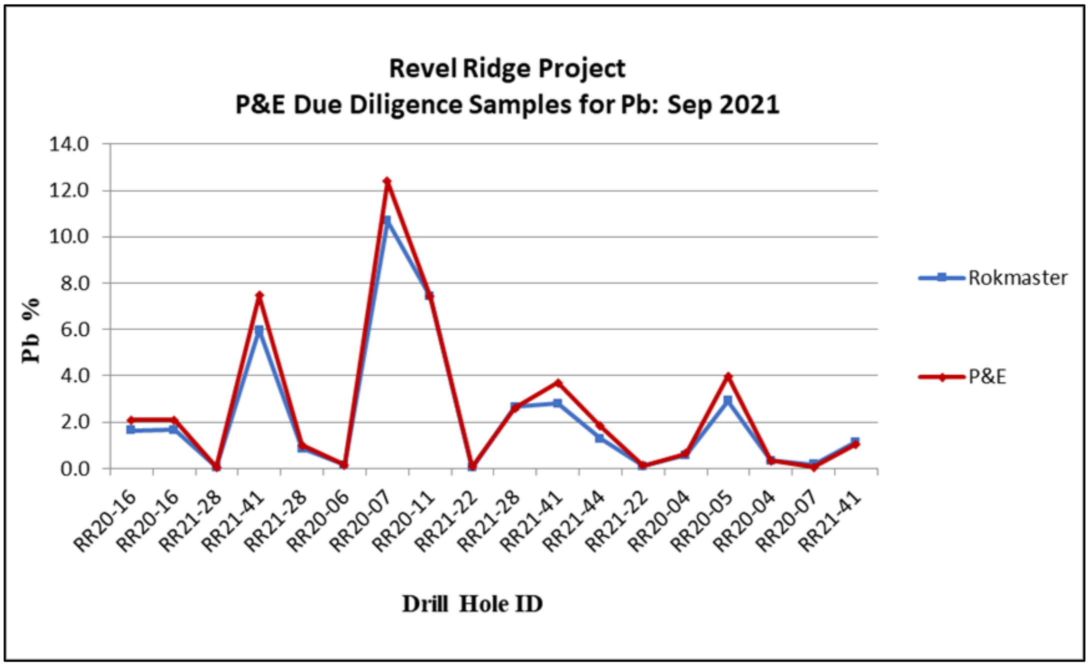
Source: P&E (2021).

Figure 12-3: Results of September 2021 Copper Verification Sampling by QPs



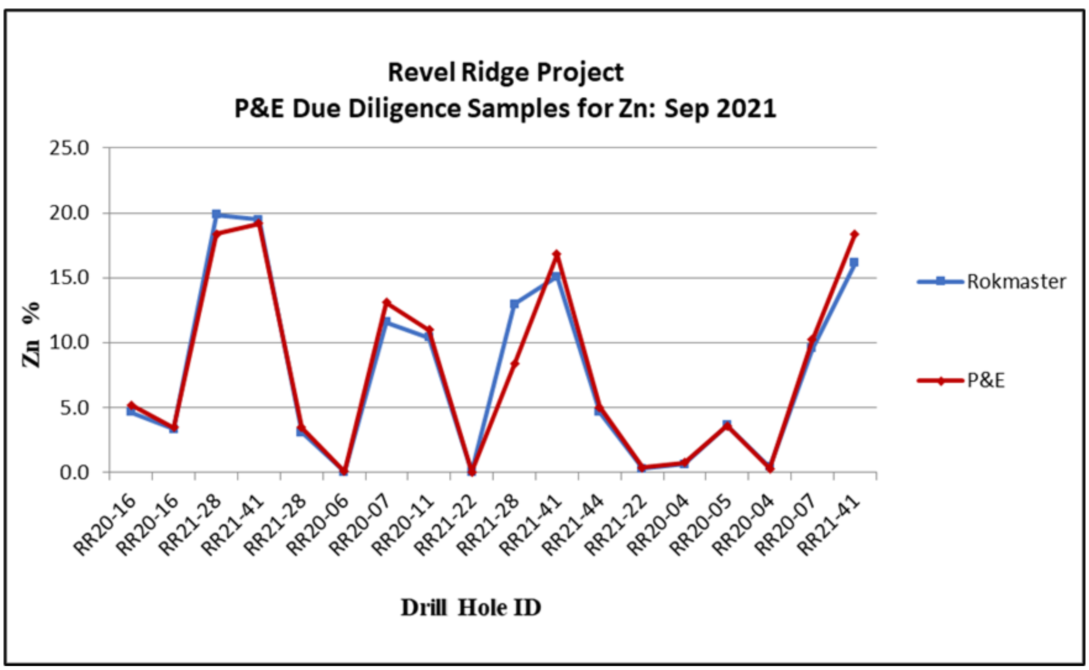
Source: P&E (2021).

Figure 12-4: Results of September 2021 Pb Verification Sampling by QPs



Source: P&E (2021).

Figure 12-5: Results of September 2021 Zn Verification Sampling by QPs



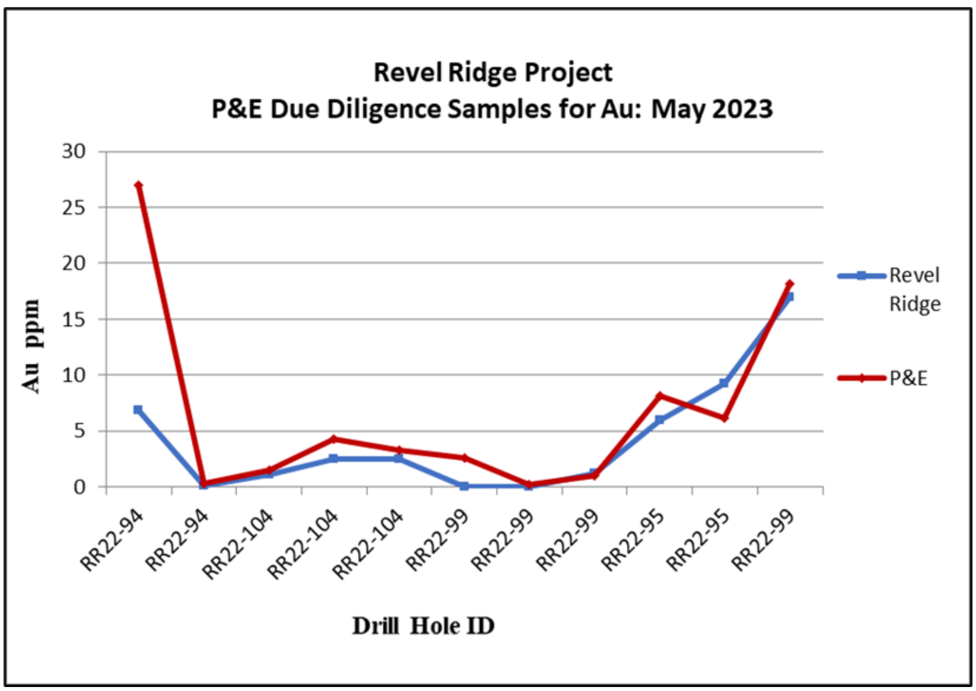
Source: P&E (2021).

12.1.2 P&E 2023 Site Visit and Independent Sampling

The Revel Ridge Project was again visited by Mr. David Burga, P.Geo., of P&E, May 22 and 23, 2023, for the purpose of completing a site visit that included drilling sites, outcrops, GPS location verifications, discussions, and due diligence core sampling. Mr. Burga collected 11 drill core samples from four Revel Ridge Project diamond drill holes. All samples were selected from drill holes completed in 2022. A range of high, medium and low-grade samples were selected from the stored drill core. Samples were collected by taking a quarter drill core with the other quarter drill core remaining in the drill core box. Individual samples were placed in plastic bags with a uniquely numbered tag, after which all samples were collectively placed in a larger bag and delivered by Mr. Burga to the Actlabs laboratory in Ancaster, Ontario for analysis. Samples at Actlabs were analyzed for Au and Ag by fire assay with gravimetric finish, and Cu, Pb and Zn were analyzed by aqua regia digest with ICP-OES finish. Bulk density determinations were measured on all drill core samples by the water displacement method.

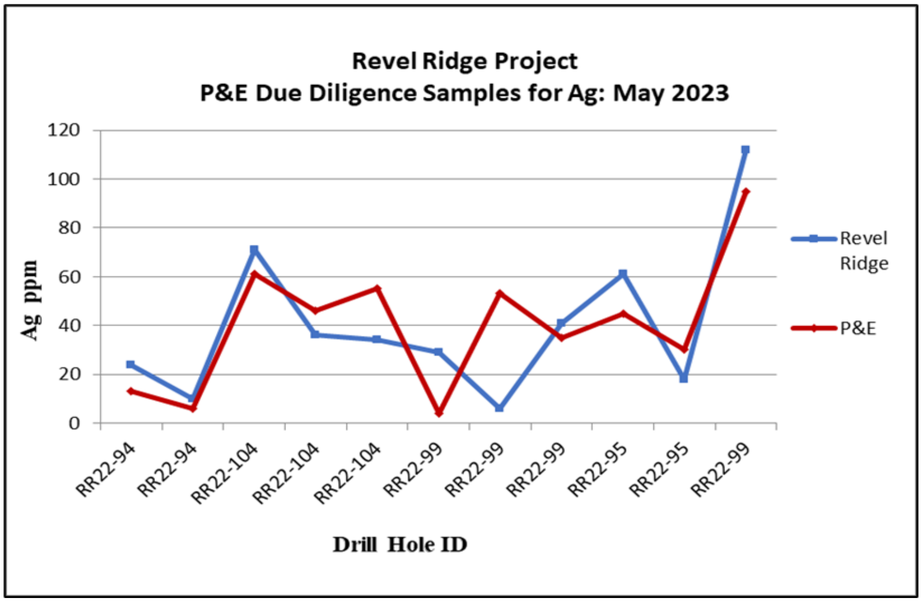
The Actlabs' Quality System is accredited to international quality standards through ISO/IEC 17025:2017 and ISO 9001:2015. The accreditation program includes ongoing audits, which verify the QA system and all applicable registered test methods. Actlabs is also accredited by Health Canada. Actlabs is independent of the QP and Rokmaster. Results of the Revel Ridge site visit verification samples for Au, Ag, Cu, Pb and Zn are presented in Figure 12-6 to Figure 12-10.

Figure 12-6: Results of September 2023 Au Verification Sampling by QPs



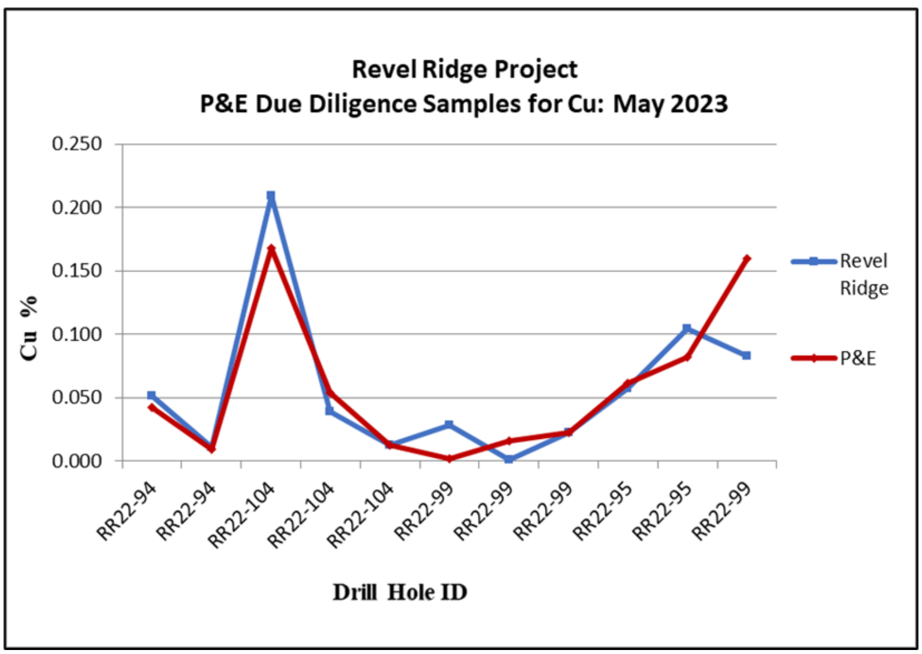
Source: P&E (2023).

Figure 12-7: Results of September 2023 Ag Verification Sampling by QPs



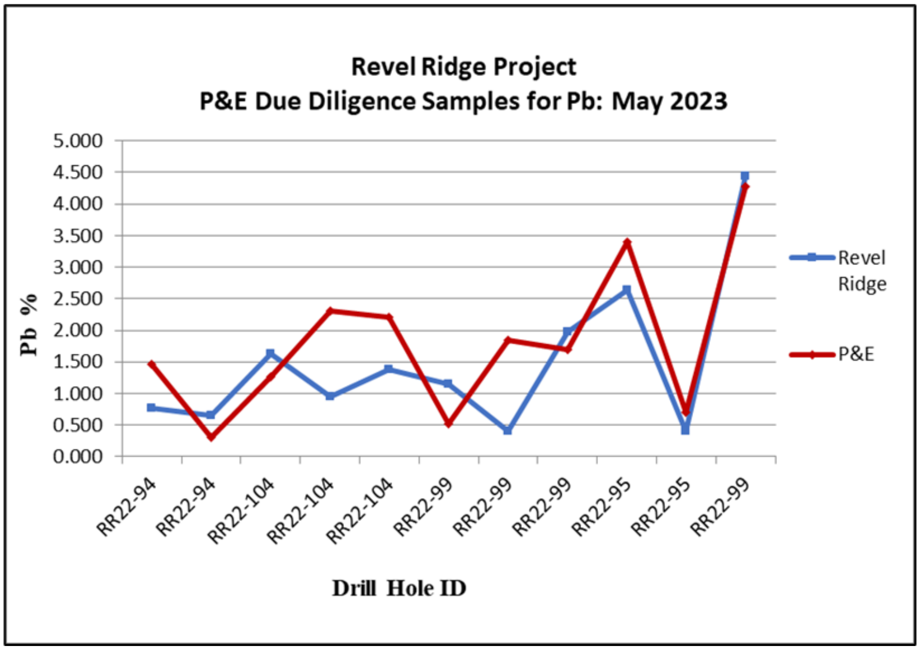
Source: P&E (2023).

Figure 12-8: Results of September 2023 Copper Verification Sampling by QPs



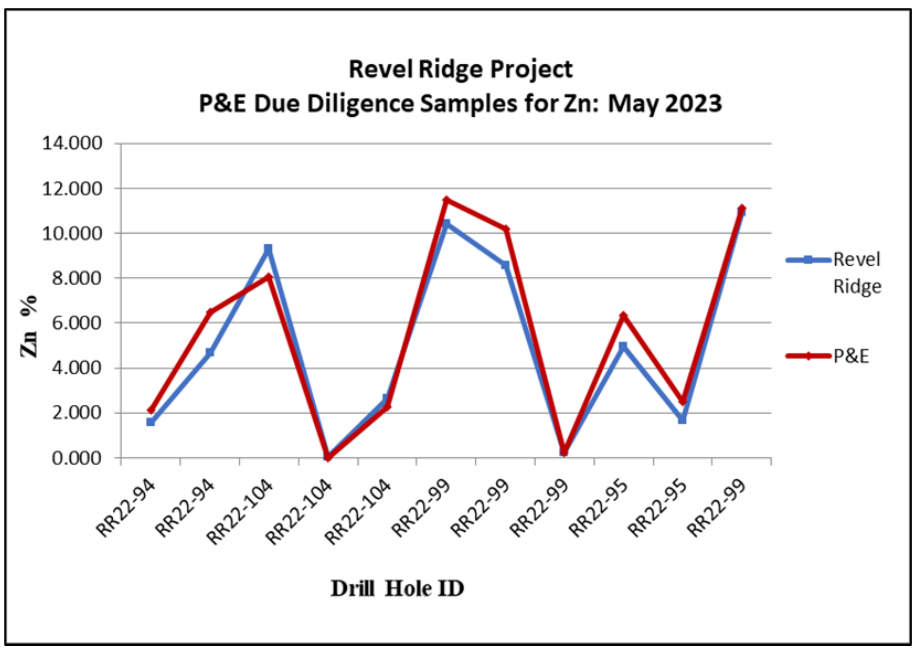
Source: P&E (2023).

Figure 12-9: Results of September 2023 Pb Verification Sampling by QPs



Source: P&E (2023).

Figure 12-10: Results of September 2023 Zn Verification Sampling by QPs



Source: P&E (2023).

12.2 Database Verification

12.2.1 P&E 2020 to 2021 Database Verification

Rokmaster supplied digital drill hole data that included drill hole collar, survey, assay, lithology and bulk density data. Assay data included Au, Ag, Pb, Zn and arsenic assay results. The coordinate reference system used is NAD83 UTM Zone 11 North. Topographic control was derived from a 1.0 m contour drone DTM surface supplied by Rokmaster.

Industry standard validation checks were carried out on the supplied databases, and minor corrections made where necessary. The QPs typically validate a mineral resource database by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, and missing interval and coordinate fields. No significant errors were noted in the supplied databases.

The QP conducted verification of the Revel Ridge Project drill hole assay database for Au, Ag, Pb, Zn and arsenic by comparison of the database entries with assay certificates, supplied by MSALABS of Langley, BC., in comma-separated values (csv) format and Portable Document Format (pdf) format. Assay data from 2020 through 2021 were verified for the Revel Ridge Project. All the 2020-2021 data (220 samples) were checked for Au, Ag, Pb, Zn and arsenic and one minor discrepancy was noted, which the QPs do not consider to be of material impact.

12.2.2 P&E 2022 Database Verification

Rokmaster supplied digital drill hole data that included drill hole collar, survey, assay, lithology and bulk density data. Assay data included Au, Ag, Cu, Pb and Zn assay results. A total of 114 drill holes, 339 underground drill holes, and 223 underground chip samples were available for mineral resource modelling. The coordinate reference system used is NAD83 UTM Zone 11 North. Topographic control was derived from a 1.0 m contour drone DTM surface supplied by Rokmaster.

Industry standard validation checks were carried out on the supplied databases, and minor corrections made where necessary. The QPs typically validate a mineral resource database by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, and missing interval and coordinate fields. No significant errors were noted with the supplied databases. It was noted that Rokmaster typically makes the first downhole survey measurement approximately 12 m below the collar, and that there are a few minor inconsistencies with subsequent downhole survey measurements. For modelling purposes, the first downhole survey orientation was also used for the collar orientation, if this was not recorded.

The QPs conducted verification of the updated Revel Ridge Project drill hole assay database for Au, Ag, Cu, Pb and Zn by comparison of the database entries with assay certificates, supplied by MSALABS of Langley, BC., in comma-separated values (“csv”) format and Portable Document Format (“pdf”) format. Assay data from 2022 were verified for the Revel Ridge Project. All the 2022 data (657 samples) were checked for Au, Ag, Cu, Pb and Zn and no discrepancies were encountered.

12.3 Comments on Data Verification

Verification of the Revel Ridge Project data, used for the current MRE, has been undertaken by the QPs, including multiple site visits, due diligence sampling, verification of drilling assay data from electronic assay files, and assessment of the available QA/QC data. The QPs consider that there is an acceptable correlation between the Au, Ag, Cu, Pb and Zn assay values in Rokmaster's database and the independent verification samples collected by the QPs and analyzed at ALS, AGAT and Actlabs. The QPs are satisfied that sufficient verification of the drill hole data has been undertaken and that the supplied data are of good quality and appropriate for use in the current MRE for the Revel Ridge Project.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Introduction

The metallurgical test work carried out to support the development of the Revel Ridge project and which creates the basis of this Section has been summarized, managed, and directed by Stacy Freudigmann P.Eng. F.Aus.IMM. of Canenco Consulting Corp.

Numerous test work programs have been undertaken on the Revel Ridge project since 1982, as summarized in Table 13-1.

Test work programs have been completed by independent reputable metallurgical laboratories, using primarily drill core samples from exploration drilling and bulk samples from underground workings; and have included but are not limited to characterization and mineralogical studies, comminution studies, DMS, bulk sorting tests, gravity concentration tests, flotation, bio-oxidation, POX and leach tests.

In previous project development phases prior to the latest metallurgical programs since 2021, testing was undertaken on composites blended from the RRMZ and the RRYZ areas of the deposits on the Revel Ridge property. More recent development test work was carried out on bulk samples and composites prepared to represent test work undertaken in 2014. Testing on these composites was designed to investigate the following:

- the production of an Au concentrate for sale
- reduced flotation mass pulls
- the downstream metallurgical changes, if any, from removal of pre-concentration by DMS from the flowsheet
- the inclusion of sensor-based sorting in the flowsheet
- the impacts of continuous gravity concentration prior to lead flotation
- the introduction of bulk flotation.

The resulting test work data was used to define the current process flowsheet that produces Pb, Zn concentrates, and Au doré, and to update the metallurgical performance, evaluating both concentrate impurities and overall Au and Ag recoveries.

Table 13-1: Summary of Test Work Completed

Year	Laboratory/ Consultant	Report No.	Mineralogy	Comminution	DMS/ Gravity/ Sorting	Flotation	Leaching	POX/Roast/ Biox	Other
1982	Lakefield Research Ltd.	LR2573 - 3				X	X	X	
1982	Lakefield Research Ltd.	LR2573A	X						2x Reports
1983	Lakefield Research Ltd.	LR2573 - 4				X	X	X	
1984	Lakefield Research Ltd.	LR2845 - 5	X			X			
1985	Mountain States R&D	Z-41				X	X	X	
1985	BP Canada Research Centre	Report No. 6	X						2x Reports
1985	BP Canada Research Centre	183	X	X		X	X		
1985	Lakefield Research Ltd.	LR2845 - 6	X						
1986	BP Canada Research Centre	-	X						
1987	Noranda Research Centre	RR 89-1		X		X			
1987	Bacon, Donaldson & Associates Ltd.	7348	X	X		X	X		Lead Con Treatment
1987	Met Engineers Ltd.	-		X		X			
1987	Coastech Research Inc.	-				X			
1987	Coastech Research Inc.	-						X	
1987	Mountain States R&D	Report No. 1				X			Cashman Process
1988	R.C. Smith Associates	-				X	X	X	Thiourea Leach

Year	Laboratory/ Consultant	Report No.	Mineralogy	Comminution	DMS/ Gravity/ Sorting	Flotation	Leaching	POX/Roast/ Biox	Other
1988	Mountain States R&D	Report No. 2				X			Cashman Process
1989	Lakefield Research Ltd.	LR3670 - 1			X	X	X	X	
1989	International Bioleach Inc.	-						X	
1989	Lakefield Research Ltd. & J.H. Wright	1							Pilot Plant
1989	Lakefield Research Ltd.	LR3670 - 2					X	X	
1990	Lakefield Research Ltd.	LR3670 - 3		X	X	X	X		Selective AsPy Float
1990	Lakefield Research Ltd.	LR3792 - 1				X	X		Pilot Plant Results
1991	Royal School of Mines - London	MA2M-90-0002				X			Pyrite/AsPy Separation
1991	Bacon, Donaldson & Associates Ltd.	MN1182				X			Pyrite/AsPy Separation
1991	Lakefield Research Ltd.	LR4060			X	X	X		Pyrite/AsPy Separation
1991	Bacon, Donaldson & Associates Ltd.	MO343				X			Pyrite/AsPy Separation
1991	Coastech Research Inc.	B 54						X	
1991	Bacon, Donaldson & Associates Ltd.	MN1037							Solvent Extraction
1991	Bacon, Donaldson & Associates Ltd.	M90-282							Redox Process
1991	Bacon, Donaldson & Associates Ltd.	MN1090			X				RRYZ Only

Year	Laboratory/ Consultant	Report No.	Mineralogy	Comminution	DMS/ Gravity/ Sorting	Flotation	Leaching	POX/Roast/ Biox	Other
1997	March Process Consulting Ltd.	2x Reports					X	X	Bioleach
1997	Morris Beattie	Interim			X	X	X	X	
1997	Process Research Associates Ltd. (PRA)	Summary			X				
1998	PRA	97-089-1		X	X	X	X	X	
1998	PRA	97-089-2			X				
1998	SRK (Canada) Inc.	1CW002.00	X						
1998	March Process Consulting Ltd.	Interim			X		X	X	
1998	Beattie Consulting Ltd.	Progress			X				
1998	Beattie Consulting Ltd.	-			X	X	X	X	
1998	Beattie Consulting Ltd.	-				X			RRYZ Only
1998	March Process Consulting Ltd.	Preliminary & Memo			X		X	X	Biosulphide Processing
2005	PRA	0407308	X	X	X	X			Acid Base Accounting
2013	SGS Canada Inc.	13986-001						X	
2014	Bureau Veritas Frank Wright Consult. Inc.	-	X	X	X	X	X	X	
2014	Inspectorate	-						X	
2020	Base Metallurgical Laboratories Ltd.	BL 604			X	X			
2021	Surface Science Western	01021SD.BVC	X						
2021-2022	Base Metallurgical Laboratories Ltd.	BL 801	X		X	X	X	X	

Year	Laboratory/ Consultant	Report No.	Mineralogy	Comminution	DMS/ Gravity/ Sorting	Flotation	Leaching	POX/Roast/ Biox	Other
2021-2022	Environmental Technologies Inc.	EN274					X		
2022	Surface Science Western	18122SD.CCC 18422SD.CCC	X						POX Residue, DDH Samples
2022	SGS Canada Inc.	18988-01					X	X	
2022-2023	Base Metallurgical Laboratories Ltd.	BL1076				X			Arsenic Depression, Limestone Analysis
2023	Base Metallurgical Laboratories Ltd.	BL1282			X				Results summarized in TM-PEA-001 Rev.B
2023	Steinert US Inc.	TRE-22523-KSS-1177			X				Results summarized in TM-PEA-001 Rev.B

13.2 Mineralogical Evaluations

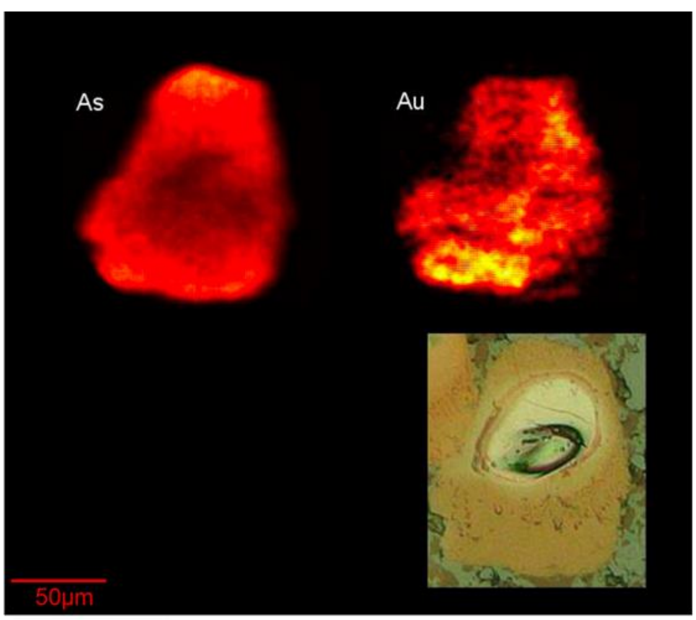
13.2.1 Surface Science Western

Samples of RRMZ drill core and pressure oxidation residues were studied using Dynamic Secondary Ion Mass Spectrometry (D-SIMS) to quantify and establish the distribution of the sub-microscopic Au content in the pyrite and arsenopyrite mineral phases, present as different morphological types. The major findings were that the sub-microscopic Au detected and quantified is refractory, i.e., it is locked within the crystalline structure of the arsenopyrite mineral phase, and it will not be directly released by the cyanide leach process. This type of Au was shown to be present as a solid solution within the mineral matrix (Figure 13-1), with minor occurrences of high-grade colloidal Au inclusions and small visible Au particles. This aligns with previous mineralogy.

The measure of the concentration of the sub-microscopic Au in the arsenopyrite was highly variable from several ppm to several hundred ppm. The coarse arsenopyrite sample graded 54.09 g/t Au and in the fine arsenopyrite the Au grade was 52.15 g/t. This indicated that there was no potential to separate the coarse and fine arsenopyrite to recover Au preferentially.

The pyrite mineral phase was also assessed, and it was determined that pyrite is only a minor carrier of sub-microscopic colloidal Au, so the historical separation test programs undertaken were most likely not required. The average Au concentrations in the various morphological types of pyrite are in the low ppm range, with coarse pyrite particles having the lowest sub-microscopic Au content. Large spikes in the Au signal were observed, indicating the presence of small visible Au particles.

Figure 13-1: Sub-microscopic Au Distribution in Arsenopyrite.



Source: Surface Science Western (2021).

During the BL801 test program and linked SGS Canada Inc. (SGS) SGS18988-01 test program, the requirement for a regrind on the POX residues prior to leaching was found to be required to increase leach kinetics and overall Au leach extraction. An understanding of possible causes for the slow leach kinetics was sought and two POX residues (10a and 10b) were combined and sent to SSW for the following:

- modal analysis mineralogy by TESCAN Integrated Mineral Analyzer (TIMA-X),
- bulk mineralogical analysis by X-Ray Diffraction (XRD),
- high spatial resolution Scanning Electron Microscopy coupled with Energy Dispersive X-Ray Spectrometry (SEM/EDX) scans for visible Au phases,
- SEM-EDX compositional analysis and Raman Spectroscopy on grains from secondary mineral phases for identification and characterization of mineral composition, morphology, and surface coatings/encapsulation by silica or other precipitates,
- and identification and quantitative analysis of carriers of sub-microscopic Au among the mineral phases present in the sample by Dynamic SIMS (D-SIMS).

Four textures of visible Au grains were commonly observed in the POX residue sample with SEM/EDX:

1. Electrum grains typically appear massive and show a wide range of Au/Ag ratios,
2. Electrum grains showing solid thin Au rich rims,
3. Au grains, which are easily distinguishable, appear porous in cross section,
4. Grains with a massive electrum core and a porous Au rim.

From the analyses, there appeared to be several factors that possibly hindered the Au extraction during leaching:

- Large Grain Size - Based on the TIMA analysis and observations approximately 5%-10% of the secondary oxide grains were greater than 100 µm in size. This would certainly limit the ingress of lixiviant, potentially lengthening required contact time to ensure complete Au recovery.
- Complex Chemical and Structural Composition - The correlation between Raman and elemental analysis showed that when secondary phases contain >~20% As, the oxide phase becomes a complex mixture of phases, no longer solely ferric oxide, but rather consisting of ferric oxides mixed with various arsenates. The ingress of the cyanide lixiviant could be inhibited by the complex nature of these oxides, resulting again in increased contact times to ensure complete leaching. This aligns with metallurgical test work results where high oxidation levels were required to obtain high Au recoveries.
- While not common, several grains were identified showing a Pb-rich coating surrounding the Fe oxide grain. It is unknown to what extent this coating might inhibit lixiviant ingress, however the mantle appeared to be significantly dense which may limit the leaching of Au.

It was hypothesized that the regrinding was reducing the large grains and mechanically breaking the complex compositions, allowing the cyanide access to the Au particles to reduce overall leach times and increase recovery of the Au.

13.2.2 Base Metallurgical Laboratories – BL 801

The content and fragmentation characteristics of the JL1 Composite was measured during the BL801 test program. The mineral content was determined quantitatively by QEMSCAN using the Particle Mineral Analysis (PMA) protocols on four size fractions. The distribution of the Pb, Zn, and arsenic bearing minerals is summarized in Table 13-2.

Table 13-2: Distribution of Pb, Zn, and Arsenic Bearing Minerals in the JL1 Composite

Metal	Mineral	Distribution (%)
Pb	Bournonite	4.1
	Galena	90.4
	Playfairite	5.5
Total		**100**
Zn	Tetrahedrite/Tennantite	0.1
	Sphalerite	99.9
Total		**100**
Arsenic	Tetrahedrite/Tennantite	0.1
	Arsenopyrite	99.6
	Lollingite	0.3
Total		**100**

Source: BaseMet (2022).

The composite sample contained by weight approximately 35% sulphides dominated by arsenopyrite and pyrite, followed by sphalerite and galena and minor amounts of pyrrhotite. Galena accounted for the Pb minerals in the sample at approximately 90%, with the remaining Pb present as bournonite and playfairite ($Pb_{16}Sb_{18}S_{43}$). These two Pb sulphide minerals would be expected to be recovered via flotation. Zn and Arsenic were almost entirely present as sphalerite and arsenopyrite respectively, both of which would be expected to be recovered via flotation.

The non-sulphide suite of elements was dominated by quartz, muscovite, and calcite.

The PMA results indicated that galena was 34% liberated at a nominal grind of approximately 71 µm P_{80}. Much of the unliberated galena was locked in complex multiphase structures, with a high concentration also associated with either sphalerite or non-sulphide gangue minerals. The liberation value would indicate that the grind is insufficient to adequately recover galena to a rougher concentrate.

Sphalerite in these samples was 50% liberated, with the locked sphalerite present in complex multiphase structures with significant quantities locked in binary form with non-sulphide gangue, galena and iron sulphides. Arsenopyrite in this sample was well-liberated at 61 %.

The liberation data also indicated that as the particle size decreased, more galena and sphalerite minerals were liberated, such that a finer grind would likely be required for these minerals. An interesting observation was that the gangue was 91% liberated, which may indicate that a bulk flotation may only require a nominal grind.

13.3 Historical Testwork

13.3.1 Test Program – 2014

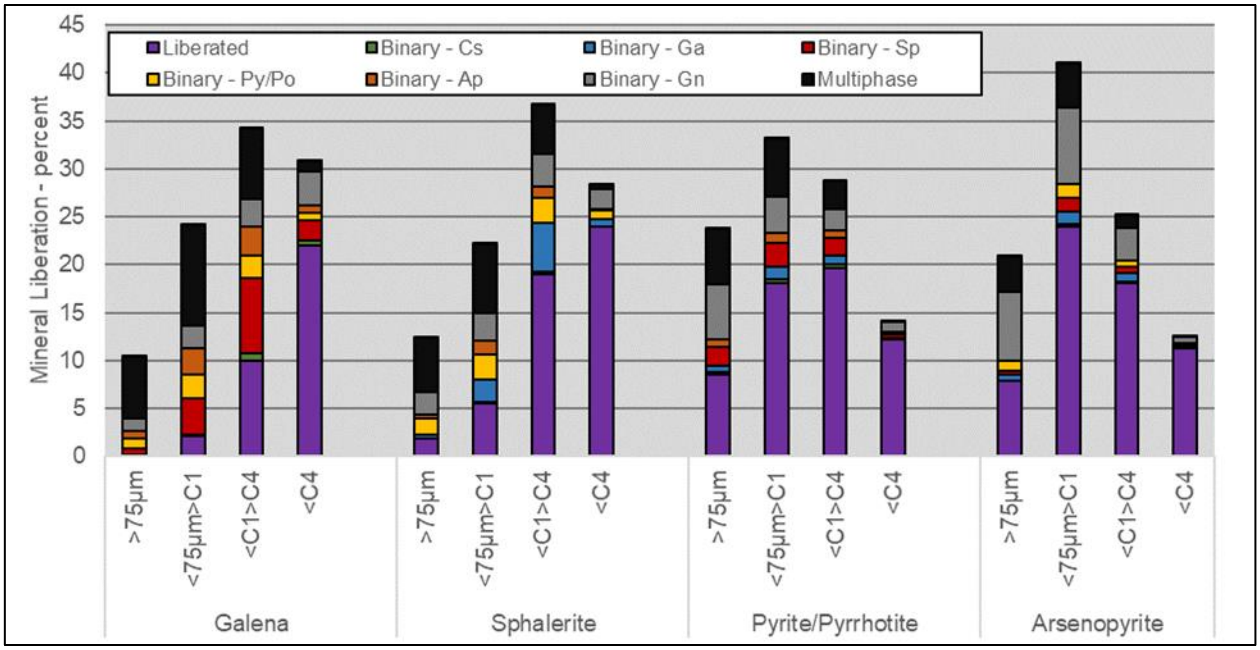
The 2014 program comprised various mineral processing and hydro-metallurgical procedures including comminution testing, DMS and differential flotation to produce separate Pb and Zn concentrates, and an Au containing pyrite/arsenopyrite concentrate. Au bulk flotation concentrate was separately subjected to bioleaching and POX procedures prior to cyanidation.

Comminution: The Bond Ball Mill Work Index, BWi, for the RRYZ and Main Zones averaged 9.5 kwh/t with the crushing work index ranging from 9.7-12.7 kwh/t. The abrasion index, Ai, for the Master Composite JL1 was 0.24 g and the Bond Rod Mill work index for the same sample was 12.9 kWh/t. The results indicate the mineralisation is relatively soft and non-abrasive.

Dense media separation: Historical dense media separation tests results indicated that the RRMZ master composites had excellent metal recovery, but that the weight distribution between sink and float portions was variable and dependant on the proportion of sulphide minerals in the sample. For the RRMZ samples the sulphides would appear to respond as massive to semi-massive with minor losses to the HMS float. The performance of the single RRYZ test was significantly worse than the RRMZ tests, possibly due to the more disseminated nature of the sulphide mineralisation. More recent test work has focussed on flotation without pre-concentration using DMS.

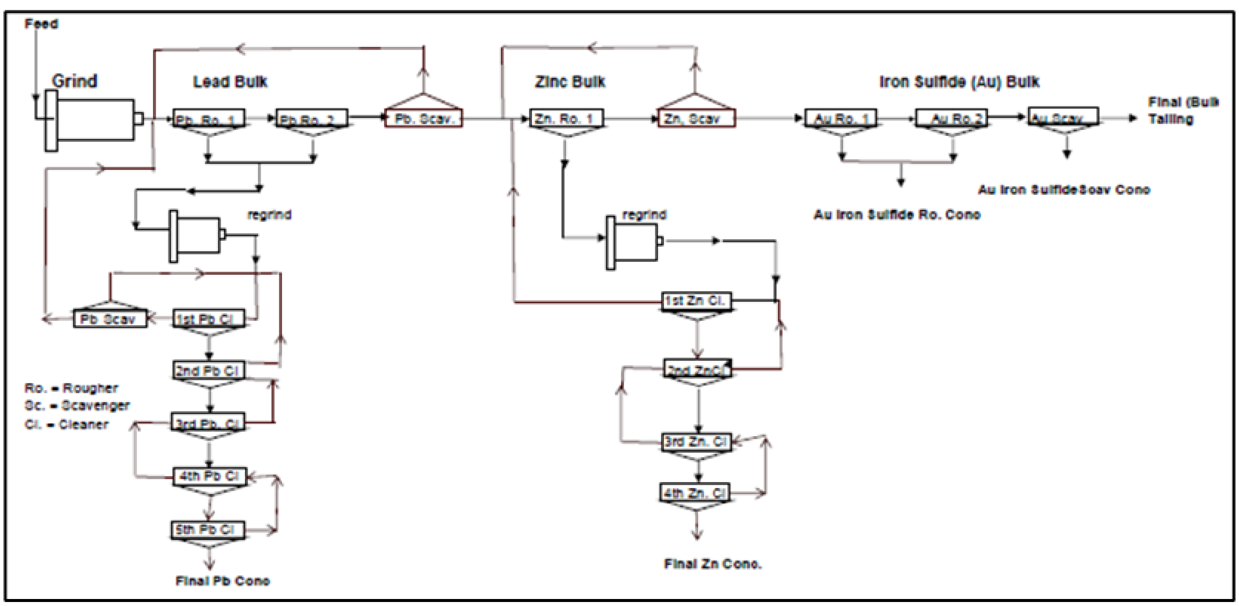
Flotation: The main result from the historical work was the flotation locked cycle (FLC) test 1 on the master composite JL1. The flowsheet and results are summarized in the Figure 13-2 and Table 13-3. Primary grind was set at approximately 80% passing 40 µm with the concentrate regrind prior to cleaning at approximately 80% passing 10 µm.

Figure 13-2: JL1 Composite Mineral Liberation by Size and Class



Source: BaseMet (2022).
Note: C1 = ~45µm; C4 = ~15µm

Figure 13-3: RRMZ Locked Cycle Flotation Test FLC1 Flowsheet



Source: F. Wright Appendix MZ-6 (2014).

Table 13-3: Summary of Flotation Test Results – RRMZ Composite JL1 LCT1

Product	Grades							Metal Distribution (%)			
	Wt. (%)	Au (g/t)	Ag (g/t)	Zn (%)	Pb (%)	As (%)	S (%)	Au	Ag	Zn	Pb
Pb con.	2.9	29.8	720	8.7	58.4	3.1	18.5	8.1	33.7	5.2	57
Zn con.	4.1	1.4	40.9	61.1	1.2	0.49	32.5	0.5	2.7	51.4	1.7
Sulphide con.	62.4	15.5	62.9	3.3	1.9	13.5	24.1	90.0	62.6	42.4	40
Tail	30.5	0.49	2.0	0.16	0.15	0.99	1.4	1.4	1.0	1.0	1.5
Feed (calc.)	100.0	10.8	62.6	4.90	2.99	8.83	17.4	100.0	100.0	100.0	100.0

Source: F. Wright Consulting Inc. (2014).

The Pb and Zn grades are 58.4% Pb and 61.1% Zn respectively with recoveries at levels expected based on the current understanding of the mineralogy. Ag follows the Pb as most of the Ag is present as freibergite and is in solid solution with the Pb minerals. Arsenic levels in the Pb concentrate varied, however with the Ag and Au grades it is saleable as a pyrite concentrate. The Au recovery to the sulphide concentrate was approximately 90%, however the mass pull was high at 62.4%. This means that 62.4% of the plant feed would be required to achieve 90% Au recovery to the concentrate. The Au in the sulphide concentrate is 15.5 g/t with the arsenic at 13.5%. This is still currently a saleable concentrate but would be subject to low payables, high penalties, and would require significant logistics to ship the larger volumes of concentrate.

Dewatering: Settling tests were undertaken on tailings generated from the locked cycle flotation tests for both the RRYZ and the Main Zones. Despite the relatively fine particle size of the RRMZ tailings the material still showed good settling characteristics and low observed turbidity in the supernatant after 24 hours. The calculated unit thickener area was 0.1 m^2/t/d solids, with a solid settling rate of 32.2 m/d, the solids specific gravity of the tailings was 2.74 and terminal pulp density calculated at 65% solids. RRYZ tailings were coarser and exhibited a relative faster average settling rate with a calculated unit thickener area requirement of 0.05 m^2/t/d solids, a lower supernatant turbidity of 15.5 mg/L and slightly higher terminal density of 67% after 24 hours.

Bio-oxidation (BiOx) and POX: Test work indicated that bio-oxidation achieved 78-95% sulphide oxidation, however low pulp density and a long retention time of 50-69 days was required.

The poor response to bio-oxidation is postulated to be due to the high arsenic content, coupled with other base metals and detrimental elements that may be causing a synergistic negative effect on the microbes. Cyanide and lime requirements were high. Based on these preliminary bio-oxidation results, pressure oxidation has become the primary focus. Standard base case conditions for autoclaving comprised:

- Initial pH adjustment to 2.1 with sulphuric acid.
- Temperature between 200 to 220℃.
- Pressure of around 415 psig (at 100 psig O2).
- Retention time, base case 60 minutes.
- Solids density, base case 10% by weight.

Au recoveries >95% were achieved by pressure oxidation of the sulphide flotation concentrate followed by neutralization and cyanide leaching. Ag recoveries were improved with a lime boil prior to leaching.

13.3.2 Test Program BL604

In 2020, a flowsheet development program was undertaken at Base Metallurgical Laboratories Ltd. (BaseMet) in Kamloops, B.C., Canada. The initial objective of that program was to attempt to upgrade the sulphide Au concentrate by assessing several different flowsheet options. Bulk samples taken from underground workings for the 2014 test work were shipped to BaseMet and composited using the same samples, procedures, and recipe as formerly used, to reconstitute the JL1 composite test sample. The head assay comparison is shown in Table 13-4 and aligns well.

Table 13-4: JL1 Composite Head Assays

Products	Elements					
	Pb (%)	Zn (%)	Au g/t	Ag (g/t)	S (%)	As (%)
JL1 Composite - 2021	2.49	4.01	7.66	59.80	11.00	5.25
JL1 Composite - 2011	2.45	3.90	6.99	57.60	11.40	5.90

Source: F. Wright Consulting Inc. (2014).

The test program was undertaken on JL1 composite material, without any pre-concentration by DMS. Table 13-5 summarizes the Au recovery using different flowsheets.

Table 13-5: BL604 Au Recovery Result Summary

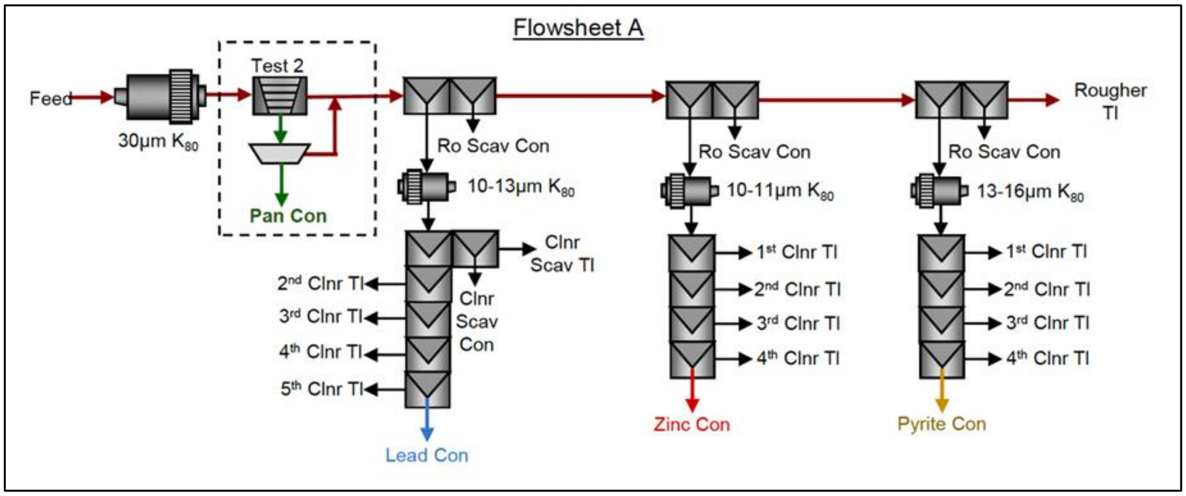
Test	Flowsheet	Mass	Assay (%) or g/t							Distribution (%)						
		%	Pb	Zn	Fe	S	Ag	As	Au	Pb	Zn	Fe	S	Ag	As	Au
1	A	10.5	3.02	61.2	22.6	57.6	141	18.1	22.6	49.0	13.4	21.6	18.9	42.3	37.5	44.2
2	A + Grav	13.5	2.24	85.9	13.1	63.8	199	2.9	28.1	71.9	19.4	28.0	25.9	62.4	41.9	54.4
3	B	6.8	20.0	3.39	18.0	20.5	442	12.0	32.4	58.9	5.9	11.5	12.1	49.5	13.7	31.5
4	B+AsPy Ro	24.7	5.39	3.46	25.2	24.6	142	17.0	21.3	56.9	21.1	59.7	54.5	54.3	73.8	75.3
5	B+Py Scav	12.1	8.96	3.74	30.3	31.8	251	15.2	31.7	47.3	11.2	34.2	33.9	52.9	32.1	52.1
6	C	12.5	0.62	0.70	28.2	18.8	20	28.5	27.4	3.3	2.3	29.9	18.9	3.9	54.6	45.7
7	Gravity Test	5.3	3.62	2.66	30.6	27.5	100	23.3	39.0	7.9	3.6	13.7	12.6	8.3	19.1	27.0
8	Gravity Test (P.1 to 7)	12.6	3.45	3.27	30.6	28.5	97	22.5	30.7	19.0	10.9	33.0	30.5	17.8	42.5	49.9
9	B+Py Scav, no Pan	21.1	4.17	2.04	23.0	19.1	104	21.3	24.7	37.5	11.1	41.9	34.6	33.6	65.7	67.7
10	C-no Pan	15.5	1.48	1.56	27.9	21.6	49	27.5	29.1	9.9	6.5	40.1	27.3	11.4	66.9	61.7
11	D	18.4	4.56	2.49	27.6	24.0	117	23.1	27.2	36.1	12.3	45.1	37.2	37.8	63.8	67.7
13	D	15.9	1.92	1.49	24.3	21.2	48	26.8	33.2	12.8	6.1	36.6	26.4	12.1	61.8	68.1

Source: F. Wright Consulting Inc. (2014).

Initially, Figure 13-4 Flowsheet A, based on the historical work, was tested to determine if there was a possibility of cleaning the sulphide concentrate. This primarily resulted in a decrease in the relative Au recovery with a decrease in the mass pull of 10.5% from the historical 62.4%. With a study of the specific gravity of the minerals and understanding of the Au association with arsenopyrite, it was hypothesized that the introduction of gravity prior to flotation might assist in decreasing the overall mass pull and increase the Au concentrate grades by recovering the dense sulphides.

This initial test was encouraging with 14% of the Au reporting to the gravity concentrate at a grade of 84.4 g/tonne.

Figure 13-4: Flowsheet A



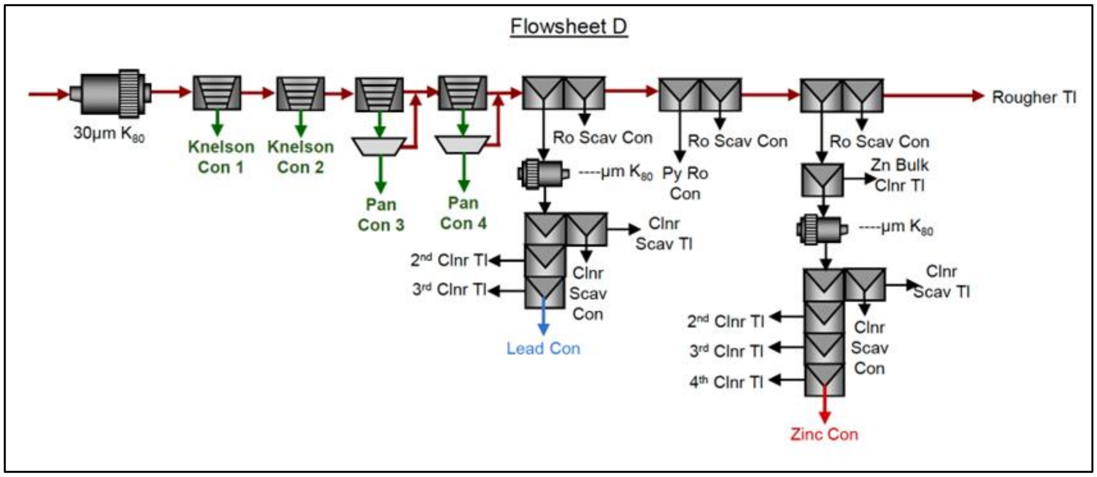
Source: BaseMet (2020).

Based on the results, it was observed that the original number of Pb cleaners could be reduces to 3 stages and less focus was placed on the Pb flotation during the 2021 test work. It was noted at the time that much of the Au was present in the Zn rougher scavenger and the first or second Zn cleaner tails and the bulk sulphide float (Pyrite Con), at the end of the flowsheet was contributing considerably less to the overall Au recovery. In Flowsheet B, Tests 3-5 included the gravity, but focussed on taking these streams with the higher proportions of Au and attempted to clean them with varying levels of success.

The final understanding was that the sulphide concentrate would not be able to be cleaned to remove arsenic without significant loss of Au. This aligns well with the mineralogy. Flowsheet C, was used to assess the historical hypothesis by Bacon, Donaldson et.al., that the pyrite might be interfering in concentration of the arsenopyrite Au considering that it contained much lower grade. After Pb flotation, the slurry was heat conditioned to 65°C for 20 minutes prior to pyrite flotation with SIBX. 8.1% of the Au reported to this pyrite rougher concentrate while, approximately 38% of the Au reported to the Zn cleaner tails. With limited success removing the pyrite, but with some success using gravity, it was hypothesised that a continuous gravity circuit, namely passing the sample through the concentrator numerous times, would achieve the Au recoveries in a decreased mass pull. Test 7 was successful in recovering 27% of the Au in only 5.3% of the mass with the combined concentrate grading 39g/t Au.

Test 8 elaborated on this test, passing the sample through the concentrator five times, and assessing whether panning the concentrate might decrease the mass. Another encouraging result was achieved with Au recovery in the combined concentrates of 61.8% in 19.4% of the mass grading 24.7 g/t Au. Although the panning increases the concentrate grades and decreases the mass pull, the recoveries drop accordingly, which again aligns well with what is understood, the mineralogy. Various permutations of this flowsheet were tested however Figure 13-5 Flowsheet D (Test 11 and repeated in Test 13) had the optimum overall result, when combining the gravity concentrates and Zn cleaner tails, of 68.1% recovery in 15.9% mass grading 33.2 g/t Au.

Figure 13-5: Flowsheet D



Source: BaseMet (2020).

13.4 Recent Testwork

The key to Revel Ridge metallurgy was a more detailed understanding of the mineralogy.

1. The galena and sphalerite mineralization are finely disseminated, this will require a finer grind to liberate and recover the target metals. Due to the dissemination, saleable grades are achievable albeit with decreased recoveries. This has been observed and duplicated historically.
2. Ag is largely in solid solution with the Pb and Freibergite, so will mainly appear in the Pb concentrate.
3. Au is refractory and predominantly associated with arsenopyrite in solid solution, although highly variable, a small amount is associated with pyrite and as free Au.
4. Some of the Au particles are present as electrum, which can often require longer leach residence times or an elevated pH through leaching, and some Au particles are relatively large, which may also extend leach times; or regrinding may be required.

13.4.1 Test Program BL801

The objective of the BL801 program undertaken at BaseMet was to both utilize and simplify the flowsheet in the BL604 testing to maximize metal recoveries. Material was prepared from the same mineralization and composite used in the previous test program. Numerous flowsheet options were evaluated including gravity-rougher, gravity-cleaner, bulk flotation, sequential flotation, and cleaner flotation tests, followed by locked cycle testing of the optimized flowsheet. The Zn rougher tailings containing Au, and in some instances, combined with the Zn first cleaner tails, from the locked cycle tests (LCT), were submitted for POX and leaching procedures at SGS.

The metallurgical development breakthrough came with an assessment of bulk concentrate metal values. Although the bulk rougher concentrate grades were low as shown in Figure 13-6, such that there was no value paid for the Pb and Zn, and it contained significant arsenic, the mass pulls were much improved over historical test work but still elevated at approximately 40%, and higher than with gravity in the flowsheet. What was observed during these tests, however, was that the Au, Ag, Pb, and Zn recoveries to the bulk rougher were all in the high 90s.

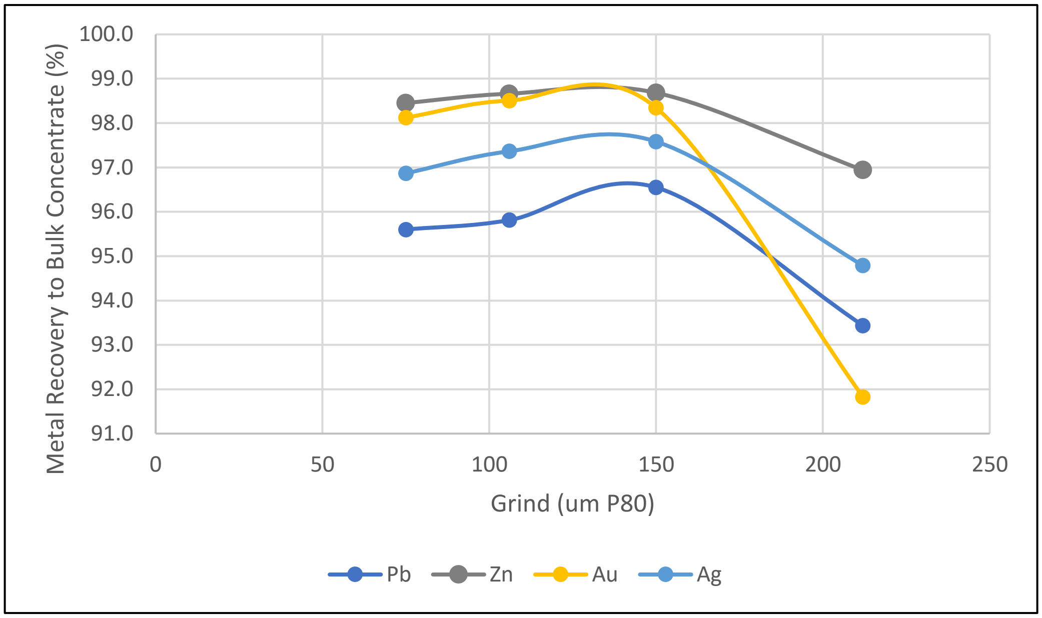
Table 13-6: BL801 – Test Cl1 Bulk Concentrate Results

Product	Weight %	Assay (%) or g/t							Distribution (%)						
		Pb	Zn	Fe	Au	Ag	S	As	Pb	Zn	Fe	Au	Ag	S	As
Bulk Concentrate	40.6	5.3	8.7	20.8	25.4	184.5	25.4	15.5	96.4	98.5	88.9	98.4	99.2	95.7	96.5

Source: BaseMet (2022).

Based on a more detailed understanding of the mineralogy at this time in the test program, it was theorised that with the higher recoveries of a reduced mass, it might be possible to coarsen the primary grind and introduce a bulk rougher prior to regrinding and Pb-Zn flotation. Subsequently a grind-recovery test sequence was undertaken with the following results.

Figure 13-6: Grind-Recovery of Metals of Value to a Bulk Concentrate



Source: Canenco (2022).

The results for this series showed that with the introduction of a bulk float prior to base metal flotation, the primary grind P_{80} could be coarsened to approximately 150 µm.

After several additional tests (18-20), the introduction of soda ash, instead of lime, into the Pb flotation improved recovery and grade to 73.5% and 40.7% Pb, respectively. The next few tests were variations of this flowsheet until gravity was removed completely in Test 23. At this point the test program stepped into Locked Cycle Tests (LCT) to prove the optimized flowsheet and produce concentrates for pressure oxidation and leaching. LCT-24 through LCT-27 are the same flowsheet with small variations in conditioning times and regrind sizes to improve recovery and grades. LCT-27 results, cycle D+E shown in Table 13-7, were the final results of the program and used for recovery predictions of metals of value to their respective concentrates.

Table 13-7: LCT 27 Results

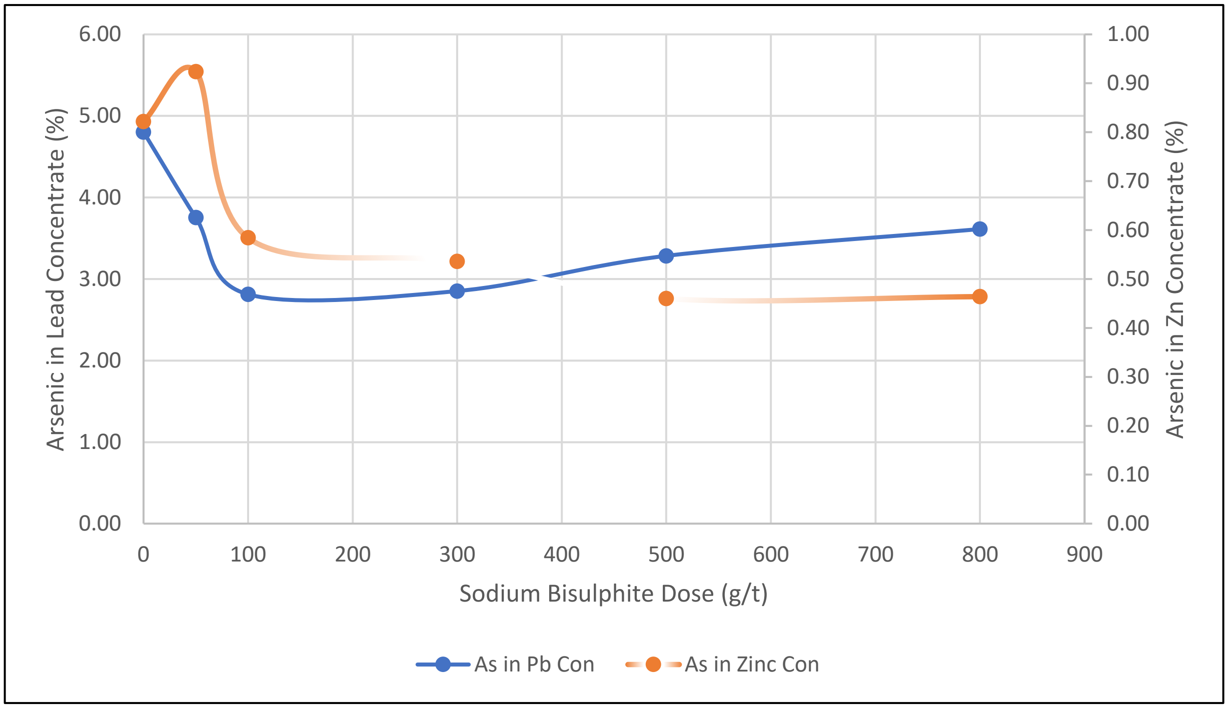
Product (Cycle D + E)	Weight %	Assay (%) or g/t							Distribution (%)						
		Pb	Zn	Fe	Au	Ag	S	As	Pb	Zn	Fe	Au	Ag	S	As
Pb Concentrate	3.1	48.5	7.8	8.2	45.9	645	19.7	4.8	71.9	6.7	2.3	21.1	39.8	5.7	2.7
Zn Concentrate	4.7	1.66	53.9	6.6	1.72	65	33.0	0.8	3.7	69.5	2.9	1.2	6.1	14.3	0.7
POX Feed	37.2	0.9	2.1	26.1	13.6	64.8	22.3	14.1	16.1	21.3	90.0	75.4	48.2	77.6	93.7
Total	**45.0**	-	-	-	-	-	-	-	**91.7**	**97.5**	**95.2**	**97.6**	**94.2**	**97.6**	**97.0**

Source: BaseMet (2022).

13.4.2 Test Program BL1076

The objective of the BL1076 program undertaken at BaseMet was to evaluate sodium bisulphite, $NaHSO_3$, in the depression of arsenopyrite and rejection thereof from the respective Pb and Zn concentrates. Material was prepared from the same mineralization and composite used in the previous test program BL801.

Figure 13-7: Arsenic in Concentrates with Varying Cleaner Dosages of Sodium Bisulphite



Source: Canenco (2023).

The results illustrated in Figure 13-7 for this series, showed that with the introduction of sodium bisulphite to the cleaners for Pb and Zn flotation, the arsenic level decreased for all dosages over 100 g/t NaHSO3. With increasing dosages of sodium bisulphite over the 100 g/t, it appeared that the arsenic in the Pb concentrate increased slightly, and in the Zn concentrate, dosages of 500 g/t provided the best result.

For the study, a dose of 100 g/t to the cleaners for both circuits were selected to provide concentrates with reduced levels of arsenic. Further optimization test work and economic trade-offs will be required on this in the next round of engineering.

13.4.3 Test Program SGS18988-01

The objective of this test program was to optimize the pressure oxidation variables and maximise the Au leach recoveries on the concentrates from BL801. Four concentrate samples were tested at SGS in Lakefield, Ontario and analyzed for Au (13.7 to 25.5 g/t), Ag (40.6 to 128 g/t), sulphur (23.0 to 27.3%), and sulphide (22.2 to 27%).

The first series of three tests were conducted on the first sample (BL 801 Bulk Concentrate 1) to examine the effects of pre-acidulation, pH and retention time. An excess of acid was added during pre-acidulation for the first test, resulting in high oxidation but Au extraction from the POX residue by CIL (following hot curing) was low at 63%. In the second test (POX2), a more typical acid dosage was used (65 kg/t, to pH 2) and oxidation remained high at 99%. This approach was used in the tests following. In POX3, the residence time was lowered to 60 minutes and sulphide oxidation reduced slightly to 97%.

The POX2 and 3 residues were then combined and split to compare cyanidation with and without a regrind. The unground POX residue metallurgical result was 92% Au extraction, while the reground residue achieved 98% Au extraction. The 92% extraction from unground CIL feed took 48 hours, while the 98% extraction from reground CIL feed was achieved in under 10 hours.

Cyanide consumption in these initial tests increased following regrind, from ~7 kg/t to 58 kg/t NaCN, however optimization of dosage and other parameters in subsequent testing reduced this back to 8.8 kg/t (CN13).

The second series of three tests were completed on sample BL802 Bulk Concentrate 2, assessing the effects of POX feed grind size (POX6), temperature (POX5) and retention time (POX4). Acid added during pre-acidulation increased relatively slightly with regrinding prior to oxidation but produced similar concentrations of iron, arsenic, and sulphur in the POX filtrate as compared with the test with no regrind (POX4). Cyanidation of the reground POX feed had relatively lower consumption of cyanide while lime consumptions remained similar. Of these comparative tests, (POX6) produced the best Au recovery at 96.7%. Dissolution of iron and sulphur were lower in the test at increased temperature of 230°C with a shorter retention time (POX5). This POX5 test resulted in the best sulphide oxidation and overall weight loss and had a similar Au extraction to POX6 at 96.4%.

A third set of tests (POX7 and 8) were undertaken on the BL 801-16 concentrate, a bulk concentrate with a coarse primary grind target of ~150 µm P_{80}. This was completed to examine the effects of regrinding such a concentrate and potentially understand the indicative effects of a lime boil step. Regrinding of the POX feed (POX8a and 8b) produced iron tenors that were double those found in tests POX7a and 7b with unground feed. Hot cure solution concentrations of iron, arsenic, and sulphur in the reground feed tests were also all higher than the tests with the unground feed. Comparative cyanidation tests indicated that Au extraction was relatively low compared to previous POX feed concentrates, with regrinding the bulk concentrate POX feed from ~184 µm P_{80} to ~16 µm P_{80} only slightly increasing the extraction from 80.3% to 82.4%. Lime boiling produced relatively higher Au extractions on reground and unground bulk concentrate POX feeds, however on the coarser POX feed the improvement of Au extraction was only 3.2% from 80.3% to 83.1%. Ag extraction increased on both the unground and reground POX feeds.

POX tests were finally undertaken on the fourth concentrate, (BL 801-24 Final Tails + BL 801-25 Final tails, from the BL801 developed LCT 24 and 25 flowsheet), to study the effects of hot curing (HC) as well as oxygen and air sparging post neutralization, on reground samples prior to cyanidation. Two POX tests (9a and 9b) were carried out and the POX residues were combined and then split in half. One half was hot cured for four hours and the other was not. The POX and hot cure residues were then ground and each one was split in half prior to cyanide leaching, resulting in four cyanidation tests – two with oxygen and two with air sparging. Cyanide consumption was lower with oxygen sparging, and lime consumption was lower with HC and oxygen sparging relative to the non-HC tests. Oxygen sparging had minimal effect on Au extraction but marginally improved Ag recovery. Hot curing resulted in significantly lower cyanide and lime consumption, however there may be a slight impact on Au extraction reducing from 98.7% to 98.2% on these tests. Results from this program are summarized in Table 13-8.

Table 13-8: Pressure Oxidation – Leaching Results

Test	POX Feed	LB, CN/CIL Test	Leach Feed	Regrind (µm, P80)	Sparging	Au Extraction (%)	Ag Extraction (%)
POX 1	BL 801 Bulk Con 1	CIL-1	HC-1	No	-	63.2	83.6
POX 2	BL 801 Bulk Con 1	CN-2	HC2+HC3	No	-	92.1	9.3
POX 3	BL 801 Bulk Con 1	CN-3	HC2+HC3	~10µm	-	98.4	47.0
POX 4	BL 801 Bulk Con 2	CN-4	HC-4	No	-	94.2	15.7
POX 5	BL 801 Bulk Con 2	CN-5	HC-5	No	-	96.4	11.7
POX 6	BL 801 Bulk Con 2	CN-6	HC-6	No	-	96.7	4.6
POX 7a	BL 801-16 Bulk Con	LB-1, CN-7	LB-1	No	-	83.1	75.1
POX 7b	BL 801-16 Bulk Con	CN-8	HC 7a+7b	No	-	80.3	67.9
POX 8a	BL 801-16 Bulk Con	LB-2, CN-9	LB-2	No	-	89.5	81.0
POX 8b	BL 801-16 Bulk Con	CN-10	HC 8a+8b	No	-	82.4	39.2
POX 9a+POX 9b Residue	BL 801-24 Final Tails + BL 801-25 Final Tails	CN-11	POX 9a+9b	12.2	Oxygen	98.8	24.6
POX 9a+POX 9b Residue	BL 801-24 Final Tails + BL 801-25 Final Tails	CN-12	POX 9a+9b	12.7	Air	98.6	23.7
HC 9a+HC 9b Residue	BL 801-24 Final Tails + BL 801-25 Final Tails	CN-13	HC 9a+9b	13	Oxygen	98.0	18.8
HC 9a+HC 9b Residue	BL 801-24 Final Tails + BL 801-25 Final Tails	CN-14	HC 9a+9b	13.2	Air	98.3	24.0

Source: SGS (2022).

13.4.4 Sorting

The sensor-based sorting test work was conducted on two sets of bulk material from the Main Deformation Zone (MDZ) with approximate weights of 500 kg and 700 kg. The bulk material was accompanied by six sample bags of rocks representing the three external dilution waste types (limestone, phyllite, and quartzite) and an internal dilution (sericite-altered) waste type, along with one bag of mineralized and a bag of high-grade material. The test work was undertaken at Steinert US facility in Walton, KY, USA, with sample preparation and assay work undertaken at BaseMet in BL1282.

The two batches of 19-45 mm bulk material were formed on discussion with the study mining engineers, as it was understood that significant dilution would likely be introduced to the plant feed due to deposit width sometimes being thinner than the minimum mining width. This would obviously decrease the process plant feed grade and metal production in these situations. The introduction of sorting was hypothesised to offset this issue and was subsequently tested.

The sorting objective was to attempt to remove most of the external dilution waste in order to significantly upgrade the mineralization feed grade to the process plant. A 5-step cascading test protocol with the X-Ray Transmission (XRT) sensor was used. These steps would concentrate the densest fraction, and then the subsequent waste fraction from each pass would be tested with a lower threshold. This "cascade mode" allows for understanding of the sorting behaviour under various sorting thresholds.

Once the sorting algorithm was developed, the first batch of bulk material was fed into the sorter and after each separation stage, the product/waste streams were manually and visually examined to identify the extent of misplaced particles. Any required adjustments were made between batches.

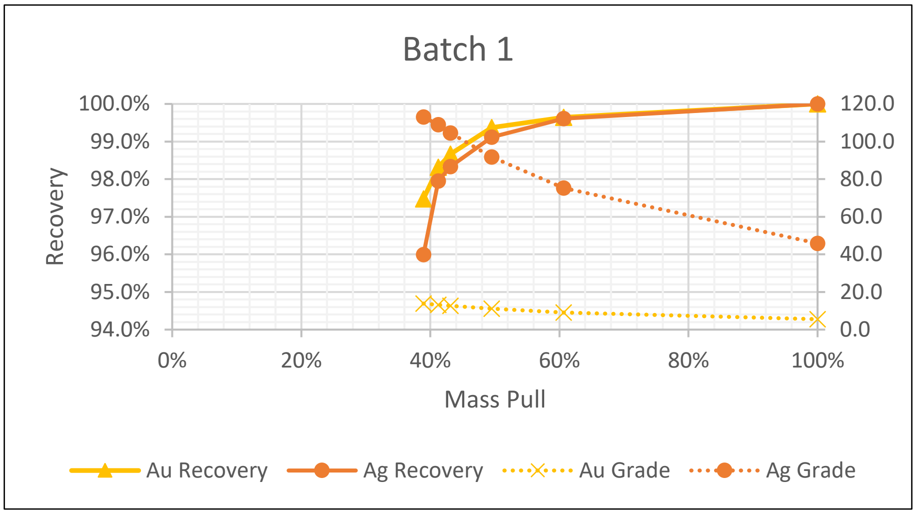
A total of 529 kg and 739 kg of bulk material was used for the first and second batch tests respectively. The calculated head grades of these batches of material are summarized in Table 13-9.

Table 13-9: Calculated Head Grades for Batch 1 and 2 Material

Element	Batch 1	Batch 2
Au (g/t)	5.55	5.88
Ag (g/t)	45.84	41.76
As (%)	4.61	4.88
Pb (%)	1.75	1.20
Zn (%)	2.46	2.00
S (%)	9.59	9.54

The sorting of the Batch 1 material at the third step resulted in 57% mass rejection and close to 99% recovery for Au. As a result, the Au grade in the material was upgraded from the fully diluted Batch 1 head grade of 5.5 g/t to 12.7 g/t, a 2.29 times increase. Ag also followed a similar pattern where over 98% was recovered in 43% of the mass, with Ag grade improving from 45.8 g/t to 104.6 g/t, a 2.28 times upgrade. The resulting waste stream graded at 0.13 g/t and 1.34 g/t for Au and Ag, respectively. The detailed sorting results for Au and Ag are illustrated in Figure 13-8.

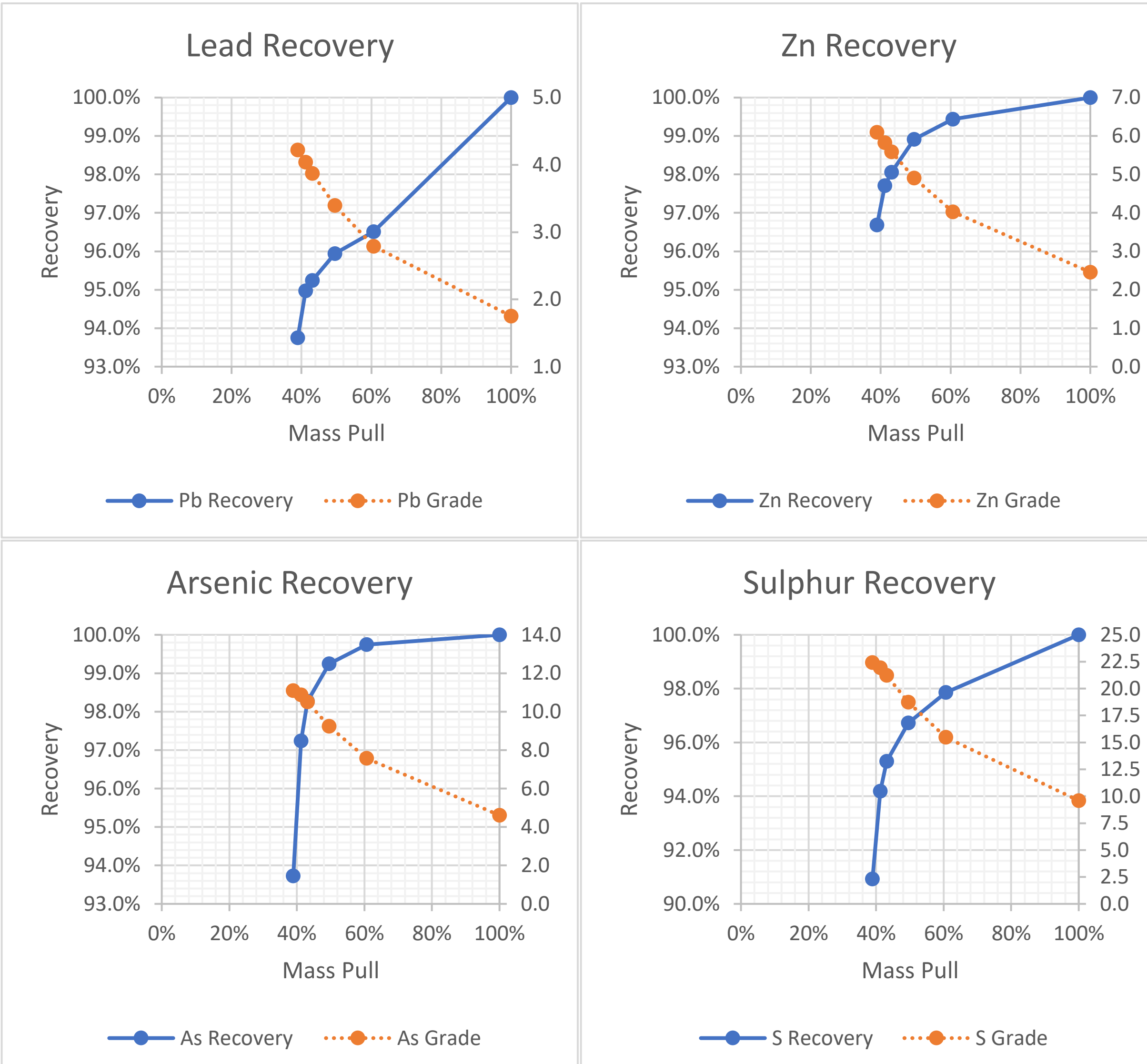
Figure 13-8: Grade-recovery Curves for Au and Ag Sort (Batch 1)



Source: Canenco (2023).

Since the Revel Ridge MDZ is an orogenic Au-polymetallic deposit, with the metals of value associated with sulphides, it was expected that the other metals associated with sulphide minerals would also be concentrated along with Au and Ag. This was confirmed with an assessment of the individual elemental performances. These results are summarized in Figure 13-9.

Figure 13-9: Batch 1 Grade-recovery Curves for Pb, Zn, As and S



Source: Canenco (2023).

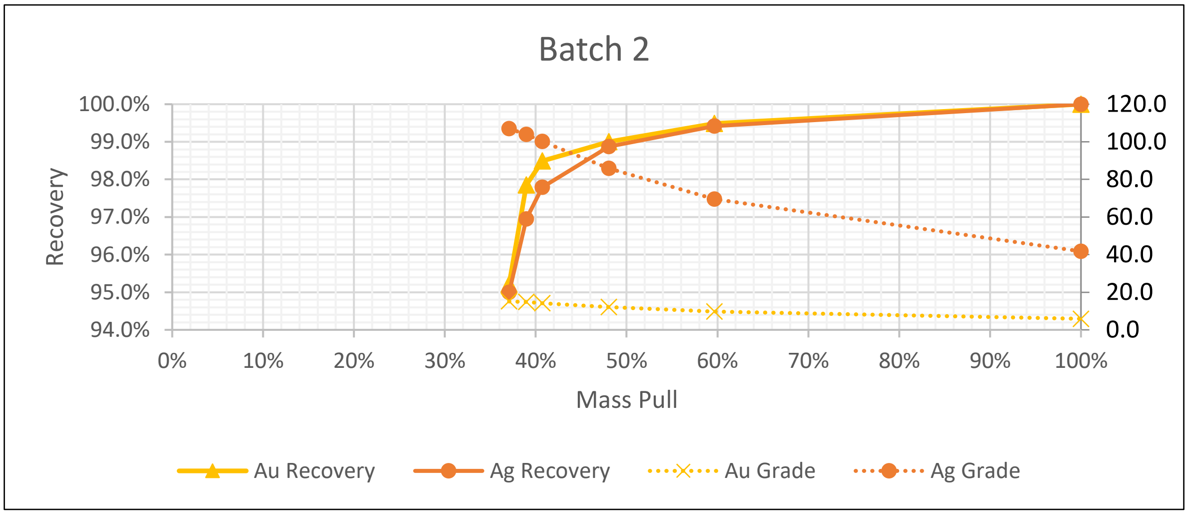
Batch 2 of the bulk material was sorted using the same algorithm, however, at a slower, more continuous feed rate to minimise the probability of misplaced particles.

Batch 2 test work performed similarly to Batch 1 in that close to 99% and 98% of Au and Ag respectively, were separated from the waste by the third stage of sorting. Sorting process on Batch 2 material at the third step resulted in 59% mass rejection and 98.5% recovery for Au. As a result, the Au grade in the material was upgraded to 14.2 from 5.9 g/t, or a 2.41 times increase. Ag also followed a similar pattern where 97.8% was recovered, with Ag grade improving from

41.8 g/t to 100.3 g/t, a 2.4 times upgrade. The resulting waste stream graded at 0.15 g/t and 1.56 g/t for Au and Ag, respectively.

The Batch 2 detailed sorting results for Au and Ag are summarized in Figure 13-10.

Figure 13-10: Grade-recovery Curves for Au and Ag Sort (Batch 2)



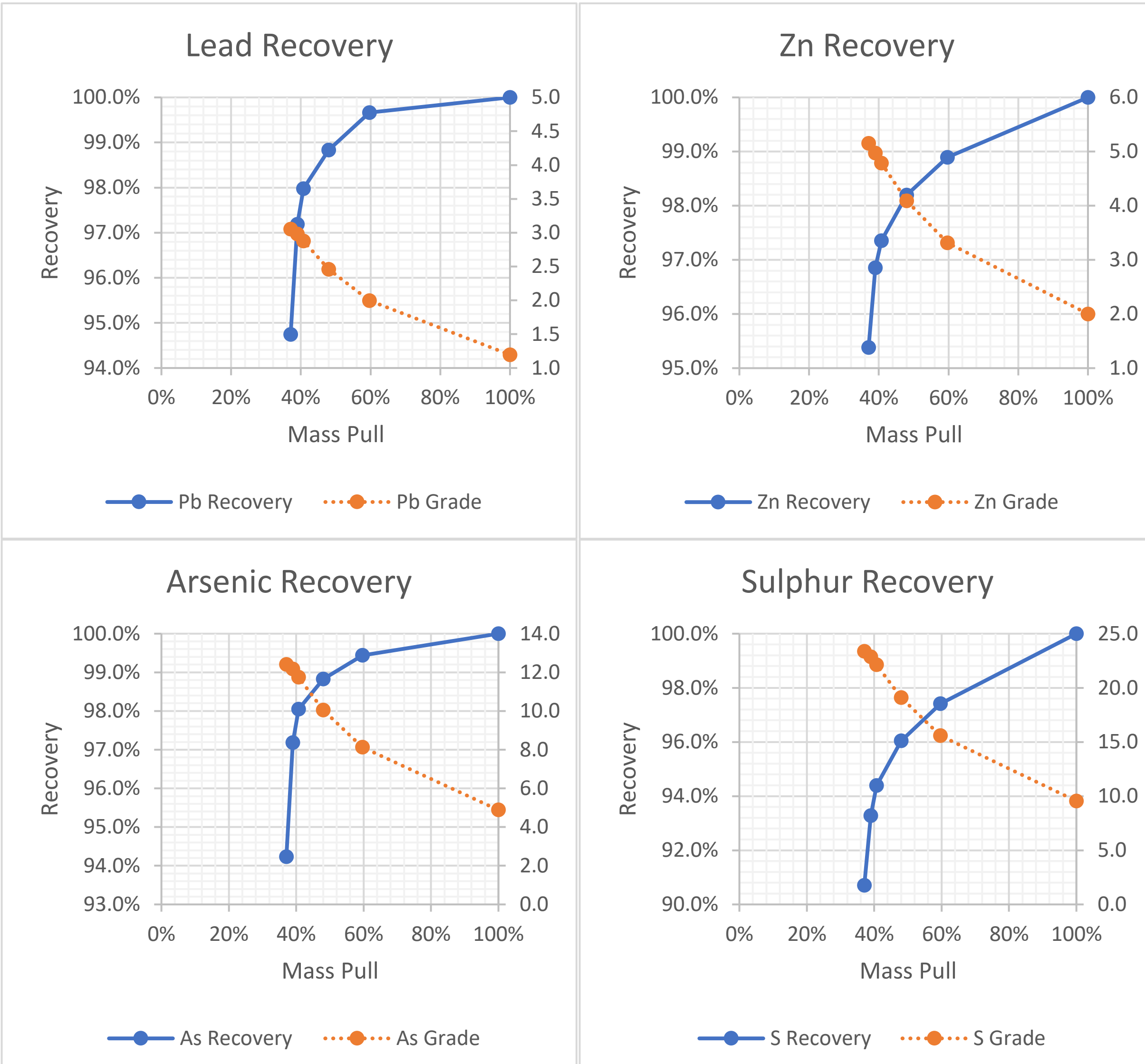
Source: Canenco (2023).

A similar outcome for Batch 2 was observed with regards to recoveries of other major elements as shown in Figure 13-11. All major assayed elements of Pb, Zn, arsenic and sulphur concentrate along with Au and Ag. These results are summarized in Figure 13-11.

The prepped Revel Ridge MDZ mineralisation tested in this program exhibited excellent potential to be sorted using the XRT sorting sensor. The results indicate that, based on the third separation threshold, over 98% of Au and Ag can be concentrated in around 41-43% of the mass, resulting over 100% upgrade in the corresponding grades.

Sorting Batch 1 material at third stage of sorting (43% of mass) resulted in 98.7% Au recovery with a concentrated stream grade of 12.7 g/t Au. 98.3% of Ag was also recovered in this fraction with a concentrated Ag grade of 104.6g/t. Sorting Batch 2 material at third stage of sorting resulted in 41% mass pull to concentrate with 98.5% Au recovery at 14.2 g/t and 97.8% Ag recovery at 100.3 g/t. Should the 4th stage of sorting algorithm be selected for the study, the mass pull for both bulk material will increase to approximately 50%, with recoveries of Au and Ag both surpassing 99%. Based on the observations from these tests, sensor-based sorting would appear to be successful in removing dilution from the mined mineralization.

Figure 13-11: Batch 2 Grade-recovery Curves for Pb, Zn, As and S



Source: Canenco (2023).

The testing methodology undertaken provides a reliable tool to identify the best sorting conditions and thresholds and overall, these tests should satisfy a PEA-level of study. It should be noted however, that the current results were obtained in a controlled laboratory environment and may be optimistic compared to operational sorting scenarios. Operational results will vary with the changing feed conditions from the mine, variability in the deposit itself, actual dilution amounts and numerous other variables. In addition, the nature of cascading test work approach can be biased towards higher recoveries as particles receive multiple chances to be sorted. Although this does not appear to be a major factor in the MDZ mineralization, it should be taken into consideration.

Further sorting test work is recommended to support ongoing engineering studies.

- For a PFS study, the concentrated material from these tests can be used for downstream metallurgical testing to estimate the potential effects on reagent consumption, Pb, Zn, Au, and Ag recoveries, as well as any potential complications with the pre-concentration of impurities in the mineralization.
- It is also recommended that additional confirmatory bulk sorting tests (1-2 tonnes) be performed, with the introduction of a number of variability samples as well.

13.4.5 Limestone

There is an abundance of outcropping limestone and marble on the surface at Revel Ridge and also at depth as shown by geological drillhole logs of both historical and Rokmaster drilling programs. The limestone at Revel Ridge is part of the regionally significant Badshot Formation. The Badshot is a Cambrian limestone whose strike length is the range of hundreds of kilometers, and which is often several hundred meters in thickness. Geological review has indicated that there was potential for limestone and marble reserves to be available to be used as a processing reagent, as available drill core geochemical analysis indicated the limestone was relatively pure. Results from recent neutralization potential testing shown in Table 13-10, also indicated that the limestone is likely of sufficient quality to be used in processing, although additional testing is likely required for more advanced planning.

Table 13-10: Limestone Neutralization Test Results

Analyte Symbol	NNP	Modified-NP	NPR	AP (Sulphide)	MPA
Unit Symbol	-	kg CaCO3/t	Ratio	kg CaCO3/t	kg H2SO4/t
RR-21-48	952	952	6090	< 0.31	< 0.31
RR-20-02	969	969	6200	< 0.31	< 0.31
RR-21-70	709	709	4540	< 0.31	< 0.31

Source: BaseMet (2023).

Study geologists have identified two target volumes which are amenable to extraction from both surface and underground sites, that likely host the required volume of limestone for the process plant. There are also numerous locations proximal to the deposit and projected plant site where limestone may be sourced. Detailed work including geological and geotechnical mapping of relevant limestone units, supported by geochemical analysis and metallurgical test work is required moving forward.

Hence, the likelihood of significant limestone material being present in the waste rejects from sorting in a mining scenario at Revel Ridge is very high. The Main Deformation Zone, which hosts the RRMZ massive sulphide mineralization, is discordant to the hosting stratigraphy at a slightly oblique angle. This leads to large areas of the deposit where the mineralisation zone has limestone in the immediate hanging wall or footwall (or both). Sorting waste rejects are recommended to be tested in the next round of engineering.

13.5 Scale Overall Optimized Recovery Results

The metallurgical testing has produced an effective flowsheet for recovering of the metals of value; removing dilution with The metallurgical testing has produced an effective flowsheet for recovering of the metals of value; removing dilution with sensor based sorting, preconcentrating with bulk flotation, followed by regrinding and sequential flotation of the bulk concentrate to produce concentrates of Pb and Zn, with the remaining Zn rougher tails being processed through a POX-leach circuit for recovery of the remaining Au and Ag. Based on the envisioned circuit and corresponding laboratory test response, the overall process recoveries based on the samples tested for the RRMZ mineralization were expected to be in the range of 94-96% Au, 84-85% Ag, 71-73% Pb and 70-74% Zn. The RRYZ mineralization is less complex metallurgically than the RRMZ mineralization and responds to standard sequential flotation. Based on the metallurgical studies undertaken in 2014, the overall process recoveries for the RRYZ were expected to be 86% Au, 94% Ag, 88% Pb, and 93% Zn.

14 MINERAL RESOURCE ESTIMATE

14.1 Introduction

The MRE presented herein is prepared in accordance with Securities Administrators' National Instrument 43-101 and Form 43-101F1, and in using the guidance provided within the "CIM Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines (2019). Mineral resources have been classified in accordance with the "CIM Standards on Mineral Resources and Reserves: Definition and Guidelines" as adopted by CIM Council (2014).

Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into a mineral reserve. Confidence in the estimate of inferred mineral resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

The QPs are not aware of any known permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the MRE.

All of the mineral resource estimation work reported herein was carried out or reviewed by Fred Brown, P.Geo., or Eugene Puritch, P.Eng., FEC, CET., both independent qualified persons as defined by National Instrument 43-101 by reason of education, affiliation with a professional association, and past relevant work experience.

Wireframe modelling utilized Seequent Leapfrog Geo™ software. Mineral resource estimation was performed using GEOVIA GEMS™ software program. Variography was performed using Snowden Supervisor™.

14.2 Data Supplied

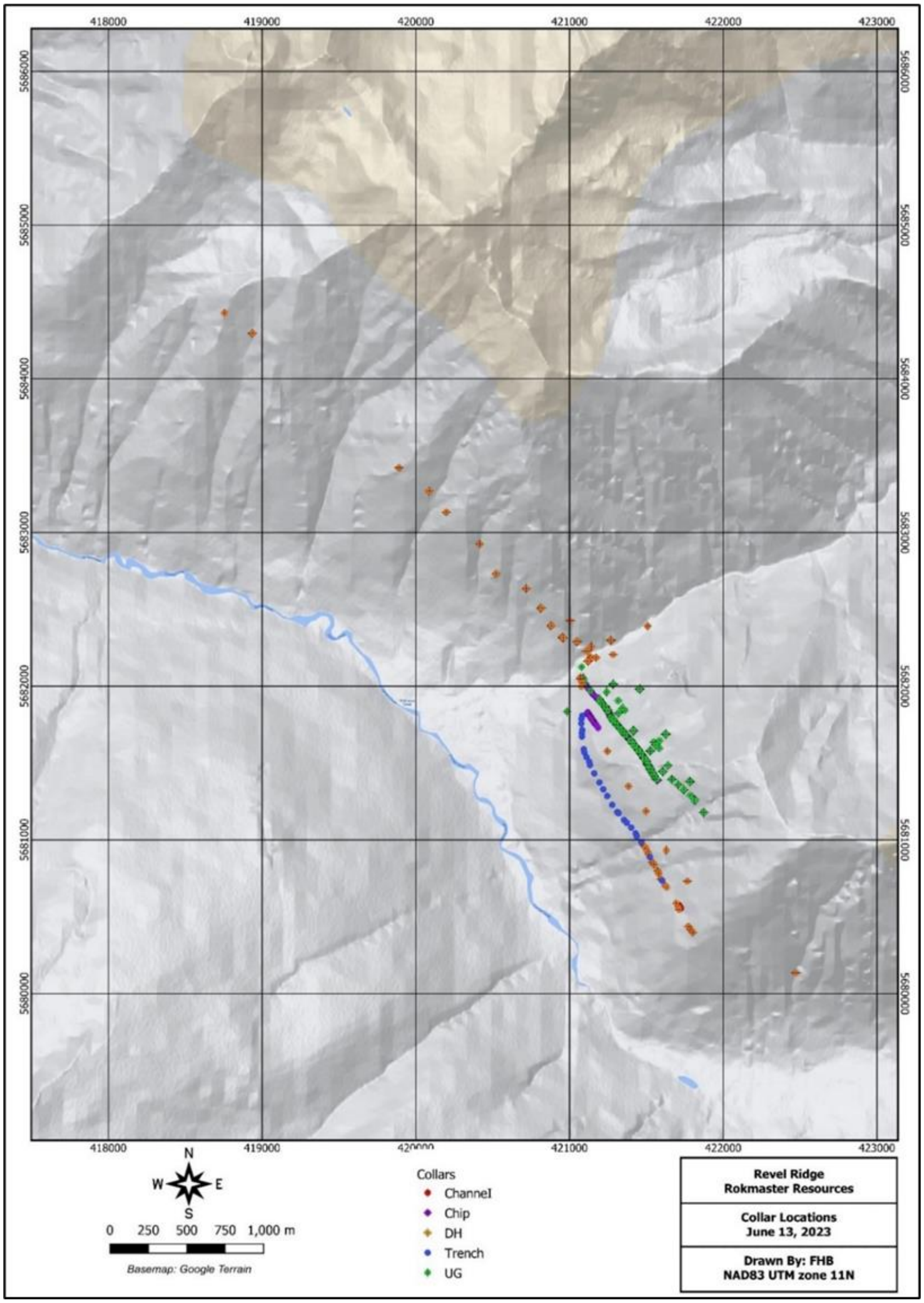
Rokmaster supplied digital drill hole data that included collar, survey, assay, lithology, and bulk density data. Assay data included Au, Ag, Pb, and Zn assay results. A total of 114 surface drill holes, 339 underground drill holes, and 223 underground chip samples were available for mineral resource modelling as shown in Table 14-1. The drilling extends approximately 4 km along strike (Figure 14-1). There was no 2023 drill hole data was available for use in this MRE.

Table 14-1: Drill Hole Summary

Type	Count	Total (m)
Surface Drill Holes	114	23,297.20
UG Drill Holes	339	58,633.90
UG Chip Samples	223	529.1
Total	**676**	**82,460.20**

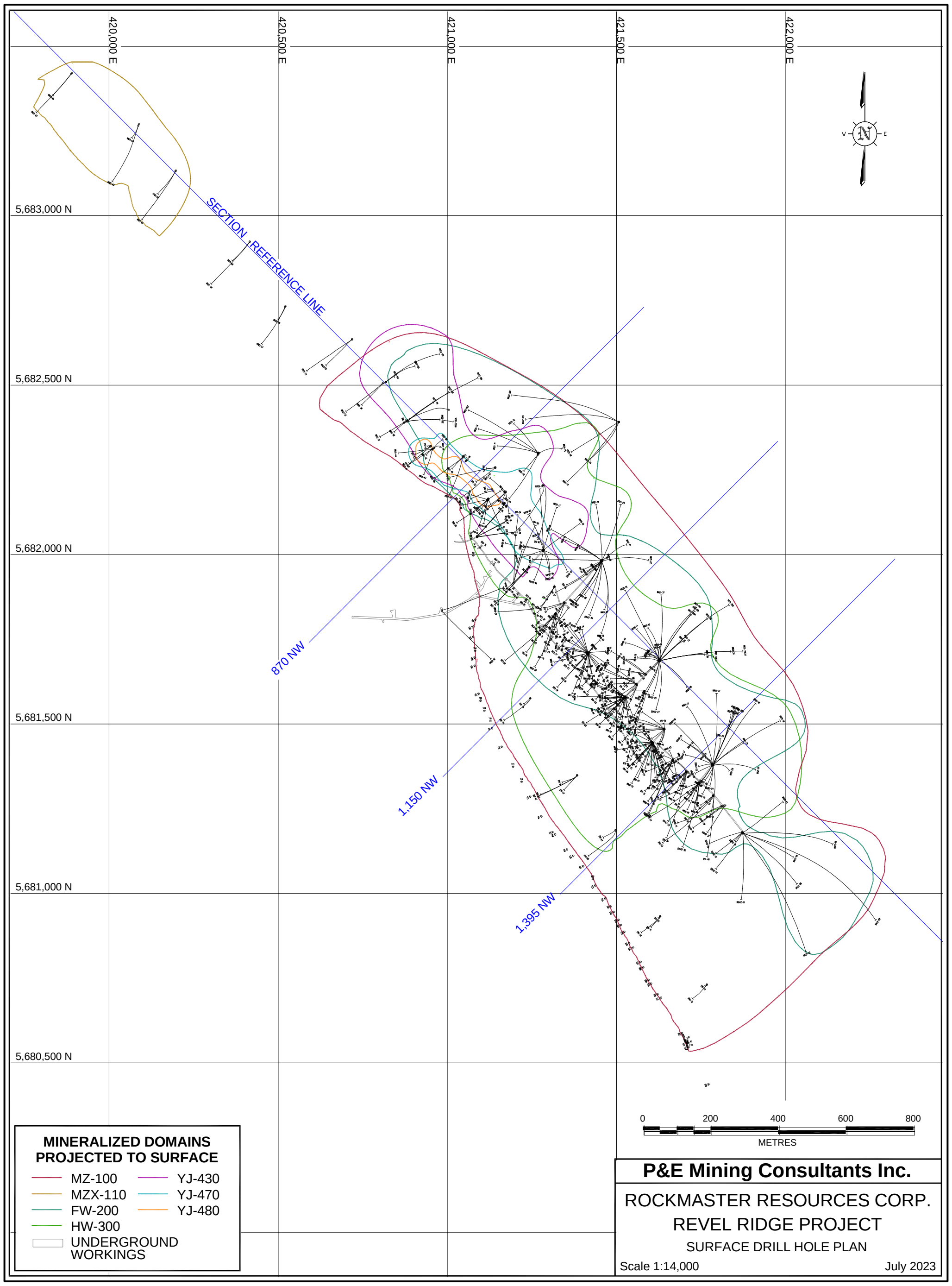
The coordinate reference system used is NAD83 UTM Zone 11U. Topographic control was derived from a 1.0 m contour drone DTM surface supplied by Rokmaster. All costs are expressed in Canadian dollars unless stated otherwise.

Figure 14-1: Drill Hole Collar Location Plot



Source: P&E (2023).
Represents all MRE domains. Channel and trench samples not used in MRE.

Figure 14-2: Drill Hole Plan



Source: P&E (2023).
RRMZ =MZ-100, RRMEX=MZX-110, RRFW=FW-200, RRHW=HW-300, RRYZ=YJ-(430, 470, 480).

Industry standard validation checks were carried out on the supplied databases, and minor corrections made where necessary. The QPs typically validate a mineral resource database by checking for inconsistencies in naming conventions or analytical units, duplicate entries, interval, length or distance values less than or equal to zero, blank or zero-value assay results, out-of-sequence intervals, intervals or distances greater than the reported drill hole length, inappropriate collar locations, and missing interval and coordinate fields.

No significant errors were noted with the supplied databases. The QPs note that Rokmaster typically makes the first downhole survey measurement approximately 12 m below the drill hole collar, and that there are a few minor inconsistencies with subsequent downhole survey measurements. For modelling purposes, the first downhole survey orientation was also used for the collar orientation, if the latter was not recorded. The QPs consider that the drill hole database supplied is suitable for mineral resource estimation. The drill hole data were imported into a GEMS™ format Access database.

14.3 Economic Considerations

Based on knowledge of similar projects, review of available data, and consideration of potential mining scenarios, the economic parameters listed in Table 14-2 were deemed appropriate for the mineral resource estimate. Metal prices were based on the March 2023 Consensus Economics long-term forecast.

Table 14-2: Economic Parameters

Element	Metal price ($USD/lb or oz)	Concentrate Recovery (%)	Smelter Payable (%)	Refining Charge ($USD/lb or oz)	Refining Charge ($CAD/lb or oz)	Average Grade (% or g/t)
Pb	0.95	71	94	0.00	0.00	1
Zn	1.26	70	85	0.00	0.00	1
Ag	22.00	85	88	0.50	0.68	1
Au	1,750.00	96	98	5.00	6.76	1
$CAD/$USD			0.74			
Concentrate Ratio (Pb/Zn Blended)			26			
Smelter Treatment Charge $USD/dmt (Pb/Zn Blended Cost)			200.00			
Concentrate Shipping Charge $CAD/tonne			140.00			
Moisture Content(%)			8			
Element	**Payable Metal ($CAD/tonne/g or %)**		**AuEq.**		**AgEq.**	
Pb	18.89		0.27		26.93	
Zn	22.33		0.31		31.85	
Ag	0.70		0.01		1.00	
Au	71.17		1.00		101.48	
Total	**113.09**					
Less Smelter Treatment Charges ($)			10.40			
Less Concentrate Shipping Charges ($)			5.38			
Revel Ridge Project – RRYZ Zones						
Pb	0.95	88	82	0.00	0.00	1%
Zn	1.26	93	85	0.00	0.00	1%

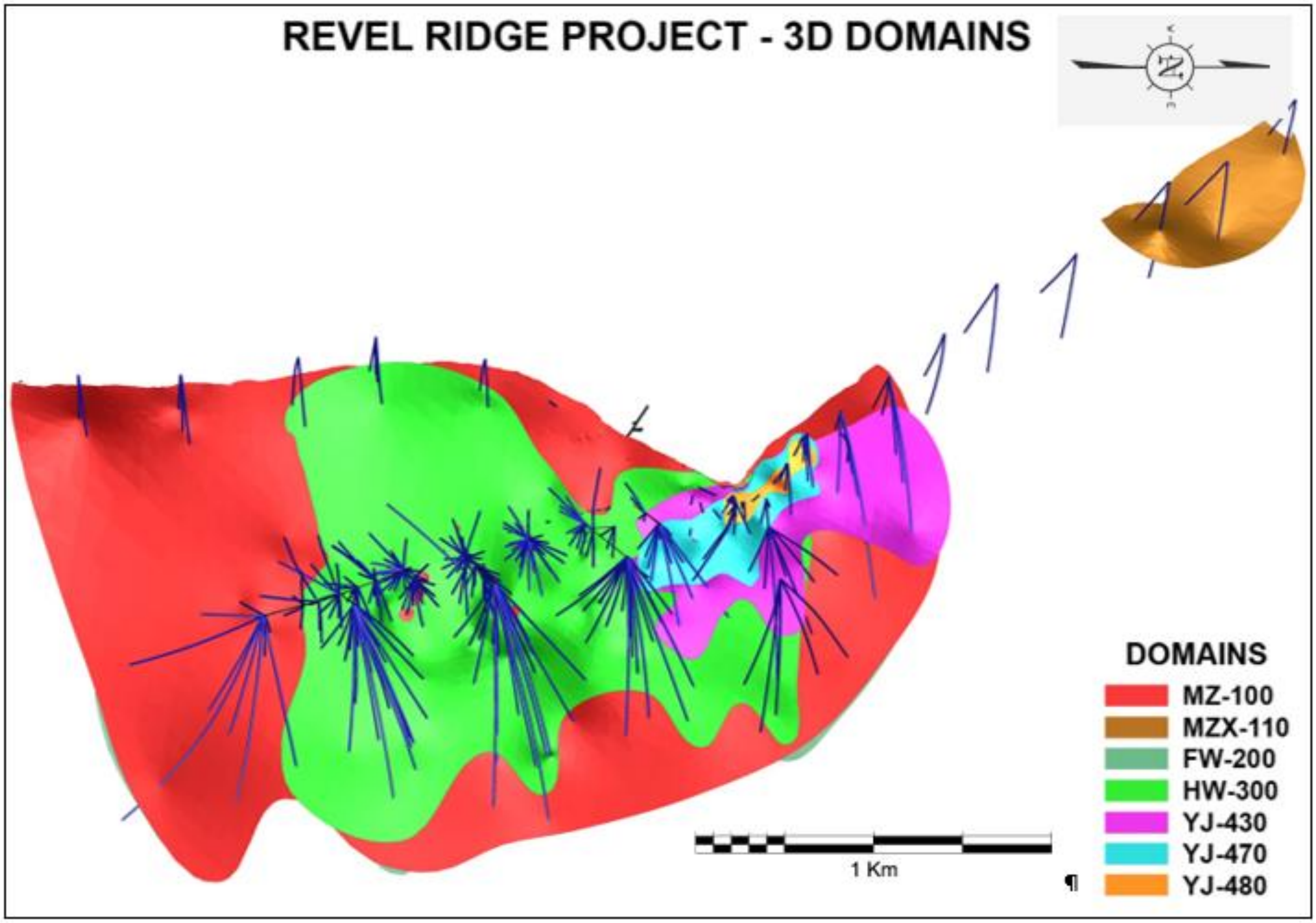
Element	Metal price ($USD/lb or oz)	Concentrate Recovery (%)	Smelter Payable (%)	Refining Charge ($USD/lb or oz)	Refining Charge ($CAD/lb or oz)	Average Grade (% or g/t)
Ag	22.00	85	88	0.50	0.68	1
Au	1,750.00	0	0	5.00	6.49	1
$CAD/$USD			0.74			
Concentrate Ratio (Pb/Zn Blended)(%)			8			
Smelter Treatment Charge $USD/dmt (Pb/Zn Blended Cost)			200.00			
Concentrate Shipping Charge $CAD/tonne			140.00			
Moisture Content(%)			8			
Element	**Payable Metal ($CAD/tonne/g or %)**		**AuEq.**		**AgEq.**	
Pb	19.40		0.31		40.59	
Zn	28.55		0.46		59.74	
Ag	0.48		0.008		1.00	
Au	0.00		0.00		0.00	
Total	**48.42**					
Less Smelter Treatment Charges ($)			33.78			
Less Concentrate Shipping Charges ($)			17.50			

14.4 Mineralization Domains

Interpreted mineralization wireframes were developed based on underground sampling, assay grades and logged drill hole lithology. Continuous zones of mineralization were identified from assay grades equal to or greater than a calculated NSR value of C$150/t or more with observed continuity along strike and down-dip. The selected intervals include lower-grade material where necessary to maintain continuity between drill holes. Three-dimensional wireframes linking drill hole cross-sections were subsequently constructed using the Leapfrog™ Radial Basis Function, with hanging wall and footwall surfaces snapped directly to the selected drill hole intercepts with a minimum wireframe width of 1.00 m.

A total of seven individual mineralization domains were defined in Figure 14-3. The mineralization domains were used to back-tag the assay, bulk density and composite tables with unique rock codes shown in Table 14-3.

Figure 14-3: 3D Domains



Source: P&E (2023).
RRMZ =MZ-100, RRMEX=MZX-110, RRFW=FW-200, RRHW=HW-300, RRYZ=YJ-(430, 470, 480).

Table 14-3: Mineralization Domains

Domain	Rock Code	Strike Length (m)
RRMZ (RRMZ)	100	2,300
RRMZ Ext (RRMEX)	110	600
Footwall (RRFZ)	200	2,200
Hanging Wall (RRHZ)	300	1,400
RRYZ 1 (RRYZ)	430	900
RRYZ 2 (RRYZ)	470	600
RRYZ 3 (RRYZ)	480	300

14.5 Exploratory Data Analysis

The mean nearest neighbour drill hole collar distance is 7.90 m. The average length of the drill holes is 181.7 m, and the average length of the underground chip sampling is 2.40 m.

A total of 3,615 Au and Ag intervals are constrained within the defined grade estimation domains. Summary statistics for the assay data are listed in Table 14-4.

Table 14-4: Assay Summary Statistics

Variable	Domain	Count	Mean	StDev[1]	CoV[2]	Minimum	Median	Maximum
Ag g/t	100	2,568	59.5	85.2	1.4	0.0001	24.10	1,160.00
	110	6	26.6	54.2	2.0	0.5000	5.00	137.00
	200	237	29.1	43.1	1.5	0.0001	13.10	303.00
	300	286	46.2	58.4	1.3	0.0001	23.90	422.00
	400	25	55.5	48.2	0.9	0.1000	50.50	199.00
	430	277	53.6	56.6	1.1	0.2000	37.00	347.00
	470	155	50.7	56.9	1.1	0.0001	40.46	391.00
	480	61	79.3	96.2	1.2	0.0001	57.80	478.90
Au g/t	100	2,568	5.9	8.6	1.5	0.0001	2.84	157.19
	110	6	3.9	1.6	0.4	1.9900	3.98	5.76
	200	237	4.3	9.9	2.3	0.0001	1.94	117.50
	300	286	1.9	4.0	2.1	0.0001	0.30	31.60
	400	25	0.3	0.6	2.3	0.0001	0.04	2.81
	430	277	0.2	1.0	5.5	0.0001	0.02	11.74
	470	155	0.1	0.1	1.5	0.0001	0.03	1.02
	480	61	0.0	0.1	1.7	0.0001	0.01	0.29
Pb %	100	2,568	2.1	3.3	1.5	0.0001	0.72	37.30
	110	6	0.3	0.5	1.9	0.0050	0.05	1.23
	200	237	0.8	1.5	1.8	0.0001	0.25	12.25
	300	286	2.0	2.7	1.4	0.0001	0.93	15.50
	400	25	2.2	2.0	0.9	0.0001	1.87	8.10
	430	277	2.4	2.6	1.1	0.0050	1.67	19.80
	470	155	2.1	2.1	1.0	0.0001	1.78	11.50
	480	61	3.8	4.6	1.2	0.0100	2.70	23.40
Zn %	100	2,568	3.8	5.4	1.4	0.0001	1.19	45.00
	110	6	0.0	0.0	0.9	0.0050	0.03	0.07
	200	237	1.4	2.8	2.0	0.0001	0.24	20.89
	300	286	4.6	6.1	1.3	0.0001	2.06	34.73
	400	25	7.5	6.4	0.9	0.0001	7.37	30.41
	430	277	7.6	7.0	0.9	0.0050	5.65	40.83
	470	155	7.3	6.9	1.0	0.0020	5.47	31.28
	480	61	8.6	6.4	0.8	0.0400	8.16	30.40
Cu %	100	1,028	0.1	0.2	1.4	0.0003	0.05	1.00
	110	6	0.1	0.1	1.2	0.0110	0.03	0.16
	200	127	0.1	0.2	1.8	0.0013	0.03	1.00
	300	144	0.1	0.1	1.4	0.0004	0.03	0.45

Variable	Domain	Count	Mean	StDev[1]	CoV[2]	Minimum	Median	Maximum
	400	17	0.0	0.0	1.4	0.0001	0.01	0.14
	430	106	0.0	0.0	1.5	0.0001	0.01	0.18
	470	85	0.0	0.1	2.0	0.0001	0.01	0.36
	480	25	0.0	0.0	1.4	0.0002	0.01	0.06

Notes: [1]StDev = Standard Deviation [2]CoV = coefficient of variation

Rokmaster supplied a total of 772 bulk density measurements taken from drill hole core. The average bulk density is 3.19 t/m^3 and the median bulk density is 2.88 t/ m^3 (Table 14-5).

Table 14-5: Summary of Bulk Density Statistics

Item	Count	Average Bulk Density (t/m^3)	Median Bulk Density (t/m^3)
Unassigned	32	2.98	2.83
RRMZ + RRMEX	555	3.26	2.93
RRFZ	77	3.00	2.82
RRHZ	72	3.08	2.84
RRYZ	36	2.98	2.81
Total	**772**	**3.19**	**2.88**

14.6 Composting

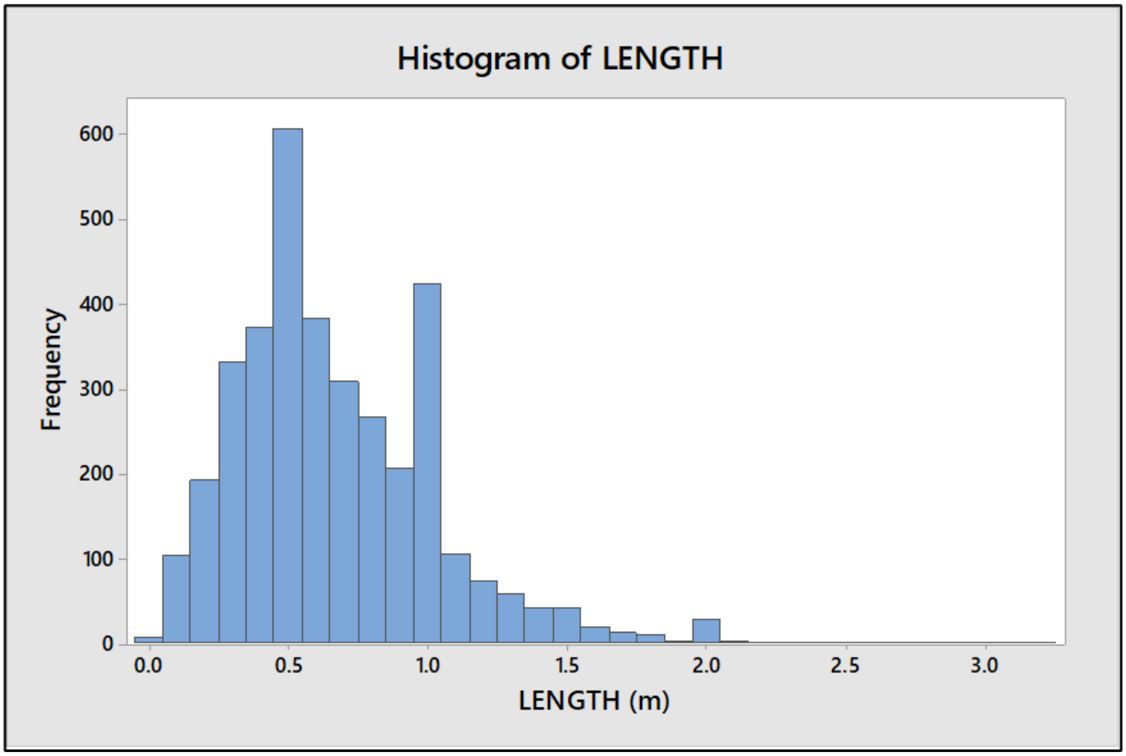
Constrained assay sample lengths within the defined mineralization domains range from 0.03 m to 3.15 m, with an average sample length of 0.67 m and a median of 0.60 m. A total of 9% of the constrained assay sample lengths are equal to 0.50 m and 31% are between 0.40 m and 0.60 m (Figure 14-4).

All constrained assay samples were composited to a length of 0.50 m in order to ensure equal sample support. Length-weighted composite grades were calculated within the defined mineralization domains. A small number of un-sampled intervals in the data were assigned a nominal value of 0.001 prior to compositing. Surface trench assays were not included in the compositing process.

The compositing process commenced at the first point of intersection between the drill hole and the mineralization domain intersected and was halted on exit from the mineralization domain. Downhole residual composites that were less than half the compositing length were discarded, so as to not introduce a short sample bias into the composite sample population. The wireframes that represent the mineralization domains were used to back-tag rock codes into the composite workspace.

The composite data were subsequently visually validated against the mineralization wireframes and extracted for analysis and grade estimation. Summary composite statistics are listed in Table 14-6.

Figure 14-4: Assay Sample Lengths



Source: P&E (2023).

Table 14-6: Composite Summary Statistics

Variable	Domain	Count	Mean	StDev[1]	CoV[2]	Minimum	Median	Maximum
Ag (g/t)	100	2,791	53.77	71.29	1.33	0.001	24.58	666.99
	110	7	24.00	49.70	2.07	0.500	7.00	136.40
	200	577	14.38	32.80	2.28	0.001	2.00	303.00
	300	1,002	19.15	43.00	2.24	0.001	0.00	422.00
	430	510	41.33	50.63	1.23	0.001	24.24	296.90
	470	267	46.81	55.54	1.19	0.001	37.79	391.00
	480	109	68.30	80.79	1.18	0.001	50.40	476.61
Au (g/t)	100	2,791	5.19	7.48	1.44	0.001	2.90	157.19
	110	7	3.67	1.61	0.44	1.990	3.41	5.76
	200	577	2.22	6.49	2.93	0.001	0.20	89.35
	300	1,002	0.58	2.23	3.83	0.001	0.00	31.14
	430	510	0.06	0.15	2.33	0.001	0.01	2.48
	470	267	0.09	0.14	1.58	0.001	0.03	1.02

Variable	Domain	Count	Mean	StDev[1]	CoV[2]	Minimum	Median	Maximum
	480	109	0.05	0.07	1.53	0.001	0.02	0.29
Pb (%)	100	2,791	1.95	2.73	1.40	0.001	0.82	18.41
	110	7	0.22	0.45	2.03	0.005	0.04	1.22
	200	577	0.41	1.14	2.76	0.001	0.02	12.25
	300	1,002	0.78	1.77	2.27	0.001	0.00	12.34
	430	510	1.78	2.27	1.28	0.001	1.15	15.85
	470	267	1.86	1.95	1.05	0.001	1.68	11.39
	480	109	3.21	3.92	1.22	0.001	2.27	23.29
Zn (%)	100	2,791	3.66	4.66	1.27	0.000	1.59	35.00
	110	7	0.03	0.03	0.85	0.005	0.02	0.07
	200	577	0.79	2.28	2.89	0.001	0.01	20.89
	300	1,002	1.95	4.27	2.19	0.001	0.00	32.70
	430	510	5.73	6.36	1.11	0.001	3.83	35.57
	470	267	6.91	6.88	1.00	0.001	5.32	28.62
	480	109	8.45	6.45	0.76	0.001	7.94	30.40

Notes: [1]StDev = Standard Deviation [2]CoV = coefficient of variation

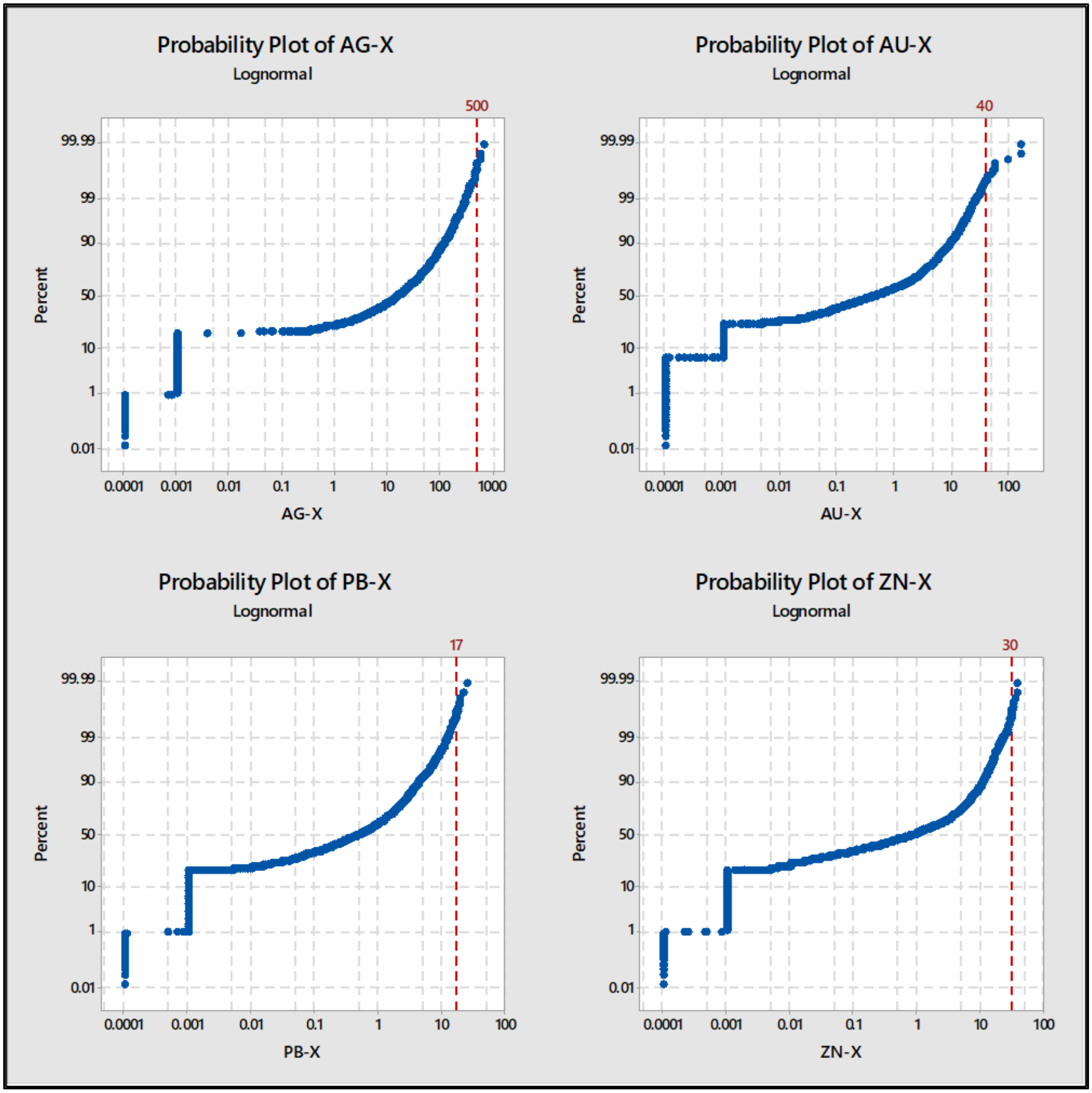
14.7 Treatment of Extreme Values

Due to the relatively smaller number of samples outside of the RRMZ, the grade capping analysis combined all grades into a single sample population for analysis. Grade capping thresholds were determined by the decomposition of the individual composite log-probability distributions for each modelled metal commodity (Figure 14-5). Composites are capped to the defined threshold prior to grade estimation (Table 14-7).

Table 14-7: Capping Thresholds

Metal	Threshold	Average Uncapped	Number Capped	Average Capped
Ag (g/t)	500	41.56	3	41.51
Au (g/t)	40	3.12	12	3.05
Pb (%)	17	1.56	5	1.56
Zn (%)	30	3.48	8	3.48

Figure 14-5: Log-Probability Graphs for Composites



Source: P&E (2023).

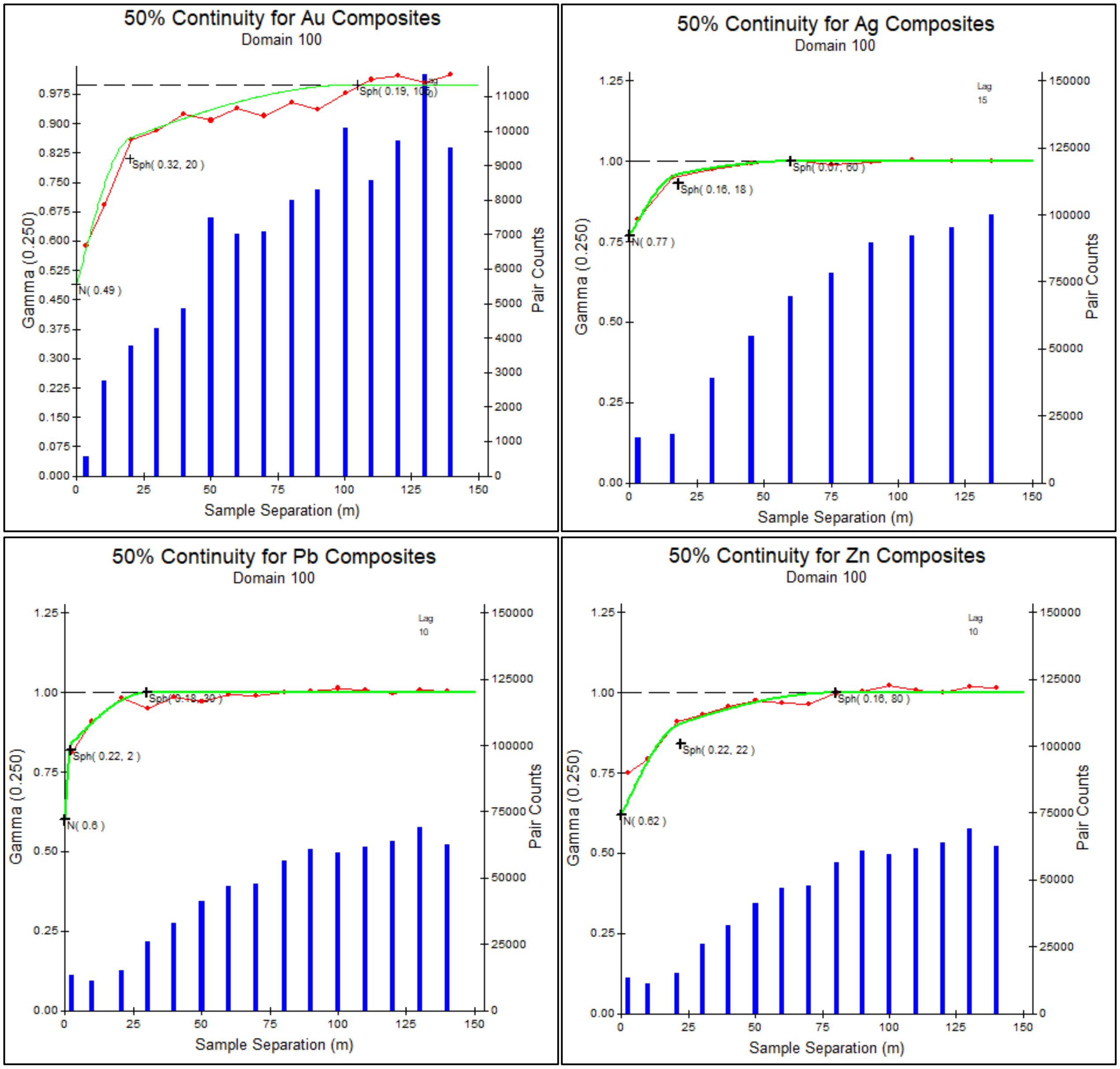
14.8 Continuity Analysis

Three-dimensional continuity analysis (variography) was conducted on the domain-coded uncapped composite data using isotropic median indicator semi-variograms for the Main Zone. Standardized spherical models were used to model the experimental semi-variograms in order to establish a reasonable classification range (Figure 14-6). Semi-variogram model ranges were checked and iteratively refined for each model relative to the overall nugget variance (Table 14-8).

Table 14-8: Semi Variograms

Composites	Value
Ag Composites	**Value**
C0	0.77
C1	0.16
C2	0.07
R1	18
R2	60
Au Composites	**Value**
C0	0.49
C1	0.32
C2	0.19
R1	20
R2	105
Pb Composites	**Value**
C0	0.60
C1	0.22
C2	0.18
R1	2
R2	30
Zn Composites	**Value**
C0	0.62
C1	0.22
C2	0.16
R1	22
R2	80

Figure 14-6: Semi – Variograms



Source: P&E (2023).

14.9 Block Model

A rotated block model was established with the limits selected to cover the extent of the mineralized structures and to reflect the general nature of the mineralization domains (Table 14-9). The block model consists of separate variables for estimated grades, volume percent domain block inclusion, rock codes, bulk density and classification attributes.

Table 14-9: Block Model Setup

Direction	Origin	Number of Blocks	Block Size (m)
Minimum X	421,800	300	5
Minimum Y	5,680,100	380	10
Maximum Z	2,100	380	5
Rotation		45° counterclockwise	

14.10 Bulk Density Grade Estimation and Mineral Resource Classification

Bulk density was estimated by Inverse Distance Squared (ID2) estimation using the nearest three to six bulk density samples within each mineralization domain.

Block grades were estimated for Pb and Zn by Inverse Distance Squared and for Au and Ag by inverse distance cubed weighting of capped composites using a minimum of five and a maximum of 12 composites, with a maximum of four composites from a single drill hole. The orientation of the search ellipsoid was defined by the modeled variography, observed grade trends, and historical mining. Composite samples were selected within a 600 m x 600 m x 60 m ellipsoid during a single estimation pass. Search and grade estimation were constrained by the individual mineralization domains, which define hard boundaries for grade estimation. Capped nearest neighbor (NN) models were also generated using the same grade estimation strategy. Block model cross-sections and plans are presented in Figure 14-7 and Figure 14-8.

Subsequent to grade estimation, an NSR value was calculated for each block. The NSR values were calculated as follows:

- RRMZ, RRFZ and RRHZ: Pb% x 18.89 + Zn% x 22.33 + Ag g/t x 0.70 + Au g/t x 71.17) -15.78.
- RRYZ Domains: (Pb% x 20.18 + Zn% x 29.71 + Ag g/t x 0.50 + Au g/t x 0.00) -51.28.

An Au equivalent value (AuEq) was also calculated for each block as follows:

- RRMZ, RRFZ and RRHZ: Au g/t + Ag g/t x 0.010 + Pb% x 0.265 + Zn% x 0.314.
- RRYZ: Au g/t + Ag g/t x 0.008 + Pb% x 0.310 + Zn% x 0.457.

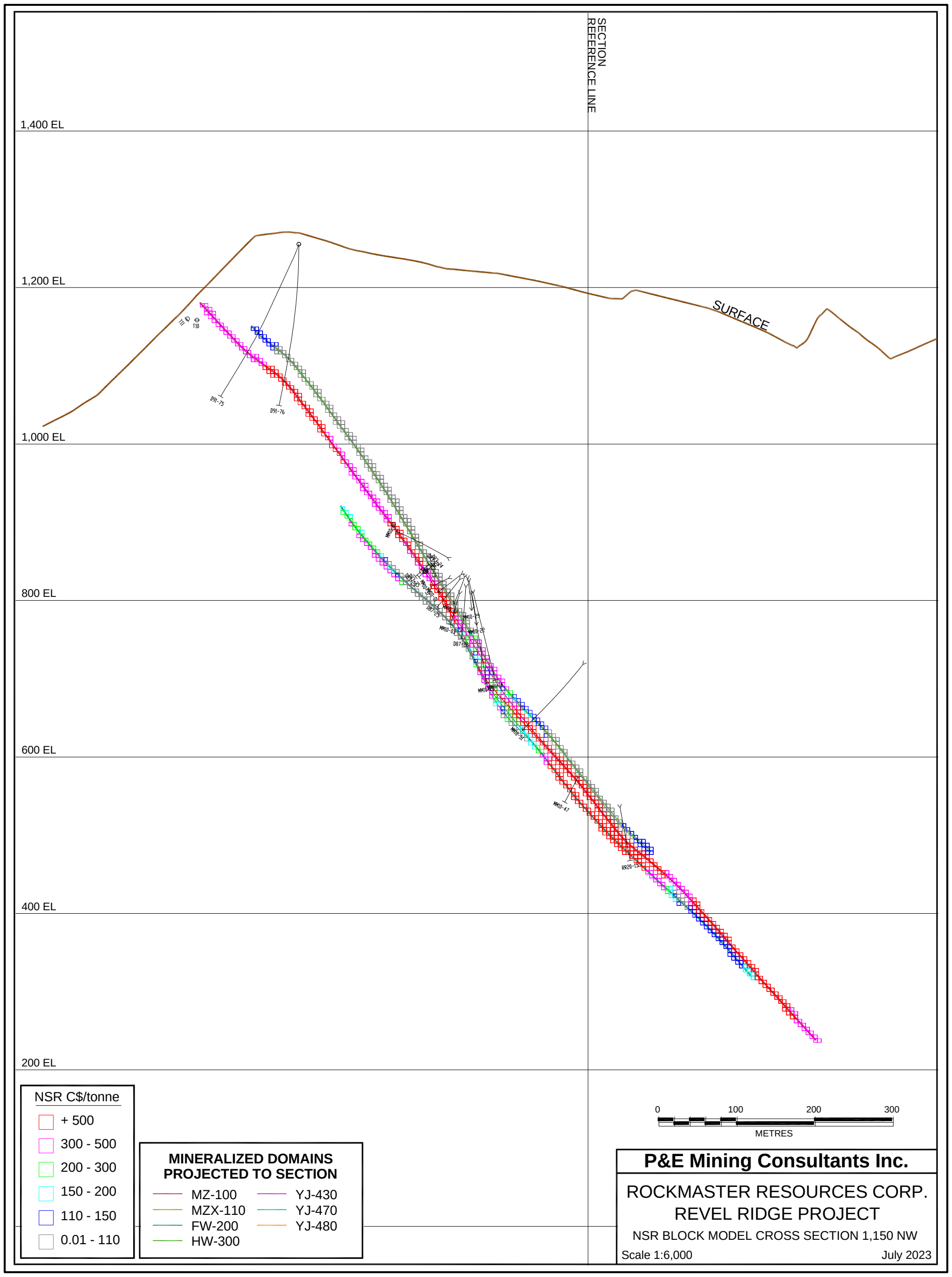
An Ag equivalent value (AgEq) was also calculated for each block as follows:

- RRMZ, RRFZ and RRHZ: Ag g/t + Au g/t x 101.478 + Pb% x 26.933 + Zn% x 31.847.
- RRYZ: Ag g/t + Pb% x 40.588 + Zn% x 59.737.

The parameters used to define the classification limits included experimental semi-variogram ranges, drill hole spacing, geological confidence and the observed continuity of the mineralization. Mineral resources were classified algorithmically based on the local drill hole spacing within each individual mineralization domain. Based primarily on the RRMZ variography ranges, blocks within 40 m of three or more drill holes were classified as measured, blocks within 80 m of three or more drill holes were classified as indicated, and all additional estimated blocks were classified as inferred. No measured mineral resources were assigned to the RRYZ domains, and the RRMEX was classified as inferred due to the limited number of drill holes.

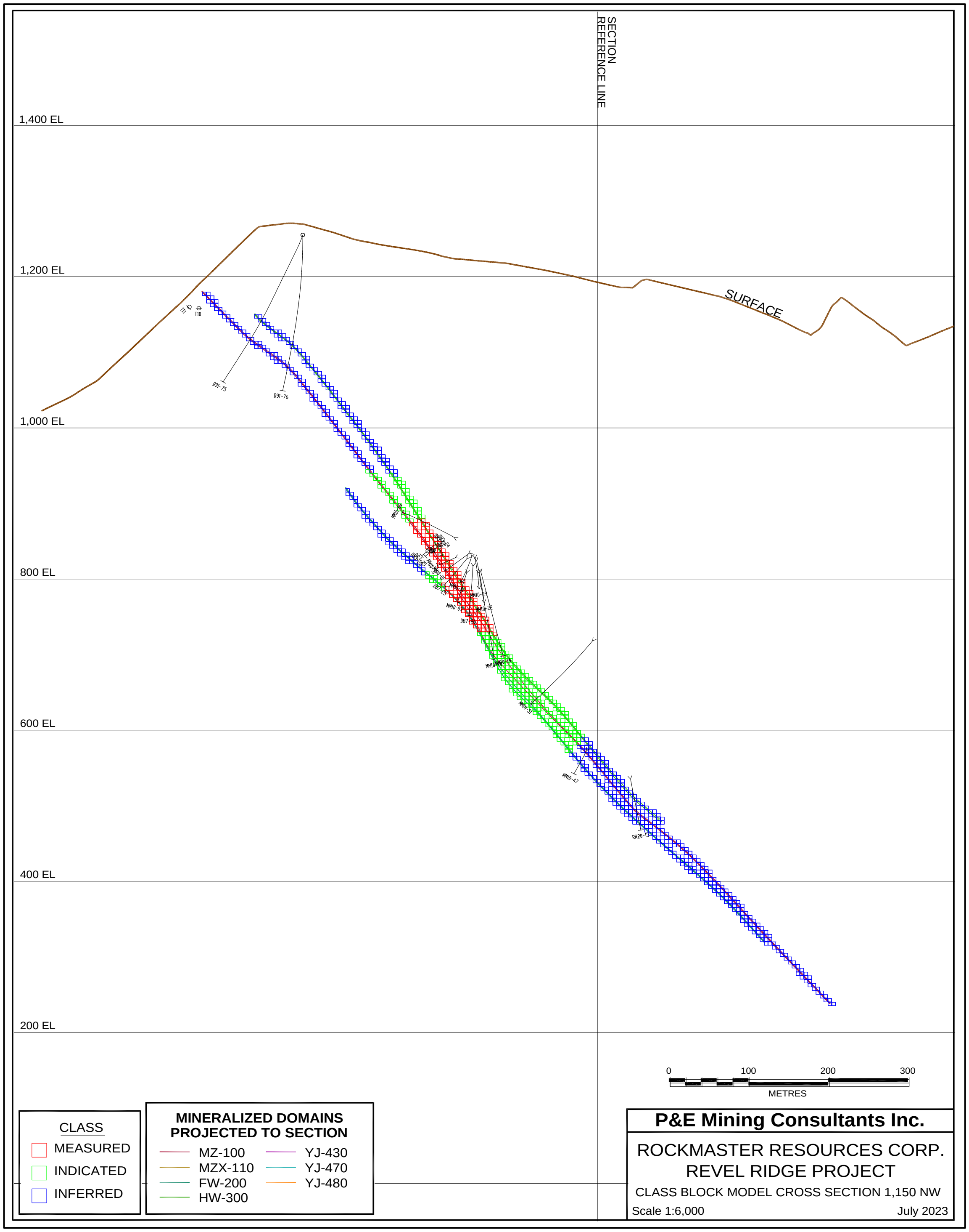
Subsequent to the initial classification, blocks were re-classified using a maximum a-posteriori selection pass that corrected isolated classification artifacts and consolidated areas of similar classification into continuous zones. Classification block model cross-sections and plans can be seen in Figure 14-7 and Figure 14-8.

Figure 14-7: NSR Block Model Cross-Section



Source: P&E (2023).

Figure 14-8: Classification Block Model Cross-Section



Source: P&E (2023).

14.11 Mineral Resource Estimate

Mineral resources have been reported using a NSR cut-off of C$110/t. The NSR cut-off was derived from $75/t mining, $25/t processing and $10/t G&A. The mineral resource estimate has an effective date of June 6, 2023 (Table 14-10).

Highlights of the mineral resource estimate include:

- Measured and indicated mineral resource, in all zones, is estimated to contain 1.53 million AuEq ounces within 7.16 million tonnes with an average grade of 6.63 g/t AuEq.
- Inferred mineral resource, in all zones, is estimated to contain 1.49 million AuEq ounces within 7.56 million tonnes at an average grade of 6.11 g/t AuEq.

The sensitivity of the mineral resource to changes in cut-off grade was also calculated across a range of potentially economic NSR cut-offs.

The Author of this technical report section considers the vein mineralization of the Revel Ridge Project to conform to CIM Mineral Resource Definitions, CIM Best Practices Guidelines, is potentially amenable to underground mining methods and meets the Reasonable Prospect of Eventual Economic Extraction.

Table 14-10: Mineral Resource Estimate

Classification	Cut-off NSR (C$/t)	Tonnes (kt)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	Pb (%)	Zn (%)	NSR (C$/t)	AuEq (g/t)	AuEq (koz)	AgEq (g/t)	AgEq (koz)
Totals For All Mineralized Zones													
Measured	110	1,916.5	58.6	3,611.6	5.49	338.5	2.05	4.01	544.46	7.88	485.6	799.0	49,231.4
Indicated	110	5,239.7	48.5	8,168.8	3.64	613.9	1.93	4.25	409.01	6.18	1,040.3	652.8	109,967.5
Meas + Ind	110	7,156.2	51.2	11,780.4	4.14	952.4	1.96	4.18	445.28	6.63	1,526.0	691.9	159,198.9
Inferred	110	7,563.9	46.9	11,414.3	4.42	1,075.1	1.48	2.62	417.53	6.11	1,486.7	621.7	151,188.8
Totals For Revel Ridge Main Zone													
Measured	110	1,550.1	63.6	3,171.4	5.89	293.6	2.25	4.25	585.42	8.46	421.5	857.4	42,730.1
Indicated	110	2,922.4	49.6	4,662.5	4.97	466.6	2.02	3.6	491.00	7.13	669.8	722.7	67,902.9
Meas + Ind	110	4,472.6	54.5	7,833.8	5.29	760.3	2.10	3.83	523.72	7.59	1,091.30	769.4	110,663.0
Inferred	110	5,689.1	49.1	8,975.5	4.94	903.3	1.66	2.93	466.75	6.79	1,241.60	688.1	125,859.5
Totals For Revel Ridge RRFZ													
Measured	110	196.1	33.8	212.8	5.08	32.0	0.95	1.78	427.01	6.23	39.3	631.4	3,980.8
Indicated	110	846.5	28.8	785.0	4.01	109.1	0.74	1.11	328.53	4.84	131.8	491.0	13,362.9
Meas + Ind	110	1,042.5	29.8	997.9	4.21	141.1	0.78	1.24	347.05	5.10	171	517.4	17,343.7
Inferred	110	704.7	21.5	488.2	3.96	89.7	0.53	1.00	313.43	4.63	104.9	469.5	10,637.3
Totals For Revel Ridge RRYZ													
Measured	110	0.5	48.0	0.8	0.11	0	1.89	3.99	122.36	2.79	0	363.1	5.8
Indicated	110	887.4	62.9	1794.1	0.1	2.9	2.65	9.08	289.50	5.47	156.2	712.8	20,336.6
Meas + Ind	110	887.9	62.9	1795.0	0.1	2.9	2.65	9.07	289.40	5.47	156.2	712.6	20,342.4
Inferred	110	132.6	126.3	538.8	0.04	0.2	2.43	4.96	198.20	4.03	17.2	521.5	2,223.3
Totals For Revel Ridge RRHZ													
Measured	110	169.7	41.5	226.6	2.35	12.8	1.53	4.37	307.37	4.55	24.8	460.9	2,514.7
Indicated	110	583.5	49.4	927.1	1.88	35.3	2.09	4.69	296.84	4.4	82.6	445.9	8,365.1
Meas + Ind	110	753.2	47.6	1,153.7	1.99	48.1	1.96	4.62	299.21	4.43	107.4	449.3	10,879.8
Inferred	110	575.1	44.8	827.6	1.67	30.9	1.51	3.1	232.23	3.49	64.6	353.7	6,539.9
Totals For Revel Ridge RRMEX													
Inferred	110	462.4	39.3	584.1	3.44	51.1	0.36	0.04	263.83	3.94	58.5	398.8	5,928.8

Notes

1. Mineral resources are not mineral reserves and do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
2. The inferred mineral resource in this estimate has a lower level of confidence than that applied to an Indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of the Inferred mineral resource could be upgraded to an indicated mineral resource with continued exploration, however there is no certainty an upgrade to the inferred mineral resource would occur or what proportion would be upgraded to an indicated mineral resource.
3. The mineral resources in this estimate were calculated using the CIM Standards on mineral resources and reserves, definitions, and guidelines (2014) prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council and CIM Best Practices Guidelines (2019).
4. The following parameters were used to derive the NSR block model C$/tonne cut-off values used to define the mineral resource:
    - March 2023 Consensus Economics long term forecast metal prices of Au US$1,750/oz, Ag US$22/oz, Pb US$0.95/lb, Zn US$1.26/lb
    - Exchange rate of US$0.74 = C$1.00
    - RRMZ process recoveries of Au 96%, Ag 85%, Pb 71%, Zn 70%
    - RRYZ process recoveries of Au 86%, Ag 94%, Pb 88%, Zn 93%
5. MDZ AuEq = Au g/t + (Ag g/t x 0.010) + (Pb% x 0.265) + (Zn% x 0.314); MDZ AgEq = Ag g/t + (Au g/t x 101.478) + (Pb% x 26.933) + (Zn% x 31.847); RRYZ AuEq = Au g/t + (Ag g/t x 0.008) + (Pb% x 0.310) + (Zn% x 0.457); RRYZ AgEq = Ag g/t + (Pb% x 40.588) + (Zn% x 59.737)
6. Totals may not sum due to rounding.

Table 14-11: NSR Cut-off Sensitivity for Measured and Indicated Mineral Resources

Cut-off NSR (C$/t)	Tonnes (kt)	Ag (g/t)	Ag (koz)	Au (g/t)	Au (koz)	Pb (%)	Zn (%)	NSR (C$/t)	AuEq (g/t)	AuEq (koz)
190	5,915.7	56.9	10,817.4	4.78	909.1	2.17	4.53	507.21	7.50	1,425.5
180	6,074.1	56.1	10,961.0	4.69	915.7	2.14	4.49	498.81	7.38	1,440.9
170	6,227.5	55.4	11,092.3	4.61	922.1	2.11	4.45	490.83	7.27	1,455.0
160	6,380.4	54.7	11,222.1	4.52	927.7	2.09	4.41	483.02	7.16	1,468.6
150	6,522.7	54.1	11,335.4	4.45	933.0	2.06	4.37	475.87	7.06	1,480.5
140	6,690.4	53.3	11,465.6	4.36	938.5	2.04	4.33	467.57	6.94	1,493.7
130	6,847.2	52.6	11,575.1	4.29	943.5	2.01	4.28	459.96	6.84	1,505.3
120	7,008.0	51.8	11,680.2	4.21	948.4	1.98	4.23	452.27	6.73	1,516.3
110	**7,156.2**	**51.2**	**11,780.4**	**4.14**	**952.4**	**1.96**	**4.18**	**445.28**	**6.63**	**1,526.0**

All tonnes, grade and metal content meet the requirements of the Reasonable Prospect of Eventual Economic Extraction.

14.12 Validation

The block model was validated visually by the inspection of successive cross-sections in order to confirm that the block models correctly reflect the distribution of high-grade and low-grade values.

As a check on global bias the average estimated block grades were compared to the average nearest neighbour block estimate at a 0.001 cut-off (in g/t for Au and Ag and in % for Pb and Zn) for measured and indicated mineral resources. The results fall within acceptable limits for linear grade estimation (Table 14-12)

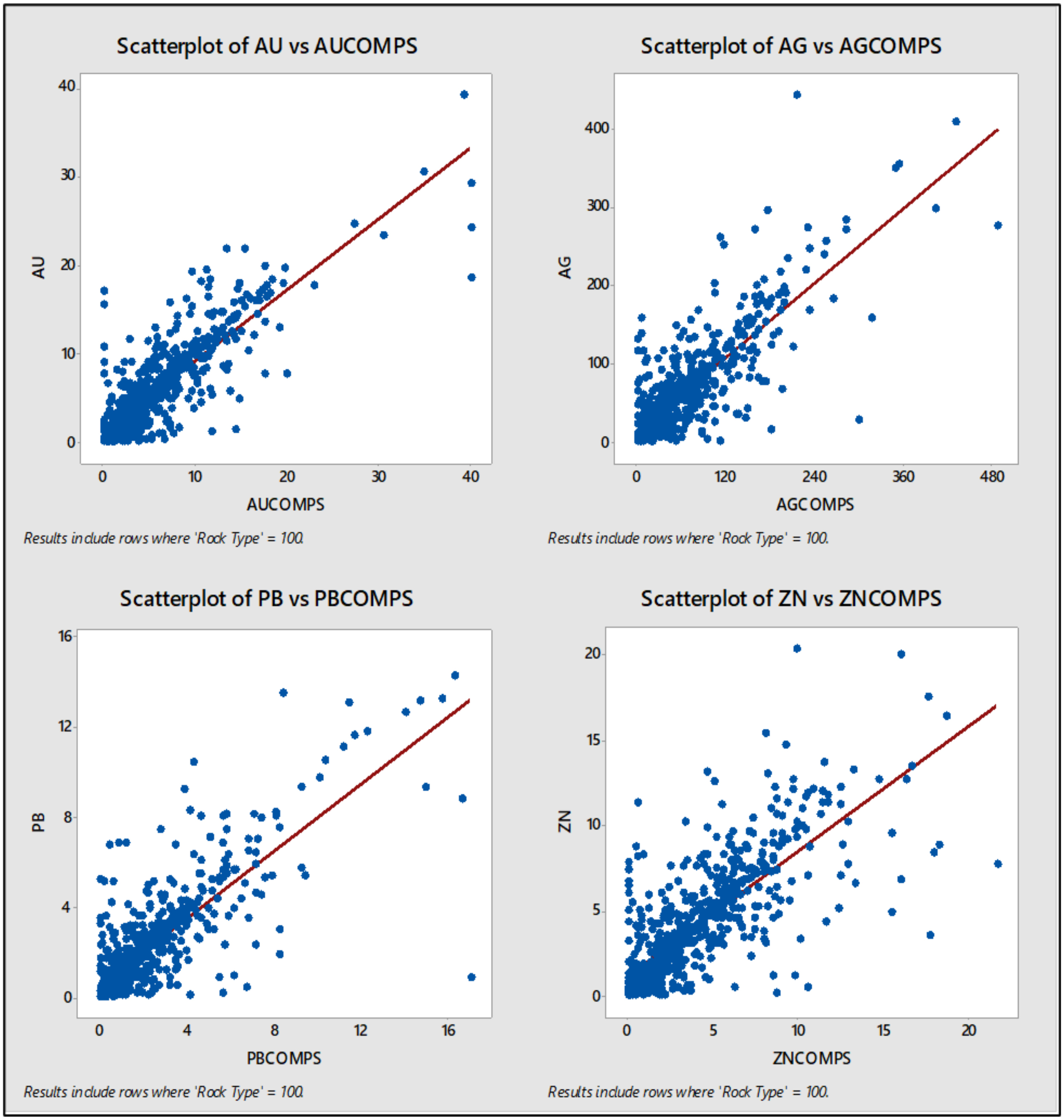
An additional validation check was completed by comparing the average grade of the composites falling within a block to the corresponding block grade estimate (Figure 14-9). The results are within acceptable limits for linear grade estimation.

Table 14-12: Comparison of ID and NN Average Block Grades (M&I)

Deposit Area	Metal ID (g/t or %)	Metal NN (g/t or %)	ID/NN
Domain	**Ag ID (g/t)**	**Ag NN (g/t)**	**ID/NN**
MZ 100	49.1	51.3	0.96
FW 200	14.3	16.5	0.87
HW 300	21.0	23.3	0.90
YJ 400	49.5	53.9	0.92
MX 110	39.3	36.2	1.09
Average	**37.3**	**39.5**	**0.94**
Domain	**Au ID (g/t)**	**Au NN (g/t)**	**ID/NN**
MZ 100	4.85	5.43	0.89
FW 200	2.05	2.27	0.90
HW 300	0.87	1.07	0.81
YJ 400	0.07	0.08	0.84
MX 110	3.44	3.54	0.97
Average	**3.19**	**3.58**	**0.89**
Domain	**Pb ID (%)**	**Pb NN (%)**	**ID/NN**
MZ 100	1.78	1.92	0.93
FW 200	0.39	0.47	0.83
HW 300	0.80	0.98	0.82
YJ 400	1.86	2.08	0.89
MX 110	0.36	0.33	1.09
Average	**1.31**	**1.45**	**0.90**
Domain	**Zn ID (%)**	**Zn NN (%)**	**ID/NN**
MZ 100	3.2	3.5	0.92
FW 200	0.7	0.8	0.85
HW 300	1.8	2.0	0.89
YJ 400	6.0	6.3	0.95
MX 110	0.0	0.0	1.05
Average	**2.6**	**2.9**	**0.92**

Note:
[1]M&I = measured and indicated mineral resources

Figure 14-9: Block Grades Vs. Composite Grades



Source: P&E (2023).

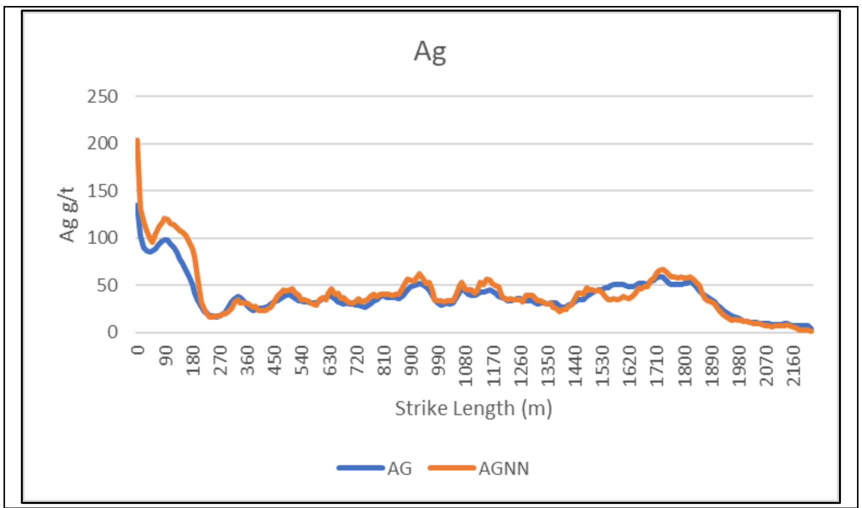
The volume estimated was also checked against the reported volume of the individual mineralization wireframes. Estimated volumes are based on partial block volumes (Table 14-13). The results fall within acceptable limits for grade estimation.

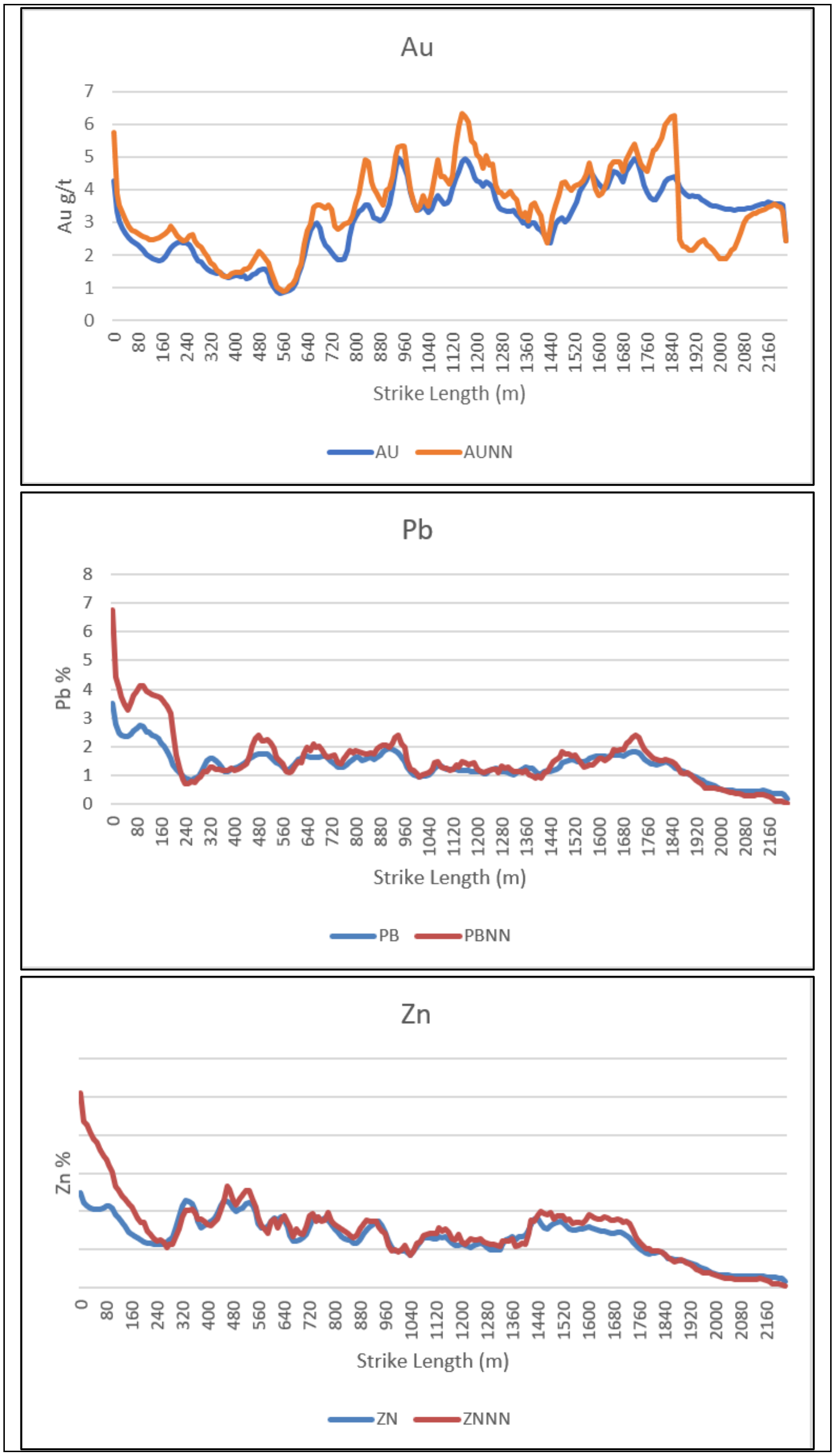
Table 14-13: Volume Comparison

Domain	Wireframe Volume (k m^3)	Estimated Volume (k m^3)
MZ 100	3,306	3,257
FW 200	1,323	1,284
HW 300	1,161	1,129
YJ 400	584	570
MX 110	150	150
Total	**6,524**	**6,390**

A check for local estimation bias was completed by plotting vertical swath plots of the estimated ID2 block grade and the Nearest Neighbour grade. The results demonstrate a reasonable level of smoothing for the ID2 estimate and fall within acceptable limits for linear grade estimation (Figure 14-10).

Figure 14-10: Swath Plots





Source: P&E (2023).

15 MINERAL RESERVE ESTIMATE

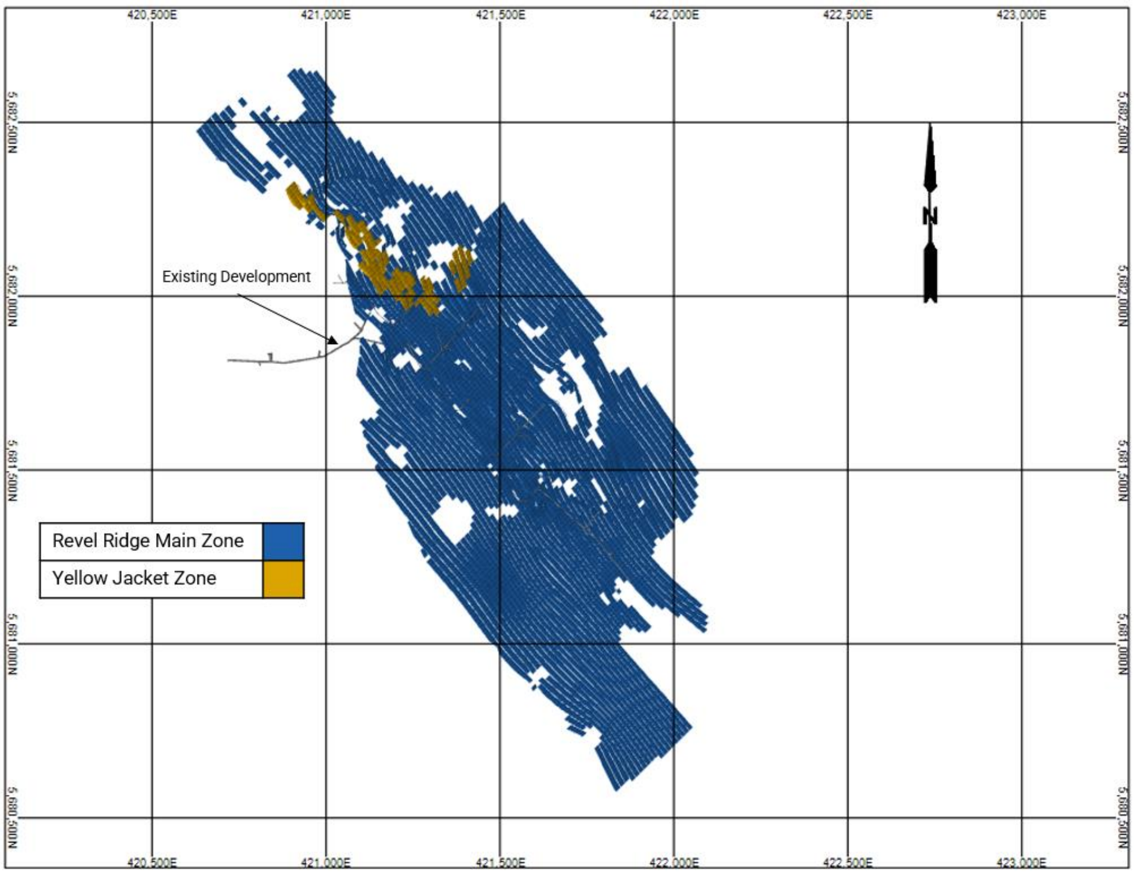
This section is not relevant to this technical report.

16 MINING METHODS

16.1 Overview Mine Design

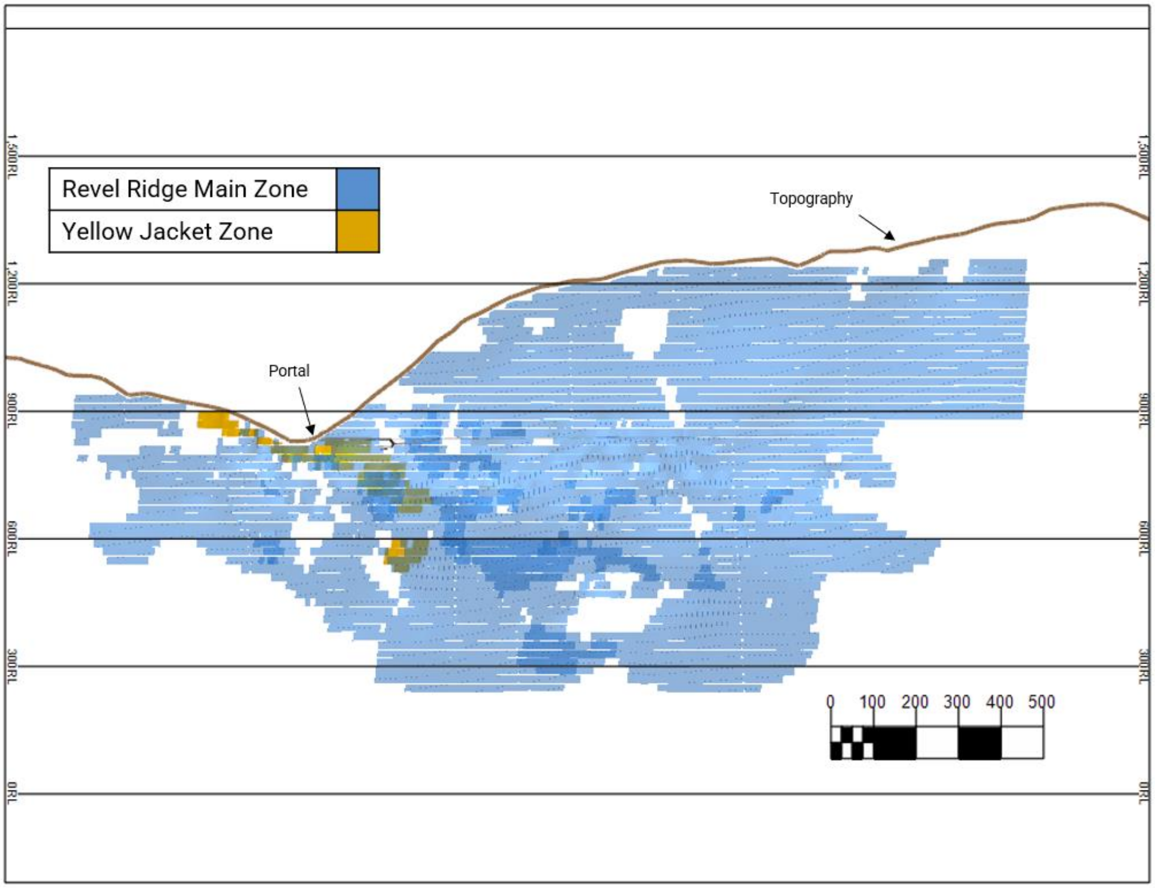
Revel Ridge will be an underground mine extracting mineralized material from the RRYZ zones and the RRMZ which consists of a high-grade main lens as well as a hanging wall and footwall lens. The mineralized material of the RRMZ and RRYZ deposits extend for 2.25 km along strike and 1.0 km vertically from the 240 level to the 1240 level. These mining zones are shown in Figure 16-1 and Table 16-2.

Figure 16-1: Revel Ridge Stope Shapes - Plan View



Source: Mining Plus (2023).

Figure 16-2: Revel Ridge Stope Shapes - Long Section Looking Northeast



Source: Mining Plus (2023).

The mine design was based on the block model developed and supplied by P&E (2023). The stopes were generated using Datamine's MSO software and applied the calculated stope cut-off grades against the NSR attribute included in the P&E block model.

Currently, there is an exploration drift on the 830 level, accessed by the 832 adit portal. There are also several other existing adits, none of which are anticipated to be used for mine traffic during mining operations but can be reopened and reinforced to provide secondary egress as required.

Mining Plus has developed a conceptual mine plan to estimate the extraction of mineralized material over a 11.4 year LOM based on an average production rate of 2,920 t/d of process facility feed. The mine design is based on stope shapes that exceed a NSR cut-off value of C$220 /t. The NSR calculation was performed separately for the RRMZ and RRYZ zone to account for their difference in processing costs.

Underground mining will utilize the LHOS mining method with the majority of stopes drilled and filled from a top drift. The stope shapes used were 20 m in height and 24 m in length with a minimum design width of 2 m. These minimum dimensions include internal waste dilution, predominately in the width when the modeled geology is less than 2 m wide. The stopes have an additional overbreak factor of 0.2 m which brings the minimum mining width up to 2.2 m. The average external dilution (overbreak) factor is 9% of the undiluted mineralized tonnes.

Mined out areas will be backfilled using pastefill in the lower and mid mining levels and Cemented Rockfill (CRF) in the highest levels of the mine above the 1020 level where there is too much head pressure to pump paste.

The mineralized material for stopes and development that are included in the mine schedule are presented in Table 16-1 and Table 16-2. The planned mining production rate is 2,920 tonnes of diluted mineralized material per day.

Table 16-1: Mineralized Material Tonnes and Grade - Main Zone

Zone	Code	Classification	Tonnes (t)	NSR ($CAD/t)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	AuEq (%)
Main	100	Measured	1,770,375	443	47.99	4.47	1.69	3.17	6.38
		Indicated	2,961,937	389	39.55	3.95	1.53	2.79	5.61
		Inferred	5,613,983	334	35.19	3.54	1.15	1.99	4.81
Main -Footwall	200	Measured	75,944	520	34.74	6.22	1.03	1.87	7.42
		Indicated	396,911	300	22.41	3.81	0.52	0.56	4.34
		Inferred	325,795	288	16.50	3.66	0.42	0.74	4.16
Main - Hanging wall	300	Measured	23,562	234	29.19	1.72	1.32	3.41	3.41
		Indicated	200,418	309	37.67	2.34	1.75	4.14	4.45
		Inferred	61,981	320	38.64	2.95	1.83	2.54	4.59
Total Main	**Total**	**Measured**	**1,869,881**	**443**	**47.22**	**4.51**	**1.66**	**3.12**	**6.38**
		Indicated	**3,559,266**	**375**	**37.54**	**3.85**	**1.43**	**2.62**	**5.41**
		Inferred	**6,001,759**	**331**	**34.21**	**3.54**	**1.12**	**1.93**	**4.77**

Notes on mineralized material estimation (1-4):
1. 2023 Mineralized material tonnes areas of September 22, 2023, and are based on a stope design cut-off grade of C$220/t NSR and a development cut-off grade of C$110/t NSR.
2. Cut-off grades for the RRMZ are based on a Pb metal price of $0.95 USD/lb, recovery of 71% and payable of 94%, a Zn metal price of $1.26 USD/lb, recovery of 70% and payable of 85%, an Au metal price of $1,750 USD/oz, recovery of 96% and payable of 98%, and a Ag metal price of $22 USD/oz, recovery of 85% and payable of 88%.
3. Foreign exchange rate used is C$1.00 = $0.74 USD.
4. Average internal (planned) dilution, external (unplanned) dilution and mining recovery factors of 46%, 9% and 96%, respectively, are assumed.

Table 16-2: Mineralized Material Tonnes and Grade - Yellow Jacket

Zone	Code	Classification	Tonnes (t)	NSR ($CAD/t)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	AuEq (%)
Yellow Jacket	430	Measured	-	-	-	-	-	-	-
		Indicated	170,368	272	63.20	0.06	2.70	7.99	4.80
		Inferred	14,157	249	44.24	0.07	1.89	7.57	4.19
Yellow Jacket	470	Measured	-	-	-	-	-	-	-
		Indicated	116,569	308	66.04	0.10	2.37	9.41	5.32
		Inferred	-	-	-	-	-	-	-

Zone	Code	Classification	Tonnes (t)	NSR ($CAD/t)	Ag (g/t)	Au (g/t)	Pb (%)	Zn (%)	AuEq (%)
Yellow Jacket	480	Measured	-	-	-	-	-	-	-
		Indicated	40,411	331	77.24	0.03	3.57	9.25	5.73
		Inferred	-	-	-	-	-	-	-
Total Yellow Jacket	**Total**	**Measured**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
		Indicated	**327,348**	**292**	**65.94**	**0.07**	**2.69**	**8.65**	**5.10**
		Inferred	**14,157**	**249**	**44.24**	**0.07**	**1.89**	**7.57**	**4.19**

Notes on mineralized material estimation [1-4]:
1. 2023 Mineralized material tonnes are as of September 22, 2023, and are based on a stope design cut-off grade of C$220/t NSR and a development cut-off grade of C$110/t NSR.
2. Cut-off grades for the RRYZ zone are based on a Pb metal price of $0.95 USD/lb, recovery of 88% and payable of 82%, a Zn metal price of $1.26 USD/lb, recovery of 93% and payable of 85%, an Au metal price of $1,750 USD/oz, recovery of 0% and payable of 0%, and an Ag metal price of $22 USD/oz, recovery of 94% and payable of 57%.
3. Foreign Exchange rate used is C$1.00 = $0.74 USD.
4. Average internal (planned) dilution, external (unplanned) dilution and mining recovery factors of 46%, 9% and 96%, respectively, are assumed.

16.2 Geotechnical Considerations

16.2.1 Site Visit

A site visit to the Revel Ridge project was performed by Mining Plus in 2022 and included a geotechnical inspection of the underground workings. The underground was accessed through the 832 Portal which is 5 m wide by 5 m high and developed in 2008. Installed ground support consists of split sets, welded wire mesh and strapping where required. The heading profile was found to be consistent throughout with minor overbreak noted. It is envisioned that minimum requirements for future development will be rock bolts and screen with some allowances to be made for shotcrete in poor ground. The existing ground support will need to be pull tested to ensure it is still performing as originally designed.

Bulk samples were extracted from the current underground workings during a previous ownership of the mine. Figure 16-3 shows an example of the bulk sample areas. It can be seen that the footwall break is clean, and that the hanging wall did not break cleanly with some overbreak noted.

Figure 16-3: Bulk Sample Area in Underground Workings - 2022

Source: Mining Plus (2023).

16.2.2 Preliminary Geomechanical Analysis

In general, the rock mass consists of strong, moderately weathered, thinly spaced (2-8 cm), clean to slightly altered undulating smooth surfaces. Bieniawski's rock mass rating (RMR) was estimated to be 60-75 in competent rock; block sizing was estimated to be 0.2 m x 1.5 m x 1.0 m. Poor ground conditions were observed as following: distinct zones of gouge within the foliation measuring 2 cm thick; and areas where the foliation is tight: weathering/alteration of the host rock is observed – block sizes in these instances reduces to 0.05 m x 0.10 m x 0.6 m. These would be distinct zones that would be managed with ground control elements (shotcrete and screen for drift development).

Rokmaster provided the QP with the geotechnical logging that occurred during the 2007 drilling campaign. The geotechnical database contains 9 boreholes drilled in 2007 totalling 1,046.9 m of geotechnically logged core. Boreholes were logged per RMR89 rock mass rating system. Minor modifications to the logs were necessary to allow for statistical analysis. A summary of the boreholes, length and RQD within the geotechnical database are provided in Table 16-3 and a summary of the geotechnical database grouped by main rock type is presented in Table 16-4.

Table 16-3: Summary of Geotechnical Borehole Logs

			RQD			
Borehole	Maximum Depth (m)	Geotechnical Logged Interval (m)	Minimum	Average	Maximum	Coefficient of variation (%)
M07SJ-01	102.72	81.4	34	67	100	29
M07SJ-02	102.72	81.1	30	63	90	30
M07SJ-03	121.01	95.3	20	65	92	28
M07SJ-04	169.77	145.4	40	76	100	22
M07SJ-05	157.58	125	40	74	100	23
M07SJ-06	114.91	84.4	16	52	100	46
M07SJ-07	175.87	103.6	16	74	100	30
M07SJ-08	197.21	164.6	3	61	100	41
M07SJ-09	197.21	166.1	10	57	95	39
Overall	1,139	1,046.92	3	65	100	34

Table 16-4: Geotechnical Database by Rock Type

		RQD			
Rock Type	Geotechnical Logged Interval (m)	Minimum	Average	Maximum	Coefficient of variation (%)
Breccia	3.05	52.5	52	52	N/A
Limestone	605.88	5.8	68	100	21
Marble	115.82	44.9	82	100	17
Mineralized	18.3	53.1	67	78	12
Phyllite	273.4	3.0	53	89	23
Schist	6.09	57.2	70	82	22
Undefined	24.38	39.3	59	76	20
Total	**1,046.92**	**3.0**	**65**	**100**	**22**

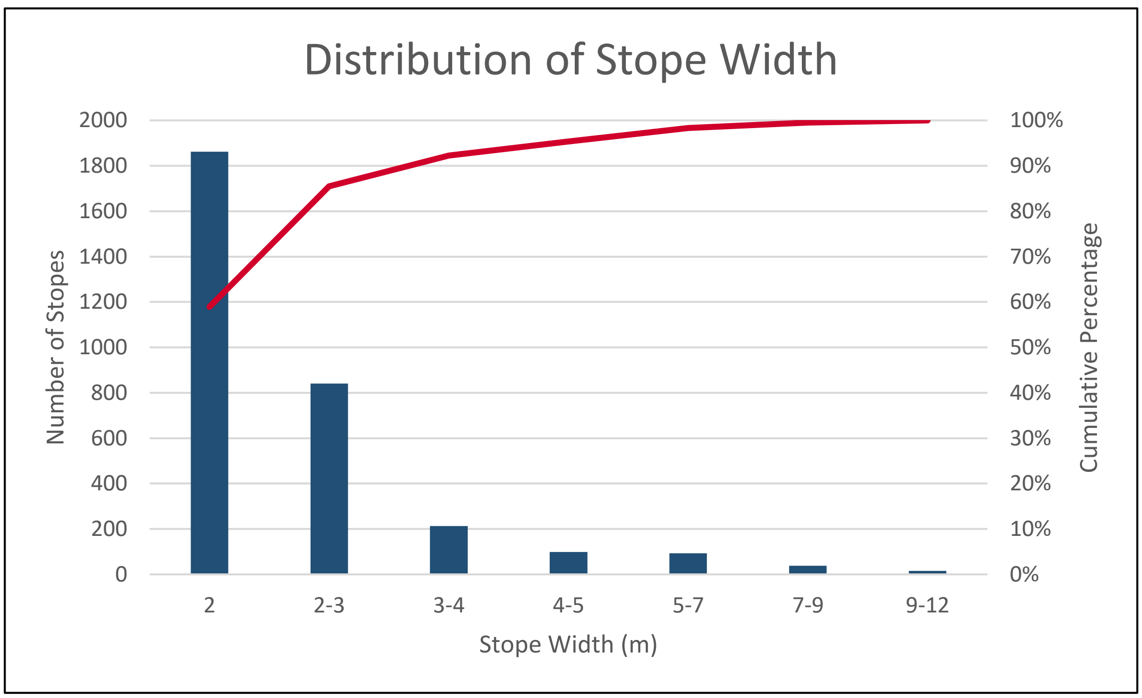
Modifications of the rock mass database were performed such that a statistical analysis of the rock mass per RMR were able to be performed. The modifications consisted of ensuring all data was consistent with the rating scale, fixing data entry issues, and assuming damp conditions for the water parameter. Table 16-5 provides a summary of the logged rock mass ratings by rock type.

Table 16-5: Rock Mass Database by Rock Type

		Rock Mass Rating (RMR89)			
Rock Type	**Total Length (m)**	**Minimum**	**Average**	**Maximum**	**Coefficient of Variation (%)**
Breccia	3.05	74	74	74	0
Limestone	605.88	40	63	82	13
Marble	115.82	53	68	77	10
Mineralized	18.3	60	64	71	7
Phyllite	273.4	40	57	69	12
Schist	6.09	59	68	77	18
Undefined	24.38	53	59	67	10
Total	**1,046.92**	**40**	**62**	**82**	**13**

Stope shapes are generally governed by mineralization widths, geotechnical conditions and drill equipment employed. The stope stability analysis provides a recommendation for a strike length for an empirically based stable stope with the prescribed stope heights and widths. The QP analysed the distribution of stope widths from the design shapes, a summary of the analysis is provided in Figure 16-4. The majority of the planned stopes are 2.0 m, with the maximum planned stope width between 9 to 12 m. Where the maximum width stopes are encountered, an additional parallel drift is driven to avoid any additional instability or dilution from the back of the stopes.

Figure 16-4: Distribution of Stope Width in Mining Inventory



Source: Mining Plus (2023).

A preliminary stope sizing recommendations were performed per Potvin (2014) methodology. Stope stability was considered per Potvin (2014) methodology and account for rock mass and proposed stope shapes. Dilution estimates at this stage of study are considered a mining factor and require more detailed geomechanical analysis to be considered applicable.

$$N' = Q' \times A \times B \times C$$

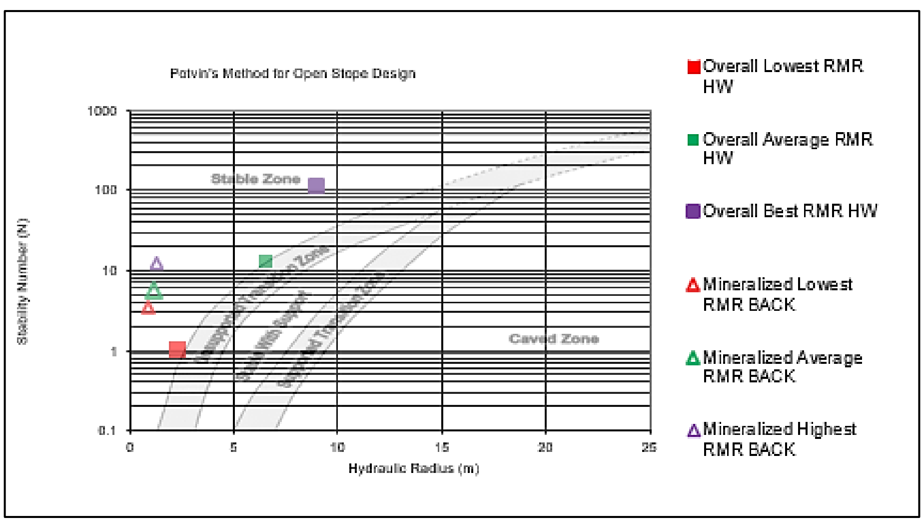
Where:

- Q’ is the modified Q Tunnelling Quality Index (after Barton et al 1974)
- A is the rock stress factor
- B is the joint orientation factor
- C is the gravity adjustment factor.

Q’ values were determined per Table 3 RMR89 ratings and transformed NGI Q’ index ratings per industry standard formula (RMR = 9 ln Q + 44). Rock strength factor was assumed to be unity as relaxed stress conditions in the immediate stope boundaries were assumed. Parallel jointing was assumed for both the back and sidewalls as parallel and orthogonal jointing to the mineralization was noted during the underground tour. The stope walls were considered on a worse case, average rock mass rating per overall results from Table 16-5; backs were considered to be within the mineralized material and worse case, average rock mass rating for MINERALIZED within Table 16-5 were employed.

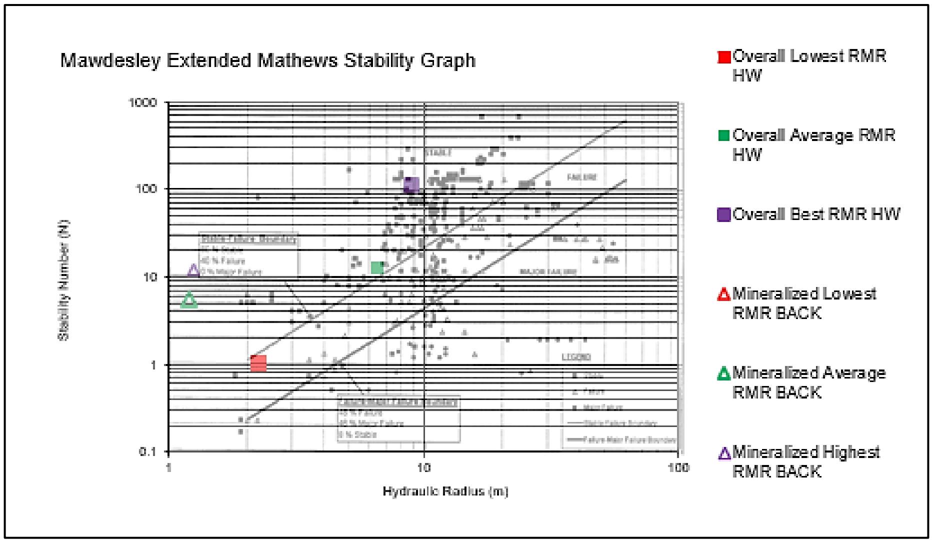
Graphical representation of the narrow 2 m stopes is provided by the Potvin analysis in Figure 16-5 and the extended stope stability graph by Mawdesley (2004) analysis in Figure 16-6.

Figure 16-5: Potvin Empirical Stability Assessment for Typical Stopes (2 m)



Source: Mawdesley (2004).

Figure 16-6: Extended Stability Graph for Typical Stopes (2 m)



Source: Mawdesley (2004).

The results indicate that average and best-case scenario rock masses will not pose instability issues with proper strike length control. Where weak rock masses are noted, shorter stopes will need to be considered and/or cable supports need to be employed. It should be noted that the lowest rock masses were observed to be localized and not permissive within the mineralized zones. Areas of weak rock mass are to be identified prior to mining, and economic assessments on the select stopes are recommended at a later stage when better definition of rock mass distribution and geotechnical requirements to ensure stable stopes in these poor rock mass zones are available.

Dilution control will be critical in the narrow stopes. Further studies on dilution are recommended when as part of a larger geotechnical study for the deposit. However, the bulk sample stopes indicate the footwall perform well over a small exposure, and the hanging wall shows minor separation along foliation over a small exposure. Estimates at this stage for dilution are to be mining factors and should be quantified at a later stage with detailed numerical models of the stopes.

From experience with similar mines, narrow vein stopes tend to break to the width of the sill drives due to stress relaxation at the drill and draw levels, Narrow development within the sill drives or specialized equipment/techniques may be able to minimize relaxation.

Rib pillars will need to be assessed upon definition of a final PEA stope plan. However, the narrow nature of the stopes and the discontinuous nature of the hanging wall veins indicate that stress issues can be managed through tight filling and mine sequencing. It is recommended that parallel mining of hanging wall veins and the main body do not occur simultaneously. A crown pillar of 10 m is planned at the top of the mineralization to prevent break throughs to surface.

Ground support for the development will consist of rock bolt support and screen on all headings. Remedial ground support of the portal and existing headings should be factored into costs. However, from the site visit this remedial work will require QA/QC testing and occasional spot bolting and upgraded intersection support. Where difficult ground is encountered (shears, faults, tightly spaced foliation), shotcrete may be required.

16.3 Underground Mine Design

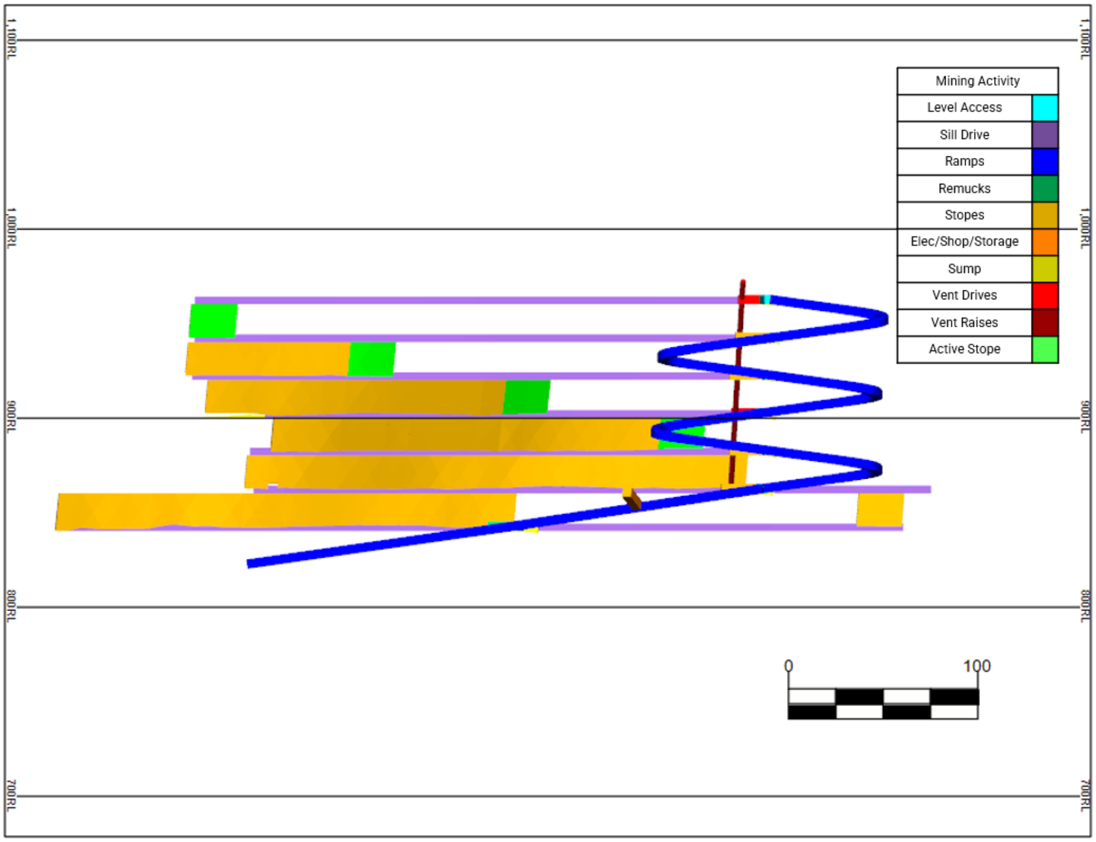
16.3.1 Mining Method Selection

The mineralized material at Revel Ridge dips at an average of 55° in all mineralized zones and is suitable for LHOS. Most stopes will be drilled down hole from a top drift and breakthrough to the bottom mucking drift. The sequence of these stopes will be from the bottom-up as much as possible to allow for downhole drilling and backfilling from the top drift. Occasionally, some mining areas will need to come online earlier to maintain the production mine plan and will not be able to utilize a top drift. These stopes will be drilled as up hole stopes from the bottom 'sill' drift and backfilled filled from the bottom drift through a pair of drillholes that come out at the top of the stope. These up hole stopes are only possible with paste backfill as there would be no upper stope access to fill with CRF.

The sequence of mining starts with a level access driven from the main ramp to the mineralized material. Sill cuts are driven in the mineralized material to the north and south of the level access to the furthest extents of mineralized material. Once the sills are in place, stoping can begin at the end of the mineralized material and retreats to the level access as they are mined and backfilled.

Stopes are mined from the bottom up in a chevron pattern whereby three stopes need to be mined out and backfilled on any given level before the next stope is started on the level above. This sequence of progressing the bottom levels contributes to geotechnical stability while also having flexibility in the mine plan for the upper levels. An example of the chevron sequence from the mine schedule is shown in Figure 16-7 with active stopes pictured in green.

Figure 16-7: Isolated View of the Bottom-up Stope Sequence - Long Section Looking Northeast

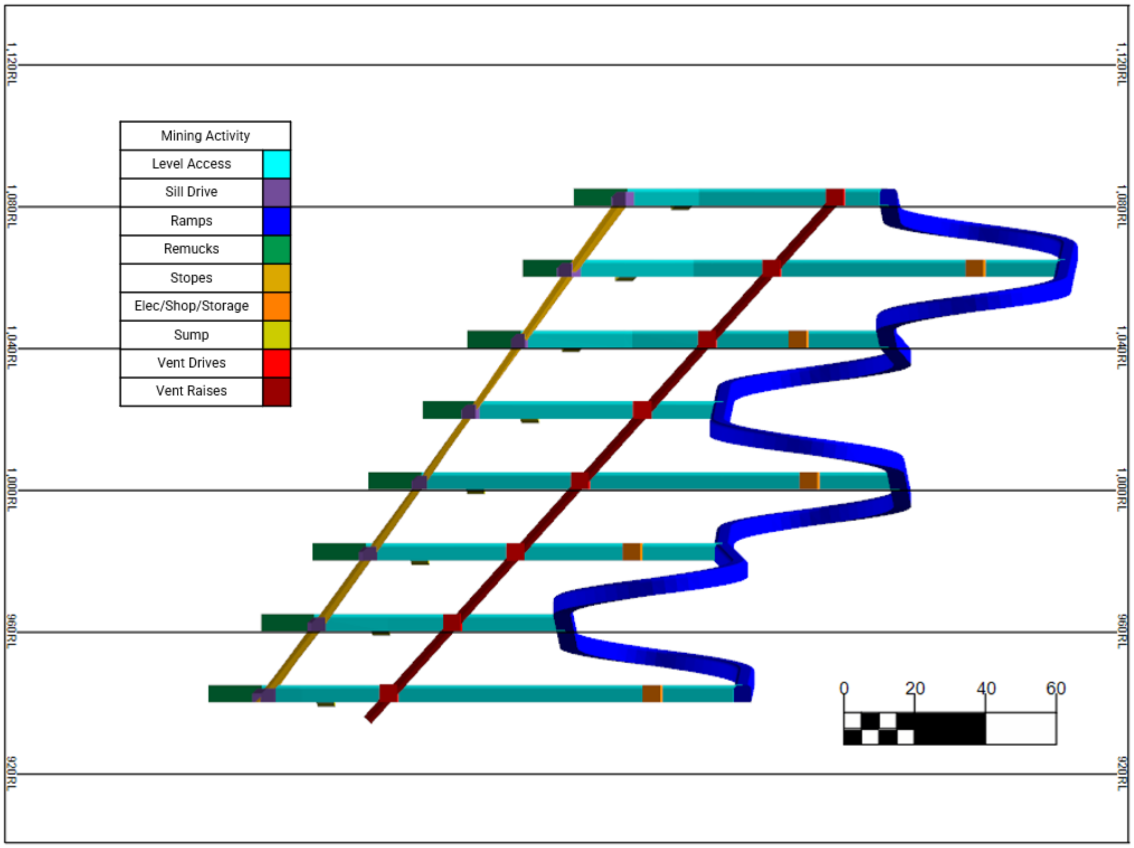


Source: Mining Plus (2023).

16.3.2 Mine Development Design

Access to the mineralized material and around the mine will be through ramps in the footwall of the mineralization. The ramps are connected to the mineralized material through level access drifts. The ramp systems are spaced at a minimum of 25 m off the mineralization with the average offset being 50 m. A cross section of a ramp system in relation to the stopes is shown in Figure 16-8.

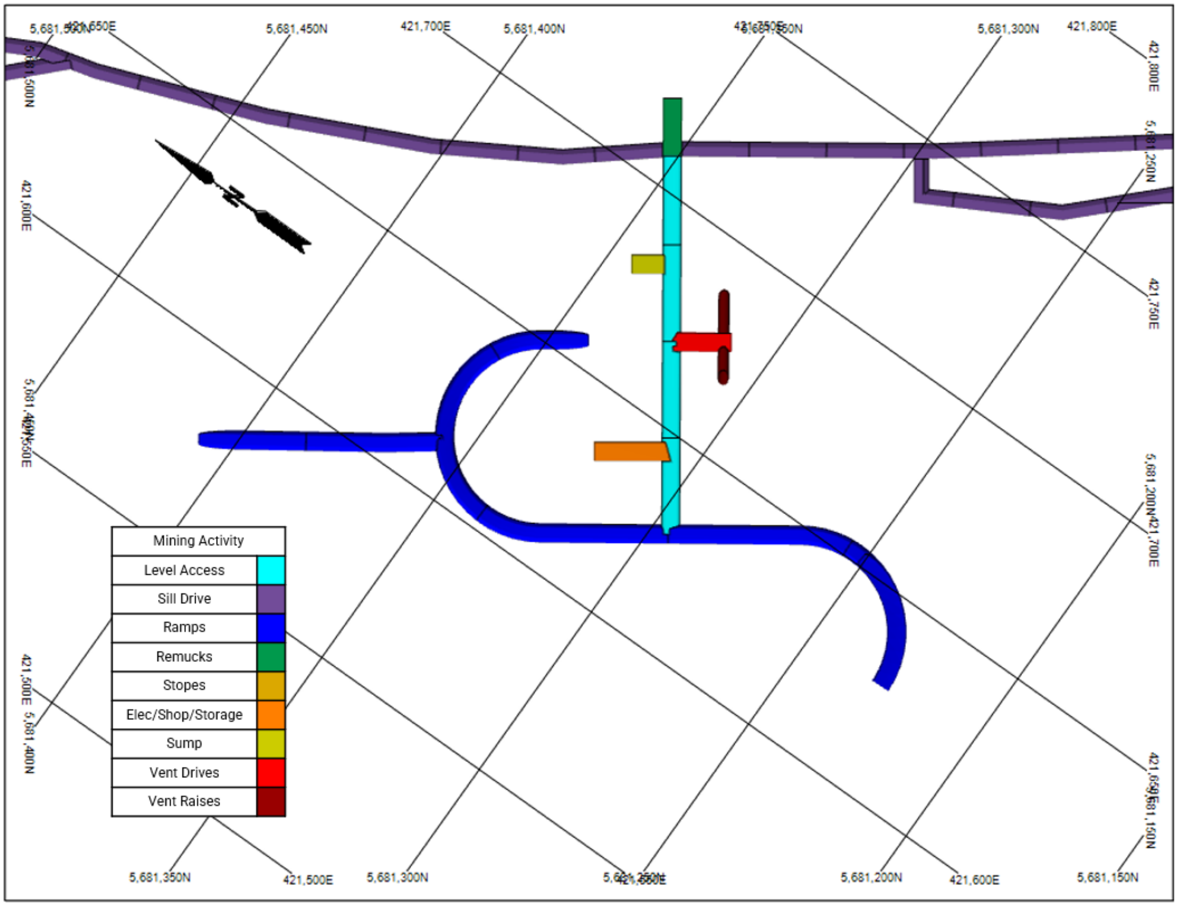
Figure 16-8: Cross Section on Level Access Drifts – Looking Southeast



Source: Mining Plus (2023).

The level access drifts lead to the mineralization and branch off to a north and south sill drift in the mineralized material. These sill drifts are utilized as the top and bottom drifts for the stopes. Level access drifts are spaced at 20 m level intervals and contain all the mining infrastructure required for each level. Levels are connected with vertically inclined raises which are used for ventilation return as well as escape ways when required. Types of level infrastructure are shown in Figure 16-9.

Figure 16-9: Plan View of Development Types and Arrangement on the 700 Level



Source: Mining Plus (2023).

The north and south sill drives off the level access can extend up to a maximum of 400 m each until they meet the ventilation limits of the auxiliary fans and ducting. Due to this limit of 800 m (north and south) for each level access, two to three different ramp systems with level access drifts are utilized for each level to have access to the full 2.25 km strike of the deposit. Ramps have been placed along the mineralization to minimize development while having full access to the mineralized material. The mine development design parameters are summarized in Table 16-6.

Sills developed through the mineralized material will be shaped to minimize waste using “shanty backs”. The shanty back profile is a square profile with a corner of the hanging wall waste removed and can be seen in Figure 16-11.

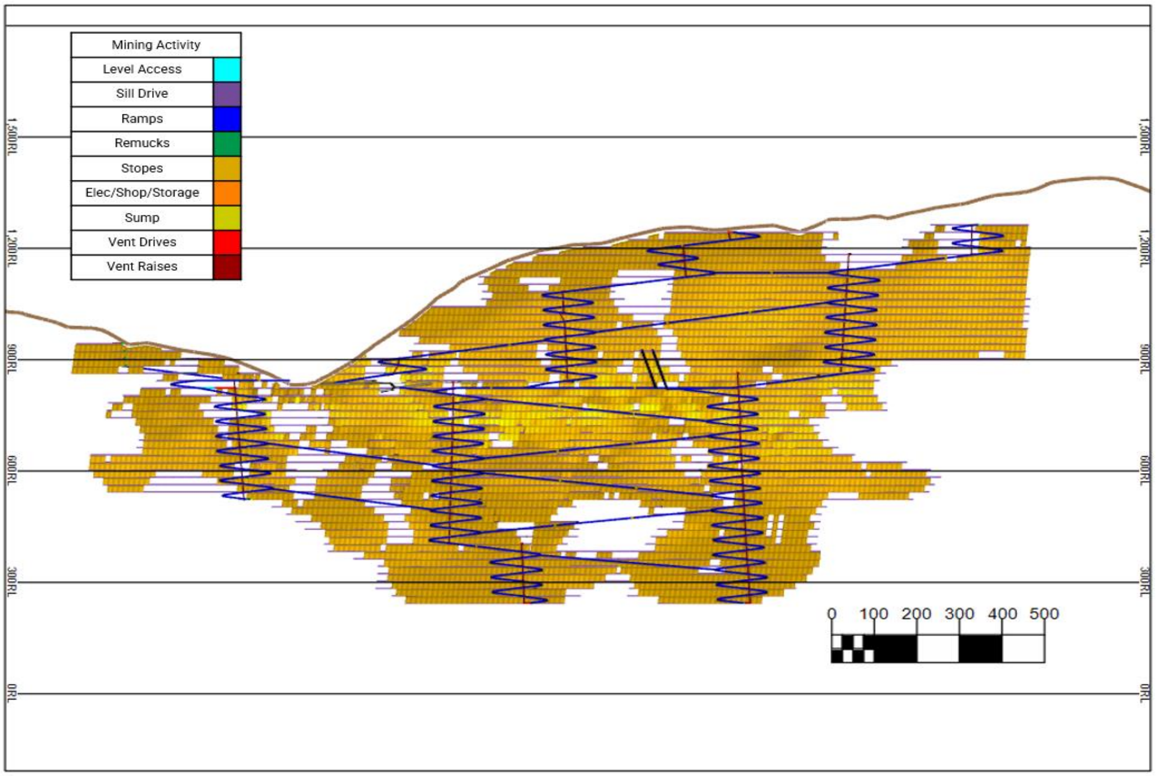
Mine development advances at an average rate of 3.3 m/d for individual headings with multiple headings mined at a time, spread over the different mine areas and levels. The combined development rate targets 29.7m/day throughout the mine life to access multiple stoping areas and support the production plan.

Table 16-6: Mine Development Design Assumptions

Drift Dimensions	Drift Profile
Ramp	5.0 m x 5.0 m Arch
Level Access	5.0 m x 5.0 m Arch
Infrastructure Drives	5.0 m x 5.0 m Flat Back
Sill Dimensions	4.0 m x 4.0 m Shanty
Vertical Development Dimensions	4.0 m x 4.0 m Round
Safety Bay	1.8 m x 2.4 m
Ramp Design Parameters	**Value**
Ramp Max Gradient (%)	15.0
Ramp Design Gradient (%)	13.8
Ramp Turning Radius (m)	25
Pillar In-between Ramp and Mineralization (m)	25
Infrastructure Design Parameters	**Value**
Remuck Drift Length (m)	15
Remuck Drift Spacing(m)	Every 150 m and Every Level Access
Sump Length (m)	10
Sump Spacing (m)	Every Level Access
Shop / Laydown Drift Length (m)	20
Shop / Laydown Drift Spacing (m)	Every Level Access
Vent Return Drift Length (m)	15
Vent Return Drift Spacing (m)	Every Level Access
Safety Bay Length (m)	1.5
Safety Bay Spacing (m)	Every 30 m

The complete mine development design and stopes are shown in Figure 16-10.

Figure 16-10: Final Underground design – Long Section Looking Northeast



Source: Mining Plus (2023).

16.3.3 Mine Stope Design

The QP has designed the conceptual stopes using Datamine's Minable Shape Optimizer (MSO) software. The key parameters used are shown in Table 16-7. The stope length in the optimizer was run at 12 m and afterwards neighbouring stopes were combined to get to the stope length of 24 m used in the study.

Table 16-7: MSO Parameters

Parameter	Value	Units
Default Density	2.86	t/m³
Optimization Field (NSR)	180	CAD/t
Footwall / Hanging wall Dilution	0	m
Minimum Mining Width	2.0	m
Maximum Mining Width	12.0	m
Mining Vertical Height	20	m
Average Length Along Strike	12	m
Minimum HW Angle	48	degrees
Minimum FW Angle	48	degrees

Parameter	Value	Units
Minimum Strike Variation	45	degrees
Maximum Strike Change	10	degrees

16.3.4 Dilution and Mine Losses

The mineralization at Revel Ridge has an average width of 2.5 m but is often as thin as 1.0 m in true width. With the deposit dipping at an average of 55°, the minimum width in a horizontal plane is 1.2 m. The chosen minimum mining width of 2.0 m was determined to be the smallest practical minimum mining width while achieving the desired plant tonnage of 2,920 t of mineralized material per day. This design constraint produces substantial internal dilution when the mineralization width is less than 2.0 m. The sill drifts have a mining width of 4.0 m to accommodate the mining equipment, and therefore also contain internal dilution that varies with the width of the mineralization. The relationship between the thinnest part of mineralization and the mine design is shown in Figure 16-11 where internal dilution can be seen as the gaps between the green hatched mineralization and the extents of the sill and stope design. An internal dilution factor for the project was calculated to be an additional of 46% of the undiluted mineralization.

External dilution was also considered to be a factor that could impact stopes in the form of overbreak. An overbreak factor of 10% was applied to stope designs less than 4 m wide as this is where the majority of overbreak tonnes would impact the mine plan. The total external dilution factor for the project was calculated to be 9% of the undiluted mineralization. The combined internal and external dilution factor total 55% of the undiluted mineralization.

Mining recovery was assumed to be 95% in stopes and 100% in sill development. The combined mining recovery for the project was calculated to be 96% of mineralized material.

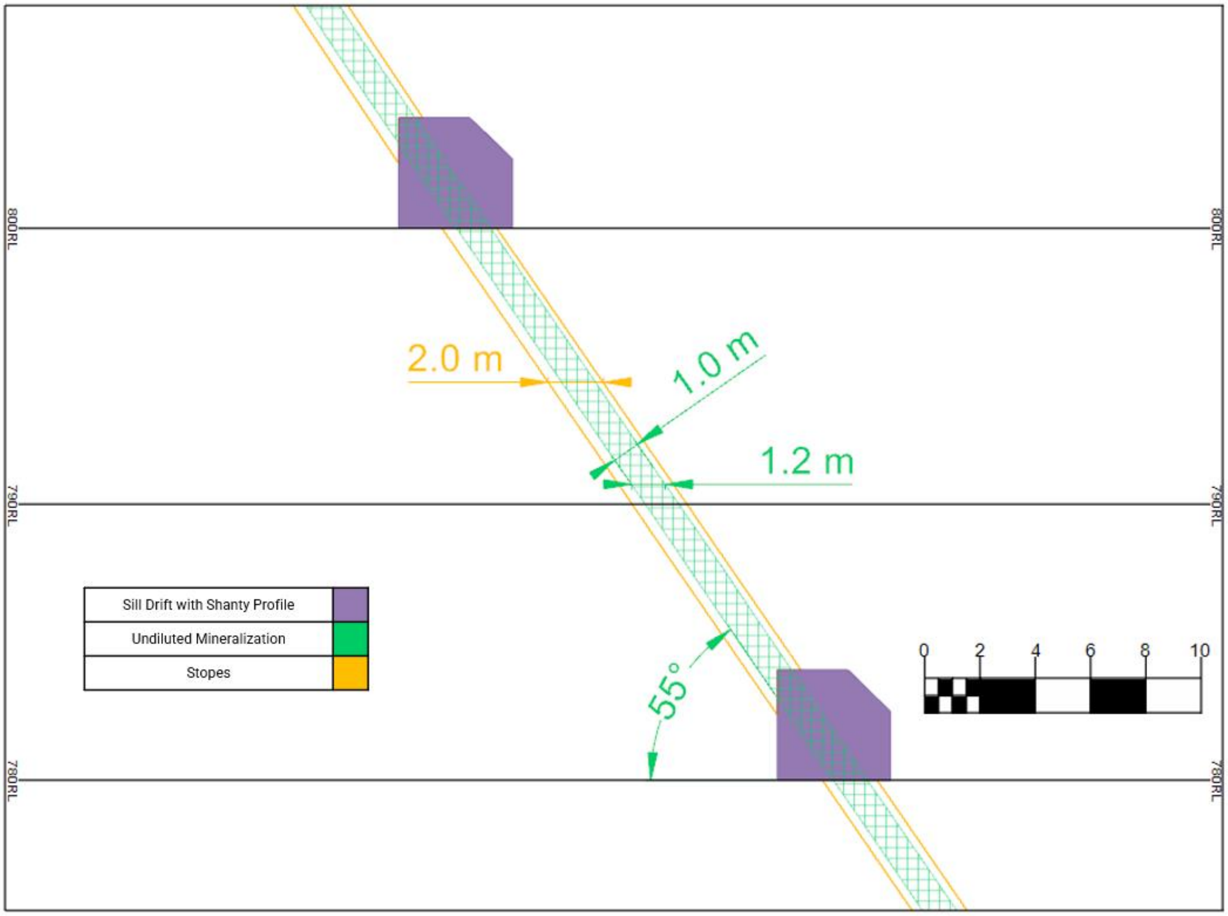
A summary of the total dilution values and factors for recovered tonnes is shown in Table 16-8. The dilution factor is defined as tonnes of dilution material (W) divided by tonnes of undiluted mineralized material (MM).

$$\text{Dilution factor \%} = W/MM \times 100.$$

Table 16-8: Summary of Mineralized Material and Dilution

	Recovered Tonnes (t)	Dilution Factor (%)
Undiluted Mineralized Material	7,604,277	-
Internal Dilution	3,510,692	46
External Dilution	657,441	9
Total Dilution	4,168,134	55
Delivered Mineralized Material	11,772,411	-

Figure 16-11: Cross Section of Geology with Stope Design to Illustrate Internal Dilution - Looking NW



Source: Mining Plus (2023).

A sorter is proposed as part of the process facility design for early removal of dilution waste.

16.3.5 Cut-off Criteria

The cut-off grade (COG) for Revel Ridge was applied to a NSR value in Canadian dollars per tonne. The NSR was included as a variable in the P&E block model using the economic parameters shown in Table 16-9 and Table 16-10.

Table 16-9: NSR Input Parameters by Commodity

	Units	Pb	Zn	Au	Ag
Metal Price	$USD/lb or oz	0.95	1.26	1750.00	22.00
RRMZ Concentrate Recovery	%	71	70	96	85
RRMZ Smelter Payable	%	94	85	98	88
RRMZ Refining Charge	$USD/lb or oz	0.00	0.00	5.00	0.50

	Units	Pb	Zn	Au	Ag
RRYZ Concentrate Recovery	%	88	93	0	94
RRYZ Smelter Payable	%	82	85	0	57
RRYZ Refining Charge	$USD/lb or oz	0.00	0.00	5.00	0.50

Table 16-10: Concentrate Treatment and Shipping Charges

	Units	Value
RRMZ Concentration Blend Ratio	Pb/Zn	26
RRYZ Concentration Blend Ratio	Pb/Zn	8
Smelter Treatment Charge (Blended Concentrate)	$USD/dmt	200
Concentrate Shipping Charge (Blended Concentrate)	$CAD/wmt	140
Moisture Content	%	8
Foreign Exchange	$CAD/$USD	0.74

A break-even cut-off grade of C$180 /t was used in the MSO software to create the initial stope designs. The COG is broken down as C$90 /t for mining, C$80 /t for processing, and C$10 /t for G&A which benchmarks similar to other Canadian mining projects with the same mining method, commodities, and production rates.

Additional COG sensitivity analysis was performed, and it was found that an optimized stope cut-off grade of C$220 /t improved the mining sequence and financials while removing 1,000,000 t of lower grade mineralized material.

An incremental cutoff grade was calculated for material that did not meet the targeted stope COG but was required to be mined for stope access and is therefore a sunk cost for the mining cost component of the COG. The incremental material may have otherwise been brought to surface as waste but because it carries enough grade to pay for the incremental cost of processing, it is added to the process facility feed and benefits the project. The incremental COG was set at C$110 /t which is enough to pay for the combined processing and G&A cost of C$90 /t and is high enough to avoid overly diluting the mill feed with low-grade material that would displace the higher-grade feed.

The total mine inventory, including incremental grade material, came to 11,772,411 t of mineralized material at an average NSR grade of C$361 /t utilizing these cut-off grades.

16.4 Backfill

The mine is designed to have two methods of backfill. The primary method will be provided by a paste backfill system which will have access to the 1,000 level and below. Cemented rockfill (CRF) will be used as a secondary system in the higher levels which cannot be efficiently reached with pastefill. CRF will be batch mixed with a wheel loader at a mixing station on surface. The mixing station will have a spray bar to provide water and a cement silo. Once mixed, CRF will be loaded into an empty truck and dumped into the open stopes from the upper-level access.

ROM waste rock from the WRF will be used as uncemented backfill whenever appropriate to reduce the quantity of waste rock that needs to be removed from the mine.

16.4.1 Pastefill System

The paste backfill system was designed to produce backfill using tailings to support the mining operation and store tailings in the mining stopes and workings. The mine will have a production rate of 2,920 tonne per day, feeding the mill at 125 tonne per hour (tph). The total solids generated by the mill will be 131.6 tph, which will consist of approximately 58.6 tph of rougher tailings, 18.3 tph of POX leach residue, and 54.7 tph of leach residue. Of the total voids created from mining, the mining operation is expected to require 792 m^3 per day of paste backfill to be able to cycle to the next stope in time and meet production.

The backfill system will consist of a filtration system, a backfill mixing system, a cement system, a filter cake storage bunker and a paste reticulation system. The filtration system receives a mix of rougher and detox tailings at 58 dry tonne per hour. A continuous mixing system will produce 61.4 dry tonne per hour (or 43.8 m^3 per hour) of paste backfill. The paste system will have the capability to produce backfill with different mix recipes with varying slump, and cement binder percentage.

The backfill system is expected have a system utilization of 75%. The remaining 25% will provide time for planned maintenance, cleaning and other operation downtime. At a 5 % cement binder mix recipe, the backfill system will use up to 118 tonne per day of dry cement when backfilling at the design rate for every 24-hour continuous fill. The cement silo will have at least 120 tonne capacity, which will be replenished daily by the local cement supplier.

The paste mix design will be based on laboratory testing, which will provide parameters such as optimal mix ratio of different waste solids, percent cement, and percent solids. Multiple mix designs will be specified for meeting different rheological properties and 28-day unconfined compressive strength (UCS) requirements. During operation, the on-site quality control lab (QC) lab will collect paste samples daily to ensure the paste meet the geotechnical requirements for stability and minimizing dilution. The paste mix design requires a seven-day cure time to meet the target strength for blasting the next stope.

16.4.2 Pastefill Design

Tailings will be received to the backfill plant from the mill. A press filter will dewater the tailings slurry and produce filter cake. The filter cake will be discharged on a reversible inclined conveyor, which will transport the materials either to a twin-shaft continuous paste mixer or to a storage bunker. When both the mill and the backfill plant are operating, the filter cake will be fed to the mixer along with the trim water and cement. The flow rate of water and cement will be ratioed to the tailings as per the mix recipe selected by the operator. When the mill is not running, the backfill plant will still be able to operate using the filter cake stockpile. The filter cake stored in the bunker can be picked up using a front-end loader and fed to the backfill system. The filter cake storage bunker will provide a 24-hour surge capacity and decouple the backfill operation from the mill. Depending on the materials properties, an auger-type live bottom feeder may be used to break up any lumps before the material is fed to the mixer. This will ensure consistent paste quality and eliminate inclusion of unmixed lumps in the paste backfill.

From the mixer, the paste overflows into a hopper, which feeds the positive displacement (PD) paste pump. The paste pump will send the paste to the mine via the reticulation system. The reticulation system is made of 4-inch diameter carbon steel pipe, and a network of boreholes that distributes paste to various levels that require backfill.

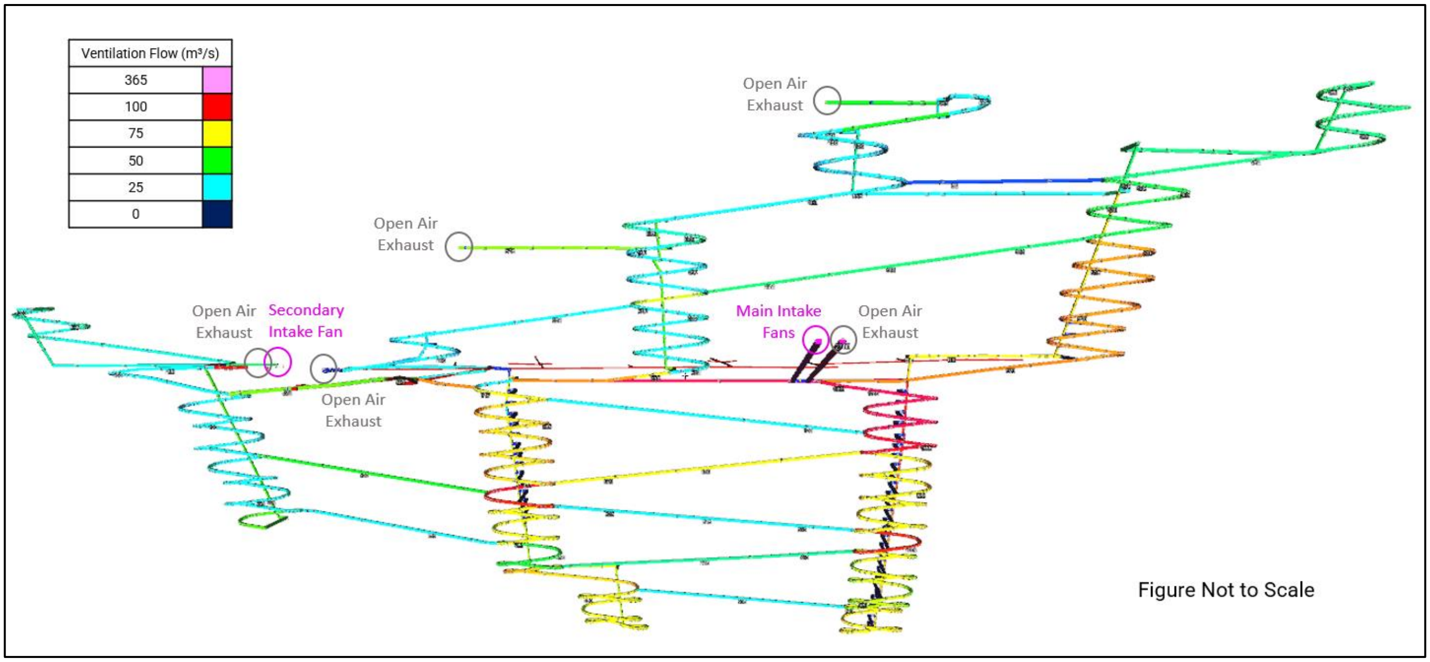
In addition, the paste system is equipped with a flush pump which will be used for normal and emergency flushes. The reticulation system will also be built with pressure sensors, pressure release mechanisms (such as rupture discs) and dump valves. In the case of pipeline blockage, the dump valve can be activated to clear the paste in the pipeline. Based on the relative distance and elevation of the mineralization, some sections of the mine will require a booster pump to deliver the paste to the stope. CRF will be used for the 1020 level and above, which is the calculated limit of the paste system with booster pump.

16.5 Ventilation

Ventilation is required underground to remove and dilute diesel emissions, airborne dust, blasting fumes, and other contaminants while also maintaining safe temperatures throughout the mine life. The ventilation requirements are based upon the maximum estimated amount of diesel equipment in operation at any given time. This is calculated utilizing the British Colombia Health, Safety and Reclamation Code for Mines (BC HSRC) regulatory factor of 0.06 m^3/s/kW for diesel equipment operating underground. The underground equipment list was reviewed, with correction for utilization and availability, to estimate that approximately 365 m^3/s of ventilation will be required for the mine to maintain a 2,920 t/d production rate. This estimation also includes a 20% addition of contingency air volume to account for leakage and other system inefficiencies.

The estimated airflow of 365 m^3/s will be provided by two 500 kW fans at the main intake portal. These two fans will work as a 'push' system by blowing air through the intake portal and creating a positive pressure effect that will force exhaust air out the other adit portals. The main fans will also push the air through propane fueled air heaters to maintain a safe work temperature and avoid freezing underground in the winter. Because the main haul road will be coming out of the 832 level exhaust portal, the underground haulage will also contain preheated mine air and will not freeze in winter. A schematic of the ventilation system is shown in Figure 16-12.

Figure 16-12: Revel Ridge Ventilation Schematic - Long Section Looking Northeast



Source: Mining Plus (2023).

Ventilation raises will be pulled through 15 m vent drifts which are attached to all level access. These raises are 4 m in diameter and primarily for return air exhausting out of the working levels. These raises link up to each other through return air drifts that exit the mine through exhaust portals. Ventilation raises can also provide secondary egress via installed ladderways when secondary ramp access is not available. Vent raises are designed to be under 50˚ from the horizontal and, in accordance with BC HSRC, will not require platforms. The air raises are expected to be raise bored by a contract driller but may also be mined conventionally or with the Long Hole production drill.

Mobile refuge stations will be distributed throughout the mine to harbour personnel in the event of an emergency. These refuge stations will move with the active work areas in accordance with the BC HSRC.

16.6 Blasting and Explosives

Blasting is part of the mining cycle for both development and production stoping. The primary choice of explosive for Revel Ridge will be bulk emulsion. Emulsion is safe to handle, water resistant and can be utilized for both LHOS and development. Bulk emulsion is less costly than pre-packaged products and can be stored in a surface magazine and transported to the underground magazine as needed. Detonation caps and boosters will be used as initiation products and will be stored separately from the bulk explosive in the surface and underground magazines. The underground magazine will be placed in-between the ramp systems on the 820 level to be at a centralized location with full access to the mine.

The average monthly explosive usage is calculated based on the mine schedule and is 150,000 kg. The surface magazine will be sized to store 120,000 kg, which is three weeks of production.

16.7 Production Schedule

The conceptual production mine plan produced an average of 2,920 t/d of process feed, targeting an annual production rate of 1,100,000 tover an 11.4-year mine life with an additional year of pre-production (Year -1) to establish initial capital development and set up stope sills for production. In Year -1 there will be 200,000 t of mineralized material stockpiled as supplemental material to achieve steady-state production in the beginning of Year 1. Production will be 2,920 t/d from Year 1 to Year 9 followed by a ramp down until mining completion in Year 12.

Lateral development is expected to progress at an average rate of 100 m/month for any single heading. Multiple development headings are scheduled concurrently in the mine plan for a total of 900 m per month.

The stope sequence schedule has an extraction rate of 800 t/d for any blasted stope. Throughout the first seven years of the production schedule, the average stope production peaks at 2,250 t/d with the rest of the 2,920 t/d comings from sill development in mineralized material. To achieve 2,250 t/d from stopes alone, three stopes need to be in production with a total of nine stopes in cycle (drilling, blasting, production, or filling) at any given time.

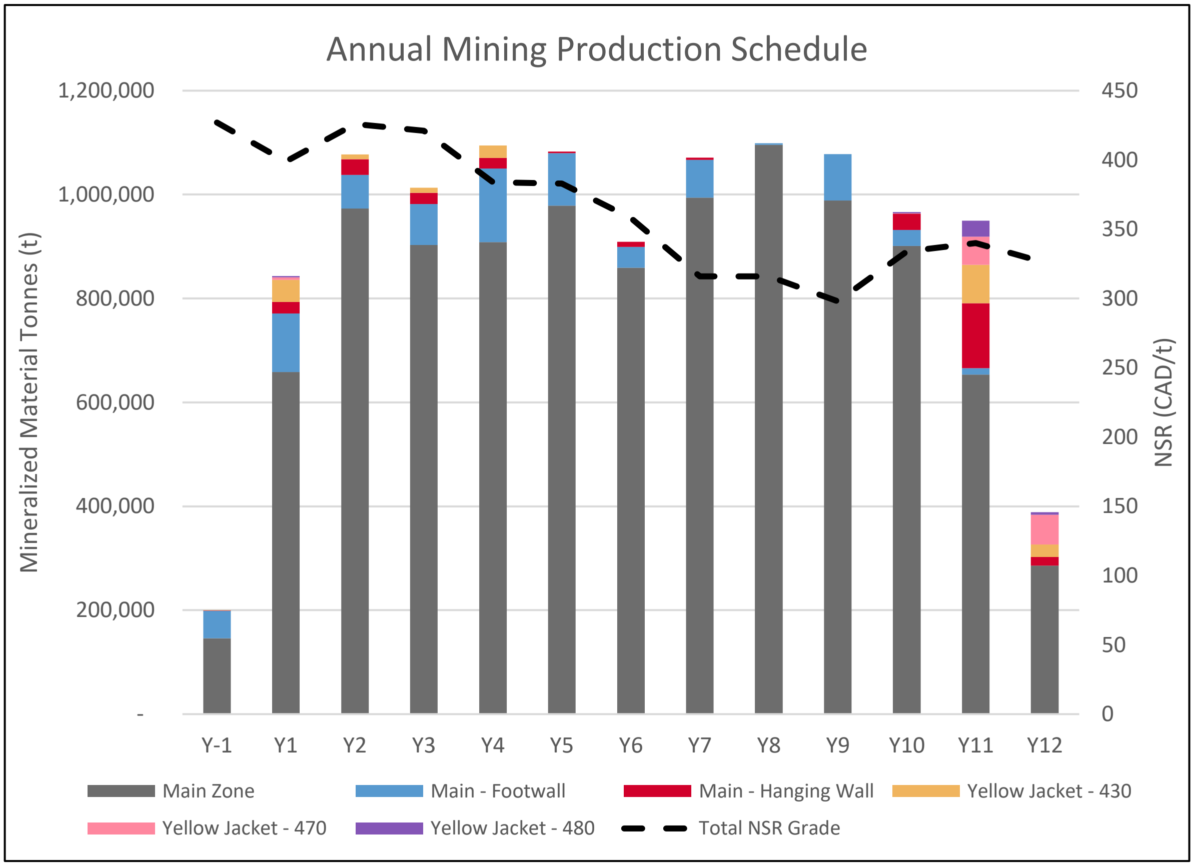
From Year 8 to the end of mine life, sill development slows down and more process facility feed is required from the stopes. In these years up to 2,920 t/d from stopes alone is achieved with four stopes in production and a total of eleven stopes in cycle. The stope cycle production rates and delays used in the mine schedule are shown in Table 16-11.

Table 16-11: Stope Production Rates and Delays

Mining Activity	Units	Rate
Stope Material Extraction	t/d	800
Pastefill Wall Construction	days	2
Pastefill Pour	t/d	1,500
Pastefill Initial Cure (Exclusion Zone / Cure only)	days	4
Stope Drilling / Additional Pastefill Cure	days	4
Cemented Rockfill Preparation	days	1
Cemented Rockfill Dump	t/d	650

The majority of tonnes will be mined from the Main zone. Timing on mineralized material from the footwall, hanging wall and RRYZ zones is based on accessibility to these additional zones while mining the main zone. These zones are scheduled alongside the RRMZ to avoid the rework of coming back through mined out areas, which is inefficient and would add cost and time to the project. The RRYZ zones are lower grade than the main zones on average and are therefore targeted to be extracted at the end of the LOM when possible. the production summary of material mined by zone is shown in Figure 16-13.

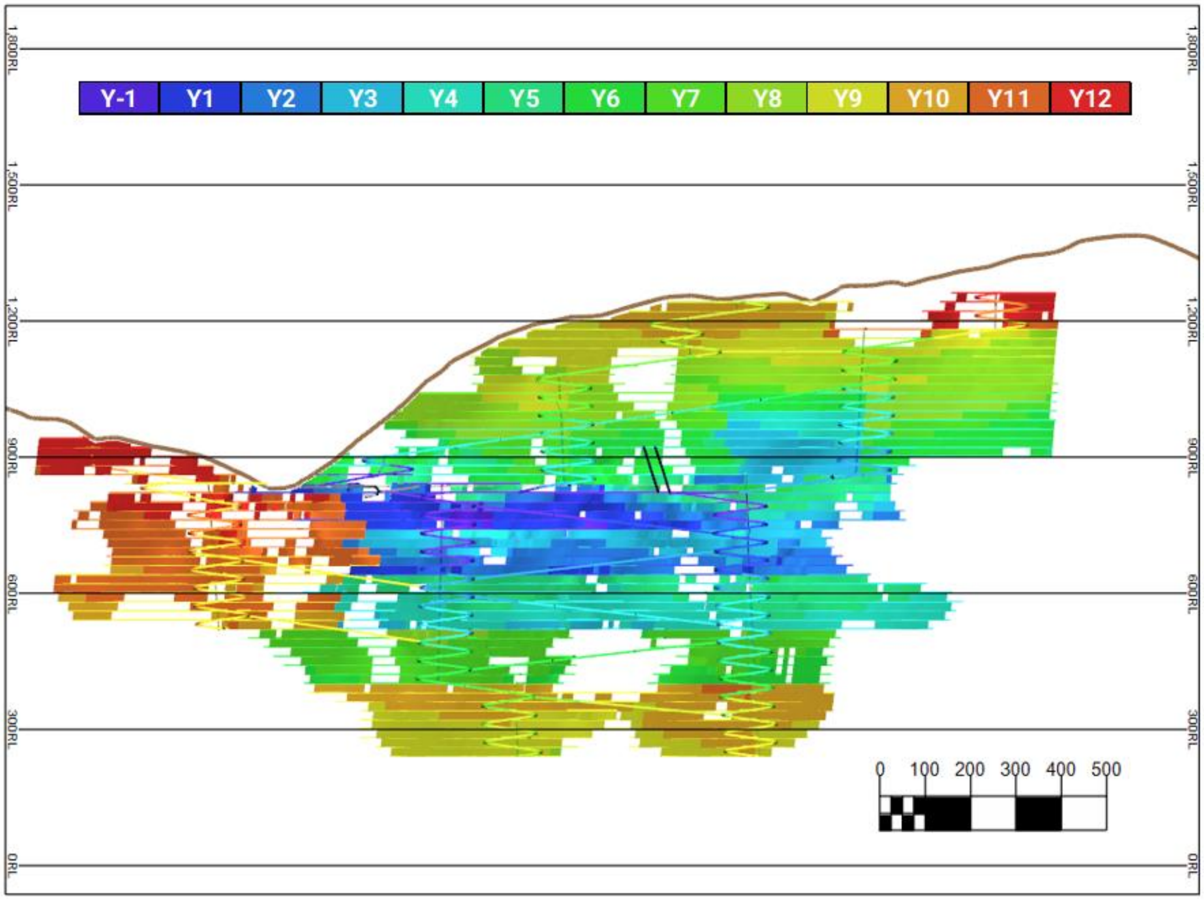
Figure 16-13: Annual Production Schedule by Mining Zone



Source: Mining Plus (2023).

The early years of the mine sequence prioritize the measured material that is also the highest grade. This material is accessible from the 832 adit portal off of two main ramp systems that start in Year -1. These ramps continue both up and down through the LOM to access the southeastern part of the deposit. In Year 9 a new adit portal is established on the northwestern side of the deposit with an additional third ramp system to access the remaining mineralized material. The LOM mining sequence is shown visually in Figure 16-14.

Figure 16-14: LOM Mining Sequence by Year – Long Section Looking Northeast



Source: Mining Plus (2023).

The full LOM schedule for all activities is shown on an annualized basis in Table 16-2.

Table 16-12: Mine Production Schedule

	Units	Grand Total	Yr-1	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12
Total Tonnes	t	**15,885,217**	**617,740**	**1,140,223**	**1,371,387**	**1,402,077**	**1,335,218**	**1,372,189**	**1,262,817**	**1,378,821**	**1,479,333**	**1,430,650**	**1,395,094**	**1,246,165**	**453,504**
Mineralized Material Tonnes	t	11,772,411	200,178	843,491	1,077,206	1,013,395	1,094,666	1,083,101	908,848	1,070,861	1,098,540	1,077,684	966,210	949,738	388,492
Stope Material Tonnes	t	8,967,689	32,156	560,299	798,795	814,555	813,248	792,540	707,301	794,275	879,483	903,863	805,743	706,576	358,856
Development Material Tonnes	t	2,804,721	168,022	283,193	278,411	198,840	281,418	290,562	201,547	276,586	219,057	173,821	160,467	243,162	29,636
Waste Tonnes	t	4,112,807	417,562	296,732	294,181	388,682	240,552	289,088	353,969	307,960	380,792	352,966	428,884	296,427	65,012
Total Metres	**m**	**132,943**	**10,264**	**11,027**	**10,768**	**11,150**	**10,886**	**11,086**	**11,036**	**11,096**	**11,091**	**10,809**	**11,033**	**10,841**	**1,856**
Vertical Metres	m	2,583	231	189	85	270	99	243	205	252	233	236	168	299	70
Lateral Metres	m	130,361	10,033	10,838	10,683	10,880	10,787	10,843	10,830	10,843	10,858	10,573	10,865	10,541	1,786
Ramp	m	25,440	3,819	1,970	2,347	2,185	996	2,084	1,906	2,119	2,643	1,417	2,497	1,246	211
Level Access	m	11,922	1,056	932	861	1,504	552	1,084	788	1,139	1,181	560	1,239	804	222
Sill Drive	m	84,442	4,430	7,294	6,924	6,403	8,857	6,938	7,494	6,870	6,145	7,948	6,226	7,720	1,192
Remuck	m	1,745	117	131	109	124	145	146	136	159	156	158	158	165	41
Sump	m	1,021	71	87	63	102	38	86	79	94	98	84	96	97	24
Electrical Substation / Shop	m	2,000	133	157	132	193	53	200	169	131	220	161	255	162	36
Raise Drive	m	1,923	164	123	87	185	67	147	123	167	223	146	207	246	40
Safety Bay	m	1,868	244	145	160	184	77	158	135	163	191	99	187	102	22
Mineralized Material Tonnes	t	11,772,411	200,178	843,491	1,077,206	1,013,395	1,094,666	1,083,101	908,848	1,070,861	1,098,540	1,077,684	966,210	949,738	388,492
NSR Grade	CAD/t	361	427	399	426	421	384	383	358	316	316	298	334	340	326
Ag Grade	g/t	38.18	43.01	43.48	44.94	39.03	38.69	34.18	31.13	31.48	42.61	38.58	30.20	37.65	55.28
Au Grade	g/t	3.69	4.57	4.03	4.42	4.59	4.01	4.25	3.87	3.24	3.21	3.03	3.44	2.85	2.34
Pb Grade	%	1.34	1.38	1.51	1.55	1.34	1.46	1.18	1.06	1.13	1.28	1.07	1.29	1.74	1.88
Zn Grade	%	2.52	2.49	2.92	2.81	2.36	2.40	1.98	2.29	2.32	1.97	2.02	2.41	3.88	4.15
AuEq Grade	g/t	5.23	6.13	5.81	6.15	6.07	5.54	5.51	5.16	4.56	4.57	4.32	4.82	5.04	4.93
Paste Tonnes	t	5,100,119	20,260	365,955	524,937	547,499	548,998	547,499	460,516	525,531	233,454	246,801	396,769	467,414	214,485
Paste Volume	m^3	2,670,220	10,607	191,600	274,836	286,649	287,434	286,648	241,108	275,147	122,227	129,215	207,732	244,720	112,296
CRF Tonnes	t	1,006,534	-	-	-	-	-	-	30,510	30,841	377,626	370,317	141,839	14,256	41,145

16.8 Mining Equipment

The equipment required to meet the production and development schedules is approximated in Table 16-13. The main objectives of mobile fleet will be to consistently achieve the scheduled 2,920 t/d of process facility feed. A production study to determine cycle times and the exact equipment requirements on a yearly basis is recommended for the next level of study.

Table 16-13: Estimated Mining Equipment Fleet

Equipment Type	Number
2 -Boom Jumbo	5
Long Hole Production Drill	3
Load-Haul-Dump (LHD) with Remote (15 tonne)	7
Haul Truck (45 tonne)	8
Bolter	6
Shotcrete Machine	1
Shotcrete/Concrete Transmixer	1
Explosive Loader	2
Boom Truck/Flat Deck	2
Mechanic's Truck	2
Fuel-Lube Truck	1
Scissor Lift	2
Grader	1
Forklift/Telehandler	2
Lift Basket Handler	1
Wheel Loader for Backfill Plant	1
Utility Vehicle (ATV)	5
Personnel Carrier	4

Power demand for the underground mine is expected to be approximately 32,000 MWh/y. This includes power supply for the underground operations, pump station and compressor. A surface load centre will feed the shop, office, and other miscellaneous surface support facilities. An additional 8,800 MWh/y demand will be delivered to the ventilation intake portal to power the main ventilation fans.

Underground power supplied at 13.8 kV and will be distributed to 1.5 MVA substations to distribute power at 600 V tp These will run the underground pump station, sumps, fans, mobile plug-ins and other electrically powered equipment.

16.9 Underground Infrastructure Facilities

The underground mine will require support from both surface infrastructure and underground infrastructure which is discussed further in Section 18.

Major items include:

- Surface paste plant with underground reticulation
- Cemented Rockfill (CRF) mixing station
- Surface explosives storage
- Primary ventilation fans with air heating
- Underground dewatering system
- Underground powder magazine and cap magazine
- Underground shop
- Underground fuel bay.

17 RECOVERY METHODS

17.1 Overview

The process design is based on processing mineralized material from the Revel Ridge deposits through crushing, particle sorting, grinding, bulk sulphide flotation followed by Pb and Zn flotation of the bulk concentrate. The Zn flotation tails are processed POX, hot cure and lime boils circuits to maximize the amenability of Au and Ag to cyanide leach and recovery into Au doré via the Merrill Crowe process. The design is based on previous testwork programs performed on the deposit, Ausenco's extensive database of reference projects and in house modelling programs. The plant is designed for a throughput of 2,920 t/d or 1.1 Mt/a at 92% availability. The crushing and sorting circuit is designed with an availability of 65%. The plant will operate with two 12-hour shifts per day, 365 days per year.

The mined material is crushed, sorted, ground and processed in a sequential flotation plant to produce a Pb concentrate and a Zn concentrate. The Pb and Zn concentrates are each thickened and filtered separately to produce final saleable products. The tailings from the Zn flotation process are oxidized in an autoclave, and the solids are washed to remove the acidic solution. The solids are neutralized and re-ground prior to being leached and washed to remove pregnant leach solution (PLS). Au is precipitated out of the solution and recovered using a Merrill Crowe circuit and Au is smelt to produce a final saleable doré product.

The process design criteria for the Revel Ridge plant is shown in Table 17-1.

Table 17-1: Process Design Criteria

Description	Units	Value
Annual Throughput	Mt/a	1.1
Daily Throughput	t/d	2,920
ROM Head Grade, Pb – design	%	1.75
ROM Head Grade, Zn – design	%	3.26
ROM Head Grade, Au – design	g/t	4.28
ROM Head Grade, Ag – design	g/t	41.5
Crushing and Grinding Circuit	-	2C-Sorting-B
Crushing and Sorting Availability	%	65
Grinding and Flotation Availability	%	92
Concentrate Filtration Availability	%	75
POX and Au Plant Availability	%	92
Crushing Plant Capacity, for design	t/h	187
ROM Feed Size, F_{100}	mm	500
Bond Crushing Work Index	kWh/t	11.9
Primary Crushing product size, P_{80}	mm	74
Secondary crushing product size, F_{80}	mm	14.6
Number of Particle Sorters	#	1 coarse and 1 fine sorter
Particle Sorter Rejects	%	35
Limestone content in Sorter Rejects	%	80
Grinding Plant Capacity, design	t/h	100
JK Drop Weight (Axb) value	-	59

Description	Units	Value
Bond Ball Mill Work Index, design	kWh/t	9.7
Grinding Feed Size, F_{100}	mm	10
Grinding Product Size, P_{80}	µm	150
Ball Mill Specific Energy	kWh/t	8.81
Bulk Flotation		
Rougher Flotation	-	1 operating line, tank cells
Residence time, design	min	24
Concentrate Regrind	Type	Regrind mill
Regrind Circuit Product Size, P_{80}	µm	20
Pb Flotation		
Rougher Flotation	-	1 operating line, tank cells
Residence time, design	min	5
Concentrate Regrind	Type	Regrind mill
Regrind Circuit Product Size, P_{80}	µm	10
Cleaner Flotation	# stages	2 stages, flotation cells
Residence time, design	min	5
Scavenger Flotation	# stage	1 operating line, flotation cells
Residence time, design	min	5
Zn Flotation		
Rougher Flotation	-	1 operating line, tank cells
Residence time, design	min	12
Concentrate Regrind	Type	Regrind mill
Regrind Circuit Product Size, P_{80}	µm	8
Cleaner Flotation	# stages	2 stages, flotation cells
Residence time, design	min	5
Scavenger Flotation	# stage	1 operating line, flotation cells
Residence time, design	min	5
Pb Concentrate Dewatering		
Thickener Type	-	High rate
Thickener U/F Solid	%	60
Filter Cake Moisture	%	10
Filter Type	-	1 Filter Press
Zn Concentrate Dewatering		
Thickener Type	-	High rate
Thickener U/F Solid	%	60
Filter Cake Moisture	%	12
Filter Type	-	1 Filter Press
Pressure Oxidation		
Autoclave trains/vessels/compartments	#	1/1/5
Operating Temperature	°C	220
Operating Oxygen Over Pressure	kPa	690
Retention Time	min	60
Operating Pressure	kPa	3150
No. of CCD stages	#	3
Wash ratio	t/t feed solids	3
Underflow Solid Density	%	40
CCD Overflow Neutralisation		

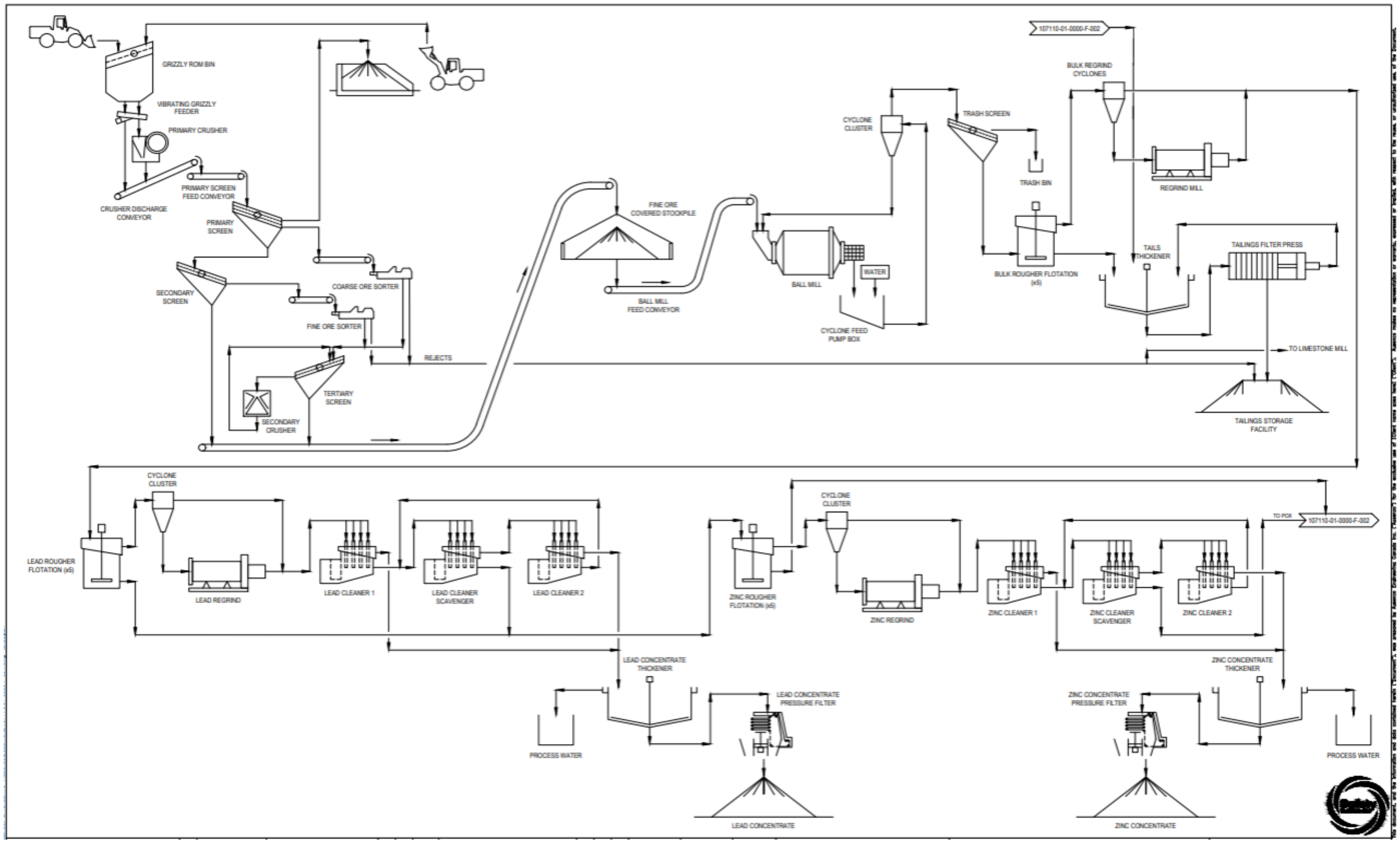
Description	Units	Value
No. of stage	#	7
Residence Time (each stage)	h	1
Neutralisation Thickener Type	-	High rate
Thickener U/F Solid	%	32
Cooling Method	-	3 Cooling Towers
Target Solution Temperature	°C	40
Lime Boil		
Operating Temperature	°C	95-100
No. of tanks	#	3
Residence Time (each tank)	h	2
Au Recovery		
Circuit Configuration	-	Leach-Merrill Crowe
Pre-leach Thickener Type	-	High rate
Thickener U/F Solid	%	50
Leach Regrind	Type	Regrind mill
Regrind Circuit Product Size, P_{80}	µm	15
Leach Residence Time	h	24
No. of leach tanks	#	7
Leach extraction	%Au	96
Leach Extraction	%Ag	80
Leach Residue Filtration		
Filter Cake Moisture	%	20
Counter Current washing stage	#	3
Wash Solution	-	Merrill Crowe Barren
Merrill Crowe		
Retention Time	h	8
Au in solution	mg/L	16
Ag in solution	mg/L	80
Addition of precoat to solids in leach solution	kg/kg	0.2
Addition of body feed to leach solution	kg/m^3	0.05
Precious Metal (Au + Ag) production, design	kg/d	60
Addition rate, Zn, design	kg/h	10
Precipitate Filter Cake	% solids	90
Cyanide Detox		
Detox Circuit System	-	SO_2/O_2
Detox Circuit Pulp Density	%	40
Residence Time	min	60
WAD Cyanide Concentration, nominal	mg/L	200
Addition Rate, Cu, Nominal	mg/L	10
Addition Rate, SO_2, nominal	g/g CN	5
Addition rate, O_2, nominal	g/g SO_2	3
WAD Cyanide target, design	mg/L	1
Tailings Handling		
Thickener U/F Solid	%	50
Filter Cake Moisture	%	18
Filter Type	-	Pressure Filter

Source: Ausenco (2023).

17.2 Process Flow Sheet

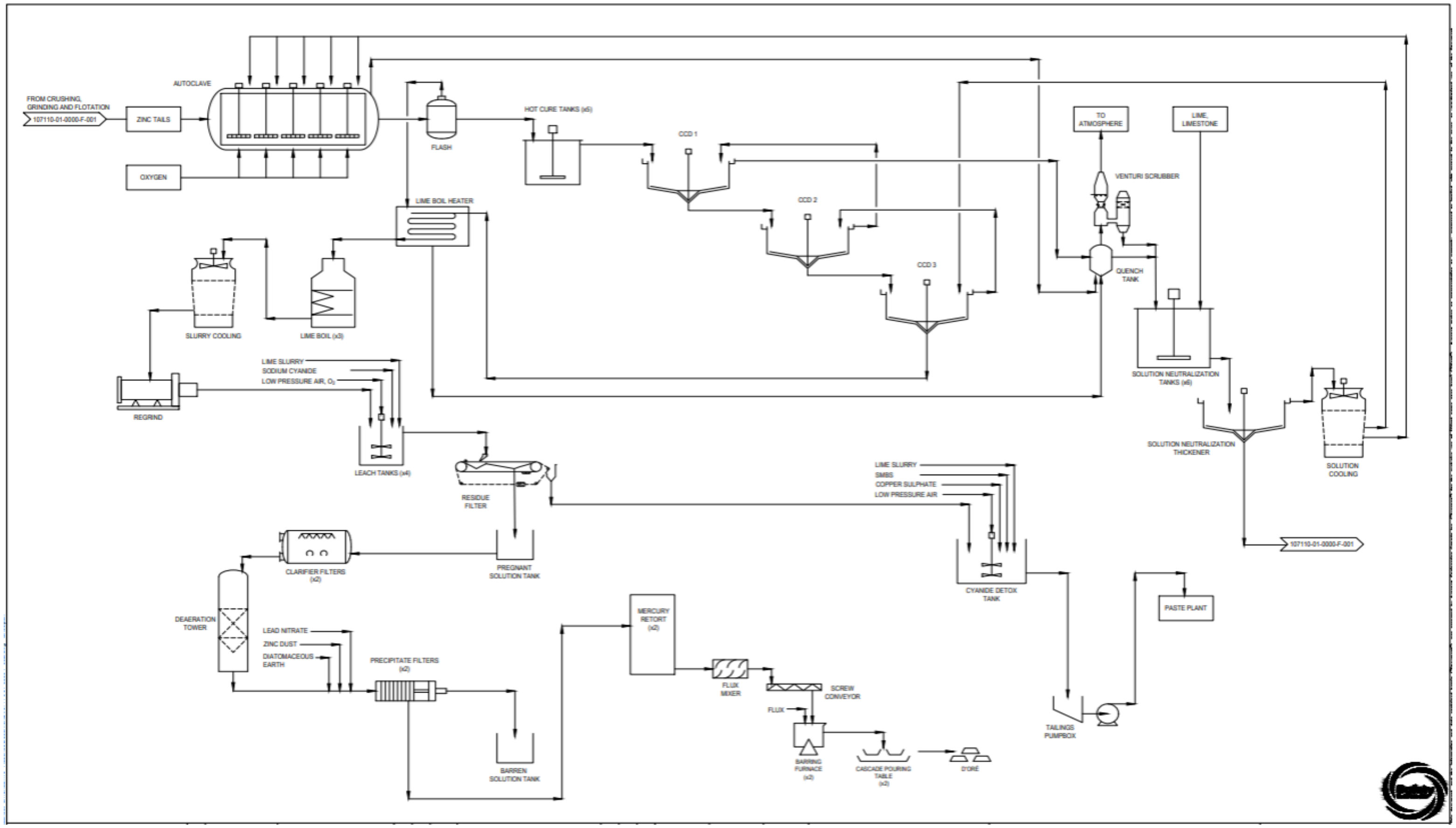
Overall process flow diagrams (PFDs) for the Revel Ridge plant are given below in Figure 17-1 and Figure 17-2.

Figure 17-1: Process Flow Diagram (Crushing, Grinding, and Flotation)



Source: Ausenco (2023).

Figure 17-2: Process Flow Diagram (POX and Au Leaching Circuit)



Source: Ausenco (2023).

The Revel Ridge site includes the underground mine, ancillary surface infrastructure, such as mine and plant administrative offices, truck maintenance facilities, sewage treatment facilities, warehouses, etc. Also on site are water treatment facilities, an oxygen plant and other process related facilities.

The process plant itself includes:

- Primary and secondary crushing circuit
- Coarse and fine particle sorting
- Grinding circuit (ball milling)
- Bulk flotation and concentrate regrind
- Pb rougher flotation, concentrate regrind, Pb cleaner flotation, concentrate thickening and filtration
- Zn rougher flotation, concentrate regrind, Zn cleaner flotation, concentrate thickening and filtration
- Pressure oxidation, gas handling, hot cure, lime boil and counter-current decantation thickening circuit
- Leach feed regrind, cyanide leach and leach filtration
- Clarification, deaeration and Merrill Crowe precipitation circuit
- Au smelting circuit and mercury retort
- Cyanide detoxification circuit
- Tailings thickening and tailings filtration circuit.

17.3 Plant Design

17.3.1 Crushing Plant

Mineralized material is hauled from the mine and tipped into the grizzly run-of-mine(ROM) bin and fed into the vibrating grizzly feeder. The oversized material is fed to the primary jaw crusher, while the undersized material and the product from the jaw crusher is deposited onto the crusher discharge conveyor. The material is conveyed via the primary screen feed conveyor to a double deck primary screen.

The oversize material from the screen is recirculated back to the primary crusher. The midsize material is conveyed to the coarse particle sorter and the undersize material is conveyed to a single deck secondary screen. The oversize material from the secondary screen passes through the fine particle sorter and the undersize is conveyed to the stockpile. The particle sorting uses x-ray transmission to separate the low density rejects from the high density product. The rejects from both the particle sorters are high in limestone which will be used for neutralizing acid created in the POX circuit. The products are fed to the tertiary screen where the oversize feeds the secondary crusher, which is in a closed circuit and the fines are conveyed to the stockpile.

Major equipment in this area includes:

- Vibrating grizzly feeder
- Primary crusher

- Primary crusher discharge conveyor
- Double deck primary screen
- Single deck secondary and tertiary screen
- Coarse particle sorter and fine particle sorter
- Secondary crusher
- Fine material conveyor.

17.3.2 Grinding and Classification

Reclaim feeders move the material onto a feed conveyor which transfer the material to the ball mill with added water. The ball mill product is discharged through a trommel and the oversize is screened out and discharged to a scats bunker, whereas the trommel undersize is discharged into the cyclone feed pumpbox. Water is added to the cyclone feed pumpbox to obtain the appropriate density prior to pumping to the cyclone. The cyclone overflow is advanced to the flotation circuit.

Major equipment in this area includes:

- Reclaim feeder
- Ball mill feed conveyor
- Ball mill
- Ball mill grinding media handling system
- Ball mill liner handling system.

17.3.3 Flotation Plant

17.3.3.1 Bulk Flotation

The bulk flotation consists of rougher flotation cells and concentrate regrind circuit.

The overflow from the cyclone cluster reports to the rougher cell feed box. Frother and collector reagents are added to the feed box. Process water and flotation (low-pressure) air is added to each of the cells to maintain the pulp density in each cell and initiate the bubble formation required for flotation.

The concentrate from the rougher flotation is collected via launders and pumped to a cluster of regrind cyclones, while the tailings from each flotation cell moves into the next cell. The final tailings from the rougher flotation train are pumped to a tailings thickener. The tailings are dewatered and filtered in parallel pressure filters and deposited in a SWSF; water is recycled to the plant.

Fine material in the cyclone overflow bypasses the regrind mill, while coarse material reporting to the underflow is reground by a mill with the product collected along with the cyclone overflow and pumped to the Pb flotation process.

17.3.3.2 Lead Rougher Flotation

The slurry entering the Pb flotation is conditioned in two agitated conditioning tanks set in parallel. The tanks feed into a single train of five Pb rougher flotation cells in series. Air is blown into the cells to produce a froth of fine bubbles that collects the selected minerals into a concentrate. The concentrate from each cell is removed and collected via a launder, while the tailings move through each successive cell in the train. The rougher concentrate is pumped into a cluster of cyclones. The underflow from the cyclones is reground in a mill, and the product is pumped into the Pb cleaner flotation process with the cyclone overflow.

The Pb cleaner flotation process consists of a Pb cleaner, a Pb cleaner-scavenger and a second Pb cleaner in series. The tailings from first Pb cleaner moves into the cleaner-scavenger, while the concentrate is collected via a launder. The concentrate from the Pb cleaner-scavenger is pumped to the second Pb cleaner, while the cleaner-scavenger tailings are collected with the tailings from the Pb rougher cells to be pumped into the Zn flotation. The tailings from the second Pb cleaner are pumped back into the Pb cleaner-scavenger, while the second Pb cleaner concentrate is collected with the concentrate from the first Pb cleaner and fed into the Pb concentrate thickener.

The solution overflow from the thickener is collected for reuse in the process plant, while the thickened underflow is pumped into a dedicated Pb concentrate filter. The filtered concentrate is stockpiled for shipment and the filtrate solution is collected for reuse in the plant.

17.3.3.3 Zinc Rougher Flotation

The tailings from the Pb rougher cells and the Pb cleaner scavenger cell are pumped to two agitated conditioning tanks in parallel. The tanks feed into a single train series of three Zn rougher flotation cells. Air is blown into the cells to produce a froth of fine bubbles that collects the selected minerals into a concentrate, which is removed from the cells and collected via a launder. The tailings from each cell moves into the next cell in the train. Finally, the tailings from the Zn rougher flotation are pumped to the POX circuit for further processing, along with the tailings from the Zn cleaner-scavenger described next. The concentrate from the Zn rougher flotation is pumped into a cluster of cyclones. The underflow from the cyclones is reground in a mill; the product is pumped into the Zn cleaner flotation process with the cyclone overflow.

The Zn cleaner flotation process consists of a Zn cleaner, Zn cleaner-scavenger, and second Zn cleaner in series. The tailings from first Zn cleaner moves into the cleaner-scavenger, with the concentrate collected via a launder. The concentrate from the Zn cleaner-scavenger is pumped to the second Zn cleaner, while the cleaner-scavenger tailings are collected with the tailings from the Zn rougher cells to be pumped to the POX process. The tailings from the second Zn cleaner are pumped back into the Zn cleaner-scavenger, with the second Zn cleaner concentrate collecting with the concentrate from the first Zn cleaner and feeding into the Zn concentrate thickener.

Solution overflow from the thickener is collected for reuse in the process plant, while the thickened underflow is pumped into a dedicated Zn concentrate filter. The filtered concentrate is stockpiled for shipment, and the filtrate solution is collected for reuse in the plant.

17.3.4 Pressure Oxidation

The tailings from the Zn rougher flotation and the Zn cleaner-scavenger are treated in a five-chambered autoclave. The autoclave is fed with oxygen for an oxygen partial pressure of 690 kPa(g) and a total pressure of 3,150 kPa(a) and operated at 220°C to oxidize the sulphide minerals in order to liberate the Au and Ag. After oxidation, the slurry exits the autoclave through a choke value into a flash tank where the pressure and temperature of the mixture is reduced by flashing water to steam to ambient pressure. The slurry then moves into a series of four hot cure tanks; the slurry is thickened and washed in a series of counter-current decantation (CCD) thickeners to remove the acidic solution from the solids.

The solution from the CCD train transfers into a train of six agitated solution neutralization tanks, which then feeds the solution neutralization thickener and the solids fed to the final tailings thickener. The cooled solution from neutralization is recycled back to the POX vessel.

The thickened oxidized solids from the CCD train pass through the lime boil heater, three lime boil tanks, a slurry cooling tank and then a regrind mill. The regrind mill reduces the final particle size of the solids in the slurry to a target P_{80} size of 15 µm.

Major equipment in this area include:

- Autoclave pressure oxidation
- Flash vessel
- Hot cure tanks
- CCD thickeners
- Venturi scrubbers
- Neutralisation tanks and thickener
- Solution cooling towers
- Lime boil tanks
- Regrind mill.

17.3.5 Cyanide Leaching and Merrill Crowe

The re-ground material moves into a series of leach tanks for leaching with sodium cyanide and lime slurry to control the pH. The leach slurry is filtered and washed on belt filters to recover the Au-Ag bearing solution. The pregnant leach solution (PLS) collects in a tank and passes through a series of two clarifier filters and a deaeration tower. The solution then moves into the Merrill Crowe circuit. Zn dust and lead nitrate is added to the solution to precipitate Au and Ag. The resulting sludge is filtered to remove moisture, and the filtrate is transferred to the barren solution tank.

Major equipment in this area includes:

- Leach tanks
- Leach residue filters

- Clarifier filters
- Deaeration tower
- Precipitate filters.

17.3.6 Gold Recovery

The dry sludge is moved to a standard Au-recovery process consisting of two mercury retort ovens, flux mixer and feeder, barring furnace, and pouring table where Au doré is produced as a final saleable product.

17.3.7 Cyanide Detoxification and Tailings Handling

The filtered leach solids are repulped and fed into a cyanide detox tank with copper sulphate, sodium metabisulphite, lime slurry, and low-pressure air. The slurry is treated to destroy any residual cyanide before being fed to a paste plant to be mixed with cement and used for mine backfill.

17.4 Energy, Water and Process Materials Requirements

17.4.1 Energy

The total installed power for the process plant and estimated power consumption is shown in Table 17-2. The oxygen plant is given in a separate line to delineate the power consumption from this ancillary facility.

Table 17-2: Summary of Process Plant Energy Requirements

Description	Operating Power (MW)	Installed Power (MW)	Energy Consumption (MWh / a)
Total Process Plant (without Oxygen Facility)	14.8	16.9	114,852
Oxygen Facility	9.1	10.0	73,298
Total Process Plant (with Oxygen Facility)	23.9	26.9	188,150*

* Totals may not add due to rounding

17.4.2 Water

17.4.2.1 Process Water

Process water is recovered from the concentrates, POX feed and final tailings thickener overflows and SWSF for reuse. Approximately 300, 000 t/y of process water is recycled via the Pb concentrate thickener, 700, 000 t/y from the Zn concentrate thickener, 6,750, 000 t/y from the POX feed thickener, 6,750,000 t/y from the pre-leach thickener, 6,750, 000 t/y from the tails thickener and 1,125, 000 t/y from the SWSF. Two tanks distribute process water around the plant; the rate from the milling and lead water tank is 825 m^3/h and the process water tank is 340 m^3/h.

17.4.2.2 Fresh (Raw) Water

Fresh water is received from a local river in the freshwater tank, which has a live capacity of 24 hours. Water is distributed by pumps that operate in continuous recirculation with the tank. Approximately 900,000 t of freshwater makeup is required per year for the flotation plant.

17.4.2.3 Fire Water

Fire water is also sourced from the local creek and stored in an on-site tank. A pump skid with a dedicated electrical pump, jockey pump, and diesel pump supplies a water distribution system for the processing plant.

17.4.2.4 Potable Water

Potable water is produced by an on-site potable water plant which processes water from the local creek and makes it fit for consumption and human use. Potable water is stored in a tank for distribution to the processing plant.

17.4.2.5 Gland Seal Water

Gland seal water is taken from the feresh water tank and pumped to various pumps throughout the processing plant, including sump pumps.

17.4.3 Air Services

17.4.3.1 Low-pressure Air

Process and instrument air is supplied to the plant at 900 kPag using a rotary screw air compressor. The air is first processed by filtration before drying to remove any moisture. A second filtration step is then used before distribution to the required circuits in the plant. Dedicated flotation air blowers provide air to flotation cells at 45 kPag.

17.4.3.2 High-pressure Air

Dedicated air compressors are used for the concentrate filtration systems. Plant air compressors supply air at 750 kPag to various processing plant equipment as needed.

17.4.4 Reagents

Reagents consumptions used in the Revel Ridge process plant are shown in Table 17-3.

Each reagent mixing and storage system is located within a specific containment area to prevent incompatible reagents from mixing and to contain any spillage. Storage tanks are equipped with level indicators, instrumentation, and alarms to ensure spills do not occur during normal operation. Appropriate ventilation, fire and safety protection, eyewash stations, and Safety Data Sheet (SDS) stations are located throughout the facilities. Sumps and sump pumps are provided for spillage control.

Table 17-3: Summary of Processing Plant Consumables and Reagent Consumption

Reagent	Unit	Consumption
Primary Crusher Liners	Sets/a	3
Secondary crusher Liners	Sets/a	6
Primary screen deck panels	Sets/a	2
Secondary screen deck panels	Sets/a	2
Tertiary screen deck panels	Sets/a	2
Ball Mill Media	t/a	51
Ball mill liners	Sets/a	2
Bulk Regrind Mill Media	t/a	142
Bulk Regrind Mill Liners	Sets/a	1
Pb Regrind Mill Media	t/a	32
Pb Regrind Mill Liners	Sets/a	1
Zn Regrind Mill Media	t/a	32
Zn Regrind Mill Liners	Sets/a	1
A241	t/a	7
SIPX	t/a	31
MIBC Frother	t/a	66
Zn sulphate	t/a	2,725
Sodium cyanide	t/a	459
Copper sulphate	t/a	3,618
PAX	t/a	38
Flocculant	t/a	54
Sodium sulphate	t/a	155
Soda ash	t/a	2,329
Lime	t/a	21,070
Limestone[1]	t/a	167,000
Cyanide	t/a	113
Sodium metabisulphite	t/a	299
Zn dust	t/a	63
Nitric acid	t/a	6
Diatomaceous Earth	t/a	154

Note: 1. Supplied from sorting rejects

Descriptions of each reagent are given below.

17.4.4.1 A241 Promoter

A241 is delivered to site as a liquid in 1,000 kg IBCs. Dosing pumps deliver this reagent without dilution to the required locations in the process.

17.4.4.2 SIPX Collector

Sodium Isopropyl Xanthate (SIPX) collector is delivered to site as a liquid in 1,000 kg intermediate bulk containers (IBCs). After dilution to a 15% by weight solution it is distributed using dosing pump.

17.4.4.3 MIBC Frother

Methyl Isobutyl Carbinol (MIBC) is received on site in liquid form in 1,000 kg IBCs. Dosing pumps deliver this reagent without dilution to the required locations in the process.

17.4.4.4 Zinc Sulphate

Zn sulphate is used a Zn depressant in Pb flotation. It is delivered to site as a powder in 1,000 kg bags. The material is mixed with water in a mixing tank to generate a solution with 10% by weight Zn sulphate and is metered to flotation cells via dosing pumps.

17.4.4.5 Sodium Cyanide

Sodium cyanide is used as a depressant for pyrite in Pb flotation, as well as to leach Au from the processed Zn flotation tailings. Cyanide is delivered to site as solid briquettes in 18 kg isotainers. Once on site, the briquettes are mixed with caustic and water in a mixing tank to produce solution containing 20% by weight sodium cyanide. The solution is transferred to the cyanide solution storage tank and supplied to the various processes by dosing pumps.

17.4.4.6 Copper Sulphate

Copper sulphate is used as an activator for Zn during Zn flotation. It is received on site in solid form as a penta-hydrate. Copper sulphate is mixed with water to prepare at solution with 10% by weight copper sulphate in an agitated tank before being dosed to the Zn flotation process via dosing pumps.

17.4.4.7 PAX Collector

Potassium Amyl Xanthate (PAX) collector is delivered to site as granulated solids in bulk bags. The reagent is mixed with raw water from distribution and transferred to a day-tank with a storage capacity of 24 hours. The mixing tank is ventilated using a fan to remove any carbon disulphide gas. After dilution to a 15% solution, PAX is delivered to the flotation circuit using multiple dosing pumps, one for each stage in the circuit.

17.4.4.8 Flocculant

Flocculant is received on site as a dry powder in 1,000 kg bags. The powder is stored in a hopper with a five-day residence time and mixed to a strength of 0.25% by weight. The solution is stored in a tank with a 12-hour residence time and pumped to the process as required via dosing pumps. Further dilution to 0.025% by weight is required at the point of use.

17.4.4.9 Sodium Sulphate

Sodium sulphate is used in the Pb cleaner process and Zn cleaner process. It is received on site in solid form as a penta-hydrate. Sodium sulphate is mixed with water to prepare at solution with 10% by weight sodium sulphate in an agitated tank before being dosed to the flotation processes via dosing pumps.

An HCN gas detector and alarm system is included in the sodium cyanide reagent area to alert operators to the presence of toxic hydrogen cyanide gas. The sodium cyanide area is located adjacent or inside the alkaline reagent area for easy access to alkaline pH modifiers.

17.4.4.10 Soda Ash

Soda ash is delivered to site as a dry powder in 1,000 kg bulk bags. It is dissolved in a solution with 10% by weight sodium carbonate and used for pH control in the Pb flotation circuit.

17.4.4.11 Lime

Hydrated lime is received on site in dry form from bulk road tankers and transferred to a storage silo. The lime will be mixed with water to create a slurry with a density of 20% by weight. The slurry is stored in a tank with a 12-hour residence time and is circulated in a loop and added to the flotation and lime boil circuits where needed.

17.4.4.12 Limestone

Sorter rejects that has 80% limestone is crushed, ground and mixed with water to create a slurry with a density of 20% by weight. The slurry is stored in a tank with a 12-hour residence time and is circulated in a loop and added to the solution neutralization circuit.

17.4.4.13 Sodium Metabisulphite

Sodium metabisulphite (SMBS) is used in the cyanide detoxification circuit. It is delivered to site as a powder in bulk bags. The SMBS enters an agitated mixing tank with raw water to dissolve the powder and create a solution. The reagent is supplied to the cyanide detoxification circuit by dosing pumps.

17.4.4.14 Nitric acid

Nitric acid is delivered in totes as solution. Process water is used to mix a 10% by weight nitric acid solution. Acid is delivered to the acid wash column using the nitric acid dosing pump.

17.4.4.15 Sodium Hydroxide

Sodium hydroxide, or caustic soda, is delivered to site as a liquid in totes or a bulka box. Dosing pumps deliver the sodium hydroxide to the carbon acid wash/ elution circiut.

17.4.4.16 Smelting Fluxes

Various fluxes are used to smelt Au doré after the electrowinning stage. Borax, silica, sodium or potassium nitrite (nitre), and sodium carbonate are delivered as granulated or powdered solids in small bags or plastic containers stored in the plant's Au room.

17.4.4.17 Oxygen

High pressure oxygen is injected into the pressure oxidation vessel while lower pressure oxygen is injected in the leach circuit pre-aeration tanks, and leach tanks to achieve a dissolved oxygen level of >20 ppm. For this purpose, liquid oxygen is supplied by the vendor in a pressurised tank. From there, it goes through vaporisers, then feeds the leach and detoxification tanks as required.

18 PROJECT INFRASTRUCTURE

18.1 Introduction

Infrastructure to support the Revel Ridge Project will consist of on-site civil work, site facilities/buildings, a water management system, and site electrical power. Site facilities will include both mine facilities and process facilities, as follows:

- Mine facilities include the paste plant, mine dry, truck shop, explosives storage and other miscellaneous facilities.
- Process facilities include the process plant, crusher facilities, assay laboratory, process plant workshop and warehouse.
- Central Waste Rock Stockpile and South Waste Storage Facility.
- Administration offices.
- Mine, process, and administration facilities will be serviced with potable water, fire water, compressed air, power, diesel, propane, communication, and sanitary systems.

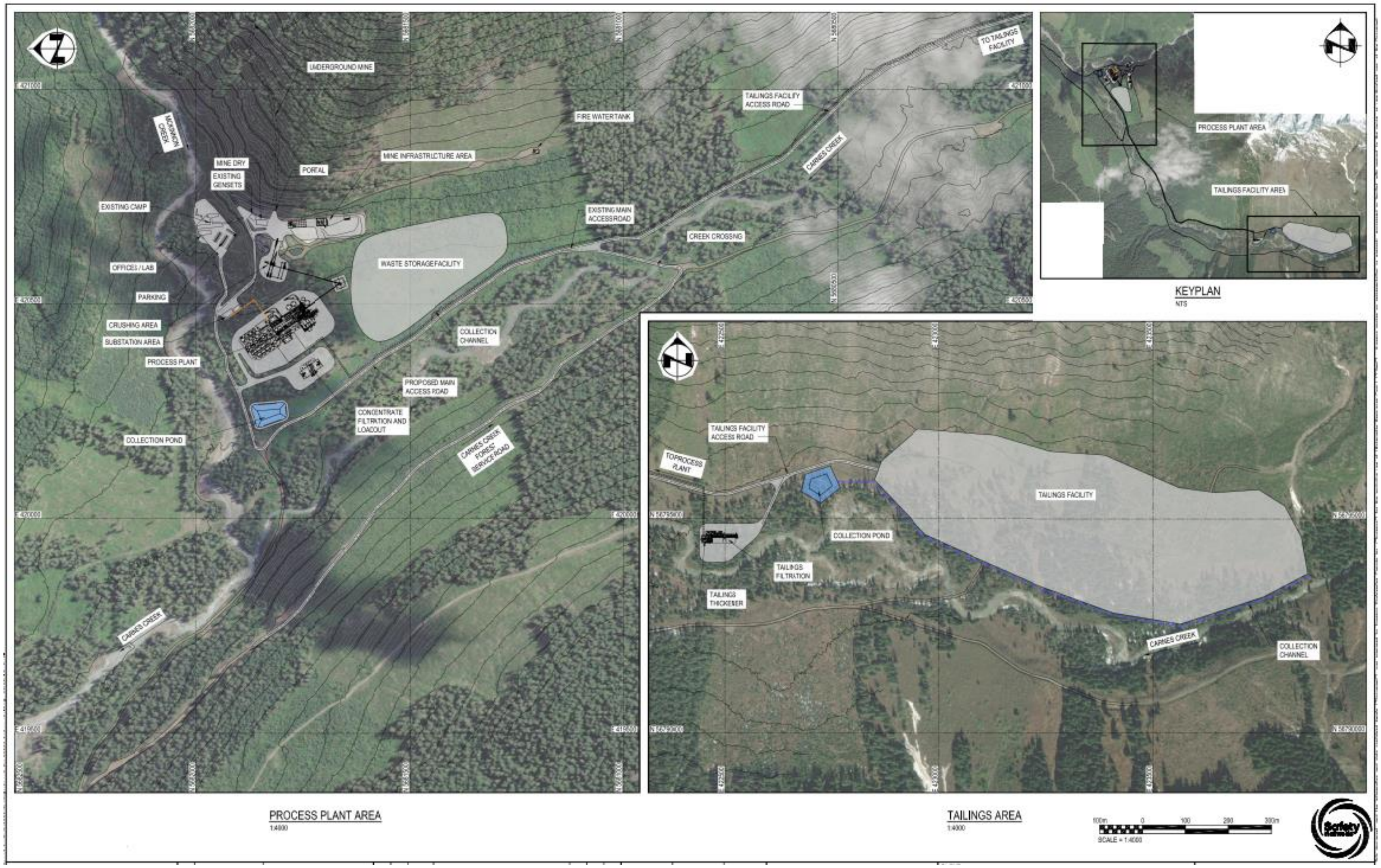
18.2 Overall Site Layout

Site selection was based on the following observations and factors:

- Selecting a site within the claim boundary
- Locating primary crushing and ROM pad to reduce hauling from portal
- Using existing camp and infrastructure
- Balancing earthwork cuts and fills across process plant and ROM pad
- Arranging administration, offices, and mine dry in close proximity to limit walking distances (important during cold weather)
- Minimising footprint and environmental impacts to the extent practicable.

The Revel Ridge site layout is shown in Figure 18 1:

Figure 18-1: Overall Site Layout Plan



Source: Ausenco (2023).

18.3 Off-Site Infrastructure

18.3.1 Site Access

The Revel Ridge Property can be reached from Revelstoke by travelling 32 km north via Provincial Highway 23 to the intersection of Carnes Creek Forest Service Road (FSR), then travelling 13 km east along the Carnes Creek FSR to reach the project site. The Carnes Creek FSR is a well-defined road and will be upgraded as needed to facilitate project traffic.

A new 1.3 km site access road will be constructed to the east of Carnes Creek which will connect Carnes Creek FSR to the existing mine camp. Part of the new site access road will necessitate a bridge crossing spanning Carnes Creek.

Supplies, labour, and service providers are readily available in Revelstoke. Local resources include commercial laboratories, warehousing, construction contractors, engineering and various other consultants, equipment, vendors and suppliers.

The Revel Ridge site will be 'drive-in', as such, no permanent camp facilities are located on the property. Workers will be housed in Revelstoke and will be transported to the site each day.

18.3.2 Water Supply

Fresh water will be sourced from the Carnes Creek. The water will be transported through pumps. Approximately 700 m of overland pipeline will be installed from the Carnes Creek to the process plant where freshwater tanks will be located. This water will be the source of potable water on site, used for the building facilities and process plant.

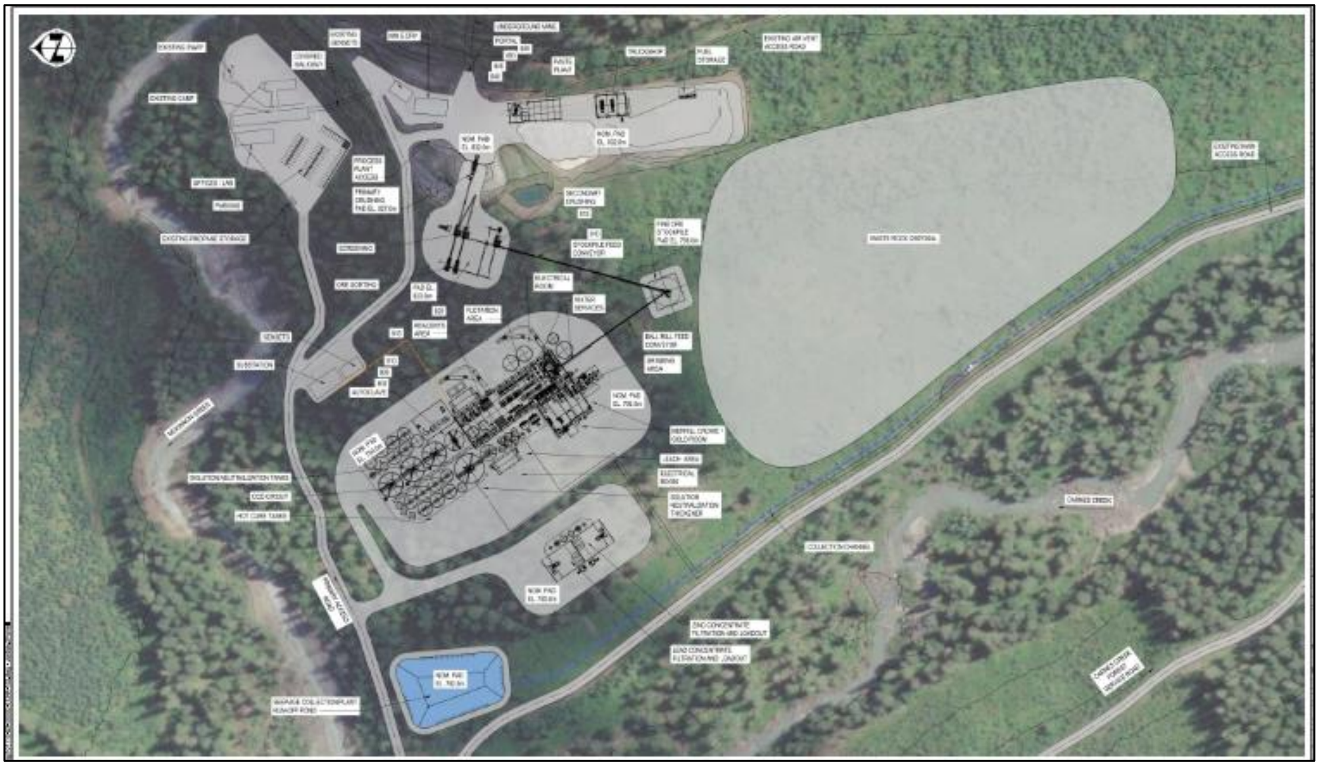
18.3.3 Power Supply and Distribution

Permanent electrical power is provided by a transmission line and connects to the BC Hydro electrical grid. This assumes the right of way for transmission lines and estimated alignment and design. A 69 kV transmission line will connect to a substation at the site before being stepped down to 13.8 kV for distribution to different power requirements across the project site.

18.4 On-Site Infrastructure

The plant sure consists of the necessary infrastructure to support the processing operations. All infrastructure buildings and structures will be built and constructed to all applicable codes and regulations. The plant site layout is shown in Figure 18-2.

Figure 18-2: Site Layout Plan



Source: Ausenco (2023).

18.4.1 Site Preparation

The existing roads will be connected to the project for site access. The typical method of clearing, topsoil removal, excavation, and backfilling will be employed, incorporating drains, safety bunds and backfilling with granular material and suitable aggregates for road structure.

Forest clearing and topsoil removal is expected to be required to allow construction of the processing plant. The ROM pad and administration areas will utilise previously cleared terraces.

Site civil work includes design for the following infrastructure:

- light vehicle plant roads,
- site access roads
- topsoil and overburden stockpiles
- mine facility platforms and process facility platforms

- water management ponds, ditches, and channels
- north and south waste management facilities,
- explosives storage.

18.4.2 Power Distribution

The high-voltage transmission from the grid will be connected by distribution line to a 69/13.8 kV substation on site. The substation will distribute power to various areas of the project including the process plant, administration building and the mining areas. Four distribution lines will be constructed at the project site to provide stepped-down power to the site administration and process facilities, and the Revel Ridge pit.

18.4.3 On-site Roads

The roads within the process plant area will be generally a standard lane width of 6 m, integrated with the process plant pad earthworks and designed with adequate drainage. The roads will allow access between the mill building, crushing buildings, and stockpile. The process plant roads will tie-in to the existing roads that will connect the administration building, change house and mine dry to the portal, ROM, and processing plant.

18.4.4 Fuel Supply, Storage and Distribution

The fuel station is located north of the truck shop and will consist of a 13 m long x 5 m wide open-air, slab on grade area with bollards. The fuel station will service the on-mine equipment and mobile fleet.

Diesel fuel will be stored on site adjacent to the ROM pad for heavy and light vehicles. Diesel fuel storage and supply will be provided by a fuel supplier and will include fuel storage, offloading pumps, dispensing pumps, associated piping and electronic fuel control/tracking.

18.4.5 Mining Infrastructure

18.4.5.1 Ventilation

Ventilation for the mine will be provided by two 500 kW fans pushing clean air through a heating unit at the main intake portal. A dedicated road will be built from the process facility to service the fans and heating unit. The ventilation arrangement is designed to exhaust warm return air out of the main access portals which will prevent them from freezing in cold weather.

18.4.5.2 Explosives Storage

A bulk explosives magazine will be located on the site at a location that will meet all regulatory requirements. There will be one bunker for bulk explosives and a second bunker for high explosives (such as blasting caps and boosters) and consumables such as firing line, nonel cords and delays. The surface magazine has been sized to hold 120,000 kg of bulk emulsion which would be three weeks of underground production. A magazine of this size would need to be 1.1 km away from inhabited buildings, traffic, fuel storage and power lines.

An underground powder magazine and cap magazine will also be created for storage of explosives needed in the early production years.

18.4.5.3 Mine Dewatering

Mine dewatering above the 830 m Level will be facilitated by gravity while levels below the 830 m Level will be dewatered using a system of sumps and submersible pumps. Sumps are designed off of all level access drifts in the mine schedule.

Submersible trash pumps situated within each of the sumps will be activated by float switches to run only when needed. The size and specifications of the pumps will be determined based on ground water inflow prior to and during operations.

18.4.5.4 Maintenance Shops

An insulated surface shop currently exists on surface and is shown in Figure 18-3. This shop will be suitable for initial mining activities as well as servicing the surface mobile equipment. An underground shop and fuel bay will be added to the maintenance facilities in the early production years to keep up with production increases and further development.

Figure 18-3: Existing Surface Shop

Source: Rokmaster (2020).

18.4.6 Process Plant Infrastructure

18.4.6.1 Plant Warehouse/Shop

The plant warehouse/shop is a pre-engineered building with concrete floor, overhead doors, fire protection and alarm systems. This building will be used for general storage, to store equipment spares for the process plant, to maintain and store light vehicles assigned to the plant, and repair and maintain process plant equipment as necessary.

18.4.6.2 Process Plant Control Room

The process plant control room is a modular office. This building is attached to the process plant and contains dual operator stations. This building is equipped with fire protection and an alarm system.

18.4.6.3 Assay Laboratory

The assay laboratory is a one-story modular building comprised of storage area, office, scale room. AA room, wet lab and met labs. This building is equipped with fire protection and an alarm system. The laboratory requires bottled nitrogen and hoods with ventilation.

18.4.7 On-Site Infrastructure

Table 18-1 shows the list of buildings required on the mine site.

Table 18-1: List of On-Site Buildings

Building Name	Building Type	L (m)	W (m)	H (m)	Area (m2)
Primary Crushing	Pre-Engineered	11	3.3	14	36
Secondary Crushing	Stick-built	7.5	4.2	12	32
Screening Building #1	Stick-built	7.5	4.2	12	32
Screening Building #2	Stick-built	7.5	4.2	12	32
Coarse Particle Sorting Building #1	Stick-built	8.9	2.2	12	20
Fine Particle Sorting Building #2	Stick-built	8.9	2.2	12	20
Stockpile Cover	Fabric Dome	18	18	29	254
Grinding	Pre-Engineered	15	23	16	334
Flotation & Reagent	Pre-Engineered	58	23	16	1,334
POX Autoclave	Pre-Engineered	16	22	12	352
Merrill Crowe	Pre-Engineered	20	27	8	540
Au Room	Pre-Engineered	17	9	8	147
Pb/Zn Concentrate Filtration	Pre-Engineered	44	17	12	726
Truck Shop Building	Pre-Engineered	20	13	14	260
Substation (E-Room #1)	Prefabricated Building	14	7.2	4	97
Substation (E-Room #2)	Prefabricated Building	9	3	4	31

18.4.7.1 Gate House and Truck Scale

The gate house is a security trailer office with a lockable gate and communications to the mine site. The truck scale is located adjacent to the main access road by the guard house.

18.4.7.2 Security Facilities

The security facility is a modular building located near the Gate House. The security facility includes rooms for personnel screening during rotations in and out of site. This facility is equipped with fire protection and an alarm system.

18.4.7.3 Main Administration Building

The main administration building is a modular, multiple level building comprised of a change/lunch facility, offices, meeting rooms, washrooms, desks, medical facility, fire protection, and alarm systems. The offices will have space for relevant employees. The medical facilities consist of first aid and emergency response rooms for on-site treatment and headquarters for mine rescue team.

18.4.8 Central Waste Rock Stockpile

An excess of waste rock will be excavated during mining activities and this rock will be stored at the Central Waste Rock Stockpile (CWRS) located to the south of the plant site. The foundation for the stockpile will be prepared by removing any topsoil and unsuitable material to obtain a firm foundation.

The stockpile will be constructed over time with 2H:1V slopes and reach a maximum volume of approximately 825,000 m^3 in Year 11 of the mine plan. A portion of the waste rock will be used in Year 12 at the South Waste Storage Facility (SWSF) and the remaining rock will be covered with topsoil and hydroseeded at closure.

18.4.9 South Waste Storage Facility (SWSF)

The SWSF will be located south of the plant site, approximately 4 km up the Carnes Creek valley. The location of the facility was selected by the QP with input from Rokmaster and Canenco. The SWSF will provide storage for filtered rough tailings and filtered POX neutralization residue for the entirety of the mine plan (approximately 4 Mm^3 at an assumed placed dry density of 1.6 t/m^3). Excess waste rock from underground mine development will also be utilized for the construction of the SWSF.

Vegetation, topsoil, and unsuitable materials will be removed from a portion of the SWSF footprint during initial construction to prepare an area for approximately two years of waste placement. A geosynthetic lining system will be installed on the prepared foundation to minimize process bleed water and contact runoff from entering the underlying foundation soils. The geosynthetic lining system will include a 150 mm thick granular bedding layer to provide a suitable subgrade for the overlying non-woven geotextile and 80 mm HDPE textured (both sides) geomembrane. A 300 mm thick granular underdrain layer will be installed over the geomembrane to protect the liner from equipment damage and to convey any collected bleed water and percolated precipitation or snowmelt from the SWSF to the collection ditch, and on to the South Water Management Pond (SWMP). Processing of the waste rock from underground mining development will likely be required to meet the specifications for the bedding and underdrain materials. The geosynthetic lining system and underdrain will be extended periodically during operations to provide additional area for waste placement.

The cross section for the SWSF, from downstream to upstream, includes a 2 m wide rockfill zone for erosion protection, compacted rough tailings and neutralization residue, and a 4 m wide granular chimney drain to maintain a low phreatic surface at the toe of the SWSF. The overall slope of the SWSF will be 4H:1V and the overall height will be approximately 60 m. Waste rock from underground mine development will be used for the erosion protection layer and chimney drain. Processing will likely be required to meet the specifications for the chimney drain.

Rockfill, rough tailings, neutralization residue, and the chimney drain will typically be placed and compacted on the underdrain material above geosynthetic lining system at the same time to maintain the same elevation along the SWSF crest. Placement will commence at the lowest elevations and advance upslope. This approach will prevent ponding of water on the SWSF surface and allow any runoff to shed from the SWSF. During the winter months, snow will be removed from select interim surfaces and temporarily stored upstream of the SWMP. Snow will be left on inactive surfaces to reduce the potential for dusting.

18.4.10 Site Water Management

The water management measures for the plant site area, CWRS, and SWSF are briefly described below:

18.4.10.1 SWSF Seepage Control

18.4.10.1.1 Geosynthetic Lining System

The lining system will be installed on the prepared basin subgrade to minimize seepage into the foundation. The geosynthetic lining system will include a granular bedding layer, non-woven geotextile cushion layer and 80 mil HDPE geomembrane.

18.4.10.1.2 Seepage Collection System

The subgrade, the geosynthetic lining system, and the overlying underdrain layer will be graded and installed to route collected seepage to the collection ditch at the toe of the SWSF. The collected seepage will then be conveyed to the SWMP.

18.4.10.2 Stormwater Management

18.4.10.2.1 Water Management Ponds (WMPs)

Geomembrane lined WMPs (CWMP and SWMP) will be constructed downstream of the plant site area, CWRS and SWSF respectively to collect runoff and snowmelt from collection ditches constructed along the toe of the SWSF and along the perimeter of the plant site area. The WMPs will provide temporary storage for storms up to and including the 1-in-50-year, 24-hour storm event (British Columbia Ministry of Environment; BCMOE, 2015). Runoff from storms up to the 1-in-200-year, 24-hour storm event will be routed via spillways at the WMPs to the environment (BCMOE, 2015). A floating diesel pump and pipeline will be installed at the SWMP to convey flows to the CWMP. Water from the underground workings will also be pumped to the CWMP. A floating electrical pump and pipeline will be installed at the CWMP to convey flows to the process plant or water treatment facility as required.

18.4.10.2.2 Diversion/Collection Ditches/Berms

Diversion ditches are included in the concept to route non contact water and snowmelt from the slopes above the SWSF and plant site area to the existing creeks. Collection ditches are included in the concept to collect runoff (contact water) and snowmelt from the SWSF and CWRS outer slopes and convey the collected contact water to the WMPs. The ditches will convey runoff from storm events up to and including the 1-in-50-year, 24-hour storm event, as per local guidelines (BCMOE, 2015). Berms will be included in the ditch arrangements to provide the required conveyance capacities. This approach was adopted based on the assumed thin overburden profile at the site and the availability of clean, durable waste rock.

18.4.10.2.3 Water Treatment and Discharge

The annual water balance indicates that the Project will operate under a net hydrologic surplus. Process bleed water from the filtered tailings, snowmelt, contact runoff collected at the WMPs, and water from the underground workings will be transferred to the CWMP. The water in the CWMP will be pumped as makeup to the process plant or pumped to the water treatment facility located at the plant site, treated as required, and discharged to the environment. The proposed final treated water discharge location will be immediately downstream of the Carnes Creek/McKinnon Creek confluence.

18.4.10.3 Site Wide Water Balance

An annual site wide water balance under annual average hydrological conditions for a typical operating year was developed using a spreadsheet approach to size various pumps and pipelines and estimate potential flow through the water treatment facility. Key inputs were sourced as follows:

- The solids content estimate in the underground paste backfill was provided by T Engineering (2023).
- The water pumped from the underground workings estimate was provided by Rokmaster (2023).
- The annual precipitation data was downloaded from a database operated by the University of British Columbia (UBC, 2022). The average annual evaporation was also estimated by KP using the Hargreaves (1985) method.
- Runoff coefficients were estimated by KP based on relevant project experience and guidance from the United States Department of Agriculture (USDA, 1986).

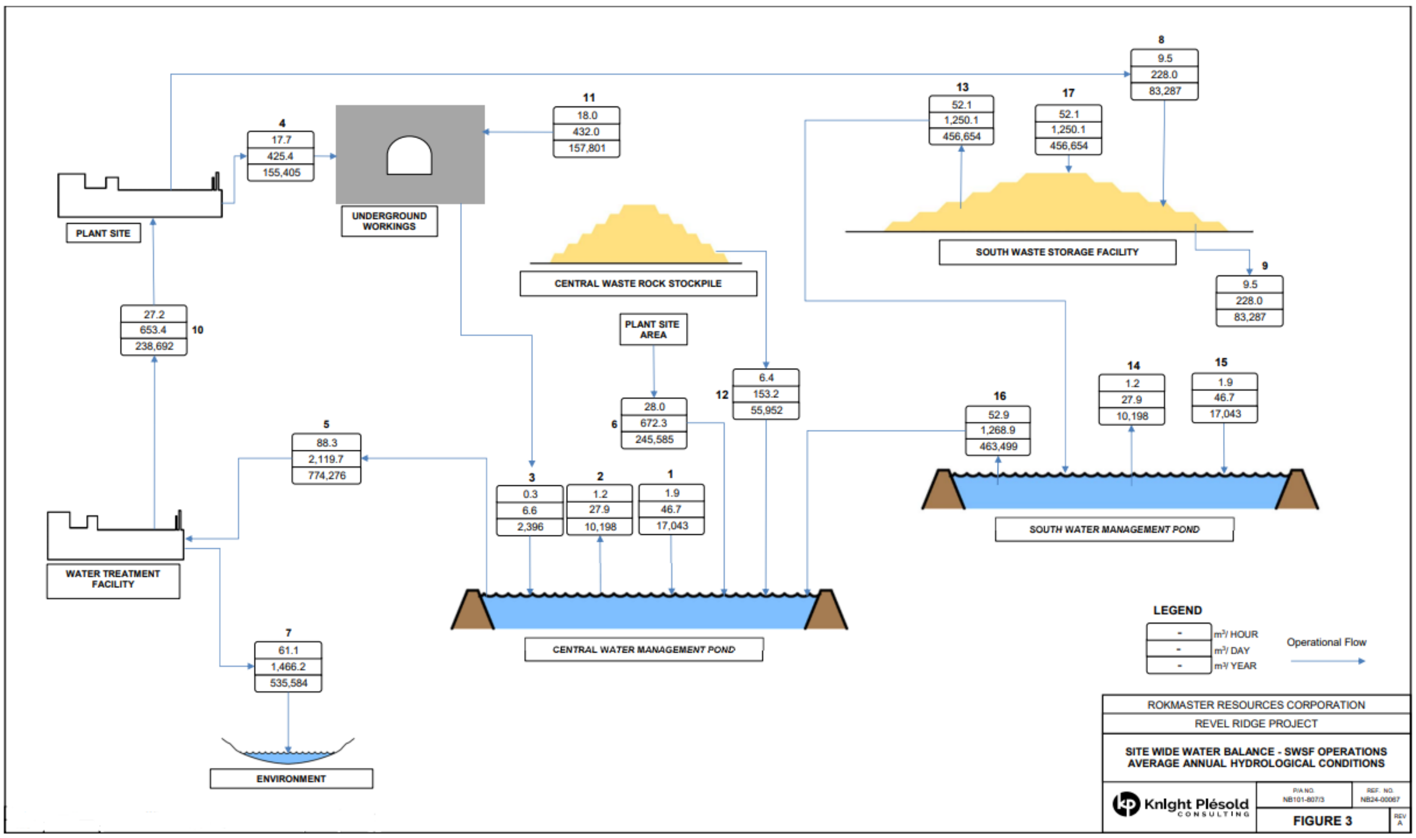
The flowsheet illustrating a typical operation year is provided on Figure 18-4. The results indicate that the Project will operate under an annual hydrological surplus with water processed through the water treatment facility each year. Specific results are summarized below.

- The flow from the SWMP to the CWMP was estimated to be 463,500 m^3/year (53 m^3/hour averaged throughout the year).
- The flow from the CWMP to the water treatment facility was estimated to be 774,300 m^3/year (88 m^3/hour averaged throughout the year).

- The flow from the water treatment facility to the plant site (treated make-up water if 100% is required to be treated) was estimated to be 238,700 m^3/year (27 m^3/hour averaged throughout the year) to provide make-up water for the metallurgical process.
- The remaining flow from the water treatment facility to the environment was estimated to be 535,600 m^3/year (61 m^3/hour averaged throughout the year).

These flow estimates were used with added contingencies to size the pumps and pipelines required to convey water at the Project, as it is expected that the majority of water requiring treatment will occur during the annual spring freshet. A monthly water balance is recommended during future, more detailed levels of study, to better estimate the water management requirements.

Figure 18-4: Site Wide Water Balance and Infrastructure



Source: KP (2023).

19 MARKET STUDIES AND CONTRACTS

19.1 Market Studies

It is envisioned that the concentrates will be trucked from the project site to Vancouver, where it will subsequently be transported by sea to clients. Concentrates and Au doré will be sold into the general market to North American, European, or Asian Smelters and refineries.

Rokmaster Resources or its consultants have conducted no market study on the sale of the concentrates and Au doré. Therefore, the market terms for this study are based on the terms proposed by Rokmaster Resources as per their discussion with Ausenco, concentrate brokers, and recently published terms from other similar studies. The QP is of the opinion that the marketing and commodity price information is suitable to be used in cash flow analyses to support this technical report.

19.2 Commodity Price Projections

For this technical report, the metal prices presented below in Table 19-1 were used for financial modelling. The metal prices are estimated based on historic market prices as shown in Table 19-1. These prices are also consistent with the range of prices used for other recent, comparable studies.

Table 19-1: Price Projections

Metal	Commodity Unit	Study Unit Price (US$)	3-Year Trailing Average (US$) (Dec. 12, 2023) *
Pb	Pound (lb.)	0.90	0.98
Zn	Pound (lb.)	1.26	1.38
Au	Troy ounce (oz.)	1,850	1,847
Ag	Troy ounce (oz.)	23.00	23.45

*Source: Capital IQ

19.3 Contracts

There are currently no sales contracts or refining agreements in place for the project.

Based on the expected Pb concentrate grade from testing, arsenic and antimony penalties will be incurred. Based on the expected Zn concentrate grade from testing, cadmium penalty will be incurred. Table 19-2 summarizes the concentrate grades and penalties. LOM concentrate grades are the weighted average grades predictated from the metallurgical recoveries form the testwork applied to the annual mineplan.

The metal payables used in the marketing study are given below in Table 19-3. A summary of the treatment, refining and transportation costs are provided in Table 19-4 and Table 19-5.

The QP is of the opinion that the information presented here is suitable for use in cashflow analyses to support this assessment.

Table 19-2: Concentrate Grade and Penalties

Metal	Grade (%)	Charge per US$/dmt	Per Step ('X') (%)	If Content > ('Y') (%)
Pb Concentrate				
Arsenic	1.48	2.00	0.10	0.40
Antimony	2.32	2.50	0.10	0.20
Zn Concentrate				
Arsenic	0.14	1.50	0.10	0.20
Cadmium	0.31	1.50	0.10	0.30

Table 19-3: Metals Payable

Payability	Pb Concentrate (%)	Zn Concentrate (%)	Au Dore
Pb	95.0	0.0	0.0
Zn	0.0	85.0	0.0
Au	95.0	70.0	99.5
Ag	90.0	70.0	98.0

Table 19-4: Transportation and Treatment Cost

Concept	Value	Unit
Pb Concentrate Transport Cost	221.4	$US/wmt
Pb Concentrate Treatment Charge	131.0	$US/dmt
Zn Concentrate Transport Cost	133.9	$US/wmt
Zn Concentrate Treatment Charge	285.0	$US/dmt

Table 19-5: Refining Charge

Metal	Unit	Pb Concentrate	Zn Concentrate	Au Dore
Au	US$/oz	15.00	5.00	5.00
Ag	US$/oz	1.20	1.20	0.50

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental Considerations

This section provides an overview of the environmental, regulatory, and social setting of the Revel Ridge Project. It outlines existing biological and physical baseline conditions, proposed new baseline studies to support future permitting applications, existing permits, and future regulatory and permitting requirements including required management plans for water, site environmental monitoring, and waste disposal. In addition, this section also discusses socio-economic baseline conditions, the status of community consultation and engagement, and conceptual mine closure and reclamation planning for the project. Recommendations are also provided if the decision is made to advance the project through the prefeasibility study, feasibility study, environmental assessment, and permitting phases.

20.2 Environmental and Social Setting

The Property is in the Revelstoke Mining Division in southeastern British Columbia approximately 32 km northeast of Revelstoke, BC, 420 km northeast of Vancouver, BC, and 290 km west of Calgary, AB. The location of the portal, that is located near the center of the Property, is at 51°16’56” N and 118°08’12” W.

The Property is composed of 35 mineral claims and 10 Crown Grant Lots covering a total area of 14,722 ha. The surface rights over the Property are owned by the Crown and administered by the Government of BC, although a detailed review of other potential rights such as placer, timber, water, grazing, trapping, outfitting, etc. has not been undertaken at this time.

Information on the project climate and physiographic setting is included in Section 5.

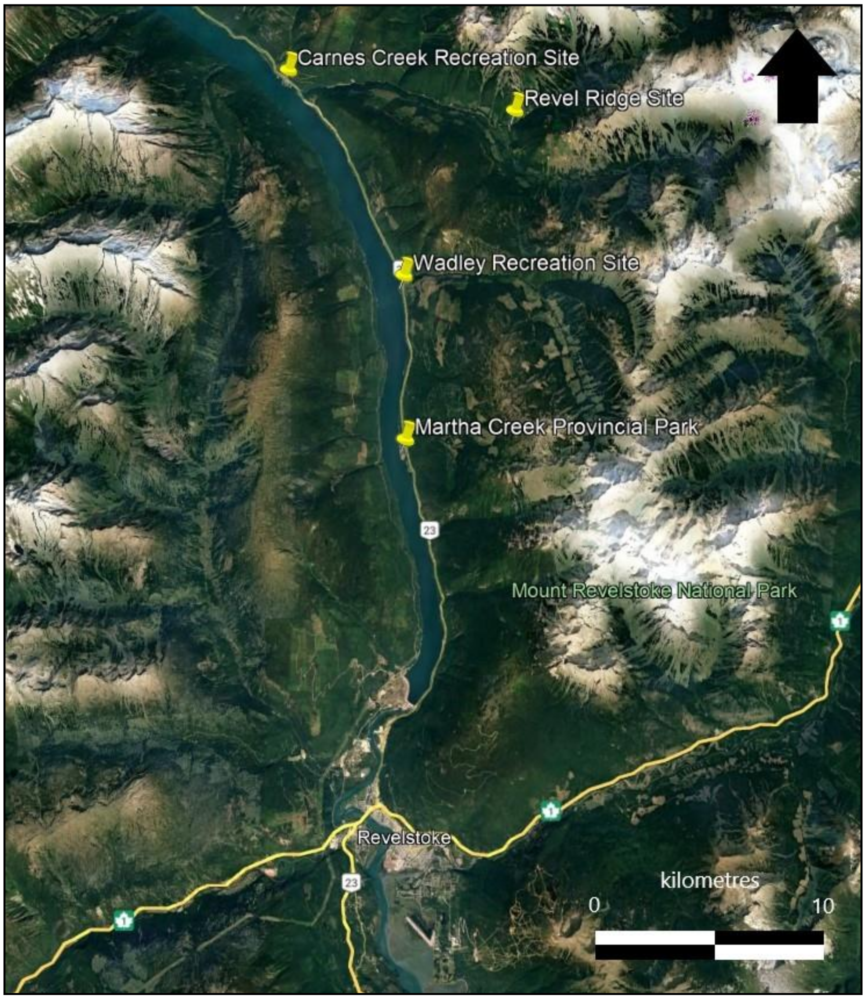
Elevations in the area of the project range from 700 to 3,050 m above mean sea level. The topography is characteristic of the Selkirk Mountains. The main watercourse on the property is Carnes Creek, which transects the area. Its source is the Durrand Glacier, which is east of the Property. McKinnon Creek is a tributary of Carnes Creek. The area surrounding the intersection of McKinnon and Carnes Creeks has been the focus of the majority of mineral exploration activiities over the life of the mineral Property.

There are two recreation sites, one provincial park, and one national park located near the Project including:

- The Carnes Creek recreation site is located on Lake Revelstoke reservoir approximately 11 km west, downstream of the Property.
- The Wadey recreation site is located on Lake Revelstoke reservoir approximately 9 km southwest, downstream of the Property.
- Martha Creek Provincial Park is located on Lake Revelstoke reservoir approximately 15 km southwest, downstream of the Property.
- Mount Revelstoke National Park is located approximately 18 km south of the Property.

The location of these parks and recreation areas relative to the project site are shown in Figure 20-1.

Figure 20-1: Environmental Setting



Source: Google Earth (2023).

A summary of the available environmental, social, and community studies and factors potentially affecting the project are provided in the following sections. New baseline studies that document existing or recent conditions will be required to support baseline development and impact assessment. In assessing the utilization of existing older baseline data, direct discussions with provincial and federal regulators will be required. To support the development of this section, a desktop review of publicly available sources was conducted to supplement the information contained in the historical environmental baseline studies.

20.2.1 Hydrology and Climate

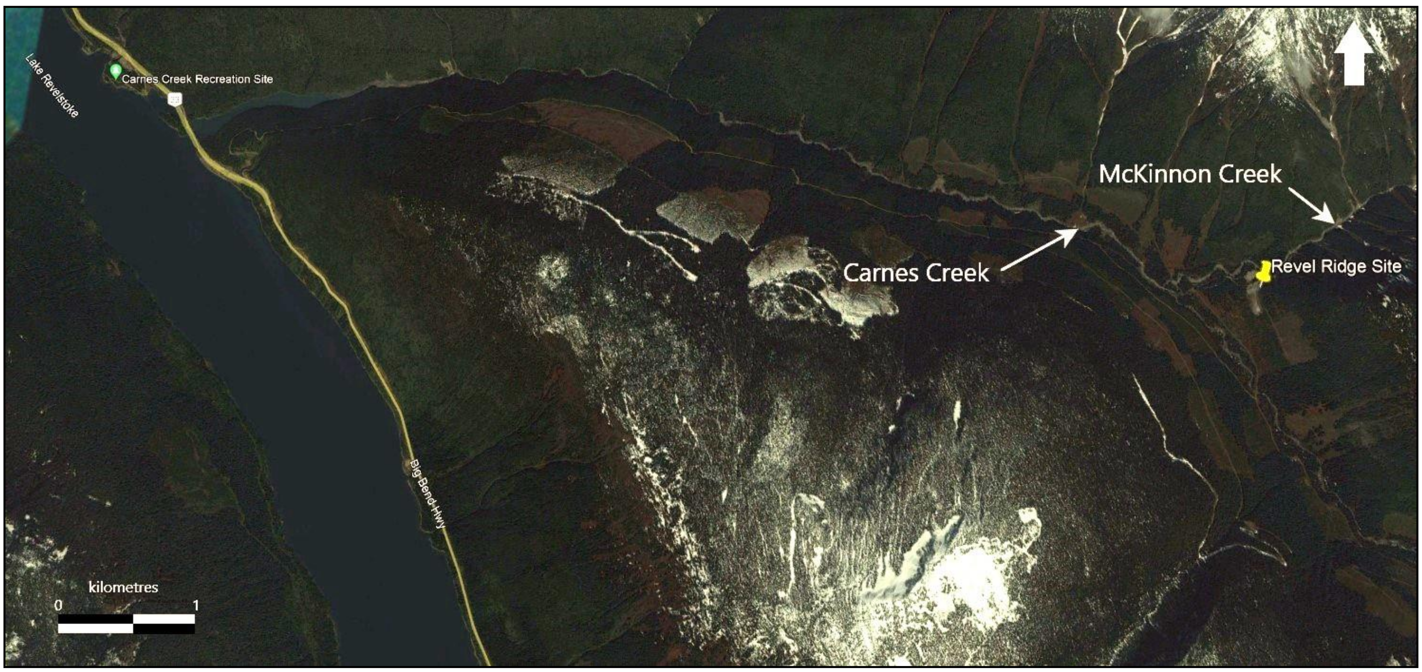
Figure 20-2 illustrates the main watercourses in the project area. Carnes Creek is a fifth order stream with a mainstem length of 26.4 km that drains a watershed area of 220 km2. Mean annual discharge at the mouth is estimated at 11.4 m^3/s, with peak flows occurring in June and July, and low flows occurring from January to March (Rokmaster, 2021).

Carnes Creek drains in a westerly direction into Lake Revelstoke reservoir, a 122 km long impoundment of the Columbia River created by the Revelstoke Canyon Dam.

Tributaries of Carnes Creek are Kelly Creek and McKinnon Creek, which drain watersheds of 56 km^2 and 38 km^2 respectively. The headwaters of Carnes Creek and McKinnon Creek are heavily glaciated and melt from these glaciers contributes to late summer flows as well as increased suspended solids.

Preliminary hydrometric monitoring was completed in 1989-1990 (Equinox, 1990). Further hydrometric investigations and detailed hydrological modelling will need to be completed for the project.

Figure 20-2: Major Watercourses in The Project Area



Source: Google Earth (2023).

Information on the regional climatic setting is included in Section 5. No site specific metorological data has been collected and will need to be as the project advances to inform engineering design and environmental assessment and permitting.

Longer-term monitoring of the project study area will be required as the project advances through PFS and environmental assessment (EA) and permitting to further characterize the hydrological conditions and develop a water balance model and long-term life of mine water management plans. Section 26 provides recommendations for the meteorological and hydrological studies that will support the advancement of the project through the PFS stage.

20.2.2 Surface Water Quality

Surface water quality monitoring has been conducted at the project site since 2020 as a condition of discharge permit #110409 (see Section 20.3.1). The monitoring program includes collection of monthly water quality data from three monitoring points: Carnes Creek upstream of McKinnon Creek, Carnes Creek upstream of project, and the portal discharge at the outlet of the settling ponds (Masse Environmental, 2020).

The monitoring programs indicated that water quality at the two sampling locations in Carnes Creek have a pH range of 6.6 - 8.1, with soft to medium water hardness, and can have elevated levels of total aluminum, copper, and iron compared to BC water quality guidelines for the protection of freshwater aquatic life.

The monitoring program also indicates the portal discharge at the outlet of the settling ponds has a pH range of 7.5 - 8.4, very hard water hardness, and can have elevated levels of total aluminum, copper, iron, arsenic, and dissolved zinc compared to BC water quality guidelines for the protection of freshwater aquatic life,Long-term water quality monitoring efforts should focus on areas potentially affected by proposed mine infrastructure (refer to Section 18) and should meet the requirements of an EA application as outlined in *Water and Air Baseline Monitoring Guidance Document for Mine Proponents and Operators* (BC ENV, 2016). Section 26 provides recommendations for the surface water quality studies that will support the advancement of the project through the PFS stage.

20.2.3 Groundwater Quality and Hydrogeology

Two groundwater monitoring wells are established on site. Groundwater quality monitoring has been completed quarterly since 2020 at these wells (Rokmaster, 2023a). Water quality monitoring data indicates that the groundwater has medium to hard water hardness and a pH range of 7.8 – 8.4. There were no exceedances in total metals relative to the BC Contaminated Sites Regulation for the protection of aquatic life.

No hydrogeological investigations have been undertaken. As the project advances through the PFS, EA, and permitting stages, groundwater monitoring and sampling data will need to be adequate to support the EA and to support the development of an integrated numerical 3D groundwater model and a long-term life of mine water management plan. Section 26 provides recommendations for hydrogeological studies that will support the advancement of the project through the PFS stage.

20.2.4 Fish and Fish Habitat

Masse Environmental completed fish surveys in the Carnes Creek watershed in 2021 (Masse Environmental, 2022) and 2022 (Masse Environmental, 2023). This work built upon previous fish surveys completed by Golder Associates in 2004 and 2008 (Golder Associates, 2008).

The main waterbodies that may potentially be impacted by the project include Carnes Creek and McKinnon Creek. A summary of fish species known to be in the area based on historical data is presented in Table 20-1.

Table 20-1: Known Fish Species in The Study Area

Mainstem Streams	Common Name	Scientific Name
Carnes Creek	Bull trout	*Salvelinus confluentus*
	Kokanee	*Oncorhynchus nerka*
	Rainbow trout	*Oncorhynchus mykiss*
McKinnon Creek	Bull trout	*Salvelinus confluentus*
	Kokanee	*Oncorhynchus nerka*
	Rainbow trout	*Oncorhynchus mykiss*

Source: Golder Associates (2008), Masse Environmental (2022).

A redd survey was conducted in 2021. Redds were observed in both Carnes Creek and McKinnon Creek (Masse Environmental, 2022). A Kokanee spawning survey was conducted in 2022. Spawning Kokanee were observed in both Carnes Creek and McKinnon Creek (Masse Environmental, 2023).

The BC Species and Ecosystem Explorer (BCSEE) web-based tool indicates 11 provincially listed at-risk fish species have the potential to be present in the Carnes Creek watershed (BC Conservation Data Centre, 2023).

Bull trout (*Salvelinus confluentus*) was recorded in both Carnes Creek and McKinnon Creek during the 2004 (Golder Associates, 2008) and 2021 fish surveys (Masse Environmental, 2022). This species is provincially Blue-listed and listed as "Special Concern" by the Committee on the status of Endangered Wildlife in Canada (COSEWIC).

20.2.4.1 Fish Habitat

Golder Associates assessed fish habitat in Carnes Creek and McKinnon Creek in 2004 and 2008. Both Carnes and McKinnon Creeks were characterized as predominantly cascade-pool morphology, characterized by high water velocities and large substrate. Cobble and boulder substrate predominated within the cascade-pool habitats. Spawning habitat for kokanee and bull trout was abundant throughout Carnes Creek and McKinnon Creek. Instream cover was predominantly large woody debris and small woody debris providing excellent rearing habitat for bull trout (Golder Associates, 2008). Turbidity and water temperature within Carnes Creek and McKinnon Creek may represent important limiting factors. Both streams are glacially fed, and discharge and turbidity can increase rapidly from melting or rain events. Fine glacial sediment is evident throughout both streams and may limit the quality of habitat (Golder Associates, 2008).

20.2.4.2 Benthic Invertebrates

Masse Environmental completed benthic invertebrate sampling in Carnes Creek and McKinnon Creek in 2022 (Masse Environmental, 2023). There were six macroinvertebrate orders and 22 families represented in the Carnes Creek and McKinnon Creek samples with individuals representing all the main functional feeding groups.

Further sampling and assessments are recommended, to establish a better understanding of the community and habitat baseline conditions within the project site and to support future permitting and approvals. Section 26 provides recommendations for fish and fish habitat studies that will support the advancement of the project through the PFS stage.

20.2.5 Soils and Vegetation

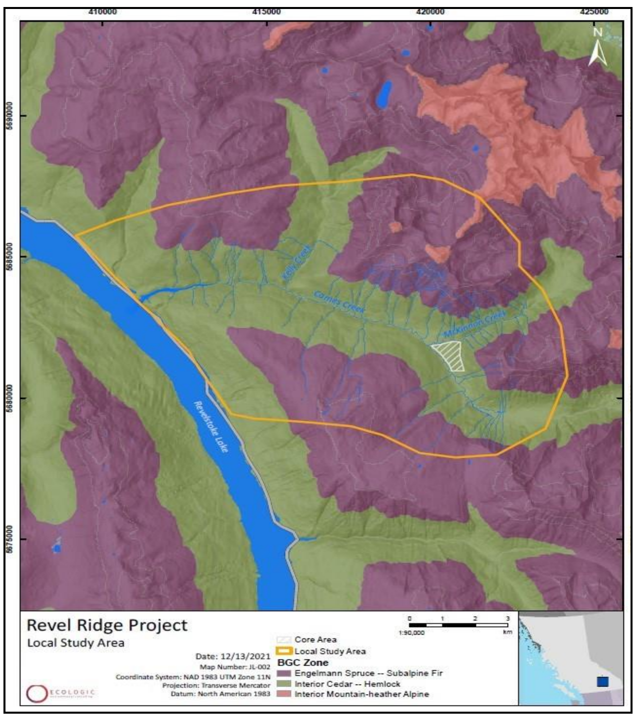
20.2.5.1 Soils

The Carnes Creek valley bottom up to mid elevations, as well as lower McKinnon Creek, are mapped as the Goldstream soil association. These are colluvial soils that are loose, porous, moderately pervious, and usually well drained, and are most commonly Orthic-Humo-Ferric Podzols (Rokmaster, 2023).

20.2.5.2 Vegetation

Preliminary ecosystem surveys, including rare plant surveys, were completed in 2004 and 2008 (Golder Associates, 2008a). In 2021, EcoLogic Consultants and Masse Environmental Consultants completed Terrestrial Ecosystem Mapping (TEM) for the Project. The TEM considered a Local Study Area (LSA) encompassing the project footprint and the surrounding area where there is a reasonable potential for adverse project-specific effects to occur. The total LSA is 10,128 ha and shown in Figure 20-3.

Figure 20-3: Terrestrial Ecosystem Mapping LSA



Source: Ecologic (2022).

The TEM identified five biogeoclimatic (BGC) variants and two subzones within the vicinity of the project area (EcoLogic, 2022). The BGC units, listed from most common to least common, are:

- Engelmann Spruce Subalpine Fir Very Wet Cold subzone
- Interior Cedar Hemlock Wet Cool Shuswap variant
- Interior Cedar Hemlock Moist Warm Thompson variant
- Interior Cedar Hemlock Very Wet Cool Columbia variant
- Engelmann Spruce Subalpine Fir Very Wet Cold Woodland variant
- Engelmann Spruce Subalpine Fir Very Wet Cold Parkland variant
- Interior Mountain-heather Alpine Undifferentiated subzone.

The Revel Ridge Property is located within the Revelstoke Timber Supply Area (TSA) administered by the Selkirk Natural Resource District in Revelstoke. This TSA covers approximately 527,000 ha and lies within the Kootenay-Boundary Natural Resource Region.

The BCSEE web-based tool indicates 10 vascular plant, two non-vascular planst, and 12 fungi provincially listed at-risk species have the potential to be present in the Carnes Creek watershed (BC Conservation Data Centre, 2023).

Whitebark pine (*Pinus albicaulis*) was recorded at higher elevations during the terrestrial ecosystem mapping (Ecologic, 2022). This species, a provincially Blue-listed species, and a Schedule 1 species at-risk, federally listed as endangered by the *Species at Risk Act* (SARA) and Committee on the status of Endangered Wildlife in Canada (COSEWIC)Proposed project infastructure does not occur not is planned in the area of this species.

20.2.5.3 Ecosystems

The Cottonwood-Spruce-Dogwood ecosystem is a Blue-listed ecosystem that covers 9.30 ha in the LSA. It occurs exclusively along Carnes Creek (EcoLogic, 2022). The proposed configuration of the South Waste Storage Facility and the associated access road potentially overlap this ecosystem.

20.2.5.3.1 Old Growth Forests

Old-growth forest occurs in a total of 2,537.19 ha (25.05%) of the LSA (EcoLogic, 2022).

BC Policy for old growth forests has been updated since the designation of Old Growth Management Areas (OGMAs) in and around the project area. New measures were launched in February 2023. The forest landscape planning component may result in a review of the existing designations.

As the project is currently arranged at this initial stage, some project areas overlap with recommended priority harvest deferral areas for Big-Treed Old Growth Forest (Government of BC, 2023). Rokmaster is commited to relocating project infrastructure to minimise these impacts, and will address these items in more detail in the next phase of engineering.

20.2.5.3.2 Wetlands

Wetlands are uncommon in the LSA due to the steep terrain. Alpine wetlands and shallow open water associated with alpine wetlands or lower elevation swamps cover 26 ha (0.26%) of the LSA (EcoLogic, 2022). The proposed configuration of the South Waste Storage Facility and the associated access road potentially overlap some wetlands.

20.2.5.3.3 Floodplains

Floodplains include active floodplain, low bench, and mid bench floodplain in the LSA along with river polygons. Floodplain ecosystems and rivers cover 90 (0.89%) of the LSA (EcoLogic, 2022). The proposed configuration of the South Waste Storage Facility and the associated access road potentially overlap some floodplains.

20.2.5.3.4 Parkland and Alpine Ecosystems

Alpine and parkland ecosystems total 716.38 ha (7.07%) in the LSA. Non-vegetated ecosystems such as rock outcrops, talus permanent snow, and glaciers are the most common totalling 68% of the parkland/alpine zone (Ecologic, 2022). These ecosystems are not ovelaind by the proposed project infrastructure.

20.2.5.4 Invasive Species

Invasive/non-native vegetation that have been reported on the site include white clover, bull thistle, Canada thistle, oxeye daisy, prickly lettuce, pineapple weed, thyme-leaved sandwort, timothy, dandelion, black medick, yarrow, common plantain, and red clover (Golder Associates, 2008a).

Additional surveys will need to be completed related to the areas of terrain/soils and vegetation/ecosystem for the mine infrastructure presented in Section 18. Section 26 provides recommendations for soils and vegetation studies that will support the advancement of the project through the PFS stage.

20.2.6 Wildlife and Wildlife Habitat

20.2.6.1 Wildlife

Golder Associates completed wildlife and wildlife habitat surveys in 2008 (Golder Associates, 2008a, 2008b, 2008c). These surveys included breeding bird surveys, encounter surveys along winter tracking transects, stand watch (primarily in riparian areas), and amphibian surveys. Additional wildlife data was collected during the TEM field survey (EcoLogic, 2022a).

Thirty-one bird species were recorded during the 2008 spring surveys (Golder Associates, 2008c). The most observed species were dark-eyed junco, MacGillivray’s warbler, winter wren, and Swainson’s thrush. Other species observed during the 2008 spring surveys were beaver, western toad, moose, deer, red squirrel, chipmunk, grizzly bear, white-tailed deer, marten, and coyote (Golder Associates, 2008c).

Wildlife occurrences noted during the 2008 winter wildlife surveys included beaver, black capped chickadee, common raven, coyote, house finch, marten, moose, mouse, pileated woodpecker, pine siskin, purple finch, red squirrel, red-breasted nuthatch, sapsucker, and snowshoe hare (Golder Associates, 2008b).

Managed wildlife species present in the Carnes Creek watershed include southern mountain caribou, grizzly bear, wolverine, mountain goat, and moose (Rokmaster, 2021).

The BCSEE web-based tool indicates seven amphibians, 45 bird, 19 mammal, 39 insect, and 27 mollusc provincially listed at-risk species that have the potential to be present in the Carnes Creek watershed (BC Conservation Data Centre, 2023).

Table 20-2 summarizes incidental wildlife observations recorded by the TEM field crew.

Table 20-2: Incidental Wildlife Observations for Species At-Risk

Group	Common Name	Scientific Name	BC List	COSEWIC	SARA
Amphibian	Western Toad	*Anaxyrus boreas*	Yellow	Special Concern	1-Special Concern
Bird	Northern Goshawk, Atricapillus subspecies	*Accipiter gentilis atricapillus*	Blue	NAR	n/a
Mammal	Grizzly Bear	*Ursus arctos*	Blue	Special Concern	1-Special Concern
Mollusc	Pale jumping slug	*Hemphillia camelus*	Blue	n/a	n/a
	Magnum mantleslug	*Magnipelta mycophaga*	Blue	Special Conern	1-Special Concern
	Herrington fingernail clam	*Sphaerium occidentale*	Blue	n/a	n/a

Source: EcoLogic (2022a).

20.2.6.2 Wildlife Habitat

Wildlife habitat features that are protected in the Kootenay Boundary Region that may be present in the Project area include (Masse Environmental, 2023a):

- Grizzly bear dens
- Significant mineral licks
- Significant wallows
- Bat hibernaculums
- Bat nursery roosts
- Hot springs or thermal springs.

Additional surveys will need to be completed related to the areas of wildlife and wildlife habitat for the mine infrastructure presented in Section 18. Section 26 provides recommendations for wildlife studies that will support the advancement of the project through the PFS stage.

20.2.7 Geochemistry

MESH Environmental completed an initial geochemical characterization program in 2007 on rock types associated with the 832 Level Adit to support an underground exploration permit for the project. In September 2007, nine rock samples were collected from the walls of the existing 832 Level Adit and five water samples were collected from locations in the property. Acid generation tests were also previously completed in 1989 on 20 samples of footwall rock as part of the metallurgical program.

The initial conclusions based on the preliminary geochemical characterization program were (MESH Environmental, 2007):

- No evidence of existing acid generation could be delineated indicating a substantial buffering potential in the deposit host rocks.
- The majority of waste rock likely to be encountered during expansion of the 832 Level Adit is expected to have low to no potential for acid generation as a result of generally low sulphur content in the rock units, coupled with the relatively high content of carbonate, and therefore neutralization potential, in the limestone unit in particular.
- Solids metal content in the waste rock is expected to be generally low, with localized spikes of increased trace metals contents to relatively moderate levels.
- A mineralized phyllite sample with an anomalous sulphur content of 6.2% suggested the potential for a small percentage of potentially acid generating material in the localized areas of mineralization, possibly associated with quartz veining.
- Testing of the 1989 footwall samples suggested that a minor amount of rock with greater than 0.6% sulphur may have uncertain acid generating potential. Material with elevated sulphide is expected to be accompanied by elevated contents of silver, arsenic, cadmium, copper, mercury, lead, antimony, uranium, tungsten, and zinc.
- Concentrations of soluble metals, as assessed by leach extraction testing, indicates some potential for neutral pH metal leaching of parameters such as antimony, arsenic, cadmium, mercury, and zinc. The tendency for metal leaching is anticipated to be localized and associated with areas of increased sulphide mineral content.

This geochemical characterization program only covers a small portion of the potential footprint or material types that may be affected by the proposed project. Geochemical characterization beyond this initial assessment should continue as the Revel Ridge deposit is developed. Additional sample selection and analyses have been recommended in Section 26 to support and advance the project through the PFS stage.

20.2.8 Socio-Economic, Cultural Baseline Studies and Community Engagement

20.2.8.1 Land Use and Cultural Heritage

The Property is located within the traditional territories of the Okanagan, Shuswap, and Ktunaxa First Nations.

The publicly accessible CAD web-based tool that identifies potential First Nation claim areas. Table 20-3 presents a list of the First Nations that have potential interests in the Revel Ridge property.

Table 20-3: First Nations with Potential Interest in Project Area

Nation	Band
Okanagan Nation Alliance	Penticton Indian Band
	Upper Nicola Band
	Lower Similkameen Indian Band
	Okanagan Indian Band
Shuswap Nation Tribal Council	Shuswap Indian Band
	Splats'in First Nation
	Neskonlith Indian Band
	Adams Lake Indian Band (ALIB)
Secwepemc (Shuswap) Nation	Skw'lax te Secwepemcul'ecw (Little Shuswap Lake Indian Band)
Ktunaxa Nation Council	Yaq'itʔa·knuqⱡi'it First Nation (Tobacco Plains Indian Band)
	St. Mary's Indian Band
	Lower Kootenay Band

Source: Government of BC (2023a).

Baseline socio-economic and cultural baseline studies,. Archaeological Overview Assessments (AOA) and Archaeological Impact Assessments (AIA) have not yet been completed for the project,. . and will be required at the appropriate time as the project advances.

20.2.8.2 Community Engagement

Both the BC Environmental Assessment Act (BCEAA) and the federal Impact Assessment Act (IAA) contain provisions for consultation with First Nations and the public as a component of the EA process. Based on the available information, there are no indications to date of community or First Nations consultation completed by Rokmaster. Further engagement and consultation measures will comply with federal and provincial regulations, best practices, and Rokmaster's internal company policies.

20.2.8.3 First Nations

Rokmaster will be required to consult with local First Nations as part of the EA process, as identified by the provincial government's section 11 Order and as indicated in the federal government's EA guidelines when they are issued for the project. On-going consultation efforts will aim to engage both community leaders and members and attempt to resolve potential issues and concerns as they arise.

20.2.8.4 Government

Rokmaster will engage and collaborate with federal, provincial, regional, and municipal government agencies and representatives as required with respect to topics such as land and resource management, protected areas, official community plans, environmental and social baseline studies, and effects assessments. Rokmaster will be required to participate in a project specific working group at the early stages of the EA process which will include representatives from many government groups. Rokmaster will be required to consult with the working group on project-related developments during the EA process.

20.2.8.5 Public and Stakeholders

Rokmaster will consult with the public and relevant stakeholder groups including land tenure holders, economic development organizations, businesses, and contractors (e.g. suppliers and service providers), and special interest groups (e.g. environmental, labour, social, health, and recreation groups), as appropriate.

20.3 Permitting

This section summarizes the existing permits in place for the project and the federal and provincial legislation and associated permits, licenses and approvals that will apply or potentially will apply to the construction and operations of the project, as currently proposed.

20.3.1 Existing Permits

Mines Act permit MX-4-500 (originally issued on June 20, 1997) includes an underground drilling component (Approval Number: 20-0400022-0831) and a surface drilling component. The underground drilling permit allows diamond drilling to occur in 12 existing drill stations underground. The approval end date for this permit was August 31, 2023. An application is currently being processed to amend this permit to extend the approval end date, with no other changes. This application was submitted on March 29, 2023.

The surface drilling permit is a site-specific permit which allows for 58 drill sites and 15 helipads. The approval end date is October 30, 2025. A Notice of Departure (File: 14675-20-0400022) was granted on May 19, 2023, to relocate five drill sites, three of which were used in June 2023. A 5-year Multi-Year Area-Based (MYAB) permit application (Notice of Work: 100413566) is currently being processed which proposes 65 drill sites and 25 helipads and will be used in lieu of the site-specific permit, pending approval.

Associated with the underground drilling permit is an Authorization from the Ministry of Environment and Climate Change Strategy for water discharge during active underground drilling (Authorization Number: 110409). This Authorization allows for 15 months of effluent discharge during active drilling operations. Approximately six months remain on this Authorization.

20.3.2 Anticipated Approvals and Authorizations

Table 20-4 presents a preliminary list of the key provincial and federal authorizations, licenses, and permits that will be required to develop the Project.

Table 20-4: Preliminary List of Potential Provincial and Federal Authorizations Required for The Revel Ridge Project

Legislation	Issuing Agency	Authorization	Purpose
		Provincial	
Mines Act	BC Ministry of Energy, Mines and Low Carbon Innovation (EMLI)	Mines Act Permit	Authorizes development including fuel storage, operations, closure, reclamation, and abandonment.
Mineral Tenure Act	EMLI	Mineral Claim Acquisition	Subsurface rights to minerals in a defined unit, up to 10,000 tonnes per year per unit.
	EMLI	Mining Lease changes	Conversion of mineral claim to a mining lease is necessary before production can exceed above limits
Environmental Management Act (EMA)	BC Ministry of Environment and Climate Change Strategy (ENV)	EMA Effluent Permit	Authorizes discharge of liquid effluent to the environment.
		EMA Air Permit	Authorizes discharge of airborne emissions to the environment.
BC Environmental Assessment Act	BC Environmental Assessment Office (BC EAO)	BC Environmental Assessment Certificate	Minimize or avoid adverse environmental, heritage, health, social, and economic effects and incorporate environmental factors and stakeholder consultation into decision making.
EMA Hazardous Waste Regulation	ENV	Hazardous Waste Regulation	Authorizes temporary storage of hazardous waste.
Forest Act and Forest and Range Practices Act	Ministry of Forests (FOR)	Occupant License to Cut (OLTC)	Authorizes cutting and removal of trees of merchantable size.
		Road Use Permit	Authorizes use of a Forest Service Road.
		Special Use Permit	Authorizes the construction of and use of a new road. Authorizes occupation of Crown Land.
Heritage Conservation Act	FOR	Heritage Inspection Permit S 12.2	Authorizes investigation through an archaeological impact assessment or mitigation of impacts to sites (should any be identified) through systematic data recovery after an impact assessment has been completed.
		Site Alteration Permit (SAP) as needed S 12.4	Authorizes alteration or removal of site (should any be identified and impacted by the Project).
Land Act	FOR	License of Occupation	Authorizes occupation of Crown Land including temporary borrow and gravel pits, construction staging areas, and for remote areas where precise tenure boundaries are not required.
Water Sustainability Act	FOR	Change Approval S11	Changes in and about a stream are carried out under change approvals and notifications. These approvals Authorize work in and around streams.
		New Water License S10	Water licences allow licensees to divert, store, and use specific quantities of water for one or more water use purposes. A water licence may also Authorize works related to the diversion and use of the water.
Wildlife Act	FOR	Authorization Permits for general wildlife (relocation)	If work occurs within identified wildlife areas. A blanket permit applies across the entire project.
		Federal	
Fisheries Act	Fisheries and Oceans Canada (DFO)	Section 35 Authorization	May require Authorization(s) if the Project causes harm to fish or fish habitat (e.g. watercourse crossings and clearing riparian vegetation)
		Scientific License	License required to harvest fish for experimental, scientific, educational, or public display purposes.
	Environment and Climate Change Canada (ECCC) Metal and Diamond Mining Effluent Regulations, SOR/2002-222	Schedule 2 Amendment Authorization to deposit an effluent that contains a deleterious substance	Metal and Diamond Mining Effluent Regulations are intended to reduce threats to fish and their habitat by improving the management of harmful substances in metal and diamond mining effluent.
Migratory Birds Convention Act	ECCC	Damage or Danger Permit	May require a permit if the Project is shown to affect nesting habitats used by migratory birds or if activities occur during the nesting season (e.g. clearing of vegetation, disturbance to nests)
Species at Risk Act (SARA)	ECCC	Species at Risk Permit	Permits may be required if the Project has the potential to affect a species listed on Schedule 1 of the Act, including any part of its critical habitat, or the residences of its individuals.
Nuclear Safety and Control Act	ECCC	License	A license is required for possession of instruments containing radioactive material, such as nuclear density gauges (portable and fixed).
Radiocommunication Act	ECCC	License	A license is required for use of radio equipment on site.
Transportation of Dangerous Goods Act	ECCC	Permit	Transportation and handling of dangerous goods as described by the regulation.
Explosives Act	Natural Resources Canada	Manufacturing/Storage License	Explosives Authorizations are required during construction and operations. Authorization is required to manufacture and operate an explosives storage facility. Licenses are required by either the company or blasting contractor.
Canadian Navigable Waters Act	Transport Canada	Permit	May require Authorization(s) if the Project activities include works built in, on, over, under, through, or across any navigable water that may interfere with navigation.

20.4 Environmental Management and Monitoring Plans

As the project progresses, several environmental management and monitoring plans will be required to guide the development and operation of the project and mitigate and limit environmental impacts. These plans will be complementary to the engineered designs required for the storage of tailings, waste rock, mineralized material, and conveyance/storage.

A preliminary list of the environmental management and monitoring plans for EA and permitting follows:

- Environmental Management System
- Surface Erosion Prevention and Sediment Control Plan
- Soil Management Plan
- Construction Environmental Management Plan
- ML/ARD Management Plan
- Mine Site Water Management Plan
- Discharge Management Plan
- Vegetation Management Plan
- Invasive Plant Management Plan
- Wildlife Management Plan
- Archaeological Management and Impact Mitigation Plan
- Mine Site Traffic Control Plan
- Fuel Management and Spill Control Plan
- Combustible Dust Management Plan
- Chemicals and Materials Storage, Transfer, and Handling Plan
- Waste (Refuse and Emissions) Management Plan
- Reclamation and Closure Plan
- Occupational Health and Safety Plan
- Aquatic Effects Monitoring Plan
- Stakeholder and Indigenous Nations Communication Plan
- Mine Emergency Response Plan.

20.5 Conceptual Mine Closure and Reclamation Plan

The current Conceptual Closure and Reclamation Plan for the project includes the following measures:

- Backfill and seal the underground workings.

- The surface infrastructure including the mineralised stockpile, explosives magazines, fuel, and storage facilities will be decommissioned and removed from the site.
- Concrete slabs and footings will be broken and placed appropriately to meet project closure and reclamation objectives.
- Process buildings, pipelines, conveyor systems, and equipment will be removed from site or appropriately landfilled in an approved facility.
- The CWRS and SWSF will be re-contoured for geotechnical stability, capped with a graded earthfill/rockfill cover to facilitate runoff and minimize infiltration, and revegetated.
- Compacted surfaces including laydowns, civil pads, and roads will be decompacted, re-contoured, capped with a graded earthfill/rockfill cover to facilitate runoff and minimize infiltration, and revegetated.
- Water treatment will be continued as required, until water quality meets discharge criteria. Once water quality meets discharge criteria, water treatment will be stopped, diversions will be decommissioned.
- The downstream slope of the SWSF will be progressively covered with soil and vegetated as the SWSF is raised. Final soil/vegetative covers will be installed along the SWSF crest and CWRS slope and crest at closure. Re-grading of the downstream slopes is not anticipated to be required at closure. The SWSF and CWRS arrangements have been laid out to mimic the local topography and the closed facilities will create landforms that closely resemble the surrounding landscape.
- At closure, it is envisaged that there will be minimal PAG rock due to the nature of the deposit and process oxidation, however any PAG rock present will be managed by capping it with low permeability glacial till to reduce seepage and oxygen infiltration.
- For mine roads, Rokmaster will remove all culverts and install cross-ditches for drainage. The mine site access road will not be deactivated as it will be required for access for continued reclamation activities and monitoring.

Closure planning will include dialogue with Indigenous groups and stakeholders to determine post-mining land use objectives and necessary investigations required to achieve and monitor those objectives.

The estimated closure and reclamation costs are discussed in Section 21.2.10.

21 CAPITAL AND OPERATING COSTS

21.1 Introduction

The capital and operating cost estimates presented in this PEA provide substantiated costs that can be used to assess the preliminary economics of the Revel Ridge Project. The estimates are mainly based on an underground mine operation, process plant construction and operation, waste storage facility construction and operation, and owner's costs and provisions. The processing plant nameplate capacity is 2,920 t/d (1.08 Mt/a) with a life of mine of 11.4 years.

All capital and operational cost estimates are presented in Canadian dollars (C$), with exchange rate variations factored in. An exchange rate of 1.35 (US$/C$) has been applied as necessary.

21.2 Capital Cost Estimate

21.2.1 Capital Cost Summary

The capital cost estimate conforms to Class 5 guidelines of the Association for the Advancement of Cost Engineering International (AACE International) with an estimated accuracy of +50%/-30% accuracy. The capital cost estimate was developed in Q4 2023 Canadian dollars. The process plant and infrastructure costs were estimated by Ausenco, mining cost was estimated by Mining Plus and the waste storage facility and water management structure costs were estimated by Knight Piésold.

The total initial capital cost for the Revel Project is C$588.3M and the LOM sustaining cost including financing is C$485.6M. The capital cost summary is presented below in Table 21-1.

Table 21-1: Summary of Capital Costs

WBS	WBS Description	Initial Capital Cost (C$M)	Sustaining Capital Cost (C$M)	Total Cost (C$M)
1000	Mining	89.4	372.1	461.4
2000	Process Plant	280.1	0.0	280.1
3000	Additional Facilities	10.4	66.9	77.3
4000	On-Site Infrastructure	19.5	0.0	19.5
5000	Off-Site Infrastructure	10.0	0.0	10.0
	Total Directs	**409.5**	**439.0**	**848.4**
6000	Project Indirect	13.2	2.1	15.3
7000	Project Delivery	61.2	7.3	68.5
8000	Owner's Cost	20.5	0.0	20.5
	Total Indirect	**94.9**	**9.5**	**104.3**
9000	Provisions (Contingency)	84.0	37.2	121.1
	Closure	-	-	**75.7**
	Project Totals	**588.3**	**485.6**	**1,149.6**

Note: total may not add up due to rounding.

The cost for the Project was split into initial capital costs, sustaining capital costs, and closure costs. The initial capital is project development costs incurred during the pre-production years. Sustaining capital is the capital incurred to support production from the project. Closure costs include all measures to remove all processing infrastructure and rehabilitate the site.

21.2.2 Basis of Capital Cost Estimate

The data for the estimates were derived from a variety of sources, including the following:

- Mining schedule
- Conceptual engineering designs by Ausenco, Mining Plus, Canenco, KP, and T. Engineering
- Major mechanical equipment costs based on vendor quotations, first principles and Ausenco's database of historical projects
- Material take-offs (MTOs) for concrete, steel, electrical, instrumentation, in-plant piping and platework factored by benchmarking against similar projects with equivalent technologies and unit operations
- Topographical information
- Engineering design at a PEA level
- Cost escalation to 2023 when historical pricing is considered
- Contingency allowance.

21.2.3 Area 1000 – Mining Capital Costs

The mining capital costs consist of capitalized mine development and the infrastructure to support the mine. The capitalized mine development includes:

- Ramps,
- Level Accesses,
- Ventilation Raises,
- Slashing and Rehabilitation of Existing Underground Workings,
- Level infrastructure,
    - Sumps, remucks, electrical substation drives, ventilation drives, storages.

These development drives will remain open for the full duration of the mine life and provide access and services to the production mining activities.

Capital infrastructure costing was sourced from benchmarking and recent quotes from previous studies in our project database. The major underground infrastructure consists of mobile equipment, ventilation fans with mine air heating, underground electrical equipment, and switch gear, backfill paste plant with underground reticulation, cemented rockfill mixing station, underground dewatering, maintenance workshop, fuel bay, powder magazine, and air compressor. The mining capital costs are summarized in Table 21-2. Major infrastructure and equipment has been sized to meet the production schedule needs and mine development layout.

Table 21-2: Mining Initial Capital Costs

WBS	WBS Description	Initial Capital Cost (C$M)	Sustaining Capital Cost (C$M)	Total Cost (C$M)
1100	Mine Development	36.2	256.0	292.2
1200	Underground Mining Equipment	9.1	103.0	112.2
1300	Underground Mine Infrastructure	3.3	7.7	10.9
1400	Ventilation and Services	3.1	1.2	4.3
1500	Backfill and Services	13.5	4.0	17.5
1700	Pre-Production OPEX	24.1	-	24.1
Total Mining Capital		**89.4**	**372.1**	**461.4**

Note: total may not add up due to rounding.

21.2.4 Area 2000 – Process Capital Costs

The definition of process equipment requirements was based on process flowsheets and process design criteria, as defined in Section 17. All major equipment was sized based on the process design criteria to derive a mechanical equipment list. Mechanical scopes of work were developed, and major equipment were sent for budgetary pricing to equipment suppliers. For mechanical equipment costs, 40% of the value was sourced from budgetary quotes; the remainder was sourced by benchmarking against other recent flotation concentrator mining projects and studies.

In support of the major installation construction contracts, engineering for the process plant was completed to a PEA-level of definition. Bulk material quantities were derived for earthworks and priced from other benchmark projects. All other quantities for electrical and instrumentation, concrete, steel, piping, cable, and platework were factored and priced.

Process plant costs are summarized in Table 21-3 and described in the following sections. Direct costs include all contractors' direct and indirect labour, permanent equipment, materials, freight, and mobile equipment associated with the physical construction of the areas.

Table 21-3: Process Plant Initial Capital Costs

WBS	WBS Description	Initial Capital Cost (C$M)
2100	Crushing Circuit	20.2
2200	Grinding Circuit	6.9
2300	Flotation Circuit	55.6
2400	Pressure Oxidation	141.0
2500	Leaching Circuit	4.9
2600	Merrill Crowe	14.8
2700	Cyanide Destruction	0.3
2800	Tailings Handling	10.9
2900	Reagents & Plant Services	25.5
	Total Initial Process Plant Costs	**280.1**

Note: total may not add up due to rounding.

21.2.5 Area 3000 – Additional Facilities

The additional facilities that will be constructed and operated include site water management structures, the CRWS, and the SWSF. The initial capital, sustaining capital, project delivery, and closure costs are provided on Table 21.4. The costs were estimated based on the conceptual waste and water management arrangements on Figure 18-1 and unit rates developed by the QP in discussion Canenco.

Table 21-4: Additional Facilities Costs

WBS	WBS Description	Initial Capital Cost (C$M)	Sustaining Capital Cost (C$M)	Total Cost (C$M)
3100	Site Water Management Structures	4.1	0.1	4.2
3200	South Waste Storage Facility and Central Waste Rock Stockpile	6.4	66.8	73.2
	Total Initial Additional Facilities Costs	**10.4**	**66.9**	**77.3**

Note: total may not add up due to rounding.

21.2.6 Area 4000 – On-Site Infrastructure Capital Costs

In support of the major installation construction contracts, engineering for the project was completed to a PEA-level of definition. Bulk material quantities were derived for earthworks including the entire project site, process plant, and priced from other benchmark projects. The power requirements for the project were estimated based on the electrical equipment list developed for the process plant, power demand for the mining operations; the cost of the substation and cable routing was estimated based on benchmarked North American projects.

The buildings required for the operation were sized and costed based on benchmark projects with similar weather and snow conditions located in Canada.

The breakdown of the on-site infrastructure capital costs is shown in Table 21-5.

The on-site infrastructure covers the cost of the site earthworks, site-wide electrical distribution, fuel storage, sewers, and various infrastructure buildings.

Table 21-5: On-Site Infrastructure Capital Costs

WBS	WBS Description	Initial Capital Cost (C$M)
4100	Bulk Earthworks	12.1
4300	HV Power Switchyard and Power Distribution	6.5
4400	Fuel Storage	0.1
4500	Sewage Systems	0.2
4600	Infrastructure Buildings	0.7
	Total Initial On-Site Infrastructure Costs	**19.5**

Note: total may not add up due to rounding.

21.2.7 Area 5000 – Off-Site Infrastructure Capital Costs

The breakdown of the costs for the off-site infrastructure planned for the project is shown in Table 21-6.

The off-site infrastructure costs include building the main access road, water supply, high voltage power supply, SWSF, permanent camp, and pipeline.

Table 21-6: Off-Site Infrastructure Capital Costs

WBS	WBS Description	Initial Capital Cost (C$M)
5100	Main Access Road	0.4
5200	Water Supply	0.9
5300	Power Supply	8.7
	Total Initial Off-Site Infrastructure Costs	**10.0**

Note: total may not add up due to rounding.

21.2.8 Area 6000-9000 – Indirect Capital Costs

Indirect capital costs are calculated as a percentage of the direct costs. The indirect capital costs are summarized in Table 21-7 and described below.

Project indirect costs include the following:

- Temporary construction facilities and services
- Messing and catering during construction
- Vendor reps and assistance
- Equipment Spares
- First fills and initial charges
- Project delivery.

Provision costs include the following:

- Contingency.

Table 21-7: Indirect Capital Costs Summary

WBS	WBS Description	Initial Capital Cost (C$M)	Sustaining Cost (C$M)	Total Cost (C$M)
6100	Temporary Construction Facilities	3.8	-	3.8
6200	Commissioning Assistance	1.9	-	1.9
6300	Spares	4.2	2.1	6.4
6400	First Fill	3.2	-	3.2
Project Indirects		**13.2**	**2.1**	**15.3**
7100	EPCM	60.4	3.3	63.7

WBS	WBS Description	Initial Capital Cost (C$M)	Sustaining Cost (C$M)	Total Cost (C$M)
7200	Environmental Services & Permitting	0.5	3.3	3.9
7300	Commissioning Services	0.3	0.6	1.0
Project Delivery		**61.2**	**7.3**	**68.5**
8100	Owner's Cost	20.5	-	20.5
Owner's Cost		**20.5**	**-**	**20.5**
Total Indirect, Project Delivery, Owner's Cost		**94.9**	**9.5**	**104.3**
9100	Contingency – Ausenco	76.5	-	76.5
9200	Contingency – Third Party	7.4	37.2	44.6
Total Contingency		**84.0**	**37.2**	**121.1**
Total Indirects		**178.9**	**46.7**	**225.4**

Note: total may not add up due to rounding.

21.2.9 Area 8000 – Owner (Corporate) Capital Costs

The owner's costs are estimated as 5% of total direct costs and are calculated to be C$20.5M owner's costs include such things as project staffing and miscellaneous expenses, pre-production labour, home office project management, home office finance, legal costs, insurance and bonds, licences, and fees.

21.2.10 Closure and Reclamation Planning

The closure cost for the project is estimated at C$75.7M.

21.3 Operating Costs

21.3.1 Operating Cost Summary

The costs considered on-site operating costs are those related to mining, processing, tailings handling, maintenance, power, and general and administrative activities.

A summary of the operating costs is presented below in Table 21-8.

The unit operating cost is C$156.97/t milled, including an annual G&A cost of C$3.65M.

Table 21-8: Operating Cost Summary

Cost Area	Annual Costs (C$M)	C$/t Milled
Mining	85.4	82.67
Process	73.1	70.76
G&A	3.7	3.53
Total	**162.1**	**156.97**

Note: total may not add up due to rounding.

21.3.2 Basis of Estimate

Key assumptions were made to estimate the operating costs for the project:

- Cost estimates are based on Q4 2023.
- Costs are expressed in Canadian Dollars (C$).
- Where applicable, an exchange rate of C$ 1.35 per US$ 1.00 was used.
- Power cost of C$ 0.06 per kilowatt-hour (kWh) was assumed.
- A diesel cost of C$ 1.20 per litre was assumed based on trailing 3-year average price.
- A throughput of 2,920 t/d or 1.08 Mt/a was used for the processing plant.
- Crushing and sorting circuit availability is assumed to be 65%, while the availability for the rest of the process plant is assumed to be 92%.
- ROM and concentrate grades, and recoveries are based on metallurgical testwork results described in Section 13.
- Material and equipment are purchased as new.
- Reagent consumption rates are based on metallurgical testwork results and in-house benchmarks.
- Grinding media consumption rates are based on mineral material characteristics as described in Section 13.

21.3.3 Mine Operating Costs

Mining costs were benchmarked from operating mines in Canada and other project studies that utilize the same LHOS mining method and extract the same commodities. These costs are summarized in Table 21-9 and Table 21-10.

Table 21-9: Development Mining Costs

Development Activity	Profile	Cost ($CAD/m)	Operating/Capital
Ramp (RMP)	5m x 5m Arch	6,300	Capital
Level Access (ACC)	5m x 5m Arch	6,300	Capital
Remucks (SP)	5m x 5m	6,300	Capital
Sumps (SMP)	5m x 5m	6,300	Capital
Sub/Shop (SUB)	5m x 5m	6,300	Capital
Vent Drives (RAD)	5m x 5m	6,300	Capital
Vent Raises (RAR) - Vertical Development	4m Diameter	3,500	Capital
Safety Bay	1.8m x 2.4m	2,500	Capital
Sills (OD)	4m x 4m Shanty	5,000	Operating

Note: total may not add up due to rounding.

Table 21-10: Production Mining Costs

Production Activity	Cost ($CAD/t)	
Stope Tonnes	50	Operating
Backfill - Paste Tonnes	19	Operating
Backfill - CRF Tonnes	30	Operating

Note: total may not add up due to rounding.

Mining activities denoted as capital have been capitalized and reallocated from operating costs to capital costs and are included in Section 21.2.3. The life of mine average cost of operating activities totaled an average of C$84.72 per a mill tonne.

21.3.4 Process Operating Costs

The process operating cost estimate is based on a 2,920 t/d mill consisting of crushing, sorting, grinding, Pb and Zn flotation, concentrate regrind, concentrate dewatering, pressure oxidation, Au leach and Merrill Crowe and tailings handling. The operating cost estimates are summarized below in Table 21-11.

Table 21-11: Process Plant Operating Cost Summary

Cost Area	Annual Costs (C$M)	C$/t Milled	LOM C$M
Power	10.8	10.44	122.9
Reagents & Consumables	38.0	36.80	433.3
Maintenance	5.1	4.97	58.5
Labour	19.2	18.55	218.3
Total	**73.1**	**70.76**	**833.0**

Note: total may not add up due to rounding.

21.3.4.1 Reagents and Consumables

Reagents, grinding media, and various consumables are required to process the mineralized material from the Revel Ridge deposits. The consumption rates of each of the consumable items are based on the metallurgical testwork outlined in Section 13 and based on the planned process plant throughput of 2,920 t/d. The total costs of the reagents and consumables by area as well as the costs of mobile equipment used are shown below in Table 21-12.

Table 21-12: Reagents and Consumables Cost Summary

Cost Area	Annual Costs (C$M)	C$/t Milled
Crushing & Sorting	0.4	0.41
Grinding	0.6	0.55
Flotation	24.9	24.08
Pressure Oxidation	8.6	8.3
Au Leach & Detox	1.3	1.22
Merrill Crowe	0.8	0.81
Tailings	0.9	0.83
Mobile Equipment	0.6	0.60
Total	**38.0**	**36.80**

Note: total may not add up due to rounding.

21.3.4.2 Maintenance Consumables

Annual maintenance consumable costs were calculated based on a total installed mechanical capital cost by area using a weighted average factor from 3% to 5%. The process area includes the crushing and sorting, grinding, flotation, pressure oxidation, Au leaching and Merrill Crowe, reagent handling, and plant services areas. The total maintenance consumable operating cost is C$5.4M/a or C$4.97/t of feed.

21.3.4.3 Power

Power operating costs are calculated form an estimate of annual power consumption using a unit cost of C$ 0.06/kWh. The annual power consumption for the processing plant is based on the average utilization of each motor on the electrical load list for the process plant.

The process plant energy consumption is estimated to be 188,150MWh per year. The total power operating cost is C$11.3M/a or C$10.44/t of feed.

21.3.4.4 Labour

Labour includes all processing and maintenance labour costs.

Processing production labour was developed using benchmarks from similar project and includes operation departments such as metallurgy, mill operations, maintenance, and the assay lab.

Each position was defined and classified as salary and wages. Costs included taxes and benefits. The annual cost is C$13.4M/a for process operations labour and C$4.7M/a for process maintenance labour. The total labour operating cost is C$20.0M/a or C$18.55/t of feed. The estimated labour force for plant operations and plant maintenance was estimated at 109 and 34 people, respectively. The estimate was based on providing a labour force to support continuous operations at 24 h/d, 365 d/a.

21.3.5 General and Administrative Operating Costs

The general and administrative (G&A) operating costs cover the expenses of the operating departments, and a summary is presented in Table 21-13.

General and administrative (G&A) costs were developed using Ausenco's in-house data on existing Canadian operations. The costs were estimated based on the following items:

- Human resources (including recruiting, training, and community relations)
- Infrastructure power (HVAC and administrative buildings)
- Site administration, maintenance, and security (including office equipment, garbage disposal)
- Assets operation (including non-operation-related vehicles)
- Health and safety (including personal protective equipment, hospital service cost)
- Environmental (including sampling, DSTF operation)
- IT and telecommunications (including hardware and support services)
- Contract services (including insurance, sanitation, licence fees and legal fees).

The total annual G&A cost was estimated at C$3.7M/a during production or C$3.53/t plant feed.

Table 21-13: G&A Cost Summary

G&A Expenses	Annual Costs (C$M)	$/t Milled
General Administrative Costs	1.7	1.65
Catering and Housekeeping	0.6	0.57
Laboratory Costs	0.4	0.34
Insurance	1.0	0.97
Total	**3.7**	**3.53**

Note: total may not add up due to rounding.

22 ECONOMIC ANALYSIS

22.1 Forward-Looking Information Cautionary Statements

The results of the economic analyses discussed in this section represent forward-looking information as defined under Canadian securities law. The results depend on inputs that 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.

Information that is forward-looking includes:

- Mineral resource and mineral reserve estimate
- Assumed commodity prices and exchange rates
- The proposed mine production plan
- Projected mining and process recovery rates
- Assumptions as to mining dilution
- Capital and operating cost estimates and working capital requirements
- Assumptions as to closure costs and closure requirements,
- Assumptions as to environmental, permitting, and social considerations and risks.

Additional risks to the forward-looking information include:

- Changes to costs of production from what is assumed
- Unrecognized environmental risks
- Unanticipated reclamation expenses
- Unexpected variations in quantity of mineralized material, grade, or recovery rates
- Geotechnical or hydrogeological considerations differing from what was assumed
- Failure of mining methods to operate as anticipated
- Failure of plant, equipment, or processes to operate as anticipated
- Changes to assumptions as to the availability and cost of electrical power and process reagents
- Ability to maintain the social licence to operate
- Accidents, labour disputes, and other risks of the mining industry
- Changes to interest rates
- Changes to tax rates and availability of allowances for depreciation and amortization.

This PEA is preliminary in nature; it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

22.2 Methodologies Used

The Project has been evaluated using a discounted cash flow (DCF) analysis based on an 5% discount rate. Cash inflows consist of annual revenue projections. Cash outflows consist of capital expenditures, including pre-production costs; operating costs; taxes; and royalties. These are subtracted from the inflows to arrive at the annual cash flow projections. Cash flows are taken to occur at the mid-point of each period. It must be noted that tax calculations involve complex variables that can only be accurately determined during operations and, as such, the actual post-tax results may differ from those estimated. A sensitivity analysis was performed to assess the impact of variations in metals price, discount rate, head grade, recovery, total operating cost, exchange rate, and total capital costs.

The capital and operating cost estimates developed specifically for this project are presented in Section 21 of this technical report in Q4 2023 Canadian dollars. The economic analysis has been run on a constant dollar basis with no inflation.

22.3 Financial Model Parameters

22.3.1 Assumptions

The economic analysis was performed assuming a Pb price of US$0.90/lb, a zinc price of US$1.26/lb, gold price of US$1,850/oz and silver price of US$23.00/oz; these metal prices were based on a 3-year trailing average and align with consensus analyst estimates. The forecasts used are meant to reflect the average metals price expectation over the life of mine. No price inflation or escalation factors were taken into account. Commodity prices can be volatile, and there is the potential for deviation from the forecast.

The economic analysis also used the following assumptions:

- Construction period of two years,
- Total mine life of 11.4 years,
- Cost estimates in constant Q4 2023 Canadian dollars with no inflation or escalation factors considered,
- Results based on 100% ownership,
- Capital cost funded with 100% equity,
- All cash flows discounted to start of construction period using middle of period discounting convention,
- All metal products are sold in the same year they are produced,
- Project revenue derived from the sale of lead and zinc concentrate and gold doré,
- No contractual arrangements for refining currently exist.

22.3.2 Taxes

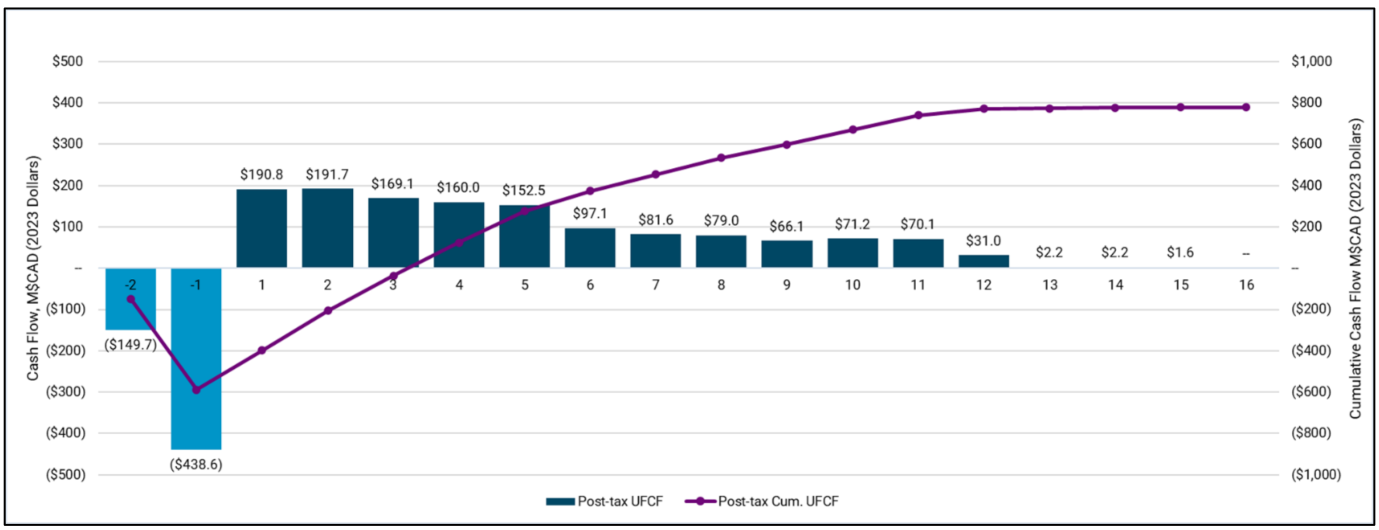
The Project has been evaluated on a post-tax basis to provide an approximate value of the potential economics. The tax model was compiled by Wentworth Taylor and calculations are based on the tax regime as of the date of the PEA technical report. At the effective date of this technical report, the Project is assumed to be subject to the Income Tax and Mineral Tax applicable in British Columbia, Canada, resulting in estimated total payments of C$412.8M over the life of mine.

22.4 Economic Analysis

The economic analysis was performed assuming a 5% discount rate. The pre-tax NPV discounted at 5% is C$750.8 M; the internal rate of return IRR is 29.0%, and payback period is 2.6 years. On a post-tax basis, the NPV discounted at 5% is C$453.9 M, the IRR is 21.1 %, and the payback period is 3.2 years. A summary of project economics is shown in Table 22-1. The analysis was done on an annual cashflow basis; the cashflow output is shown graphically in Figure 22-1 and with detail in Table 22-2.

Readers are cautioned that the PEA is preliminary in nature. It includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Figure 22-1: LOM Post-Tax-Free Cash Flow



Source: Ausenco (2023).

Table 22-1: Economic Analysis Summary

General	LOM Total / Avg.
Lead Price (US$/lb)	0.90
Zinc Price (US$/lb)	1.26
Gold Price (US$/oz)	1,850
Silver Price (US$/oz)	23.00
USD:CAD	1.35
Mine Life (Years)	11.4
Total Processed Feed Tonnes (kt)	11,772
Total Waste Tonnes (kt)	4,113
Production	**LOM Total / Avg.**
Head Grade – Pb (%)	1.34
Head Grade – Zn (%)	2.52
Head Grade – Au (g/t)	3.69
Head Grade – Ag (g/t)	38.18
Recovery Rate – Pb (%) to saleable Pb Concentrate	68.4
Recovery Rate – Zn (%) to saleable Zn Concentrate	66.8
Recovery Rate – Au (%) to saleable Pb Concentrate	13.8
Recovery Rate – Ag (%) to saleable Pb Concentrate	36.5
Recovery Rate – Au (%) to saleable Zn Concentrate	0.4
Recovery Rate – Ag (%) to saleable Zn Concentrate	5.8
Recovery Rate – Au (%) to doré	80.4
Recovery Rate – Ag (%) to doré	41.7
Total Metal Payable – Pb (M lbs)	224
Total Metal Payable – Zn (M lbs)	372
Total Metal Payable – Au (koz)	1,300
Total Metal Payable – Ag (koz)	10,716
Average Annual Payable Production – Pb (M lbs)	20
Average Annual Payable Production – Zn (M lbs)	33
Average Annual Payable Production – Au (koz)	114
Average Annual Payable Production – Ag (koz)	940
Operating Costs	**LOM Total / Avg.**
Mining Cost (C$/t Processed)	82.67
Processing Cost (C$/t Processed)	70.76
G&A Cost (C$/t Processed)	3.53
Total Operating Costs (C$/t Processed)	156.97
Cash Costs (By-Product Basis) (C$/oz Au)*	540.2
AISC (By-Product Basis) ($/oz Au)**	836.1
Capital Costs	**LOM Total / Avg.**
Initial Capital (C$M)	588.3
Sustaining Capital (C$M)	485.6
Closure Capital (C$M)	75.7
Salvage Value (C$M)	42.0
Financials	**Pre-Tax**
NPV (5%) (C$M)	750.8
IRR (%)	29.0
Payback (Years)	2.6
Financials	**Post-Tax**
NPV (5%) (C$M)	453.9
IRR (%)	21.1
Payback (Years)	3.2

Notes: * Cash Costs include mining costs, processing costs, mine-level G&A, offsite charges, and royalties.
** AISC Costs includes cash costs plus sustaining capital, expansion capital, royalties, salvage value, and closure costs.

Table 22-2: Project Cash Flow

Macro Assumptions	Units	Total / Avg.	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lead Price	US$/lb	$0.90	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	$0.9	--	--	--	--
Zinc Price	US$/lb	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	$1.26	--	--	--	--
Gold Price	US$/oz	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	$1,850	–	–	–	–
Silver Price	US$/oz	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	$23.0	–	–	–	–
Revenue	**C$M**	**$4,483**	**--**	**--**	**$446**	**$485**	**$452**	**$443**	**$439**	**$344**	**$357**	**$370**	**$341**	**$341**	**$335**	**$131**	**--**	**--**	**--**	**--**
Off-Site Costs	C$M	($337)	--	--	($33)	($35)	($28)	($32)	($26)	($23)	($27)	($27)	($25)	($26)	($38)	($17)	--	--	--	--
Royalties	C$M	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Operating Cost	C$M	($1,848)	--	--	($149)	($164)	($158)	($176)	($165)	($150)	($164)	($172)	($181)	($155)	($154)	($58)	--	--	--	--
EBITDA	**C$M**	**$2,298**	**--**	**--**	**$263**	**$285**	**$265**	**$235**	**$248**	**$171**	**$166**	**$171**	**$135**	**$159**	**$143**	**$56**	**--**	**--**	**--**	**--**
Initial Capex	C$M	($588)	($150)	($439)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sustaining Capex	C$M	($486)	--	--	($51)	($47)	($49)	($32)	($40)	($33)	($44)	($50)	($37)	($48)	($37)	($17)	--	--	--	--
Closure Capex	C$M	($75.7)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	($75.7)	--	--	--
Salvage Credit	C$M	$42.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	$42.0	--	--	--
Change in Working Capital	C$M	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pre-Tax Unlevered Free Cash Flow	**C$M**	**$1,191**	**($150)**	**($439)**	**$213**	**$238**	**$216**	**$203**	**$208**	**$139**	**$122**	**$121**	**$98**	**$111**	**$106**	**$39**	**($34)**	**--**	**--**	**--**
Cumulative Pre–Tax Unlevered Free Cash Flow	C$M	$1,191	($150)	($588)	($376)	($137)	$78	$281	$490	$628	$750	$871	$969	$1,080	$1,185	$1,224	$1,191	--	--	--
Income Tax, Government Royalties and Profit Sharing	C$M	($413)	--	--	($22)	($47)	($46)	($43)	($56)	($42)	($40)	($42)	($32)	($39)	($36)	($8)	$36	$2	$2	--
Post–Tax Unlevered Free Cash Flow	**C$M**	**$778**	**($150)**	**($439)**	**$191**	**$192**	**$169**	**$160**	**$152**	**$97**	**$82**	**$79**	**$66**	**$71**	**$70**	**$31**	**$2**	**$2**	**$2**	**--**
Post–Tax Unlevered Free Cash Flow – Excl. Expansion Capital	C$M	$778	($150)	($588)	($397)	($206)	($37)	$123	$276	$373	$454	$533	$600	$671	$741	$772	$774	$776	$778	--
Production Summary																				
Waste Mined Total	kt	4,113	--	418	297	294	389	241	289	354	308	381	353	429	296	65	--	--	--	--
Mineralized Material Mined Total	kt	11,772	--	200	843	1,077	1,013	1,095	1,083	909	1,071	1,099	1,078	966	950	388	--	--	--	--
Mineralized Material Mined to Process	kt	11,572	--	--	843	1,077	1,013	1,095	1,083	909	1,071	1,099	1,078	966	950	388	--	--	--	--
Mineralized Material Mined to Stockpile	kt	200	--	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Stockpile to Process	kt	200	--	--	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Process Feed	kt	11,772	--	--	1,044	1,077	1,013	1,095	1,083	909	1,071	1,099	1,078	966	950	388	--	--	--	--
Project Life	yrs	11.4																		
Processing Summary																				
Process Feed – Lead Grade	%	1.34%	--	--	1.49%	1.55%	1.34%	1.46%	1.18%	1.06%	1.13%	1.28%	1.07%	1.29%	1.74%	1.88%	--	--	--	--
Process Feed – Zinc Grade	%	2.52%	--	--	2.84%	2.81%	2.36%	2.40%	1.98%	2.29%	2.32%	1.97%	2.02%	2.41%	3.88%	4.15%	--	--	--	--
Process Feed – Gold Grade	g/t	3.69	--	--	4.13	4.42	4.59	4.01	4.25	3.87	3.24	3.21	3.03	3.44	2.85	2.34	--	--	--	--
Process Feed – Silver Grade	g/t	38.2	--	--	43.4	44.9	39.0	38.7	34.2	31.1	31.5	42.6	38.6	30.2	37.6	55.3	--	--	--	--
Total Lead Content	**M lbs**	**349**	**--**	**--**	**34.2**	**36.8**	**30.0**	**35.1**	**28.1**	**21.3**	**26.7**	**30.9**	**25.5**	**27.5**	**36.4**	**16.1**	**--**	**--**	**--**	**--**
Total Zinc Content	**M lbs**	**654**	**--**	**--**	**65.4**	**66.8**	**52.6**	**58.0**	**47.2**	**45.8**	**54.7**	**47.7**	**48.0**	**51.2**	**81.2**	**35.5**	**--**	**--**	**--**	**--**
Total Gold Content	**koz**	**1,396**	**--**	**--**	**139**	**153**	**150**	**141**	**148**	**113**	**111**	**113**	**105**	**107**	**87**	**29**	**--**	**--**	**--**	**--**
Total Silver Content	**koz**	**14,450**	**--**	**--**	**1,456**	**1,556**	**1,272**	**1,362**	**1,190**	**910**	**1,084**	**1,505**	**1,337**	**938**	**1,150**	**691**	**--**	**--**	**--**	**--**
Average Recovery – Lead to Saleable Lead Concentrate	%	68.4%	--	--	68.4%	68.4%	68.4%	68.4%	68.4%	68.4%	68.4%	68.4%	68.4%	68.4%	68.4%	68.4%	--	--	--	--
Average Recovery – Zinc to Saleable Zinc Concentrate	%	66.8%	--	--	66.8%	66.8%	66.8%	66.8%	66.8%	66.8%	66.8%	66.8%	66.8%	66.8%	66.8%	66.8%	--	--	--	--
Average Recovery – Gold (%) to saleable Lead Concentrate	%	13.8%	--	--	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	--	--	--	--
Average Recovery – Silver (%) to saleable Lead Concentrate	%	36.5%	--	--	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%	--	--	--	--
Average Recovery – Gold (%) to saleable Zinc Concentrate	%	0.4%	--	--	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	--	--	--	--
Average Recovery – Silver (%) to saleable Zinc Concentrate	%	5.8%	--	--	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	--	--	--	--
Average Recovery – Gold to doré	%	80.4%	--	--	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%	80.4%	--	--	--	--
Average Recovery – Silver to doré	%	41.7%	--	--	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	--	--	--	--
Total Lead Produced	M lbs	254	--	--	25.0	26.9	21.9	25.6	20.5	15.5	19.5	22.6	18.6	20.1	26.6	11.8	--	--	--	--
Total Zinc Produced	M lbs	481	--	--	48.0	49.1	38.7	42.6	34.7	33.6	40.2	35.1	35.3	37.6	59.6	26.1	--	--	--	--
Total Gold Produced	koz	1,320	--	--	131	145	142	134	140	107	105	107	99	101	82	28	--	--	--	--
Total Silver Produced	koz	12,141	--	--	1,223	1,308	1,069	1,144	1,000	764	911	1,265	1,123	788	966	580	--	--	--	--
Pb Concentrate Produced – Dry	kt	225	--	--	22.1	23.8	19.4	22.7	18.2	13.8	17.2	20.0	16.5	17.8	23.5	10.4	--	--	--	--
Pb Concentrate Produced – Wet	kt	250	--	--	24.6	26.5	21.6	25.2	20.2	15.3	19.2	22.2	18.3	19.7	26.1	11.6	--	--	--	--
Zn Concentrate Produced – Dry	kt	367	--	--	36.7	37.5	29.5	32.6	26.5	25.7	30.7	26.8	27.0	28.8	45.6	19.9	--	--	--	--
Zn Concentrate Produced – Wet	kt	408	--	--	40.8	41.7	32.8	36.2	29.4	28.6	34.1	29.8	30.0	32.0	50.6	22.2	--	--	--	--
Total Payable Lead	**M lbs**	**224**	**--**	**--**	**22.0**	**23.6**	**19.3**	**22.5**	**18.0**	**13.6**	**17.1**	**19.8**	**16.3**	**17.6**	**23.3**	**10.3**	**--**	**--**	**--**	**--**
Total Payable Zinc	**M lbs**	**372**	**--**	**--**	**37.1**	**37.9**	**29.9**	**33.0**	**26.8**	**26.0**	**31.0**	**27.1**	**27.3**	**29.1**	**46.1**	**20.2**	**--**	**--**	**--**	**--**
Total Payable Gold	**koz**	**1,300**	**--**	**--**	**129**	**142**	**139**	**131**	**138**	**105**	**104**	**105**	**98**	**99**	**81**	**27**	**--**	**--**	**--**	**--**
Total Payable Silver	**koz**	**10,716**	**--**	**--**	**1,074**	**1,148**	**938**	**1,004**	**878**	**671**	**799**	**1,171**	**986**	**692**	**848**	**509**	**--**	**--**	**--**	**--**
Total Payable Gold Equivalent	**koz AuEq**	**1,795**	**--**	**--**	**178**	**194**	**181**	**177**	**176**	**138**	**143**	**148**	**136**	**136**	**134**	**52**	**--**	**--**	**--**	**--**
Total Operating Costs	**C$M**	**($1,848)**	**--**	**--**	**($149)**	**($164)**	**($158)**	**($176)**	**($165)**	**($150)**	**($164)**	**($172)**	**($181)**	**($155)**	**($154)**	**($58)**	**--**	**--**	**--**	**--**
Mine Operating Costs	C$M	(973)	--	--	(71.4)	(84.5)	(83.1)	(95.3)	(84.7)	(82.5)	(84.9)	(90.5)	(100.7)	(83.2)	(83.2)	(29.2)	--	--	--	--
Process Operating Costs	C$M	(833)	--	--	(73.8)	(76.2)	(71.7)	(77.5)	(76.6)	(64.3)	(75.8)	(77.7)	(76.3)	(68.4)	(67.2)	(27.5)	--	--	--	--
G&A Costs Total	C$M	(41.6)	--	--	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(1.4)	--	--	--	--
Total Unit Operating Costs	C$/t Processed	(157)	--	--	(143)	(153)	(156)	(161)	(152)	(166)	(153)	(156)	(168)	(161)	(162)	(150)	--	--	--	--

Macro Assumptions	Units	Total / Avg.	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total Offsite Charges	**C$M**	**($337)**	**--**	**--**	**($33)**	**($35)**	**($28)**	**($32)**	**($26)**	**($23)**	**($27)**	**($27)**	**($25)**	**($26)**	**($38)**	**($17)**	**--**	**--**	**--**	**--**
Lead Concentrate Transport Cost	**C$M**	(55.5)	--	--	(5.4)	(5.9)	(4.8)	(5.6)	(4.5)	(3.4)	(4.2)	(4.9)	(4.0)	(4.4)	(5.8)	(2.6)	--	--	--	--
Zinc Concentrate Transport Cost	**C$M**	(54.7)	--	--	(5.5)	(5.6)	(4.4)	(4.8)	(3.9)	(3.8)	(4.6)	(4.0)	(4.0)	(4.3)	(6.8)	(3.0)	--	--	--	--
Lead Concentrate Treatment Charges	**C$M**	(39.9)	--	--	(3.9)	(4.2)	(3.4)	(4.0)	(3.2)	(2.4)	(3.0)	(3.5)	(2.9)	(3.1)	(4.2)	(1.8)	--	--	--	--
Zinc Concentrate Treatment Charges	**C$M**	(141)	--	--	(14.1)	(14.4)	(11.4)	(12.5)	(10.2)	(9.9)	(11.8)	(10.3)	(10.4)	(11.1)	(17.5)	(7.7)	--	--	--	--
Gold Refining Charges	**C$M**	(11.2)	--	--	(1.1)	(1.2)	(1.2)	(1.1)	(1.2)	(0.9)	(0.9)	(0.9)	(0.8)	(0.9)	(0.7)	(0.2)	--	--	--	--
Silver Refining Charges	**C$M**	(11.8)	--	--	(1.2)	(1.3)	(1.0)	(1.1)	(1.0)	(0.7)	(0.9)	(1.3)	(1.1)	(0.8)	(0.9)	(0.6)	--	--	--	--
Cash Costs (By-Product Basis)																				
Cash Cost*	US$/oz Au	$540.20	--	--	$339.58	$366.25	$442.22	$525.69	$515.67	$643.08	$664.85	$647.98	$824.10	$663.59	$541.43	$334.93	--	--	--	--
AISC Cost**	US$/oz Au	$836.13	--	--	$629.53	$610.51	$704.59	$705.57	$730.66	$873.49	$980.38	$999.21	$1,108.40	$1,024.76	$882.12	$789.69	--	--	--	--
Total Initial Capital	**C$M**	**($588)**	**($150)**	**($439)**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Mine Development and Pre-Production Mining	**C$M**	($59.3)	--	($59.3)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mine Capital Cost & Contingency	**C$M**	($30.1)	--	($30.1)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Process Plant Direct Costs	**C$M**	($320.1)	($96.0)	($224.1)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Process Plant Indirect Costs	**C$M**	($74.4)	($22.3)	($52.1)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Owners Costs	**C$M**	($20.5)	($6.1)	($14.3)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Processing Contingency Costs	**C$M**	($84.0)	($25.2)	($58.8)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Sustaining Capital	**C$M**	**($486)**	**--**	**--**	**($51)**	**($47)**	**($49)**	**($32)**	**($40)**	**($33)**	**($44)**	**($50)**	**($37)**	**($48)**	**($37)**	**($17)**	**--**	**--**	**--**	**--**
Mine Capital Cost & Contingency	**C$M**	($372)	--	--	($38.7)	($37.4)	($39.7)	($23.0)	($30.7)	($23.8)	($34.7)	($40.2)	($28.3)	($38.8)	($28.1)	($8.6)	--	--	--	--
DSTF	**C$M**	($114)	--	--	($11.8)	($9.6)	($9.7)	($8.9)	($9.3)	($8.9)	($9.5)	($9.7)	($9.1)	($9.7)	($9.1)	($8.2)	--	--	--	--
Salvage Value	**C$M**	$42.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	$42.0	--	--	--
Closure Cost	**C$M**	($75.7)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	($75.7)	--	--	--
Total Capital Expenditures Including Salvage Value, Closure Costs	**C$M**	**($1,108)**	**($150)**	**($439)**	**($51)**	**($47)**	**($49)**	**($32)**	**($40)**	**($33)**	**($44)**	**($50)**	**($37)**	**($48)**	**($37)**	**($17)**	**($34)**	**--**	**--**	**--**

Dollar figures in Real 2023 C$M unless otherwise noted.

* Cash Costs costs consist of mining costs, processing costs, mine-level G&A and transportation cost

** AISC Costs includes cash costs plus sustaining capital, expansion capital, royalties, salvage value, and closure costs

22.5 Sensitivity Analysis

A sensitivity analysis was conducted on the base case pre-tax and post-tax NPV and IRR of the project, using the following variables: metal prices, discount rate, head grade, total operating cost, and initial capital cost.

The post tax sensitivity analysis results are summarized in Table 22-3 as presented in the press release, the pre-tax sensitivity analysis results are shown in detail in Table 22-4.

As shown in Figure 22 -2 and Figure 22-3, the sensitivity analysis revealed that the project is most sensitive to changes in commodity price and head grade, and less sensitive to discount rate, total operating cost, and initial capital cost.

Table 22-3: Post-Tax Sensitivity Summary

Post-Tax Sensitivity to Metal Price

Post-Tax NPV (US$M) Sensitivity to Discount Rate

Discount Rate	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
1.0%	$159	$435	$700	$965	$1,231
3.0%	$93	$334	$566	$797	$1,028
5.0%	$37	$250	**$454**	$657	$860
8.0%	($29)	$149	$319	$488	$657
10.0%	($64)	$95	$247	$397	$547

Post-Tax IRR (%) Sensitivity to Discount Rate

Discount Rate	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
1.0%	6.6%	14.6%	21.1%	27.0%	32.4%
3.0%	6.6%	14.6%	21.1%	27.0%	32.4%
5.0%	6.6%	14.6%	**21.1%**	27.0%	32.4%
8.0%	6.6%	14.6%	21.1%	27.0%	32.4%
10.0%	6.6%	14.6%	21.1%	27.0%	32.4%

Post-Tax NPV (US$M) Sensitivity to OPEX

Total OPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0)	$210	$415	$618	$821	$1,023
(10.0)	$127	$332	$536	$739	$941
--	$37	$250	**$454**	$657	$860
10.0%	($55)	$167	$372	$575	$778
20.0%	($146)	$81	$290	$493	$696

Post-Tax IRR (%) Sensitivity to OPEX

Total OPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0)	13.0%	19.6%	25.6%	31.0%	36.1%
(10.0)	10.1%	17.2%	23.4%	29.0%	34.3%
--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	2.4%	11.7%	18.7%	24.8%	30.4%
20.0%	0.0%	8.4%	16.1%	22.6%	28.4%

Post-Tax NPV (US$M) Sensitivity to Initial CAPEX

Initial CAPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	$121	$326	$529	$731	$934
(10.0%)	$80	$288	$491	$694	$897
--	$37	$250	**$454**	$657	$860
10.0%	($6)	$212	$416	$620	$822
20.0%	($49)	$173	$379	$582	$785

Post-Tax IRR (%) Sensitivity to Initial CAPEX

Initial CAPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0)	11.3%	20.1%	27.5%	34.3%	40.5%
(10.0)	8.7%	17.0%	24.0%	30.3%	36.1%
--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	4.8%	12.5%	18.6%	24.2%	29.2%
20.0%	3.2%	10.6%	16.5%	21.8%	26.6%

Post-Tax NPV (US$M) Sensitivity to Recovery

Recovery	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	($293)	($111)	$71	$239	$403
(10.0%)	($128)	$77	$265	$449	$631
--	$37	$250	**$454**	$657	$860
10.0%	$194	$419	$642	$865	1,088
20.0%	$342	$586	$830	$1,073	1,315

Post-Tax IRR (%) Sensitivity to Recovery

Recovery	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0)	0.0%	0.0%	7.9%	14.2%	19.5%
(10.0)	0.0%	8.2%	15.1%	20.9%	26.2%
--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	12.6%	20.0%	26.6%	32.5%	38.1%
20.0%	17.7%	25.0%	31.6%	37.8%	43.5%

Post-Tax NPV (US$M) Sensitivity to Head Grade

Head Grade	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	($293)	($111)	$71	$239	$403
(10.0%)	($128)	$77	$265	$449	$631
--	$37	$250	**$454**	$657	$860
10.0%	$194	$419	$642	$865	$1,088
20.0%	$342	$586	$830	$1,073	$1,315

Post-Tax IRR (%) Sensitivity to Head Grade

Head Grade	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0)	0.0%	0.0%	7.9%	14.2%	19.5%
(10.0)	0.0%	8.2%	15.1%	20.9%	26.2%
--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	12.6%	20.0%	26.6%	32.5%	38.1%
20.0%	17.7%	25.0%	31.6%	37.8%	43.5%

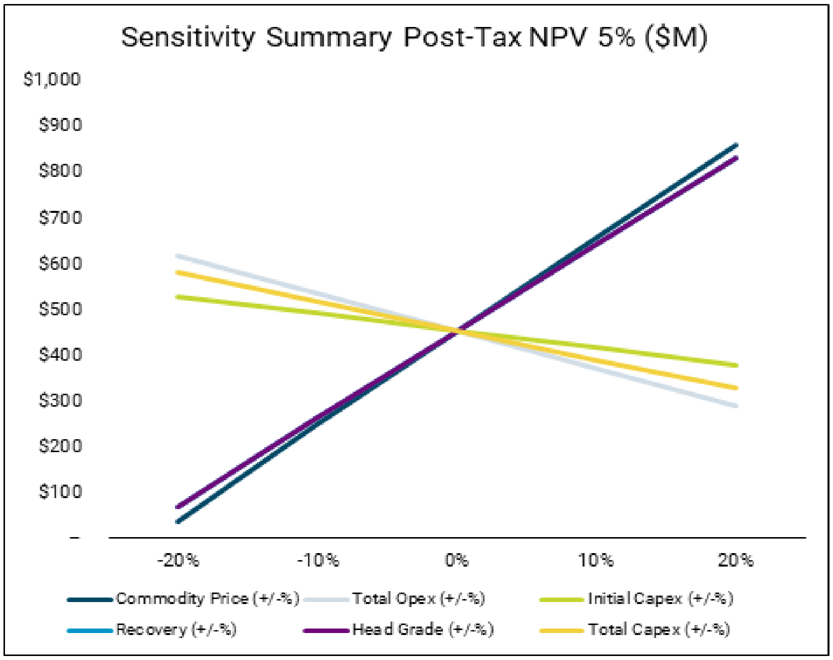
Post-Tax NPV (US$M) Sensitivity to Total CAPEX

Total CAPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	$172	$376	$579	$782	$984
(10.0%)	$108	$313	$517	$719	$922
--	$37	$250	**$454**	$657	$860
10.0%	($34)	$186	$391	$594	$797
20.0%	($105)	$122	$328	$532	$735

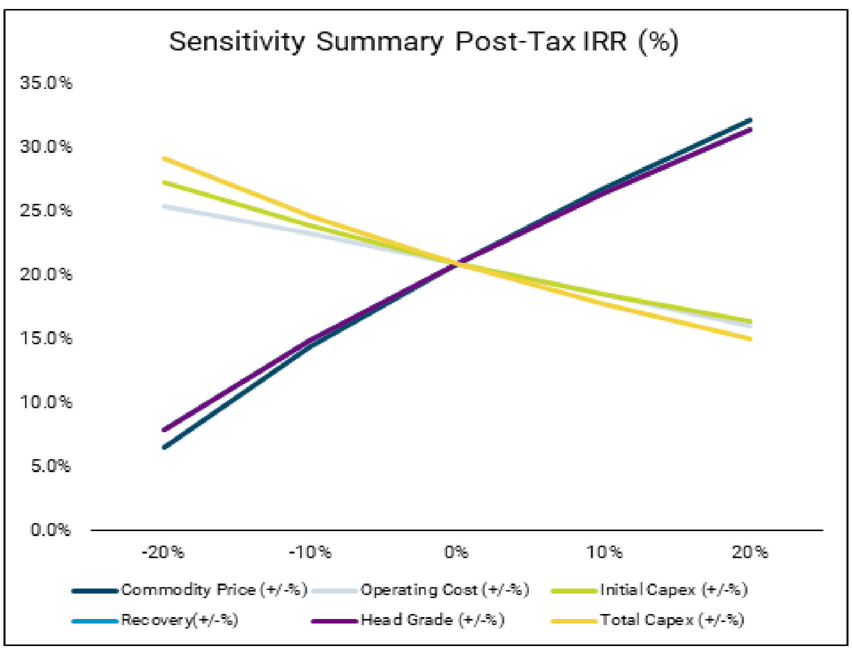
Post-Tax IRR (%) Sensitivity to Total CAPEX

Total CAPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0)	13.6%	22.0%	29.3%	35.9%	42.1%
(10.0)	9.9%	18.0%	24.8%	31.0%	36.8%
--	6.6%	14.6%	**21.1%**	27.0%	32.4%
10.0%	3.6%	11.6%	17.9%	23.5%	28.6%
20.0%	0.9%	9.0%	15.1%	20.5%	25.4%

Figure 22-1: Post-Tax NPV and IRR Sensitivity Results



Source: Ausenco (2023).



Source: Ausenco (2023).

Table 22-4: Pre-Tax Sensitivity Summary

Pre-Tax Sensitivity to Metal Price

Pre-Tax NPV (US$M) Sensitivity to Discount Rate

Discount Rate	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
1.0%	$252	$669	$1,086	$1,503	$1,920
3.0%	$178	$540	$903	$1,266	$1,629
5.0%	$115	$433	**$751**	$1,069	$1,387
8.0%	$39	$302	$566	$830	$1,093
10.0%	($3)	$232	$466	$701	$935

Pre-Tax IRR (%) Sensitivity to Discount Rate

Discount Rate	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
1.0%	9.9%	20.4%	29.0%	36.7%	43.9%
3.0%	9.9%	20.4%	29.0%	36.7%	43.9%
5.0%	9.9%	20.4%	**29.0%**	36.7%	43.9%
8.0%	9.9%	20.4%	29.0%	36.7%	43.9%
10.0%	9.9%	20.4%	29.0%	36.7%	43.9%

Pre-Tax NPV (US$M) Sensitivity to OPEX

Total OPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	$372	$690	$1,008	$1,326	$1,643
(10.0%)	$243	$561	$879	$1,197	$1,515
--	$115	$433	**$751**	$1,069	$1,387
10.0%	($13)	$304	$622	$940	$1,258
20.0%	($142)	$176	$494	$812	$1,130

Pre-Tax IRR (%) Sensitivity to OPEX

Total OPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	18.2%	27.0%	34.7%	42.0%	48.8%
(10.0%)	14.3%	23.8%	31.9%	39.4%	46.3%
--	9.9%	20.4%	**29.0%**	36.7%	43.9%
10.0%	4.3%	16.6%	25.9%	33.9%	41.3%
20.0%	0.0%	12.4%	22.6%	31.0%	38.7%

Pre-Tax NPV (US$M) Sensitivity to Initial CAPEX

Initial CAPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	$226	$544	$862	$1,179	$1,497
(10.0%)	$170	$488	$806	$1,124	$1,442
--	$115	$433	**$751**	$1,069	$1,387
10.0%	$60	$377	$695	$1,013	$1,331
20.0%	$4	$322	$640	$958	$1,276

Pre-Tax IRR (%) Sensitivity to Initial CAPEX

Initial CAPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	16.3%	28.0%	37.8%	46.7%	55.0%
(10.0%)	12.8%	23.8%	33.0%	41.2%	48.9%
--	9.9%	20.4%	**29.0%**	36.7%	43.9%
10.0%	7.3%	17.4%	25.6%	32.9%	39.6%
20.0%	5.2%	14.9%	22.7%	29.6%	36.0%

Pre-Tax NPV (US$M) Sensitivity to Recovery

Recovery	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	($347)	($93)	$162	$416	$671
(10.0%)	($116)	$170	$456	$742	$1,029
--	$115	$433	**$751**	$1,069	$1,387
10.0%	$346	$696	$1,045	$1,395	$1,745
20.0%	$577	$958	$1,340	$1,721	$2,103

Pre-Tax IRR (%) Sensitivity to Recovery

Recovery	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	0.0%	0.1%	11.6%	19.8%	26.9%
(10.0%)	0.0%	11.9%	21.0%	28.8%	35.8%
--	9.9%	20.4%	**29.0%**	36.7%	43.9%
10.0%	17.8%	27.6%	36.2%	44.1%	51.5%
20.0%	24.5%	34.2%	42.9%	51.0%	58.7%

Pre-Tax NPV (US$M) Sensitivity to Head Grade

Head Grade	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	($347)	($93)	$162	$416	$671
(10.0%)	($116)	$170	$456	$742	$1,029
--	$115	$433	**$751**	$1,069	$1,387
10.0%	$346	$696	$1,045	$1,395	$1,745
20.0%	$577	$958	$1,340	$1,721	$2,103

Pre-Tax IRR (%) Sensitivity to Head Grade

Head Grade	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	0.0%	0.1%	11.6%	19.8%	26.9%
(10.0%)	0.0%	11.9%	21.0%	28.8%	35.8%
--	9.9%	20.4%	**29.0%**	36.7%	43.9%
10.0%	17.8%	27.6%	36.2%	44.1%	51.5%
20.0%	24.5%	34.2%	42.9%	51.0%	58.7%

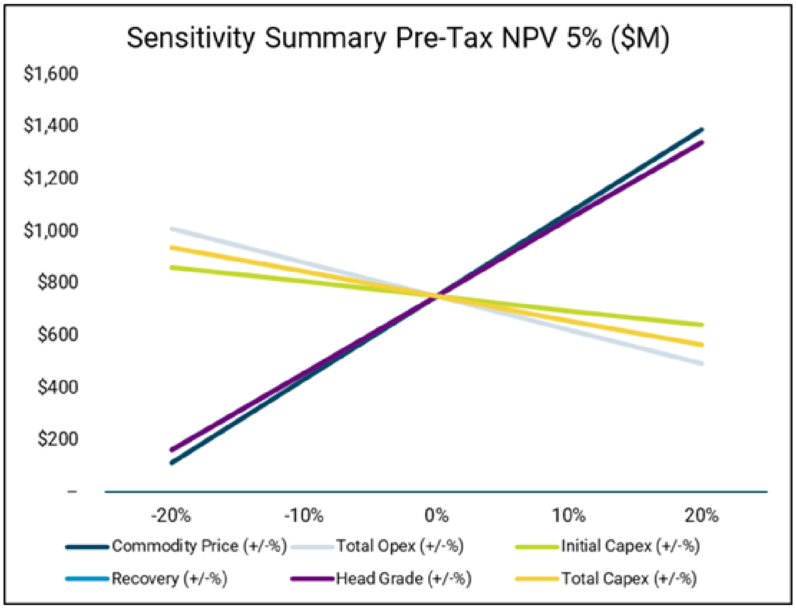
Pre-Tax NPV (US$M) Sensitivity to Total CAPEX

Total CAPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	$301	$619	$937	$1,255	$1,573
(10.0%)	$208	$526	$844	$1,162	$1,480
--	$115	$433	**$751**	$1,069	$1,387
10.0%	$22	$340	$658	$976	$1,294
20.0%	($71)	$247	$565	$883	$1,201

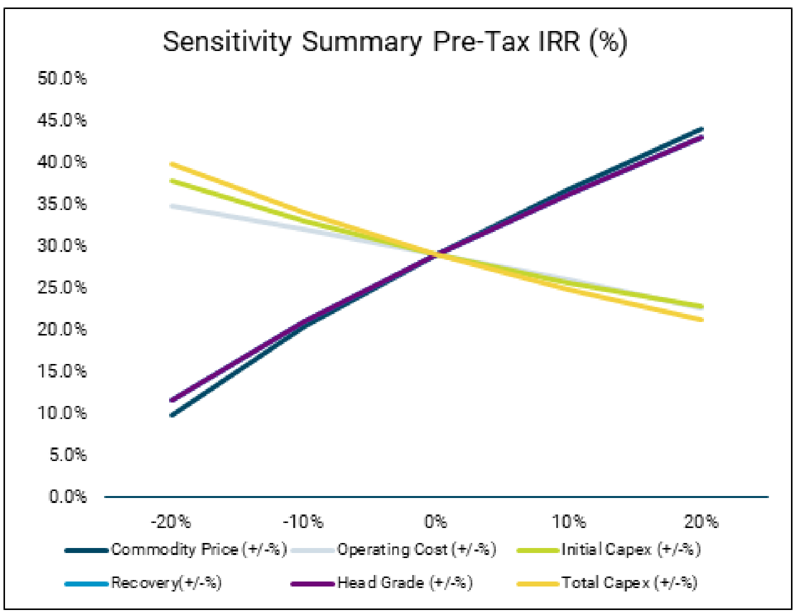
Pre-Tax IRR (%) Sensitivity to Total CAPEX

Total CAPEX	Commodity Price (20.0%)	(10.0%)	--	10.0%	20.0%
(20.0%)	19.1%	30.2%	39.7%	48.5%	56.7%
(10.0%)	14.2%	24.9%	33.9%	42.0%	49.7%
--	9.9%	20.4%	**29.0%**	36.7%	43.9%
10.0%	5.9%	16.5%	24.8%	32.2%	38.9%
20.0%	2.1%	13.0%	21.2%	28.2%	34.7%

Figure 22-2: Pre-Tax NPV and IRR Sensitivity Results



Source: Ausenco (2023).



Source: Ausenco (2023).

23 ADJACENT PROPERTIES

The Revel Ridge Property is situated in a well mineralized area of British Columbia, specifically the northern end of the Kootenay Arc, and is adjacent to several properties with different types of mineralized showings, all within approximately 10 km of the RRMZ portals (Figure 23-1).

The Mastodon Property is 5 km to the southeast of the Main Zone. The Mastodon is a group of deposits and showings which include the Mastodon (BC Minfile: 082M 005), Mastodon North (BC Minfile: 082M 195), Lead King (BC Minfile: 082M 094), Little Slide (BC Minfile: 082M 006) and Little Slide No. 3 (BC Minfile: 082M 196). The area is a series of polymetallic (Zn, Pb, Cd, Ag, Au, Cu) breccia, replacement-type bodies that are tabular (Mastodon - 90 x 60 x 3 m) in Badshot Limestone which may be structurally controlled. It displays many of the same characteristics as the RRMZ and could be a parallel mineralized structure. Teck Resources Ltd. (Teck) exploration programs failed to discover sufficient surface indications of mineralization. The entire Mastodon showings area has been subjected to several geochemical surveys, with several lead or zinc anomalies having been outlined to-date. Surface drilling of these anomalies has been discouraging.

The Locojo Showing (BC Minfile: 082M 264) on the LJ Property (see Imperial Metals in Figure 23-1) is located 5 km to the east of the RRMZ. It is a relatively new discovery (made in 2016) that has recently been exposed from beneath a glacier. Weymin Mining Corporation was the original staker of this showing. The showing is considered a Besshi-type massive sulphide (Cu-Zn-Pb) deposit (G04). Little exploration work has been carried out at this showing, due to its remote location.

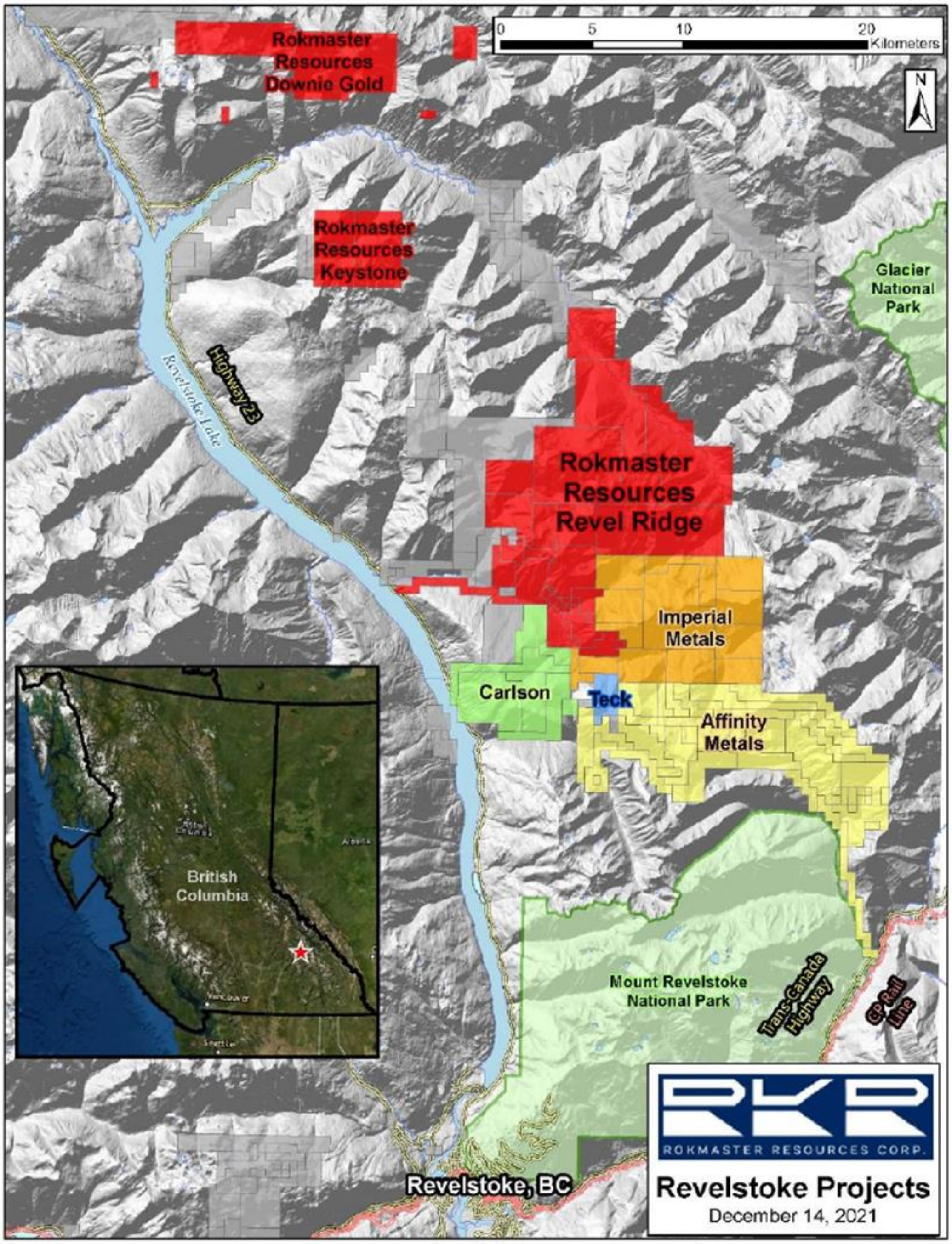
The current owner of the LJ Property is Imperial Metals Corp. In 2020, diamond blade saw channel sampling was completed over extensions of the massive sulphide occurrence recently exposed by glacial melt back. Geologists and field technicians completed six diamond saw-cut channel samples over a width of 90 m in an east-west direction perpendicular to the strike direction. The area was pressure washed to expose bedrock across the strike where possible. All of the samples were mineralized. For example, assay results for 2020 Trench 5 were 5.53% Zn, 3.45% Pb and 4.43 g/t Ag over 8.40 m (Imperial website, December 2021).

The Regal Property is located 10 km southeast of Revel Ridge (see Affinity Metals in Figure 23-1). The Property is held 100% (under option) by Affinity Metals (Affinity). Affinity made the high-grade Silver Stoke discovery in 2019. The high-grade Silver Slam Zone and a new gold showing were discovered in 2020.

Exploration work in 2020 consisted of a prospecting and mapping program and 3,442.5 m of diamond drilling. The drill program resulted in the expansion of the Silver Stoke high-grade silver vein system, and also intersected multiple mineralized horizons 320 m to the southwest, in the vicinity of the historical Allco Mine. The newly discovered Silver Slam contains silver-gold bearing base metal veining, and a zinc-rich massive sulphide horizon. The sulphide mineralization and the structural and lithological setting shows similarities to the Revel Ridge mineralization.

The reader is cautioned that the Author of this technical report section has not verified the above information and the mineralization described may not necessarily be representative of the Revel Ridge Property.

Figure 23-1: Adjacent Properties to Revel Ridge



Source: Rokmaster (2021).

24 OTHER RELEVANT DATA AND INFORMATION

This section is not relevant to this technical report.

25 INTERPRETATION AND CONCLUSIONS

25.1 Introduction

The QPs note the following interpretations and conclusions in their respective areas of expertise, based on the review of data available for this technical report.

25.2 Mineral Tenure, Surface Rights, Water Rights, Royalties and Agreements

The Revel Ridge Property is located in the Revelstoke Mining Division in Southeastern British Columbia approximately 32 km northeast of Revelstoke, BC, 420 km northeast of Vancouver, BC and 290 km west of Calgary, AB. The location of the portal, that is located near the center of the Property, is UTM 11U420,719 m E, 5,681,811 m N (51° 16' 56" N and 118° 08' 12" W).

Rokmaster has an exclusive option to earn a 100% interest in the property, which is composed of 35 mineral claims and 10 Crown grants covering a total area of 14,772 ha. The property is not subject to any royalties or other outstanding liabilities.

25.3 Geology and Mineralization

The Revel Ridge Property has two main polymetallic precious and The Revel Ridge Property has two main polymetallic precious and base metal deposits: 1) the Revel Ridge Main Deformation Zone (MDZ); and 2) RRYZ RRYZ Zone (RRYZ). The MDZ is a ductile deformation zone hosting sheeted massive sulphide mineralization characterized by banded massive and stringer arsenopyrite-pyrite-sphalerite-galena vein-like tabular mineralization with appreciable contents of gold and silver. Sulphide mineralization within the MDZ is classified as the Revel Ridge RRMZ (RRMZ), with distinct Northwest Extention (RRMEX), Hangingwall (RRHZ), and Footwall (RRFZ) Zones spatially, and likely genetically, related to the MDZ. The MDZ has been traced on surface through drilling, geological mapping, and soil geochemistry for a minimum strike length of 5.7 km and by concentrated drilling for a strike length of approximately 2,200 m and a down-dip extent of at least 1,175 m. The RRMZ generally dips approximately 55° to 60° to the northeast with an average true thickness of 2.5 m and can reach 15 m true thickness. The RRMZ is considered to be an orogenic gold deposit. It remains open to expansion by drilling along strike and down-dip.

The smaller, nearby RRYZ is composed of multiple parallel siliceous sphalerite-galena-bearing mineralized zones. The individual zones making up the RRYZ occur as lenticular bodies within isoclinally folded silicified and marbleized limestone horizons. The RRYZ sub-parallels and is in the immediate hanging wall of the RRMZ. The RRYZ is enriched in silver, zinc and lead compared to the RRMZ. The RRYZ is considered to be a carbonate replacement silver zinc-lead deposit. It remains open to expansion by drilling along strike and down-dip.

25.4 Exploration, Drilling and Analytical Data Collection in Support of Mineral Resource Estimation

Both the RRMZ and the RRYZ have potential for further expansion. The RRMZ in particular, remains open to expansion by drilling down-dip and along strike. The RRMZ has a predictable tabular geometry and grade distribution and is laterally extensive as defined in the surface mapping, geochemical surveys, mineral prospecting and sampling, and drilling completed to the effective date of this technical report.

In total, at least 453 underground and surface drill holes totalling 82,931 m have been completed on the Revel Ridge Property to the effective date of this technical report. Historically, a total of at least 40,948 m in 332 drill holes were completed by many operators prior to 2020. Rokmaster completed a total of 41,983 m in 121 drill holes in 2020-2021 and 2022. Rokmaster's underground and surface drilling programs focused on the expansion of the RRMZ and RRYZ, and discovery/delineation of the nearby RRFZ, RRHZ and RRMEX Zones.

Based on site visits, due diligence sampling and subsequent assaying at independent laboratories, the Authors consider that there is good correlation between the gold, silver, copper, lead, and zinc assay values in Rokmaster's database and the independent verification samples collected by P&E and analyzed at AGAT and Actlabs. The Authors are of the opinion that the data are of good quality and appropriate for use in the current MRE.

25.5 Metallurgical Testwork

Since 1982, 54 metallurgical programs have been undertaken at reputable laboratories. While the historical programs are informative, it wasn't until the 2014 program, managed by Frank Wright Consulting Inc., where an effective flowsheet began to emerge. The test work programs since 2020, managed by Canenco Consulting Corp., built off that test work, incorporating information from BaseMet and Ausenco's senior executive metallurgical engineers and developed the current flowsheet for the basis of this PEA.

The current effective flowsheet for recovery of the metals of value includes removing mine dilution with sensor-based sorting, preconcentrating the mill feed with bulk flotation, followed by regrinding and sequential flotation of the bulk concentrate producing concentrates of lead and zinc, with the remaining zinc rougher tails being processed through a POX-leach circuit for recovery of the remaining gold and silver.

In discussion with Kevin Murray P.Eng. of Ausenco, study geologists identified volumes of limestone on the project site which are amenable to extraction and likely host the required volume for the process plant neutralization requirements. Large areas of the RRMZ have limestone in the immediate hangingwall or footwall (or both). Hence, the likelihood of significant limestone material being present in the mine dilution and consequently the waste rejects from sorting is very high. Results from recent testing have indicated that this limestone is likely of sufficient quality to be used in processing.

Based on the envisioned circuit and corresponding laboratory test response, the overall process recoveries based on the samples tested for the RRMZ mineralization were expected to be in the range of 94-96% Au, 84-85% Ag, 71-73% Pb and 70-74% Zn. The RRYZ mineralization is less complex metallurgically than the RRMZ mineralization and responds to standard sequential flotation. Based on the metallurgical studies undertaken in 2014, the overall process recoveries for the RRYZ were expected to be 86% Au, 94% Ag, 88% Pb, and 93% Zn.

25.6 Mineral Resource Estimate

The MRE in this current technical report, has been prepared by the Authors following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 and in conformity with generally accepted

"CIM Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines using the drill hole database provided by Rokmaster. In addition to the drill hole database, this MRE also includes analytical results from 223 underground chip samples. Both drill hole and underground chip sample data have been composited over 0.5 m intervals. These data have been reviewed and validated, and the Mineral Resource Estimated by the Authors using inverse distance cubed for gold and silver and inverse distance squared for lead and zinc.

The updated 2023 MRE for the Revel Ridge Project, with an effective date of June 6, 2023, is presented in Table 25-1. At a cut-off of C$110/t NSR, the MRE totals for all the mineralized zones are: 1.53 million AuEq ounces contained within 7.16 million tonnes with an average grade of 6.63 g/t AuEq in the Measured and Indicated classifications; and 1.49 million AuEq ounces within 7.56 million tonnes at an average grade of 6.11 g/t AuEq in the Inferred classification (Table 25-1).

Table 25-1: Revel Ridge Total Updated Measured and Indicated and Inferred Underground Mineral Resources

Classification	Tonnes	AuEq (g/t)	AuEq (oz)	AgEq (g/t)	AgEq (oz)	Au (g/t)	Ag (g/t)	Pb (%)	Zn (%)
Measured	1,916,500	7.88	485,600	799.0	49,231,400	5.49	58.6	2.05	4.01
Indicated	5,239,700	6.18	1,040,400	652.8	109,967,500	3.64	48.5	1.93	4.25
Meas + Ind	**7,156,200**	**6.63**	**1,526,000**	**691.9**	**159,198,900**	**4.14**	**51.2**	**1.96**	**4.18**
Inferred	7,563,900	6.11	1,486,000	621.7	151,188,800	4.42	48.9	1.48	2.62

Notes

1. Mineral resources are not mineral reserves and do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
2. The inferred mineral resource in this estimate has a lower level of confidence than that applied to an Indicated mineral resource and must not be converted to a mineral reserve. It is reasonably expected that the majority of the Inferred mineral resource could be upgraded to an indicated mineral resource with continued exploration, however there is no certainty an upgrade to the inferred mineral resource would occur or what proportion would be upgraded to an indicated mineral resource.
3. The mineral resources in this estimate were calculated using the CIM Standards on mineral resources and reserves, definitions, and guidelines (2014) prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council and CIM Best Practices Guidelines (2019).
4. The following parameters were used to derive the NSR block model C$/tonne cut-off values used to define the mineral resource:
    - March 2023 Consensus Economics long term forecast metal prices of Au US$1,750/oz, Ag US$22/oz, Pb US$0.95/lb, Zn US$1.26/lb
    - Exchange rate of US$0.74 = C$1.00
    - RRMZ process recoveries of Au 96%, Ag 85%, Pb 71%, Zn 70%
    - RRYZ process recoveries of Au 86%, Ag 94%, Pb 88%, Zn 93%
5. MDZ AuEq = Au g/t + (Ag g/t x 0.010) + (Pb% x 0.265) + (Zn% x 0.314); MDZ AgEq = Ag g/t + (Au g/t x 101.478) + (Pb% x 26.933) + (Zn% x 31.847); RRYZ AuEq = Au g/t + (Ag g/t x 0.008) + (Pb% x 0.310) + (Zn% x 0.457); RRYZ AgEq = Ag g/t + (Pb% x 40.588) + (Zn% x 59.737)
6. Totals may not sum due to rounding.

25.7 Mining Method

The mine design for Revel Ridge contains 11.77 Mt of mineralized material from Measured, Indicated and Inferred resources that are sent to the process facility with a mining rate of 2,920 t/d.

The selected mining method of LHOS using cemented backfill and mechanized equipment is an established and proven method that maximizes mineralized material extraction by mining adjacent to backfill. The mine schedule has been built using dependency assumptions in Deswik software to create a robust mine sequence while targeting higher grade stoping areas early in the LOM.

25.8 Recovery Methods

The process plant design is based on a throughput of 1.065 Mt/a or 2,920 t/d of mineralized material. The LOM average head grades fed to the crusher are Pb 1.34%, Zn 2.52%, Au 3.69 g/t, Ag 38.2 g/t. Mined material is crushed, sorted, ground and processed in a sequential flotation plant to produce Pb and Zn concentrate. The Pb and Zn concentrates are each thickened and filtered separately to produce final saleable products. The Zn tailings are oxidized in an autoclave, and the solids are neutralized and leached. Au is precipitated out of the solution and recovered using a Merrill Crowe circuit and Au is smelt to produce a final saleable doré product. The process plant flowsheet designs were based on testwork results, financial evaluations, and industry standard practices. The flowsheet was developed for optimum recovery while minimizing capital expenditure and LOM operating costs. The comminution and recovery processes are conventional and well-established in the mining industry with no significant elements of technological innovation.

25.9 Infrastructure

25.9.1 Site Infrastructure

The Revel Ridge Project includes on-site infrastructure such as civil, structural and earthworks development, site facilities and buildings, on-site roads, water management systems, and site electrical power facilities. Off-site infrastructure includes site access roads, fresh water supply, power supply and concentrate transportation. The site infrastructure will include:

- Mine facilities include the mine administration offices, mine dry and change house, truck shop, and miscellaneous facilities.
- Process facilities include the process plant, crusher facilities, assay laboratory, process plant workshop and warehouse.
- Mine waste rock and dry-stack tailings facility (Central Waste Rock Stockpile and South Waste Storage Facility)
- Both the mine facilities and process facilities will be serviced with potable water, fire water, compressed air, power, diesel / propane, communication, and sanitary systems.

The Revel Ridge property can be reached from Revelstoke by travelling 32 km north via Provincial Highway 23 to the intersection of Carnes Creek Forest Service Road (FSR), then travelling 13 km east along the Carnes Creek FSR to reach the project site. The Carnes Creek FSR is a well-defined road and will be upgraded as needed to facilitate project traffic.

The existing 1.3 km site access road will be upgraded to the east of Carnes Creek and connects Carnes Creek FSR to the existing mine camp. Part of the site access road upgrades will necessitate a refit of the bridge crossing spanning Carnes Creek. A 69 kV transmission line will connect to a substation at the site before being stepped down to 13.8 kV for distribution to different power requirements across the project site.

Fresh water will be sourced from the Carnes Creek and pumped to the process plant where a freshwater tank will be located.

25.9.2 Waste Storage Facility

The results from the conceptual level analyses indicate that there is sufficient area to dispose of all mine waste rock and process tailings waste materials on site. The Project will operate under a hydrologic surplus, indicating that water treatment (as required), and discharge will occur on an ongoing basis throughout the mine plan.

25.10 Market Studies and Contracts

Market price assumptions were based on a review of public information, industry consensus, standard practices, and specific information from comparable operations in the region, however no specific market studies or product valuations were completed as part of this PEA

The concentrates will be trucked from the project site to Vancouver, where it will subsequently be transported by sea to clients. Concentrates and Au doré will be sold into the general market to North American, European, or Asian Smelters and refineries.

For this technical report, the metal prices presented in Table 25-2 were used for financial modelling. The metal prices are long-term forecasts over three years provided by an analyst consensus long-term forecast, and as agreed by Rokmaster Resources.

Table 25-2: Price Projections

Metal	Commodity Unit	Unit Price ($US)
Pb	Pound (lb.)	0.90
Zn	Pound (lb.)	1.26
Au	Troy ounce (oz.)	1,850.00
Ag	Troy ounce (oz.)	23.00

There are currently no sales contracts or refining agreements in place for the project.

The metal payables used in the marketing study are given below in Table 25-3. A summary of the treatment, refining and transportation costs are provided in Table 25-4 and Table 25-5.

Table 25-3: Metals Payable

Payability	Pb Concentrate (%)	Zn Concentrate (%)	Au Dore
Pb	95.0	0.0	0.0
Zn	0.0	85.0	0.0
Au	95.0	70.0	99.5
Ag	90.0	70.0	98.0

Table 25-4: Transportation and Treatment

Concept	Value	Unit
Pb Concentrate Transport Cost	221.4	$US/wmt
Pb Concentrate Treatment Charge	131.0	$US/dmt
Zn Concentrate Transport Cost	133.9	$US/wmt
Zn Concentrate Treatment Charge	285.0	$US/dmt

Table 25-5: Refining Charge

Metal	Unit	Pb Concentrate	Zn Concentrate	Au Dore
Au	US$/oz	15.00	5.00	5.00
Ag	US$/oz	1.20	1.20	0.50

25.11 Environmental, Permitting and Social Considerations

Several baseline studies and reports were completed between 2004 and 2022. The programs involved the collection of baseline data within the proposed project footprint area and commenced the process of identifying potential environmental constraints and opportunities related to the proposed development of the project.

Updated and expanded baseline studies complementary to the onsite engineered infrastructure designs, should include air quality, meteorology, noise, greenhouse gases and climate change, hydrogeology, and cultural resources, and will be required to support the project through pre-feasibility, feasibility, environmental impact assessment and permitting. New baseline data should be collected and analyzed in accordance with current applicable scientific standards and methodologies and historical baseline data reviewed from that perspective. In assessing the utility of using older baseline data, direct discussions should be conducted with provincial and federal regulators.

Baseline study recommendations for the purpose of advancing the project to the PFS stage are provided in Section 26.

Where possible, the project intends to locate project infrastructure to limit impact on old growth forest and mountain caribou habitat presently mapped in the area. The possible presence of provincially blue listed species that may be in the vicinity of the Project site will be investigated in more detail as the project progresses. These areas of study are key considerations for the current project site environment and will require more detailed understanding, management, and discussions with all stakeholders.

In terms of water management, the main consideration for the project is the location of the SWSF. The facility as envisioned in this technical report may potentially overlap mapped wetland and floodplain ecosystems and this should be studied in more detail moving forward. Future fish and fish habitat surveys should determine if these ecosystems can be frequented by fish during high-water flow events.

As additional baseline data is collected and community engagement efforts proceed, changes to project infrastructure design (and estimated costs) may be required at the PFS and future stages due to the following:

- Improved understanding of vegetation/ecosystem and wildlife habitat,

- Improved understanding of fish habitat characteristics for the areas of proposed project disturbance,
- Refined understanding of hydrological and hydrogeological conditions as related to water balance,
- The quality of mine contact water based on geochemical characterization and predictions,
- Further understanding of any possible traditional land use activities near the project area, and
- A more detailed understanding of archaeological sites of cultural importance.

25.12 Capital Cost Estimate

The capital and operating cost estimates presented in this PEA provide substantiated costs that can be used to assess the preliminary economics of the Revel Ridge Project. The estimates are mainly based on an underground mine operation, process plant construction and operation, waste storage facility construction and operation, and owner's costs and provisions.

The capital cost estimate conforms to Class 5 guidelines of the Association for the Advancement of Cost Engineering International (AACE International) with an estimated accuracy of +50%/-30% accuracy. The capital cost estimate was developed in Q4 2023 Canadian dollars. The process plant and infrastructure costs were estimated by Ausenco, mining cost was estimated by Mining Plus and the waste storage facility and water management structure costs were estimated by Knight Piésold.

The total initial capital cost for the Revel Project is C$588.3M and the LOM sustaining cost including financing is C$485.6M. The capital costs are summarized in Section 21.

25.13 Operating Cost Estimate

The operating cost estimate was developed in Q4 2023 using data from projects, studies and previous operations from internal database. The operating cost estimate is around +50%/-30% accurate. The estimate covers the mining, processing, tailings handling, maintenance, power, and general and administrative activities. Section 21 includes a summary of the operating expenses.

The unit operating cost is C$156.97 /t milled, including an annual G&A cost of C$3.65 M.

25.14 Economic Analysis

An economic model was developed to estimate the Project's annual pre-tax and post-tax cash flows, sensitivities and net present value results using a 5% discount rate.

On a pre-tax basis the net present value (NPV) discounted at 5% is C$750.8M; the internal rate of return (IRR) is 29% and payback period is 2.6 years. On a post-tax basis, the NPV discounted at 5% is C$453.9M; the IRR is 21%, and the payback period is 3.2 years.

A sensitivity analysis was conducted on the base case post-tax NPV and IRR of the project using the following variables: gold price, operating costs, initial capital costs, mill recoveries, and mill head grades. The sensitivity analysis revealed that the project is most sensitive to changes in gold price, mill head grade and mill recovery, and to a lesser extent, changes in operating costs and initial capital costs.

The preliminary economic assessment is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.

25.15 Risks and Opportunities

25.15.1 Risks

25.15.1.1 Geology and Mineral Resources

- Presence of unfavourably oriented structures, weak rock masses or hydraulic gradients may result in shallower slope angles being required.
- Unsuitable geotechnical and hydrogeological conditions for project infrastructure will either require facility relocation or increase costs associated with mitigation.
- If only a limited amount of the inferred resource are able to be upgraded then at the next level of engineering the mineable tonnage would be truncated, which would negatively impact the economic viability of the Project.

25.15.1.2 Mining

- Poor geotechnical and hydrological conditions may increase the level of external dilution, which may negatively impact the sorting plant capacity and possibly the process plant feed grade and the project economics.
- The mining production plan requires multiple production fronts and the efficient cycling of stopes. Any difficulties accessing mine areas or delays to the mining cycle (blasting, mucking, backfilling) could reduce the overall production rate of material to the process facility.

25.15.1.3 Metallurgical Testwork

- Metallurgical Recovery may not be achieved which will negatively impact metal production and project economics. Further test work is required to bound the recovery estimates and limit the impacts of this risk.
- Test work impurity depression is not achieved in operation which will negatively impact concentrate saleability or potentially increase operational reagent costs. Further test work will mitigate the preliminary nature of this work.
- Sorting may not achieve the metal recoveries and mass rejection results on all mineralized material that were achieved on the test sample and could result in lower feed grades to the grinding and flotation circuits which could have a negative impact on project economics. This could be mitigated with further sorting testwork on variable material sources.
- Mine waste and sorter reject limestone quantity and quality that is to be used for acid neutralization in the process may not be in sufficient mass or neutralizing capacity. There may be a need to purchase supplemental

limestone if insufficient quantity or could produce more lower capacity material both would increase operating costs and have negative impact on project economics.

25.15.1.3.1 Project Infrastructure

- Unsuitable geotechnical and hydrogeological conditions for project infrastructure will either require facility relocation or increase costs associated with mitigation.
- The project is located in mountainous terrain, which is prone to landslides or avalanches. Potential geohazards will need to be mapped to minimise impacts to future infrastructure locations and regular inspections will be required during operations and mitigation of potential geo-hazards will likely be required periodically.
- The minimum offset distance from the SWSF toe to the creeks was set at approximately 30 m. This distance will need to be reviewed during future, more detailed levels of study, to satisfy local environmental regulations/guidelines. Additional waste storage areas may need to be evaluated if the 30 m offset is required to be adjusted.

25.15.1.4 Environmental, Permitting and Social or Community Impact

- Limited environmental studies have been completed. Fish and wildlife habitat including that of red and blue-listed and endangered species occur or may occur in the project area.
- Wetland, floodplain and old-growth ecosystems are present in the project area and presently overlap with project infastructure.
- Elevated background levels of some metals naturally occurs in some watercourses in the project area.
- First Nation and community consultation has not been undertaken.
- Robust biophysical and socio economice baseline data collection programs are required to inform project design and future environmetnal impact assessment, permitting and First Nation and community consultation.
- Improved understanding of vegetation/ecosystem and wildlife habitat,
- Improved understanding of fish habitat characteristics for the areas of proposed project disturbance, Refined understanding of hydrological and hydrogeological conditions as related to water balance,
- The quality of mine contact water based on geochemical characterization and predictions,
- Further understanding of any possible traditional land use activities near the project area,
- And a more detailed understanding of archaeological sites of cultural importance.

25.15.1.5 Market Studies and Contracts

- The concentrate transportation cost in the PEA is based on projects in the nearby region which may vary and impact the project economics.
- There are no contracts established with any equipment suppliers, power or fuel suppliers, and marketing companies. Equipment quotes were received for the mining fleet and major process equipment; however, the prices are subject to vary at the time of project construction and execution.
- The marketing terms considered in this PEA are based on projects with similar commodities. No marketing study was completed, or any discussions were held with the marketing companies in determining the marketing terms.

- The salability of the Pb and Zn concentrates could become more difficult and/ or sell profitable due to higher than anticipated levels of penalty elements in the concentrates and the changing Pb and Zn concentrate markets.

25.15.2 Opportunities

25.15.2.1 Geology and Mineral Resources

- The opportunity to increase confidence in the resource estimate includes upgrading of the Inferred material.
- There is an opportunity to increase overall resources with additional exploration.

25.15.2.2 Mining

- True widths of the resource may be wider than modelled. Wider stope designs could result in less planned dilution and less required mining development to achieve the production rate.
- Geotechnical and hydrogeological conditions may be favourable to plan which could result in a reduction to external dilution and water infiltration.

25.15.2.3 Metallurgical Testwork

- There are opportunities to further optimise reagent dosages with additional test work which may decrease operational costs.
- Additional sorting test work may show improvement, or advances in sorting fine particles currently being assessed in the industry, may be implemented which will increase grade and metal production from the processing plant.
- Limestone test work may show the purity is sufficient to be used in other areas of the plant where pH buffering is required, decreasing lime purchasing and operational costs.
- There are opportunities to optimize equipment sizing particularly around the comminution and pressure oxidation circuits with more comminution data on the mineralized material and increased granularity of sulphur grades and deportment in the mine plan.

25.15.2.4 Environmental, Permitting and Social or Community Impact

Opportunities as listed below should be considered as the project continues the development path.

- Strong cooperation between First Nations, regulatory agencies, and project proponents have recently been seen to have great success. Should such an opportunity be possible with stakeholders, it could reduce risks for permitting delays.
- Developing a strong environmental and socio-economic baseline data and focusing on the use of low impact and sustainable technologies, may aid the permitting process by showing lesser overall impacts to the environment.
- Entering discussions with federal and provincial agencies regarding the utility and use of historic baseline data, for streamlining and optimizing the collection of additional baseline data required for project environmental assessment.

26 RECOMMENDATIONS

26.1 Overall Recommendations

The Revel Ridge Project demonstrates positive economics, as shown by the results presented in this technical report.

It is recommended to continue developing the Project through PFS. The recommended work program to advance through PFS includes additional drilling to convert inferred resources to indicated resources, additional drilling, metallurgical work and trade-off studies to further improve the process plant design, additional geotechnical drilling to improve the mine plan, further work to characterise the water management and tailings storage facility and expansion and ongoing data collection of environmental data for future permitting. Table 26-1 summarizes the estimated cost for the recommended future work on the Revel Ridge Project.

Table 26-1: Cost Summary for the Recommended Future Work

Item	Budget (C$M)
Exploration and Drilling	9.6
Metallurgical Testwork	1.4
Mining Methods	0.8
Process and Infrastructure Engineering	1.5
Water Management and SWSF	3.0
Environmental Studies, Permitting, Social or Community Recommendations	1.0
Concentrate Marketing Studies	0.1
Total	**17.3**

Note: total may not add up due to rounding.

26.2 Exploration & Drilling

A further drill program totalling 24,000 m is recommended to both build additional resources and to convert Inferred to Indicated Mineral Resources. Approximately 50% of the meter budget should be devoted to Mineral Resource growth in two primary directions:

- Down-dip on the RRMZ in the southeastern quadrant of the deposit in areas where coarse gold mineralization has been recently identified.
- Down-dip and along strike towards the northwest on the RRMZ expanding where surface drilling completed in 2022 facilitated Mineral Resource expansion.

The remainder of the meter budget can be used to efficiently convert Inferred to Indicated Mineral Resources in areas of the deposit with currently broad drillhole intersections, particularly up-dip of the 830 Level. The total cost of the recommended drill program is estimated to total $9,600,000 which is based on the cost of drill programs conducted between 2020 and 2023.

26.3 Metallurgical Testwork

Additional metallurgical and mineralogical characterization studies are recommended in order to further develop and optimize the process flowsheet. The following summarizes the recommended test work and estimated cost.

- Mineralogical investigations should be completed using variability composite samples that represent the various mineralisation's that occur within the RRMZ and RRYZ deposits. $80,000.
- Preconcentration by Sensor Based Sorting should continue be optimized and samples produced for the downstream flotation concentration. $120,000.
- A full comminution test work program is required including fine grinding energy studies to support a Prefeasibility Study. $85,000.
- The optimized flowsheet for flotation needs to be assessed using variability samples from the respective deposits to support a Prefeasibility Study. $250,000.
- The optimized flowsheet for POX-Leach needs to be assessed using variability samples from the RRMZ to support a Prefeasibility Study. $250,000.
- The current optimized process flowsheet needs to be assessed using variability samples composited from continuous intervals of drill core representing RRYZ and blends of this material with the RRMZ mineralization to mimic mining scenarios in an effort to support a Prefeasibility Study. $250,000.
- Geological and metallurgical work is required with regards to the Limestone on site. A full program should be undertaken, with assessment of further replacing some of the lime requirements in the process plant and any excess available should be assessed for sale. $60,000.
- Filtration, Rheology, thickening test work now needs to be undertaken on concentrates and tailings from optimised flowsheet. $150,000.
- Geochemical, geotechnical and paste test work characterisation studies on all tailings and residue streams are recommended once the flowsheet is optimised. $150,000.

26.4 Mining Methods

The Revel Ridge Mine ground conditions are conducive to long hole open stoping with tight paste backfilling. The rock mass rating database provided indicates FAIR to GOOD conditions with zones of POOR rock mass. Stopes will have geotechnical limits on strike length and widths in POOR zones, and strike lengths will need to be geotechnically restricted in FAIR rock mass. Dilution is critical for the narrow veins as even best mining practices do limit hanging wall delamination, further studies are required to quantify the amount of dilution expected at Revel Ridge.

Recommendations for future studies include the following:

- Geotechnical drill program with acoustic televiewer logging that augments the existing geotechnical database,
- Geotechnical definition of the rock units,
- Geotechnical material testing of rock units,
- Creation of a geotechnical block model,
- In-situ stress measurement program for underground mining,

- Integrated hydrogeological and geotechnical modelling,
- Review of underground mine plan for geotechnical suitability once mining method is finalized,
- Finite element modelling of underground mining.
- Paste test work

26.5 Process and Infrastructure Engineering

The estimated cost for process and infrastructure engineering for the PFS is C$1.5M. Engineering deliverables would include:

- Process trade-off studies (comminution, particle sorting, lead-zinc sequential flotation, pressure oxidation, gold leaching & Merrill Crowe),
- Flow diagrams (comminution, recovery processes, tails),
- Detailed equipment list,
- Power listing and consumption estimate,
- Architectural (building sizes) to estimate steel and concrete quantities,
- Detailed material and water balance,
- Detailed process design criteria,
- General arrangements (GA) and elevation drawings (for crushing/overland conveying, comminution, flotation, tailings).
- Electrical single line drawing,
- Equipment and supply quotations updated, and sources determined,
- Estimate of equipment and materials freight quantities,
- Capital cost estimate,
- Operating cost estimate,
- Major equipment spares and warehouse inventory cost estimate,
- Construction workhours estimate, and
- Construction schedule.

26.6 Water Management and Tailings Storage Facility

- Site investigations should be completed, including geotechnical drilling, test pit excavations, in situ testing, sampling, seismic lines, instrumentation installation, and laboratory testing to gain an understanding of the geotechnical, hydrogeological, and geological site conditions and develop design parameters to support more detailed levels of design.
- Physical and geochemical characterization of the tailings, coarse rejects and waste rock (including filtration test work on the tailings) should be undertaken to estimate in situ placed densities, stable slope angles, filtered tailings management requirements, and potential ARD and Metal Leaching potential of the wastes.

- A seismic hazard assessment for the site should be completed to estimate the magnitude of extreme earthquake events.
- Avalanche and terrain hazards mapping are recommended to quantify potential risks.
- Consideration should be given to installation of a Westbay device for ground water measurement.

26.7 Environmental Studies, Permitting, Social or Community Recommendations

The following recommendations are made regarding the design and implementation of environmental and socio-economic baseline studies. Qualified professionals should be retained to design and oversee the implementation of each of these studies. A review of historical baseline data (collected between 1990 and 2022) should be undertaken as part of the design and scoping of these studies, prior to field implementation. These studies and activities will be necessary to support the project to the PFS stage and provide a strong basis for future EA preparation and permitting.

26.7.1 Water Resources

- Compile a multi-year seasonal hydrological and meteorological monitoring plan for key areas within the study boundary to further characterize the hydrological conditions and to develop climate normals, extreme storm event estimates, water management requirements and a future water balance model. This should include installation of stream gauges to estimate flows in Carnes Creek and McKinnon Creek with time and generate flood level estimates. The water balance model will be used as a predictive tool regarding the quality and quality of water available to support project infrastructure designs as well as prediction of effluent quality and quantity. Consideration should be given to upgrading the site-specific meteorological station, based on the adequacy of continuing to use data from regional stations.
- Development and implementation of a surface water and groundwater monitoring, sampling, and testing plan focusing on areas that will be potentially affected by mine infrastructure based on current infrastructure plans
- Development of a conceptual hydrogeological model based on monitoring and testing results to provide the basis for the future development of a three-dimensional numerical groundwater model that will support advanced feasibility design phases and EA.

The estimated cost for the above recommendations is approximately $500,000. Cost savings can be realized for hydrogeological characterization work by coordinating closely with geotechnical and exploration drilling teams and their drilling programs.

26.7.2 Geochemistry

- A geochemical assessment of the ARD/ML risk for the Project should be implemented utilizing the existing geological model for the site and sampling of fresh drill core sampled intervals, if available. Generally, the program should consist of the collection of the following samples:
  - Collection of around 200 to 300 waste rock samples based on the site geological and structural model,
  - Three to six tailings samples, collected during future mineralogical test work,
  - Three to six mineralogical rock samples,

- Several overburden samples.

- Range of analytical tests to include elemental analysis; acid-base accounting; shake flask extraction (short term leach); NAG pH; minerology; and humidity cell testing (minimum 40 weeks).
- Development of preliminary source terms for the weathering of waste rock, mineralized material, and tailings for use in water quality modelling.
- Preliminary interpretation of results and assessment of requirement for site specific mine rock management practices and water treatment.

The estimated cost for the above is approximately $200,000.

26.7.3 Fish and Fish Habitat and Aquatic Studies

- Develop and implement multi-year and seasonal baseline fish and fish habitat for key waterbodies within and downstream of the Project area.
- Develop and implement multi-year baseline aquatics study that includes physical and chemical parameters, aquatic sediments, tissue residues, and aquatic life (invertebrates, algae, macrophytes) for key areas within the project area and for reference areas.
- Based on the results of the above, develop plans that effectively mitigate potential impacts to fish and fish habitat based on an assessment of alternatives, including mine waste facilities.

The estimated cost for the above is approximately $100,000.

26.7.4 Terrestrial and Wildlife Monitoring

- Develop and implement, in conjunction with local stakeholders, a seasonal baseline vegetation/ecosystem and wildlife/wildlife habitat survey plan for key areas within the project area with special emphasis on any potential listed for threatened species.

The estimated cost for the above is approximately $100,000.

26.7.5 Air Quality and Noise:

- Baseline conditions for air quality and noise should be established for near field and further afield operations.

The estimated cost for the above is approximately $20,000.

26.7.6 Near Surface Soil Characteristics

- Near surface soil textures and chemistry should be established for the Project area as part of the baseline program.

The estimated cost of the above is $10,000.

26.7.7 Socio-Economic, Cultural Baseline Studies and Community Engagement

- Complete AOA or AIA on locations of proposed project infrastructure.
- Develop and implement socio-economic baseline study.
- Initiate stakeholder engagement and consultation to understand current land and resource use at or near the Project area and potential impacts to same due to Project development.

The estimated cost for the above is approximately $50,000.

26.7.8 Environmental Constraints Mapping

- To assist in the development of the project at the PFS stage, environmental constraints mapping should be developed and continuously updated, based on the results of historical and future baseline environmental and land use studies. This mapping should be utilized to limit risks at the design stages of the project.

The estimated cost for the above task is approximately $10,000.

26.7.9 Concentrate Marketing Study

- A concentrate marketing study should be completed to confirm the payable metal values and deleterious element penalties associated with the sale of both the lead and zinc concentrates.

The estimated cost for the above task is approximately $65,000.

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